

URSA MAJOR MINERALS INCORPORATED

A report describing the surface diamond drilling and geophysical surveys on the URSA MAJOR
– XSTRATA CANADA, Shakespeare East Down Plunge Joint Venture Project, carried out on
the:

SHAKESPEARE JOINT VENTURE PROPERTY

November 2010 through to March 2011 and June 2011

In Part of Shakespeare Township (G-3001)

Sudbury, Mining Division, Ontario

1:50,000 NTS Map Sheet

Zone 17T 41I/5Espanola Sheet, South Central Canada

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Onaping, Ontario Canada

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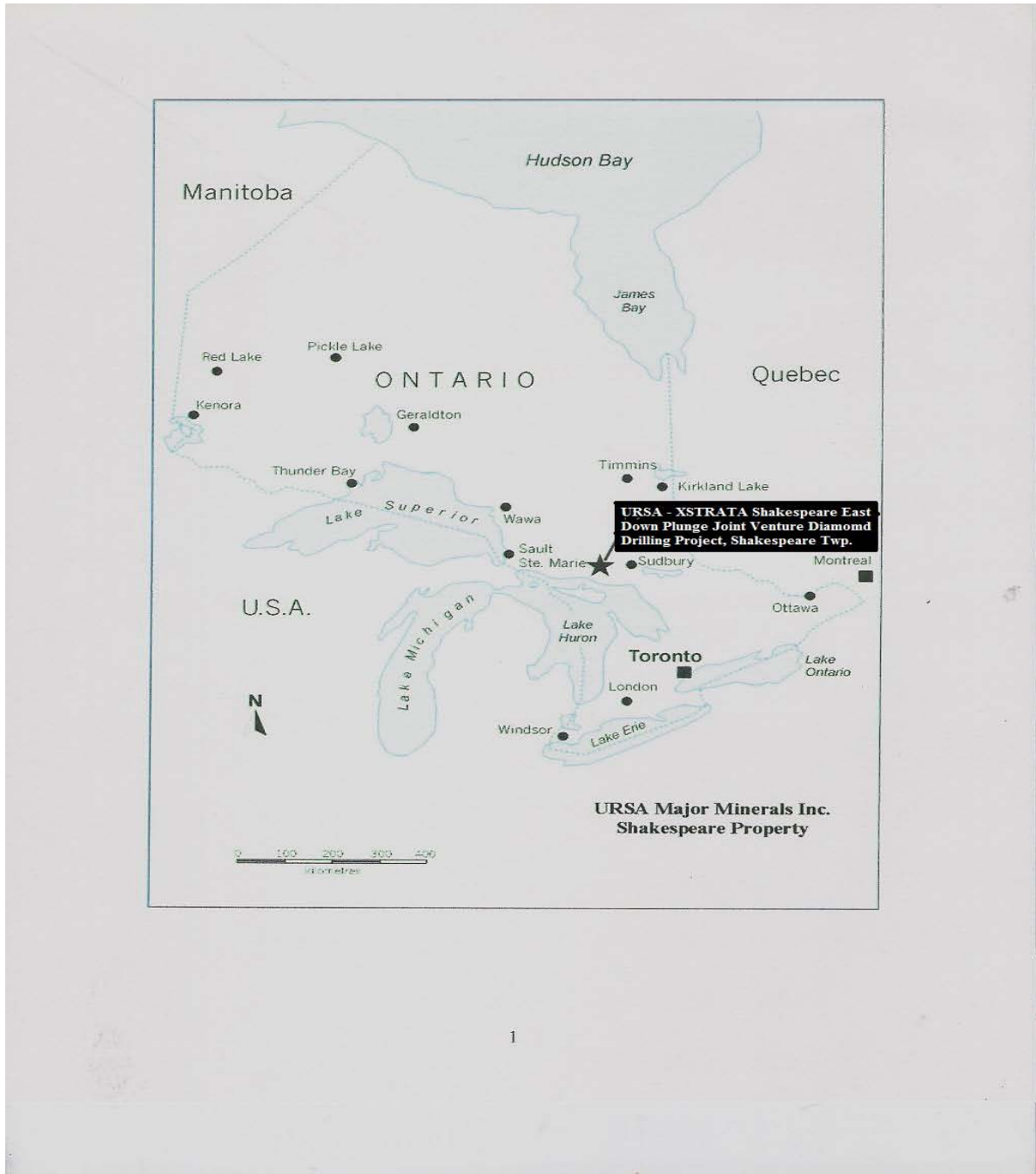


Figure: 1.0 URSA Major Minerals Incorporated – Xstrata Canada Shakespeare East Down Plunge Joint Venture Exploration Project, Shakespeare Township, Sudbury Mining Division, Ontario Location Map

1.0 Introduction

From late November of 2010 to mid March of 2011 and June 2011, URSA Major Minerals Incorporated carried out exploration diamond drilling exploration on what has been referred to as the Shakespeare East Down Plunge area to extend the results of previous geological, geophysical and diamond drilling exploration in the area to the west of the current target.. The Shakespeare East Down Plunge area is located in Shakespeare, Porter, Baldwin and Dunlop Townships

The URSA – Xstrata Shakespeare East Down Plunge diamond drilling - exploration Joint Venture Project consisted of 2,278 meters of coring in 3 diamond drill holes (U-08-01, U-08-02 and U-08-03) were put down on the URSA Major/Xstrata Shakespeare Property, in Shakespeare Township, Ontario. The exploration efforts also included PEM borehole geophysical surveying performed in DDH's U-08-01 and U-08-02. The geophysical survey reports containing the specific details and results of borehole survey efforts can be found within the appendices at the back of this technical report.

The initial Joint Venture diamond drilling work began on November 29th., 2010 and was completed on March 11th., 2011. Subsequent to encouraging bore hole geophysical results indicated from DDH U-08-02, diamond drilling efforts on the Joint Venture Project were continued from June 17th., 2011 through to June 28th., 2011.

Each of the diamond drill holes encountered the typical Shakespeare Intrusive Suite of rocks containing generally low grade Shakespeare style sulphide mineralization with a few isolated intermittent narrow higher grade intervals of nickel-copper and PGM mineralization.

On the URSA Shakespeare Property, the Shakespeare Intrusive Suite is located near the south west end and on the north facing limb of the doubly plunging Porter Lake Syncline. In the area the Shakespeare Intrusion essentially trends NE – SW and has been traced along strike by drilling for over 1.6 kilometres. The younging direction of the intrusion is NW, dipping at approximately -65 degrees and plunging at approximately 25 degrees to the NE.

In this particular area, the entirety of the Shakespeare Intrusive Suite and contained part of the Shakespeare East Down Plunge part of the mineral deposit is completely blind from the surface. The hanging wall rocks above and confining the upper parts of the Shakespeare Intrusive Suite consist of well bedded quartzite's of the Mississauga formation. The footwall rocks below the intrusive suite consist predominantly of gabbro and quartz gabbro materials of the Nipissing Intrusive Suite.

The layered Shakespeare intrusive suite essentially consists of 3 major lithological units consisting of quartz diorite, quartz gabbro and melagabbro rocks. Various internal sub divisions have been recognised within the major lithological units, some of which may have been important and integral parts as related to the development of the Shakespeare type – metal bearing sulphide mineral deposits.

The intensity distribution and recognised styles of sulphide mineralization, the position of such mineralization within the host intrusive suite are consistent with observations from previous

exploration efforts in many other parts of the Shakespeare East and West mineral deposits.

Selective highlights of the results of the sampling and assay values obtained from the diamond drill holes from available company press releases includes:

DDH	From: (m)	To: (m)	Length* (m)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)
U-08-01	683.62	686.11	2.49	0.057	0.028	0.008	0.022	0.013	0.014
U-08-02	615.82	618.54	2.72	0.31	0.14	0.024	0.155	0.120	0.065
U-08-03	661.16	663.49	2.33	0.29	0.23	0.018	0.20	0.21	0.13
Includes	661.16	662.49	1.33	0.41	0.25	0.025	0.22	0.20	0.11

Table 1.0 Selective assay highlights from the diamond drill holes.

A summary of the exploration expenditures incurred by URSA on the Shakespeare East Down Plunge Joint venture efforts include:

Diamond Drilling =	\$331,079.99
O.L.S., Land – Collar Surveying =	\$965.10
URSA Geology – Exploration =	\$26,646.15
Sample Assaying =	\$7,589.64
Drafting – Graphic Services =	\$1,017.00
Transportation =	\$6,309.69
Borehole Geophysical Surveying =	\$27,509.00
Project Related Field Supplies =	\$2464.95

The average cost per meter of diamond drill coring is: \$145.34 per meter.

The all inclusive drilling program cost per meter of drilling is: \$177.16 per meter.

The total cost of the URSA –XSTRATA Shakespeare East Down Plunge Joint Venture Exploration Project has been determined to be: \$403,581.52

The total costs to be assigned for assessment work credits with respect to the diamond drilling portion of the exploration efforts has been determined to have a value of: \$376,072.52.

The results and expenditures associated with the Crone Geophysics and Exploration Ltd., URSA Shakespeare borehole geophysical survey efforts have been featured in two separate reports which have been previously filed for assessment credits with the Ministry of Northern Development Mines and Forestry.

2.0 Property Location and Access

The URSA Major Minerals Inc., Shakespeare Property, is located approximately 75 km's west and 10km north of the Trans Canada Highway 17, from the Greater City of Sudbury, Ontario.

The project area is principally located near the junction of four townships, Shakespeare, Porter, Baldwin and Dunlop in the Provincial District of Sudbury – Sudbury Mining Division, Ontario.

The property and the Shakespeare Nickel Mine site is also located within an easy 5 ½ to 6 hour drive from the City of Toronto.

The largest population centers within close vicinity of the property and the mine site include: Nairn Centre, Espanola, Webbwood and Massey, Ontario.

The principal means of access onto the property is by way of a network of hard surfaced municipal roads leading north from the Trans Canada Highway 17, which connect up to the 36 kilometre long partially paved and gravel surfaced, Shakespeare Nickel Mine access road.

A significant portion of the current access road was originally constructed and extensively used as part of a larger network of forestry roads. Presently the Shakespeare access road gets used by a wide variety of vehicles. Typical travel time from the City of Sudbury to the mine site is approximately 1 hour 30 minutes. The property and project area are typically accessible by road with light automobiles all throughout all seasons of the year. Larger scale haulage vehicles, such as ore trucks and the like are only restricted from using the road during the municipal ½ loading season which typically runs annually from March 15th., to about June 01st., each year.

Other parts of the property; further afield from the main project site; can be accessed via a network of skidder – drill, ATV- snowmobile and old walking trails. Agnew Lake located in the southern part of the property and allows good access to various parts of the property by boat, or float equipped aircraft during the ice free months and snowmobile during the winter months.

3.0 Property Ownership

The URSA Major Minerals Incorporated., Shakespeare Project Patented and Leased Property, is presently in good standing the largest portion being located in the north eastern corner of Shakespeare Township, but also including the north west corner of Baldwin Township, south west corner of Porter Township and the south east corner of Dunlop Township, all within the provincial geographic jurisdictional District of Sudbury, Sudbury Mining Division, Ontario.

The Patented and Leased mining claim property consists basically of an elongated north east – south west property trending approximately 5.6 km's by 2.8 km's wide in the north west – south east direction.

More specifically the property consists of 34 Patented and Leased mining claims consisting of 80 mining claim units covering an area of 2180 ha's, equal to 3200 acres located in the Townships of Shakespeare, Baldwin, Porter and Dunlop.

Ursa Major Minerals Incorporated

Shakespeare Project Patented and Leased Mining Claims

<u>Township</u>	<u>Status</u>	<u>Unit</u>	<u>Acres</u>	<u>Claim #</u>
Shakespeare	P	1	40	S 35592
Shakespeare	P	1	40	S 35594
Shakespeare	P	1	40	S 35595
Shakespeare	P	1	40	S 35596
Shakespeare	L	1	40	S 35597
Shakespeare	L	1	40	S 35599
Shakespeare	L	1	40	S 35600
Shakespeare	P	1	40	S 35601
Shakespeare	P	1	40	S 35602
Shakespeare	P	1	40	S 35603
Shakespeare	P	1	40	S 35604
Shakespeare	P	1	40	S 35609
Shakespeare	P	1	40	S 35612
Shakespeare	L	1	40	S 35616
Shakespeare	L	1	40	S 35617
Shakespeare	L	1	40	S 35618
Shakespeare	L	1	40	S 36040
Shakespeare	P	1	40	S 36041
Shakespeare	P	1	40	S 36042
Shakespeare	P	1	40	S 36043
Shakespeare	P	1	40	S 36044
Shakespeare	P	1	40	S 36045
Shakespeare	P	1	40	S 36046
Shakespeare	P	1	40	S 36047
Shakespeare	P	1	40	S 36048

Shakespeare	P	1	40	S 36049
Shakespeare	P	1	40	S 36050
Shakespeare	P	1	40	S 36051
Baldwin	L	4	160	1203117
Shakespeare	L	8	320	1203118
Dunlop	L	8	320	1203119
Baldwin	L	12	480	1247350
Porter	L	4	160	1247351
Baldwin	L	<u>16</u>	<u>640</u>	<u>3001690</u>
		80	3200	34

P = Patented mining claim

L = Leased mining claim

Table: 2.0 URSA Major Minerals Incorporated Listing of Claim Areas-Number of Claims / Claim Units and Land Tenure Status

The diamond drill holes as described within this report were collared on the leased mining claim S-1203118 in Shakespeare Township, and were completed to their final depths on the leased mining claim S-1247350 in Baldwin Township, Sudbury Mining Division, Ontario.

4.0 Physiography and Climate

The general geographic region occurs within the limits of the Great Lakes Basin near the rugged north shore of Georgian Bay and represents the north limits of the Great Lake Forest region, and approximately 50km's (30 miles) west of the edge of Sudbury Basin area.

A large drainage basin area has been developed allowing drainage towards the Spanish River which ultimately drains into Georgian Bay to the south. It has been suggested that the Spanish River may have existed during pre Wisconsin glacial times and may have been part of a very old river system.

Agnew Lake, which was once part of the original Spanish River channel was dammed up by the International Nickel Company of Canada (INCO) in the late 1900's in order to generate hydro electric power for their Copper Cliff smelting operations. The damming of the river resulted in the development of Agnew Lake which is in the order of 32 km's (20 miles +/-) in length.

The north eastern and north western areas of Shakespeare and Baldwin Townships is noted for its rugged terrain, well marked by a series north easterly trending deep gullies and ridges, quite distinct forming saw toothed topography. Within the property area the topography can be defined as somewhat rolling hills, marked by several well exposed open craggy areas with abrupt scarp – cliff like features, influenced by the resistive nature of the surrounding geology, structures and erosion that occurred in the area. The erosion characteristics of the area are governed in part by the surround geology, which is made up of predominantly highly resistant, fine to course grained, quartz rich metasedimentary rocks which were then intruded by younger massive sills and or dyke like features of less resistive gabbroic rocks. This assemblage of rocks were then subject to assorted epochs of local and regional deformation to include the Penokian Orogeny, which in part resulted in the strongly developed deformation, and folding to occur in the area. Large scaled faulting associated with the Murray Fault system - zones, such as the Hunter Lake, Cameron Creek and Fairbanks Lake faults to name a few, were ultimately responsible for further dissecting and over thrusting some of the surrounding geology, which has allowed distinct ridges to form as a result of deep erosion occurring along these parallel structural zones.

The surrounding hills in the area are generally well vegetated, with an abundance of tree and animal species, with distinct habitats being observed in gullies and on ridges. The area has been very well glaciated, forming local crag and tail formations with large exposures of geology and boulder piles. Some glacial – divergent river channel ways are evident most notably along Stumpy Bay through to Long Bay area where fine grain sand and silt materials running off from the surrounding hill sides have been visibly cut by the flowing waters. For the most part many of the gully and valley areas have been deeply eroded with some remnant sands, silts and clay like materials having been deposited. Some of these areas were then overgrown and have since developed into wet poorly drained swampy terrains. Locally glacial striations have been observed which would appear to indicate ice direction of north and northeast.

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 Mississauga quartzite hills in the area.



Photograph: 1.0, View of the local geography facing eastwards towards the north shore of Agnew Lake in Baldwin Township



Photograph: 2.0, View Birds Eye View of the narrows of Agnew Lake - Stumpy Bay , facing northwards towards the URSA Major Minerals Incorporated – Shakespeare Nickel Mine, in Shakespeare Township, Ontario.

The seasonal weather and weather patterns that can be observed within the area are typical of the weather patterns known to occur within the Great Lakes Forest of Georgian Bay region which extends towards the southern limits of the Boreal Forest located only a short distance towards the north.

Winters are typically cold often with temperatures in the -30 to -40 degree C., range, while summer temperatures can sometimes reach +30 to +35 degrees C., which is not uncommon. The area is known to be notoriously windy, occasionally very strong north winds appear to funnel down the length of the Spanish River valley area and pour out into the west end of Agnew Lake.

5.0 Vegetation and Wildlife

The surrounding west Agnew Lake area is generally well vegetated with a wide variety of second or third growth tree species, with in places some small remnants of timber areas that was once dominated by large, towering white and red pine trees. Beginning well over 100 years ago, several companies in the area were involved in large scaled logging operations involving the harvesting of the big pines. Such logging operations were carried out extensively along the shores, and spreading inland from the course of the Spanish River, while using the river as a means of transporting the timber to the various saw mills and transportation facilities located downstream. Subsequent to some of these logging operations, the area was frequently subject to forest fires, with the scars and remnants of such events still being evident to this day. Scattered evidence of the former logging operations can still be seen, as remnants of old campsites, chains and pins in outcroppings, old horse haulage roads were carved out and can be found in many places throughout the surrounding country side.

The area may be best characterized as being made up of a wide variety of “mixed bush”, being made up of an abundance of tree species some of which include:

Flora and Fauna of the area typically include:

White and Trembling Aspen – Poplar

White – Paper Birch, Yellow Birch

Black Spruce with the occasional White Spruce

Red and White Pine

Eastern White Cedar

Hemlock, located on the north sides of hills and shaded gullies

Sugar, Mountain Maple, Striped Maple

Balsam Fir

Some larger sized Oak and Oak scrub brush on top of hills

Black, Swamp, and Mountain Ash in some swamps

American Hop Hornbeam, Jack Pine and Tamarack, are occasionally seen

Wide variety of Willow, Speckled Alder, Mountain Holly and assorted brush

Juniper

Beaked Hazel Nut

Wild life in the area can be periodically abundant and includes:

White Tailed Deer

Moose, less common than deer

Black Bear

Timber Wolf

Red Fox

Beaver

6.0 Exploration and Property Production History

It is not the intention or within the scope of this report to describe in great detail the extensive exploration history of the area of interest, and so for further details the reader is advised to refer the extensive collection of assessment files for the Shakespeare, and the adjacent townships of Baldwin, Porter, Dunlop and Hyman areas found at the Ministry of Northern Development and Mines, Resident Geologists Office, located in Sudbury, Ontario.

Over the many years of local history, the extensive Spanish River drainage basin and its many tributaries would have offered easy access, allowing Trappers and Fur Traders, Loggers, Hunters and Fishers, settlers and prospectors to travel far inland. It is highly conceivable that some of these areas were examined for possible metals, for example where rusty, or unusual rock formations such as veining or the like may have occurred, but unfortunately there is very little in the way of physical evidence or documentation that might indicate such efforts ever took place.

It has been reported that sometime during the 1920's the original Shakespeare showings were explored by the Sudbury Shakespeare Gold Copper Syndicate with some limited trenching having been carried out at that time. Judging by the actual size the Shakespeare occurrence – West Shakespeare deposit area, it is remarkable how little surface trenching was carried actually. In 1941, Frobisher Exploration staked the property and over the next several years carried out a plane table survey, geological mapping and diamond drilling in the area of the Shakespeare deposit. Three diamond drill holes were completed in 1942 and another 15 in 1948. Limited metallurgical test work was also carried out in 1941 by Falconbridge which gave favourable results.

Falconbridge acquired the claims from Frobisher Exploration in 1947. Between 1949 and 1953 Falconbridge completed geological mapping, magnetometer and radiometric surveys, diamond drilling and resource estimation. Drilling consisted of 12 holes totalling 1,829 m designed mainly to provide data on the Shakespeare deposit to a depth of approximately 76 m.

The 1951 resource work estimated resources to depths of 152 meters (498.56 feet) and 30 meters (98.4 feet). The resource estimate to 152 meters (498.56 feet) depth assumed mining by open pit and underground methods, with considerable waste stripping required. Results of the estimate indicated a total of 3,273,000 short tons grading 0.34% Ni and 0.40% Cu. The resource estimate to the 30 meters (98.4 feet) depth used only open pit mining with pit wall slopes of 80 degrees. Results of this estimate indicated a total of 1,255,000 short tons grading 0.33% Ni and 0.37% Cu. The 1951 estimates included mineralization located between 2000 West and 800 West lines and used a series of cross-sections and a long section to obtain such resources figures. The long section indicates relatively consistent ranges for grade. A few drill hole intercepts seemed abnormally narrow with some lower grades which appear to correspond to holes which may have passed under the zone. No further work was undertaken on the property until 1974 when a new resource estimate and engineering study were completed. Two resource estimates were completed. The first defined a tonnage available for open pit mining, at a 1:1 stripping ratio and 60° pit wall slopes, totalling 2,869,000 short tons at grades of 0.33% Ni and 0.36% Cu to a depth of 58 meters (190.24 feet). The second resource, applying open pit extraction with a stripping ratio of 0.5:1, totalled 2,195,000 short tons, grading 0.33% Ni and 0.36% Cu.

The engineering study involved a preliminary review of the feasibility for mining the shallow depth resources. The study envisaged mining by open pit methods, barging of ore across Agnew Lake and

trucking of ore to a Falconbridge mill approximately 65 miles (40.65 kilometres) away. The results of the study were considered negative.

With improved metal prices in 1985 led Falconbridge to complete additional diamond drilling, new resource estimations and a number of economic and metallurgical studies to further evaluate the Shakespeare deposit. Diamond drilling included 16 holes designed to intersect the near surface expression of the Shakespeare deposit on 30.5 meter (100.04 foot) centers. Most of the drill holes were collared between 200W and 2000W and intersected the zone at depths of less than 76 meters (249.28 feet).

The 1985 resource estimate included material between grid lines 500W and 2000W and indicated a total resource of 2,081,373 short tons, grading 0.36% Ni, 0.42% Cu, 0.22 g/t Au, 0.40 g/t Pt and 0.46 g/t Pd. A resource totaling 1,106,703 short tons, grading 0.37% Ni, 0.40% Cu, 0.23 g/t Au, 0.41 g/t Pt and 0.45 g/t Pd to a 30 meters (98.40 feet), depth was also estimated. In 1985, mineralogical and metallurgical tests were conducted by both Falconbridge and Lakefield Research, (a division of Falconbridge) and indicated results which were reasonable, but less favourable than the 1941 tests.

Engineering studies were completed by L.T. Dunks of L.T. Dunks and Associates and D.M. Smith, of Falconbridge assuming a similar mining plan to the 1974 study, but incorporating results from the new metallurgical work. The engineering study results were again negative. In 1986, Falconbridge completed an additional 4 diamond drill holes, totalling 1,617 m and a further engineering study. All 4 holes were drilled west of 1800W and designed to test for extensions of the deposit to depths greater than 152 meters (498.56 feet) below the surface. The engineering study was completed by Walter Thompson and Associates with a similar mining plan as the 1985 study, but assuming ore haulage to the Falconbridge mill on a new road constructed along the north side of Agnew Lake. The results of this study were still negative. The potential for profitability was indicated in the event of a slightly larger, higher grade resource, higher metal prices and road access existing.

Historical mineral resource estimates for the Shakespeare Property as presented in this section are summarized in the table below.

None of these resource estimates were found to be compliant with National Instrument 43-101.

No further work was performed on the property until 2000, when the property was joint ventured to URSA Major Minerals Incorporated. Work by URSA Major since 2000 has involved digital compilation, geological mapping, sampling, geophysics and diamond drilling.

To date URSA Major Minerals Inc., has completed on the Shakespeare East and the Shakespeare West Minerals deposit areas a total of 96 diamond drill holes accounting for 17,572.78 meters (57,638.72 feet) of diamond drilling carried out to directly explore the deposit areas.

A summarization of the diamond drilling carried out by: URSA Major Minerals Incorporated on the Shakespeare West, Shakespeare East and Shakespeare East Down Plunge sulphide bearing mineral deposits include as indicated below:

DDH's., U-03-03 to U-03-46	= 8,205.76 meters	(26,914.89 feet)
DDH's., U-03-48 to U-03-55	= 2,214.77 meters	(7,264.45 feet)
DDH's., U-03-59 to U-03-84	= 5,775.00 meters	(18,942 feet)
DDH's U-03-91 to U-03-97	= 386.25 meters	(1,266.9 feet)
DDH's U-03-99 to U-03-111	= 991 meters	(3,250.48 feet)
DDH's U-03-112 to U-03-114	= 1,500 meters *	(4,920 feet)
DDH's U-03-115 to U-03-124	= 5,746 meters	(18,846.88 feet)
DDH's U-08-01 to U-08-03	= 2,278 meters	(7,471.84 feet)
Total:	= 27,096.78 meters	(88,877.44 feet)

* Approximate figure only.

Table: 3.0 Historical URSA Major Minerals Incorporated diamond drilling on the Shakespeare West and Shakespeare East mineral deposits.

Pre URSA Major Minerals Incorporated, resources evaluations and reported deposit size and grade estimations were once carried out by Lochhead, Penstone, for Falconbridge Ltd., have been presented below:

Historical Resource Estimations of the Shakespeare Project Mineral Deposits Known at the Time

Historical Resource Estimates for the Shakespeare Deposit. Date	Depth (feet)	Type	Tonnage	Ni (%)	Cu (%)	Au (g/t)	Pt (g/t)	Pd (g/t)
Lochhead (1951)	500	Maximum	3,273,000	0.34	0.40			
	100	Minimum	1,255,000	0.33	0.37			
Penstone (1974)	190		2,869,000	0.33	0.36			
			2,195,000	0.33	0.36			
Falconbridge (1985)		Global	2,081,373	0.36	0.42	0.22	0.40	0.46
	100	Open Pit	1,106,000	0.37	0.40	0.23	0.41	0.45

Table: 4.0 Shakespeare Project Historical Mineral Resources Data

Between early 2003 and the present an extensive amount of testing and evaluation work has been carried out on the Shakespeare West and Shakespeare East mineral deposits.

The first initial round of resources evaluation work was carried out in early 2003, while second more extensive second round of resources evaluation studies was carried out on the Shakespeare East and Shakespeare West mineral deposit areas by Micon International Limited in the late winter and spring

of 2004, and as a result of such efforts Ursa Major Minerals Inc., was able to report on April 15th, 2004 that:

“Drilling to February 2004 has resulted in an in-pit Indicated Resource of 12.0 million tonnes, grading 0.35% nickel, 0.36% copper, 0.02% cobalt, 0.19 g/t gold, 0.34 g/t platinum and 0.38 g/t palladium at an average cut-off value of CDN\$43.65/tonne total in-situ metal. Using 24-month average commodity prices, the mineralization has a gross in-situ value of CDN\$79.59/tonne. The Indicated Resource includes the Shakespeare East deposit that was discovered by URSA Major in 2002 and Shakespeare West deposit that was previously drilled by Falconbridge Limited (Falconbridge). The attached table presents tonnage and grades for the two deposits. A small amount of Inferred Resource is present in addition to the above Indicated Resource. The resource has been estimated by Micon International Limited (Micon).

SHAKESPEARE DEPOSIT, MINERAL RESOURCE ESTIMATE (At a \$CDN43.65 Average*, and \$CDN24.09 Incremental**, Contained Metal Value Cut off)

Modern Resources Evaluations of the Known Shakespeare Project Mineral Deposits

Category	Tonnes (t)	Ni (%)	Cu (%)	Co (%)	Au (g/t)	Pt (g/t)	Pd (g/t)	Contained Value/t (\$CDN)
Shakespeare East Deposit								
Indicated	9,027,000	0.36	0.37	0.02	0.194	0.344	0.382	\$82.33
Inferred	22,000	0.29	0.24	0.02	0.135	0.229	0.237	\$49.52
Shakespeare West Deposit								
Indicated	2,978,000	0.29	0.33	0.02	0.185	0.341	0.373	\$71.27
Inferred	93,000	0.27	0.31	0.02	0.172	0.330	0.353	\$67.65
Grand Total								
Indicated	12,005,000	0.35	0.36	0.02	0.191	0.343	0.380	\$79.59
Inferred	115,000	0.27	0.29	0.02	0.165	0.311	0.331	\$64.20

Table: 5.0 Modern – Re evaluated Shakespeare Project / Shakespeare East and West Minerals Resource Figures.

* - Average cut off grade from all blocks selected in Whittle optimized pit

** - Marginal cut off grade at the pit rim, which only has costs applied for haulage, G&A and processing.

The mineral resource estimate is based on the following assumptions. The resources would be mined by open pit methods at estimated rates of between 4,500 and 5,000 tonnes/day, milled at existing facilities and an estimated 66% of the contained metal value will be payable after concentrator losses and smelter charges.

Early resource evaluation and modeling work were reported from a block model with Gemcom software and a pit shell optimized with Whittle 4X software using a \$CDN1.75/tonne mining cost, 45° pit slope, \$CDN10.50/tonne processing cost, \$CDN1.00/tonne G&A and a \$CDN4.40/tonne road haulage cost (\$0.08/tonne-kilometre). No external dilution has been applied.

Contained metal value were calculated using 24-month-average commodity prices (nickel \$US4.21/lb, copper \$US0.82/lb, cobalt \$US10.48/lb, gold \$US351.43/oz, platinum \$US635.40/oz and palladium \$US300.31/oz) and an 18-month-average Canadian dollar exchange rate of 0.7067.”

The Shakespeare Nickel Project is presently in the pre-production mining stages of advanced exploration - testing and mineral resources evaluation efforts.

URSA Major completed an updated feasibility study in 2008 defined an open pit mineable, diluted Probable Reserve of 11,824,000 tonnes grading 0.33% nickel, 0.35% copper, 0.02% cobalt, 0.33 g/t platinum, 0.36 g/t palladium and 0.18 g/t gold. The mineral reserve is to a maximum depth of 250 meters below surface and was determined by applying an C\$12.84/tonne NSR internal cut-off value which is derived from the sum of the milling and G&A costs. An additional Indicated Resource of 1,832,000 tonnes grading 0.37% nickel, 0.41% copper, 0.03 % cobalt, 0.36 g/t platinum, 0.39 g/t palladium and 0.22 g/t gold at an NSR cut off of CDN\$50/tonne is located outside of the pit shell.

The majority of the Indicated Resource is down plunge to the east of the pit shell. The results in the holes reported in July 2008 are very encouraging because these intersections define a plunging zone of consistently higher grade nickel mineralization within an envelope of typical Shakespeare grade. The July 2008 drilling, while widely spaced, indicates that the higher grade zone has a strike length of in excess of over 200 meters and remains open to depth. The current drilling has the potential to further extend this zone. If successful, this program could significantly improve the opportunity for developing an underground mine down-plunge from the planned Shakespeare east pit.

In December 2010, URSA Major initiated a drill program to test the down plunge extension of the Shakespeare East deposit. An immediate goal of the program is to expand the size of the Shakespeare deposit and assess the potential of underground production from this part of the deposit. A long section illustrating the proposed targets in relation to the current mining operations, reserves and resources and previous drilling is available on the company's website at www.ursamajorminerals.com.

As part of the URSA Major – Xstrata Canada Joint Venture Project URSA drilled two holes on the Shakespeare East down plunge target totaling 1,515 meters. Diamond drill hole U8-01 was located 200 meters northeast of previous drilling by the company, was drilled to a depth of 798 meters and intersected a narrow 0.35 meter interval of sulphide mineralization at approximately 684 meters that was truncated by a fault structure. Diamond drill hole U-08-02 which was drilled to a depth of 717 meters was used to overcut diamond drill hole U-08-01. Featured highlights in diamond drill hole U-08-02 included: 0.43% Ni, 0.16% Cu, 0.03% Co, and 0.52 grams of combined Au, Pt, and Pd over 1.30 meters, including 0.71% Ni, 0.10% Cu, and 0.48 grams combined Au, Pt, and Pd over 0.35 meters.

A borehole time domain electromagnetic (EM) survey by Crone Geophysics (Crone) identified a strong off-hole conductive response at a depth of 675 meters down the hole. Crone modeled the conductive plate as dipping at 60° to the north and terminating just above the trace of U8-01. This orientation is consistent with that of the Shakespeare mineralization. Hole U8-01 is located east of the Shakespeare property on ground that is currently under a joint venture agreement with

Xstrata Nickel. URSA Major has earned a greater than 81% interest in the property which is currently subject to certain back-in rights to Xstrata.

In the 4th quarter ending January 31, 2011, URSA Major hauled 64,947 tonnes of ore the Strathcona Mill at an average grade of 0.40% copper, 0.34% nickel, 0.02% cobalt, 0.36 g/t platinum, 0.39 g/t palladium, 0.19 g/t gold, and 2.25 g/t silver. The grade for the 4th quarter was approximately 90% of budgeted grade. Shipments to the Xstrata Canada – Strathcona Mill facility for the year ended January 31, 2011 totalled 199,253 tonnes of ore.

Mining at Shakespeare and trucking at a nominal rate of 1,000 tonnes per day continued until approximately March 15th when trucking operations were temporarily suspended due to the spring season, half-load trucking restriction. This restriction is an annual event and is taken into consideration in the annual operating plan for the Mine. Trucking resumes when the spring load restriction is removed by the Municipality of Sudbury, which typically occurs in late May.

**7.0 URSA MAJOR – XSTRATA CANADA, Shakespeare East
Down Plunge Joint Venture Project**

The URSA – Xstrata Shakespeare East Down Plunge diamond drilling Joint Venture Project consisted of 2,278 meters of coring in 3 diamond drill holes (U-08-01, U-08-02 and U-08-03) were put down on the URSA Shakespeare Property, in Shakespeare Township, Ontario.

The initial Joint Venture diamond drilling work began on November 29th., 2010 and was completed on March 11th., 2011. Subsequent to some encouraging bore hole geophysical results indicated from DDH U-08-02, diamond drilling efforts on the Joint Venture Project were continued from June 17th., 2011 through to June 28th., 2011.

The diamond drill hole summary details have been provided in the table below:

Hole No.	Final Depth Meters	Direction Azimuth	Inclination	Torrance O.L.S. Nad 83 UTM Coordinates		
				Northing	Easting	Elevation In M's
U-08-01	798	148	-77	5134402.7	0437085.3	348.5
U-08-02	717	147	-69.5	5134402.4	0437085.0	348.5
U-08-03	<u>763</u>	147	-73	5134404.2	0437088.8	348.2
Total:	2278					

Table 6: URSA / Xstrata Shakespeare East Down Plunge – Joint Venture Diamond Drilling Program, Shakespeare Township, Ontario.

Each of the diamond drill holes encountered the Shakespeare Intrusive Suite of rocks containing low grade Shakespeare like sulphide mineralization with a few isolated intermittent narrow high grade intervals.

The total cost of the URSA –XSTRATA Shakespeare East Down Plunge diamond drilling Joint Venture Project has been determined to be 403,581.52.

A summary of the exploration expenditures incurred by URSA on the Shakespeare East Down Plunge Joint venture project include:

Diamond Drilling =	\$331,079.99
O.L.S., Land – Collar Surveying =	\$965.10
URSA Geology – Exploration =	\$26,646.15
Sample Assaying =	\$7,589.64
Drafting – Graphic Services =	\$1,017.00
Transportation =	\$6,309.69
Borehole Geophysical Surveying =	\$27,509.00
Project Related Field Supplies =	\$2464.95

The total cost of the URSA –XSTRATA Shakespeare East Down Plunge Joint Venture Exploration Project has been determined to be: \$403,581.52

The total costs to be assigned for assessment work credits with respect to the diamond drilling portion of the exploration efforts has been determined to have a value of: \$376,072.52.

The results and expenditures associated with the Crone Geophysics and Exploration Ltd., URSA Shakespeare borehole geophysical survey efforts have been featured in two separate reports which have been previously filed for assessment credits with the Ministry of Northern Development Mines and Forestry.



Figure: 2.0 Google Earth image depicting the relative location of diamond drill holes U-08-01, U-08-02 and U-08-03 as compared with the location of the producing URSA Shakespeare Nickel Mine Site, located in Shakespeare Township, Ontario.

The diamond drilling contractor on the project was George Downing Estate Drilling Ltd. Diamond drill hole U-08-01 was drilled using the LF-70 machine, while U-08-02 and U-08-03 were drilled using the VD-5000 drill machine. The diamond drilling operations were carried out 24 hours per day on 12 hour shifts with two men per crew. The diamond drilling crew included an onsite foreman who was typically present on site during the day shift operations.

conductive plate were necessary so as assist in targeting and exploring the extent of potential sulphide mineralization thought to be associated with the conductive response. The results of the borehole geophysical survey work have been prepared and presented in a separate reports and have been included within Appendix III attached to this report..

Diamond drill hole U-08-02 was started on January 13th., 2011 and was completed on March 11th., 2011 to a final depth of 717 meters. Drill hole U-08-02 was located on the same set up as drill hole U-08-01, so as to overcut the trace of U-08-01, and explore for sulphide mineralization above an interpreted structural zone.

Drilling operations were suspended at 42 meters down the hole on January 18th., 2011, due to an accident on the drilling machine which resulted in serious injury to the drill operator. A detailed investigation was carried out by the Ontario Ministry of Labor and George Downing Estate Drilling Ltd. As a result, some significant operational – safety related modifications were made to the VR-5000 diamond drilling machine. Diamond drilling operation were restarted on February 22nd., 2011.

Diamond drill hole U-08-02 encountered 0.43% Ni, 0.16% Cu, 0.03% Co, and 0.52 grams of combined Au, Pt, and Pd over 1.30 meters, including 0.71% Ni, 0.10% Cu, and 0.48 grams combined Au, Pt, and Pd over 0.35 meters.

8.0 Regional and Local Geology

The reporting of the early exploration and associated investigative efforts on the URSA Shakespeare project and property area were initially reported on by: (Shore, Perkins, Campbell et.al.)

The geological setting and property exploration history in this report, including past exploration and resource estimates, have been well summarized and presented in a report prepared by: Eric Kallio, P. Geo., entitled “Technical Report for the Shakespeare Property, Shakespeare Township, Ontario, NTS 411/5 for URSA Major Minerals Incorporated” and dated November 28, 2002. Kallio’s summarizations have also been incorporated into a number of the Micon International technical reports covering the URSA Shakespeare Project.

As part of a detailed study of the Ni-Cu and PGE bearing sulphide mineralization in the Shakespeare Intrusion Suite, (Sproule, Sutcliffe, et.al., 2004) has done well to summarize surrounding regional geology in the context of the Shakespeare Intrusive Suite.

“The Shakespeare intrusion is located in the northernmost part of the Southern Province, close to the border with the Superior Province and adjacent to the ~2480 Ma Agnew Lake and East Bull Lake mafic intrusions. It is hosted by metasediments of the Hough Lake Group and the Elliot Lake Group members of the 2.45-2.2 Ga Huronian Supergroup.

The Southern Province has experienced a prolonged tectonic and magmatic history from ~2540 – 1000 Ma (Bennett et al., 1992). The province formed in the Neoproterozoic by a plume-induced rifting event between 2.49 and 2.44 Ga (Card and Pattison, 1973). An assemblage of sedimentary and lesser volcanic rocks, the Huronian Supergroup, filled the resultant basins (Bennett et al., 1992). It was intruded by large layered mafic intrusions of the East Bull Lake suite (including the East Bull Lake, Agnew Lake, and River Valley intrusions) and the Matachewan and Hearst Dyke Swarms at 2.4-2.5 Ga and by the Nipissing Gabbro at ~2.2 Ga.

The intrusion of the Nipissing Gabbro into the Southern Province and Superior Province granite-greenstone basement rocks was concurrent with the 2206-2223 Ma Blezardian Orogeny (Noble and Lightfoot, 1992). Buchan et al. (1998) suggested that the Nipissing Gabbro was fed by the 2.2 Ga Senneterre dykes from a mantle plume centred SE of Ungava Bay, and Lightfoot et al. (1987) proposed that the Nipissing Gabbros represent the remnants of an eroded continental flood basalt province. The entire area was subsequently deformed at ~1900-1850 Ma during the Penokean Orogeny.”

Huronian and Early Archean Regional Geological Setting West of the Sudbury Basin

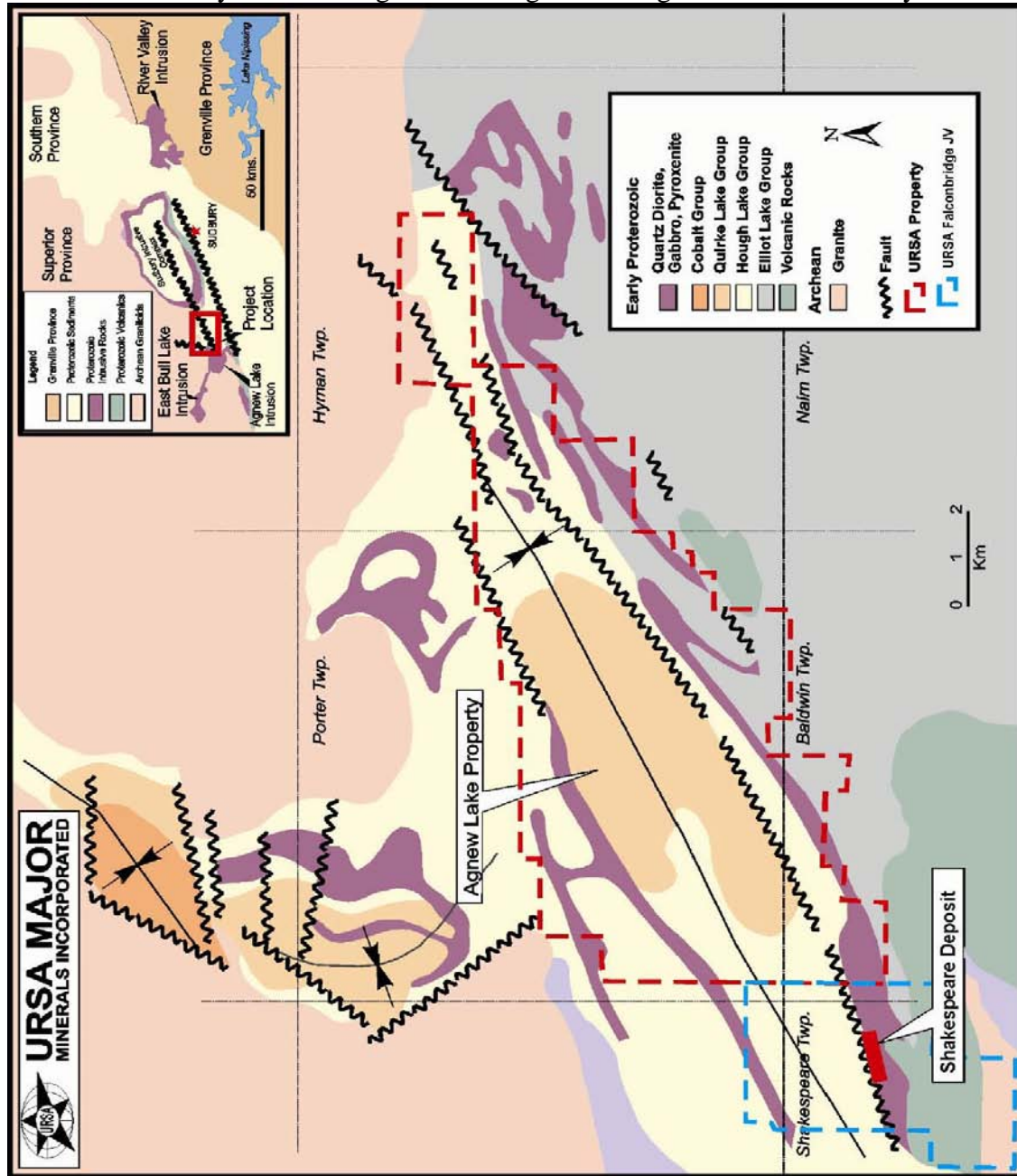


Figure 4.0 Regional Geological Setting

8.1 Brief Geology of the Shakespeare Property and the Surrounding Property Area

A brief summarization of the local geology of the Shakespeare Property and the Shakespeare intrusive Suite has been described as such by (Sproule, Sutcliffe, et. al., 2004):

“The Shakespeare intrusion is part of the 2.2 Ga Nipissing Gabbro event, an extensive mafic-ultramafic intrusive suite in the southern Superior and Southern Provinces in Ontario that contains a wide range of magmatic and hydrothermally-modified magmatic mineralization including: Co-Ag veins (e.g., Cobalt), internal disseminated Cu-Ni-(PGE) sulfides (e.g., Kelly, Davis-Kelly), disseminated Cu-Ni-Cr-(PGE) pipes (e.g., Casson Lake), massive-disseminated Cu-Ni-(PGE) basal sulfides (e.g., Janes, hydrothermally mobilized at Rathbun), and massive-disseminated internal Ni-Cu-Co-(PGE) sulfides (e.g., Louise, Waters) (Card and Pattison, 1973; Lightfoot and Naldrett, 1996; Jobin-Bevans et al. 1998).

The Shakespeare intrusion intrudes meta sediments of the Hough Lake Group and the Elliot Lake Group members of the 2.45-2.2 Ga Huronian Supergroup. It has been dated at 2217 Ma using the U-Pb single zircon method (Sutcliffe et al., 2002). The intrusion is hosted by medium-grained massive to graded quartzite's, and dips steeply north at 40-80°. The intrusion has experienced regional greenschist to amphibolite facies metamorphism, likely during the Penokean Orogeny (Lightfoot and Naldrett, 1996).

The intrusion is a complex differentiated sill approximately 14 km in strike length ranging ~300-430 meters in thickness. It comprises two magmatic packages: 1) a 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 Upper Group is variably chilled against the Lower Group, which suggests that the Lower Group was partly crystallized as a second magma pulse representing the Upper Group entered the magma chamber. Mineralized melagabbro dykes intrude the lower unmineralized gabbro/pyroxenite package and may represent feeders to the Upper Group or small apophyses of the Upper Group cutting downward into the Lower Group.

The biotite quartz diorite, quartz gabbro, and melagabbro contain abundant angular to sub rounded clasts of quartzite (derived from the country rocks), blue quartz eyes, and lesser diorite (autoclastic or exotic) clasts, ranging in size from the mm-scale up to the meter scale. The percentage of clasts in the melagabbro varies from near zero to up to 30%. The clasts are significantly more abundant in the mineralized melagabbro.

The intrusion has been metamorphosed to greenschist facies.”

8.2 Brief Geology and Sulphide Mineralization of the Shakespeare Intrusive Suite

Located on the Ursa Major Minerals Inc., Shakespeare Project Property, is the highly unique Shakespeare Intrusive phase has been identified, which is known to host the very sizable Ni., Cu., and precious metal bearing Shakespeare mineral deposits located north of Agnew Lake in Shakespeare Township. This previously unrecognized intrusive now typically referred to as the Shakespeare Intrusive – Shakespeare Suite which has been traced for a considerable distance along strike off of the Shakespeare Property. The sulphide bearing Shakespeare Intrusive Suite identified on the Ursa Major Minerals Inc., Shakespeare Property has also been identified on the company's 100% owned Agnew Lake Property located several km's further to the east.

The rocks of the Shakespeare Intrusion – Shakespeare suite can be characterized as being made up of a rather unusual assemblage of rocks ranging from a highly felsic dioritic end member through to a highly mafic – ultramafic, pyroxenitic end member. The rocks which form the hang wall to the Shakespeare stratigraphy include a thick sequence of well bedded and foliated fine to medium grained quartz arenites rocks with narrow inter beds of more dirty looking arkosic and finer grained silty metasediments.

More specifically the rocks of the Shakespeare intrusion include fine to medium grained biotite quartz diorite. Some of these rocks contain many small to larger scaled fresh to sometimes highly digested faint remnants of highly assimilated quartzite xenolithic materials in the areas that is sometimes referred to as the intrusive roof zone. Where undisturbed these rocks can vary in thickness up to approximately 100 meters (328 feet) in true thickness. The younger quartz diorite rocks overly the visibly more mafic medium grained, light green to salt and pepper grey – white quartz gabbro materials of approximately 40 to 50 meters (131.20 to 164 feet) in thickness. These rocks contain visible reduced quartz, an increase in amphiboles and pyroxenes, sometimes associated with biotite, illmenite. and occasionally scattered concentrations of sulphide mineralization. The biotite quartz diorite and the quartz gabbro rocks form approximately $\frac{1}{2}$ to $\frac{2}{3}^{\text{rd}}$, of the thickness of the stratigraphy and is sometimes referred to as the upper part of the Shakespeare Suite.

The quartz gabbro overlies a markedly increased mafic – melagabbro unit being made up of predominantly amphiboles after pyroxene, associated with 10 to 30 % feldspars, local biotite and illmenite. The melagabbro unit which has an estimated thickness of from approximately 20 to 40 meters (65.60 to 131.20 feet) can be broken into two sub units which include an upper rock fragment bearing Melagabbro, overlying a more massive medium grained, equigranular melagabbro. The rock fragment bearing melagabbro unit is characterized as 10 to 15 meter thick unit of somewhat altered looking a fine to medium grained amphibole rich rock that has been found to contain an abundance of small mm scaled to large scaled, rarely multi cm scaled rounded to angular shard like rock fragments of former felsic looking rocks such as the overlying quartzite's and or quartz gabbros. Occasionally more mafic looking rock fragments have been noted. The underlying fresher looking, more massive equigranular melagabbro which varies in thickness from 10 to 30 meters, (32.80 feet to 98.40 feet) is characterized as containing visibly increased lighter colored feldspars relative to the amphibole pyroxene minerals and has a more distinctive igneous texture.

In places, the lower contact of the Shakespeare Intrusion – Shakespeare Suite forms a visibly sharp, chilled contact with the adjacent rocks, while at several locations the contact appears evident as a 5 to 15 meter (16.40 feet to 49.20 feet) thick zone of somewhat irregular, sometimes bulbous like admixture of overlying melagabbro rocks and the underlying Nipissing Suite of gabbroic rocks, sometimes referred to as the lower contact footwall zone.

Sulphide mineralization has been recognized within the entire Shakespeare stratigraphy, but is most concentrated within the lower mafic units. Occasionally small mm scaled concentrations of fine grained pyrrhotite associated with chalcopyrite, pyrite and or marcasite, can be seen within the quartz diorite rocks, occurring most notably as sulphide bearing, thin quartz rich fracture filling veins. Marcasite, and occasionally fine grained dusty like appearances of chalcopyrite, galena and sphalerite have been noted within very tight chlorite rich partings developed within the adjacent quartzite sediments and often within the blue grey hornfels altered small to large scaled quartzite xenoliths- megaliths within the quartz diorite rocks.

A visible increase in the presence of strongly developed wide spread, spotted to streaky blue grey hornfels alteration of the quartzite xenoliths usually signifies the approaching contact of the area of the underlying quartz gabbro, which usually also marks a significant increase in the visible sulphide content. Quite often the upper parts of the quartz gabbro are often barren of sulphides, or only contain very small, <1mm sized grains as traces of very fine grained pyrrhotite and chalcopyrite, and usually contains no visible pyrite, relative to the overlying rocks. Progressing downwards through the quartz gabbro small 1mm to 3mm, sometimes up to 5mm isolated composite blebs of pyrrhotite with minor chalcopyrite can develop, and then will be isolated by more barren quartz gabbro. Within the lower parts of the quartz gabbro unit, an increase in the illmenite content usually signifies an approaching increase in the sulphide content. In these areas there begins an increase in the sulphide content, with in places more concentrated sulphides forming intermittent bands - collections of 1mm to 5mm composite blebs of pyrrhotite and chalcopyrite can develop. One or more of these concentrations – collections or bands can form, sometimes being surrounded by relatively barren quartz gabbro.

At or near, sometimes wavering slightly from the often faint contact between the quartz gabbro and the melagabbro rocks, there is a very marked increase in the concentration of and collection of 1 to 10mm, sometimes 15 to 20mm well developed composite blebs of fine to medium grained pyrrhotite and chalcopyrite mineralization, forming more consistent looking zones. The overall sulphide content may be slightly erratic and vary from say 1% to approximately 10% +/- by volume, and can develop for several meters above the contact area.

At or near the contact between the overlying quartz gabbro and the underlying melagabbro there is a very significant increase in the sulphide content, which has resulted in a well developed zone of 10% up to 30 or 40% of larger scaled 5mm to 10mm up to 30mm and 40mm of congealed like, interconnected blebs of fine to medium grained, net textured like pyrrhotite and chalcopyrite. The thickness of these interconnected sulphide range from 0.40 meters to up to 3 meters (1.312 feet to 9.84 feet). Most often the zone of interconnected sulphide mineralization occurs very near the contact between the two rock units, but on occasion was found to waver slightly from one side to the other. Within this collection of sulphides there can be a visible

increase in the chalcopyrite content, which equates to noticeably higher grades, and essentially marks the upper, ore grade part of the mineral deposit.

The bulk of the sulphide mineralization found within the Shakespeare Intrusion, occurs principally within the melagabbro rocks. Both the rock fragment melagabbro and the massive equigranular melagabbro are consistently mineralized with small blebs and disseminations of fine grained pyrrhotite and chalcopyrite mineralization. Typically the rock fragment bearing melagabbro contains both small scaled 3mm to 5mm to sometimes 10mm blebs associated with small scales <1mm to 3mm individual, interstitial grains, disseminations of fine grained pyrrhotite and chalcopyrite mineralization. The sulphide content of these rocks is very consistent and ranges from 3 to 5%, to 5 to 7%, sometimes up to 10 or 12% pyrrhotite, with 1 to 2% sometime 3% of fine grained chalcopyrite. In the upper part of the melagabbro in contact with the quartz gabbro, the blebby concentrations and finer grained disseminations appear to form a transition zone between the blebby and the disseminated styles of sulphide mineralization. Some of the rock fragments were found to contain fine grained chalcopyrite and pyrrhotite, while in some areas it would appear that sulphides were able to collect; may have been trapped; along the edges of some of these rock fragments. Progressing to the lower levels of the unit, there is a noticeable decrease in the dimensions of the sulphide minerals to form a highly consistent collection of smaller scaled mineral grains. Within the upper parts of the melagabbro unit, narrow mm scale to cm scaled, chalcopyrite rich, - pyrrhotite bearing quartz, carbonate, chlorite fracture filling veins have commonly developed within these rocks, and become less evident lower down in the stratigraphy. Some of the sulphides bearing fracture filling veins appear to have been somewhat structurally controlled.

Within the massive equigranular melagabbro near the lower most part of the unit, the rocks are very consistently mineralized with 3 to 5%, often 5 to 7% up to 10% or more of well developed small scaled <1mm to 3mm grains of typically fine grained pyrrhotite and 1 to 3% of fine grained chalcopyrite mineralization. On a few rare occasions, small scaled blebs and sulphide bearing fracture filling veins will be present within the unit. The lower part of the consistently mineralized melagabbro marks the lower edge – lower limits of the ore grade portion of the mineral deposit.

The concentrations of sulphide mineralization found to occur within the lower contact zone, the area of the potential mixing of the Shakespeare Intrusive melagabbro with the underlying barren Nipissing gabbro, can be somewhat variable with narrow to wide sections of poorly to well mineralized melagabbro being separated by significant stretches of barren Nipissing gabbros. Within these rocks concentrations of sulphides are typically in the form of the finer grained disseminations, are consistent with the sulphides found in the massive melagabbro, but can be variable and can range from traces to upwards of 10% +/- by volume in places. These rocks usually do not contain sufficient areas of metal grades to be classified within the main part of the mineral deposit.

The footwall rocks of the Shakespeare stratigraphy include massive fresh looking, usually sulphide poor quartz gabbro, and pyroxene rich – feldspar gabbros of the Nipissing Suite.

8.3 Geology in Diamond Drill Holes U-08-01, U-08-02 and U-08-03

The URSA – Xstrata Shakespeare East Down Plunge diamond drilling Joint Venture Project consisted of 2,278 meters of coring in 3 diamond drill holes (U-08-01, U-08-02 and U-08-03) were put down on the URSA Shakespeare Property, in Shakespeare Township, Ontario.

The three diamond drill holes were essentially collared at approximately 34+05E and 8+85N on the old imperial Falconbridge – URSA exploration grid. The diamond drill holes are located approximately 270 meters (1,875 feet) grid north east along strike of the vertical projection of the Shakespeare East mineralized zone within the limits of the optimized Shakespeare East pit shell design.

At this particular grid location, diamond drill hole U-08-01 was aligned at 148 degrees azimuth, inclined at -77 degrees and drilled to a final depth of 798 meters. Diamond drill hole U-08-02 was aligned at 147 degrees azimuth, inclined at -69.5 degrees and drilled to a final depth of 717 meters. Diamond drill hole U-08-03 was aligned at 147 degrees azimuth, inclined at -73 degrees and drilled to a final depth of 763 meters.

The geology, structures, mineralization and so on encountered in this diamond drilling program is the same as that which was encountered in the historical drilling efforts, ultimately resulting in the definition – outlining of the Shakespeare East and Shakespeare West mineral deposits.

Each of the diamond drill holes encountered basically the same very predictable lithologies down each of the holes, helping to confirm continuity, attitude, sulphide mineralization and so on.

The largest volume of rock in the area consists of well bedded quartz rich sedimentary rocks which have been intruded by the typical Nipissing gabbro rocks. These rocks have been in turn been intruded by the slightly yonder Shakespeare Intrusive Suite. The lower 1/3rd, of the Shakespeare Intrusive Suite hosts well developed, consistent and wide spread concentrations of nickel, copper and precious metal bearing sulphide materials that have been traced along strike for more than 1.6 km's.

The general geology encountered within the diamond drill holes of the joint venture program has been described below:

Geology of Diamond Drill Hole U-08-01

Diamond drill hole U-08-01, cut through approximately 618 meters of moderate to well bedded Mississauga quartzite's, with some minor dispersed arkose sedimentary materials. The quartzite beds often vary in thickness from 100 mm's to upwards of 2 meters in thickness is not uncommon in the area. The quartzite beds often exhibit well defined cross bedding, scour and trough laminations, re working features and the like. The individual quartz rich sedimentary beds are often well defined and typically separated by very fine grained silt rich interbeds that can range in thickness from less than 10 mm, but do not typically exceed 0.50 meters in thickness.

At the depth of 621.15 meters in the hole the upper limits of the Shakespeare Intrusive Suite – roof zone rocks were encountered. These rocks essentially consist of Quartz diorite materials, mottle grey white, massive fine to medium grained, visible sharp upper and lower contact. Intrusive rock incorporated within it a few small 8 mm x 8 mm to 50 mm and up to 90 mm partially assimilated xenoliths of fine grained siltstone materials. Typically these intrusive rocks can contain visible scattered traces of small po grains. Within the limits of the roof zone, there are often Faint visible remnants of fine grained sedimentary rocks amongst what appears to have been originally multiple narrow to potentially large scale injection of Shakespeare quartz diorite into the surrounding sediments. In places the rocks have been moderately stretched out - clearly deformed, and as such can make it difficult to fully appreciate the extent of the intrusive nature of the quartz diorite and so on. In some places it is still possible to examine the faint remnants of the original sedimentary - depositional fabric, which has been overprinted with a distinct structural fabric. The orientation of the deformation alignments seems to be somewhat variable in places. Some large scale xenoliths derived from the country rocks maybe present within the roof zone, and can consist of Quartzite's intermixed with fine grained laminated and more massive, thicker deposited siltstone materials. The siltstone materials vary in thickness from < 1 mm to 9 mm's consisting of many - multiple laminations to much thicker depositions of 1,900 mm's to 2,000 mm's where it would appear that some original fine grained quartz sediments may have been highly contaminated with fine grained silt fractions.

At a depth of 592.94 meters to 602.15 meters, intruding into the surrounding quartzite's a Lamprophyre intrusion was encountered in the drill hole. These rocks are typically light to medium grey, typically fine to medium grained. The upper part of the intrusion is in contact with the well laminated siltstones, the lower part of the intrusion is in contact with a fine to medium grained quartzite. The upper and lower contacts of the intrusion exhibit a thin 100 mm to 130 mm finer grained chill like interior margin. The intrusion has incorporated within it 2% to 3% of small light grey to white rounded to angular xenolithic 2mm to 10 mm x 30 mm rock fragments, suspected to be possible remnant bits of quartzite material derived from the local surroundings. In a few places the intrusive rocks and the xenolithic fragments look to have been stretched out - foliated like.

The Shakespeare quartz diorite roof zone was cut through down to a depth of 674.58 meters having a thickness of 53.43 meters in the hole. The lower parts of the quartz diorite materials form a more continuous interval of what appears to be principally the massive looking igneous

intrusive rock. Near the lower part of the unit there are what appear to be very faint remnants of possibly originally highly assimilated xenolithic rock fragments.

At a depth of 674.58 meters the drill hole encountered the Shakespeare quartz gabbro down to the depth of 684.00 meters, having a particular thickness of 9.42 meters in the hole. At this location the quartz gabbro rocks would appear that the original intrusive rocks were possibly quite massive and coarse grained consisting of decreased quartz feldspar content with a visible increase in the amphibole and pyroxene content relative to the overlying quartz diorite materials..

The contact between the overlying quartz diorite and the underlying quartz gabbro is clearly visible but has likely been re aligned due to the overprinting deformation. In diamond drill hole U-08-01 the rocks have been very moderate to very strongly deformed - stretched out and have a distinct mylonitic texture - appearance. These rocks have also been moderately to strongly altered. It would appear that most if not all of the original mafic minerals have been altered to chlorite. Some carbonate alteration also seems evident. Secondary sulphide minerals, principally pyrite appears to have developed during the alteration - secondary remobilization mineralization. Some highly stretched out or broken remnants of original primary grains and or blebs of po with some cpy can be observed in a number of locations throughout the interval.

In terms of concentrations of sulphide mineralization, from: 683.62 m's to 683.97 m's, there would appear to be the remnants of what could possibly be part of what may have once been interconnected - net textured concentrations of fine grained po. These sulphide bearing materials were sampled but returned only low nickel – copper – cobalt and precious metal values.

In diamond drill hole U-08-01, the contact between the overlying Shakespeare quartz gabbro and the underlying footwall Nipissing type gabbro rocks seems to be marked as a significant structural zone.

This structural zone which extends from 649.00 meters through to 684.00 meters consists essentially of a relatively intact structural - mylonitic zone. This structural zone appears to be fairly wide spread and actually appears to have developed within the upper part of the Shakespeare intrusive suite quartz diorite roof zone, <4d> unit. The influence of the same structure also appears to be evident within the upper part of the Shakespeare quartz gabbro <4c> unit. It would appear that such a structure has significantly dislocated the lower parts of the Shakespeare intrusive suite stratigraphy. The dislocated Shakespeare quartz gabbro <4c>, is in structural contact with the underlying varitextured Nipissing type quartz gabbro <3b> unit.

As a result of the structural dislocation of the lower part of the Shakespeare quartz gabbro and all of the Shakespeare melagabbro, these rocks were brought into contact with the Nipissing type gabbro to quartz gabbro like rocks. These rocks are typically mottled grey - white green, massive, typically coarse to medium grained vari textured in some places. In many places the gabbro contains some visible disseminated and locally more intense development - alteration - with mineral grains of brown - black mica minerals, possibly biotite. Throughout the interval there are several narrow blue grey quartz veins which have developed with the gabbro. Some of these veins also contain some local minor amounts of butter yellow to yellow orange iron carbonate with some light grey to white ca carbonate. In some instances the quartz - carbonate

veins contain traces to locally abundant po and cpy. At some locations within the gabbro rocks the quartz veins seem to contain more cpy as compared with the po content in the same type of veins.

In places the Nipissing type gabbro rocks are typically dark green to brown green, massive medium to fine grained locally altered gabbro materials. In a number of places the gabbro shows signs of fine grained alteration with what appears to be a combination of fine grained mica and chlorite minerals.

Throughout these rocks there are commonly developed many thin <1mm to 15 mm's with several in the order of 20 mm's to 30 mm's to 35 mm, blue grey quartz - fe carb - cal carb and minor chlorite fracture filling veins whiten lesser po. The orientations of many of these late secondary vein features appear to be quite variable.

Diamond drill hole U-08-01 was stopped at a depth of 798 meters within Nipissing type gabbro rocks.

Geology of Diamond Drill Hole U-08-02

Diamond drill hole U-08-02 which was located on the same section as that of DDH U-08-01, includes what is believed to be a completed with little or no interruptions in the succession of quartz rich – bedded sedimentary rocks, followed by and including the Shakespeare Intrusive Suite of rocks and the underlying Nipissing type gabbro rocks. DDH U-08-02 was collared into bedded quartzite's which were drilled though to a depth of 598.92 meters.

The sedimentary rocks in the drill hole are essentially described as quartz rich sediments typically fine to medium grained, light grey to light beige in color. Some locally coarser grained 1mm to 2 mm grains of grey - blue grey quartz can be seen in some places. The typical thickness of the quartzite beds varies from approximately 300 mm's to approximately 1,000 to 2,000 mm's. In many places visible cross bedding has been developed. The thickness and orientation of the thicker quartzite sediments are often defined and marked by many narrow, sometimes quite thin 3mm's to 5mm's to 40 mm's and 50 mm up to locally larger scale more common 200 mm to 400 mm to less common and rare 1,000 mm to 1,350 mm fine grained grey brown siltstone interbeds. The sedimentary rocks exhibit rather consistent bedding inclinations. In a few places it would appear that the interbeds and the overlying and underlying coarser grained sediments have been locally distorted due to possible soft sediment loading deformation. With the injection - intrusion of the Shakespeare Intrusive Suite rocks into the sedimentary rocks, the associated forces of such an event may have resulted in the mild steepening of the sedimentary rocks. From approximately 495 m's., through to 535.73 m's., the quartzite sediments exhibit some visible blue grey spotted and streaky hornfels alteration. In general the rocks look to have been cooked. The possible cooking of the quartzite's by the Shakespeare intrusion may have resulted in the generation of a few narrow 8 mm and 10 mm up to mm quartz rich veins developed both within the quartzite's and the siltstones.

Near the lower most limits of the sedimentary unit, intrusive rocks suspected as being possible a possible individual separate pulse - phase of the quartz diorite part of the intrusion. Within the

broader interval from: 535.73 m's to 581.75 meters, there are what look to be 4 identifiable injections of this possible later phase of Shakespeare quartz diorite, which would seem to have intruded - overprinted onto the original, larger scale intrusive mass of Shakespeare quartz diorite. The orientation of the contacts of this possible younger phase would seem to suggest an irregular shape. It is also possible such rocks may represent a part of the same lamprophyric intrusive materials encountered in diamond drill hole U-08-01.

Rocks are typically grey brown, fine grained, contain the visible feldspar - quartz and biotite constituents. The intrusive contacts are visibly sharp, with the surrounding quartzite's. The rocks near the contacts are fine grained. This intrusive phase has picked up 3% to 5% of small 1mm up to 20mm elongated xenoliths of a very fine grained sediment materials likely quartzite. In places the rocks show signs of undergoing some visible deformation as can be clearly seen with the stretching - alignment of the xenoliths. In places the rocks exhibit streaks and spots of butter yellow iron carbonate. Iron carbonate is prevalent near the intrusive contacts. Small 1mm to 2 mm spots of iron carbonate as pressure shadows around some of the xenoliths. In places visible fine grained stretched out grains of py have been observed.

At the depth of 548.92 meters, down to a depth of 581.21 meters the drill hole cut through a thickness of the Shakespeare Intrusive Suite quartz diorite roof zone materials with abundant quartzite xenoliths.. In this particular drill hole these rocks consisted essentially of several narrow 20 mm to 25 mm up to 1,110 mm, grey - light olive green, somewhat visibly altered, fine to medium grained quartz diorite materials injected within a fine grained quartzite materials. As a result of the intruding quartz diorite, the intruding mass has incorporated - contains many small 15 mm to 110 mm with several 400 mm to 800 mm, to as large and seemingly rare 4,000 mm, typically fine grained blue grey - hornfels altered quartzite xenoliths.

Much of these quartz diorite – quartzite materials have been at least mildly altered. In places such alteration would seem to be evident as with the development of localized fe carb alterations particularly evident within some of the quartz diorite injections. Within the central part of the interval there is some fine grained chlorite alterations is visibly evident.

Trace amounts of small <1mm to 1mm grains of po and cpy are quite common within the quartz diorite injections. Several of the quartz diorite injections contain possibly 1% to 2% of some stretched out small 1mm to 2 mm grains and small 2mm to 3mm blebs of po with traces of cpy. Interestingly and rather oddly - uncommonly in places some of these localized sulphide materials exhibit weak to strong conductivity - connectivity.

At 581.21 meters Shakespeare quartz gabbro was encountered in the diamond drill holes extending to a depth of 618.18 meters. As compared with the same rocks rock units encountered in the adjacent DDH U-08-01, the quartz gabbro rocks in DDH U-08-02 appear to be completely intact and not dislocated by a visible structure.

These rocks are typically massive looking, mottled light-dark grey to grey white, medium to locally coarse grained to noticeably vari textured towards the upper part of the interval. The upper contact with the hornfels altered quartzite sediments is ragged looking with alteration to fine grained brown mica - chlorite minerals distinct across 3mm's to 5mm's. The lower contact

of the unit appears to be somewhat gradational. Some visible deformation –mineral alignment fabric is visibly evident in the immediate contact area.

The quartz gabbro rocks typically contain 1/2 - 1% small 3mm irregular blebs fine grained po, with minor cpy in Shakespeare quartz gabbro, 1mm to 20 mm qtz - fe carb chl fracture filling veins. Near the lower most part of the interval the massive quartz diorite contains appreciable small 3mm round like to 10mm x 15 or 20mm ragged like blebs of fine to medium grained po with visibly lesser cpy. There are short 100 mm to 150 mm parts of the sulphide bearing materials which exhibit connectivity. The bulk of the blebby sulphide minerals appear to be concentrated at or near the base of the Shakespeare quartz gabbro unit. In particular from 615.91 meters to 618.15 m`s, includes the highest concentrations of typically 7 to 10%, locally 25 to 30% of scattered - isolated, locally interconnected blebs of po with visibly much less cpy. The cpy content would appear to be typically in the 1/2 to 1% to locally 1.5 to possibly 2% of contained cpy.

At a depth of 618.18 meters through to 662.00 meters the diamond drill hole cut through the major Shakespeare melagabbro unit which can be subdivided into two distinct subunits.

From essentially 618.18 meters through to 641.83 meters consists of the Shakespeare rock fragment bearing melagabbro phase of the Shakespeare Intrusive Suite. The rocks are typically massive, medium grained, light to medium green in color with some lighter colored feldspars. The interval contains a number of small 3 mm to 5 mm up to 20 mm partially assimilated felsic like somewhat round - sub round rock fragments. Some of the rock fragments maybe remnants of former potentially older quartzite, quartz diorite and or quartz gabbro rocks. Some of the larger scale rock fragments somewhat resemble, maybe highly cooked versions of gabbroic rocks. The rocks typically contain and vary from traces to 1/2 % to commonly 1% to 3% occasionally up to 4% of 1 mm to 3 mm grains of fine grained po and lesser cpy. Throughout the interval there are several narrow 1 mm to 3 mm grey qtz-cal carb-fe carb fracture filling veins. Some of these veins contain fine grained cpy with lesser po.

At 640.64 meters there is a rather interesting looking 5 mm x 30 mm possible remnant rock fragment possibly derived from the coarse grained vari textured gabbro - melagabbro sub unit. The bulk of the rock fragment consists of a blue grey quartz very similar in appearance to the blue grey quartz observed within the vari textured sub unit. The quartz rich rock fragment also contains visible intergrowths of platy mica minerals, as compared with intergrowths of needle like amphiboles in the vari textured gabbro.

From essentially from 641.83 m's to 662.00 meters+/- consists of a massive medium green colored equigranular melagabbro phase of the Shakespeare Intrusive Suite. It would appear that change over from Shakespeare melagabbro through to the Nipissing type gabbro is gradational and not at all visibly - macroscopically very well defined. The melagabbro rocks are typically quite massive - solid looking, broken in a few places with some orthogonal joints. The rocks contain from trace to 1/2%, more commonly 1% to 3% occasionally up to 5% and rarely 7% to 10% of disseminated grains of po and cpy. Towards the lower limit of the interval the cpy seems to have increased relative to the po content. Towards the lower most part of the interval the overall sulphide content drops off to trace amounts. It is suspected that the massive equigranular

melagabbro extends beyond the limits of the visible contained sulphides. In places the equigranular melagabbro contain scattered 1 mm to 8 mm to 10 mm qtz-cal carb-fe carb fracture filling veins. Some of these veins contain fine grained cpy and lesser po.

From 643.30 meters., to 643.42 meters., an isolated narrow shear with abundant fine grained chlorite developed within a deformed broken apart fe carb-cal carb- grey quartz fracture filling vein materials. The isolated shear is developed within the massive melagabbro rocks. Some thin 3 mm to 5 mm chloritic fault gouge materials are evident, and as such would suggest some possible limited physical dislocation of the rocks.

At a depth of 662.00 meters the Nipissing type gabbro rocks were encountered. These rocks are typically massive, medium to dark green, medium grained. The dry core of the Nipissing gabbro materials has a somewhat waxy appearance as compared to the matte like - porous looking appearance of the Shakespeare melagabbro materials located above. The contact between the overlying melagabbro and the underlying gabbro – quartz gabbro materials is commonly gradational; the specific location is not easily discernable at times.

The gabbro interval contains many small < 1mm to 5 mm, up to less commonly 30 mm to 40 mm, average typically 3 mm's to 5 mm's and rarely 100 mm and 110 mm, quartz-epidote-cal carbonate - fe carbonate late, sharp edged - contact fracture filling veins. Occasionally some of these fracture filling veins contain visible small < 1mm grains of cpy and po. The fracture filling veins seem to be commonly orientated at: 59 tca and seemingly less common at: 20 to the core axis.

The diamond drill hole was completed to a final depth of 717.00 meters in the Nipissing gabbro rocks.

Geology of Diamond Drill Hole U-08-03

Further to the drilling of diamond drill holes U-08-01 and U-08-02 in the late Fall of 2010 and Spring of 2011, Crone Geophysics and Exploration Company conducted bore hole geophysics in both of the drill holes so as to possibly located possible sources of conductivity in the vicinity of the drill holes.

The surveying of diamond drill hole resulted in the detection of an off hole conductive source interpreted to be located above diamond drill hole U-08-01. The drilling of U-08-02 was set up so as to test the source of the borehole geophysical response. Subsequent to the drilling of hole U-08-02, this hole was also run with borehole geophysics in an attempt to determine if diamond drill hole U-08-02 had encountered the source of the geophysical response. The interpretation of the geophysical survey work indicated that there was a conductive source located approximately ½ way between diamond drill holes U-08-01 and U-08-02. As such it was decided that a third URSA / Xstrata joint venture hole U-08-03 would be put down to test the geophysical response - area between the two previous drill holes.

Diamond drill hole U-08-03 located on the same section as DDH,'s U-08-01 and U-08-02, was also collared into bedded quartzite sedimentary rocks. The sedimentary rocks were cut down to

a depth of 621.15 meters in the drill hole essentially consisting of quartzite, being light white – grey blue, overall fine to medium grained with common rhythmic coarsening followed by fining of grain size.. Commonly bedded in 610 mm to over 3000mm intervals (average 2000 mm). Individual beds are marked by a fine grained, laminated siltstone that sometimes exhibits evidence of ductile deformation (stretching, lineation of minerals) and is sometimes the target of limonite / hematite alteration. The siltstone varies from 3 mm to over 600mm, but is usually 50mm in thickness. Siltstone intervals increase in width down hole. Quartzite beds vary in purity, with occasional clean beds and more common beds with silt / mica impurities. Commonly dark, fine silt/mica bands cross bedding.

Cross bedding is also commonly observed, although in highly broken / altered areas it is weak to absent. Trough Cross Lamination is present in intervals up to 900mm, but more commonly 200 – 300 mm.

Jointing is common within the quartzite, and seems to form parallel to bedding (pre existing planes of weakness?) but occasionally cross cuts the fabric of the quartzite (particularly in heavily jointed / broken zones).

At the depth of 597.79 meters through to 603.00 meters the diamond drill hole encountered a narrow lamprophyre like dyke. The dyke materials have been described as being fine grained, exhibiting mineral lineation (angle varies, obviously larger scale folding). Dark brown color, has Xenoliths? Of lighter colored aphanitic material (5mm to 25 mm). Rare pyrrhotite was observed in some of the fracture fillings.

At a depth of 621.15 meters through to 622.67 meters, consists of a relatively thin segment of Shakespeare quartz diorite. These rocks have been described as being fine to medium grained (sub mm up to mm scale) quartz diorite varying slightly in color but overall lighter brown-green. Occasionally, relict sedimentary textures observable in xenoliths, but more commonly partial assimilation and baking have destroyed original sedimentary fabric. Mica and amphibole rich, minerals commonly exhibit a strong mineral fabric.

From 622.67 meters the diamond drill hole cut through the Shakespeare quartz gabbro materials down to a depth of 665.66 meters. The quartz gabbro rocks have been described as being fine to medium grained with overall 5% quartz (less towards lower contact) and a “salt and pepper” texture. Very homogenous and consistent in regards to textural features and mineralogy. Rock fragments can be seen near the base of this unit and rarely throughout. Mafic minerals are predominantly amphibole and dark mica. Ilmenite is a common oxide mineral present within the unit. The quartz gabbro rocks commonly contain traces of disseminated pyrrhotite, and chalcopyrite. Some minor chalcopyrite is commonly found along the rims of pyrrhotite grains. Locally 5-7% pyrrhotite and 0.5% to 1% of chalcopyrite around grain edges have been observed. These rocks typically contain small blebs and disseminated grained of po and cpy. Towards the lowermost part of the quartz gabbro unit from 662.06 meters to 665.65 meters there is an increased part of the sulphide content consisting blebs / clumpy disseminated grains, 1-2% chalcopyrite, 3% pyrrhotite and 10% pyrrhotite, with 0.5% chalcopyrite as interconnected sulphides.

At a depth of 665.66 meters through to 702.51 meters, the diamond drill hole encountered the Shakespeare melagabbro rocks. These melagabbro rocks have been described as being dark green, medium grained melagabbro with approximately 20% plagioclase, minor (1% or less) quartz, and approximately 75-80% amphiboles and chloritized mafic minerals. Pyroxenes have undergone a high degree of replacement. In areas, the melagabbro looks “washed out” and crystal boundaries seem mushy. Ilmenite very common, grains almost exclusively 1x1mm to 4x4mm.

The sub unit of the Shakespeare melagabbro, being the rock fragment phase was encountered from 665.66 meters to 694.35 meters in the drill hole. These rocks at this location consisted principally of partially resorbed xenolithic fragments from 1mm x 1mm up to 90mm x 100mm, varying from rounded to angular/sub angular are commonly observed. Occasionally, fragments contain a high amount of sulphides, mostly chalcopyrite with pyrrhotite (no pyrite). The sulphide content within these rocks varies from 0.5% to 5% of disseminated and small blebs of po associated with 0.05% to 1% of cpy.

The lower sub unit of the Shakespeare melagabbro extending down from 694.35 meters through to 702.51 meters. The massive equigranular melagabbro phase essentially consists of texturally equigranular pyroxenes (replaced), amphiboles, and plagioclase present. Semi-blocky grains of pyroxenes are commonly observed. These massive melagabbro rocks in this particular hole have been described as containing relatively fine grained 0.5% of po and 0.5% cpy.

Just below the lower contact of the Shakespeare melagabbro and the underlying Nipissing type gabbro, is the lower footwall – contact admixed zone which extends from 702.51 meters through to 706.73 meters. These rocks essentially consist of a mixture of Shakespeare melagabbro like rocks with Nipissing gabbro like rocks that often form irregularly shaped masses of igneous melt materials located in the footwall of the Shakespeare mineral deposits. These materials commonly contain fine grained – disseminated po and cpy.

At the depth of 702.51 meters through to 763.00 the rocks encountered in the drill hole are essentially Nipissing like quartz gabbro to gabbro like rocks. The rocks have been described as fine to medium grained quartz gabbro with amphibole (actinolite?) replacing pyroxene. Biotite minerals are common. Occasional pyrrhotite / chalcopyrite disseminations with rarer pyrite. Quartz – carbonate fracture filling veining is also common within these rocks.

9.0 Assay Results from Sampling of the Diamond Drill Holes

Each of the diamond drill holes, U-08-01, U-08-02 and U-08-03, put down in this drilling program encountered the typical lithological assemblages of hanging wall sedimentary rocks, which followed by the Shakespeare Intrusive suite or rocks and ending in the underlying Nipissing type gabbro rocks to form the footwall of the of the mineralized target horizon.

A total of 196 samples were collected from the 3 diamond drill holes. As part of these efforts, 44 samples were collected for DDH U-08-01, 64 samples were collected for DDH U-08-02 and 88 samples were collected from DDH U-08-03. Several barren field blanks, ¼ duplicate samples and standard reference materials were also included within the sample streams. All of the core sample materials were submitted to Accurassay Laboratories for analysis. Sample materials collected from DDH U-08-01 were analyzed for Au, Pt, Pd, Ag, Ni, Cu and Co. Samples collected from DDH's U-08-02 and U-08-03 were analyzed for Au, Pt, Pd, Ni, Cu and Co.

Each of the drill holes cut through a typical thickness of the Shakespeare style of sulphide mineralization within the lower 1/3rd., of the Shakespeare Intrusive suite.

Although the encountered lithologies and extent – distribution of the sulphide mineralization were determined to be consistent with the current understanding of the working deposit model, overall the wide spread mineralization tended to be lower grade with isolated narrow spikes of some higher grade materials.

Diamond drill hole U-08-01, Shakespeare like sulphide mineralization was encountered and essentially sampled from 679.00 meters through to 706.32 meters. The sulphide mineralization was somewhat narrower than expected mainly on account that the much of the mineralized horizon seemed to have been cut off by a significant structure. The best assay results obtained from the drill hole was 0.057% Ni, 0.024% Cu, 0.008% Co and 0.050 grams combined of Au, Pt, Pd and Ag, over 2.49 meters.

Diamond drill hole U-08-02 Shakespeare like sulphide mineralization was encountered and essentially sampled from 593.38 meters through to 654.70 meters. Some selective highlighted values obtained from the sampling include: 0.43% Ni, 0.16% Cu, 0.03% Co, and 0.52 grams of combined Au, Pt, and Pd over 1.30 meters, and 0.71% Ni, 0.10% Cu, and 0.48 grams combined Au, Pt, and Pd over 0.35 meters.

Diamond drill hole U-08-03 encountered sulphide mineralization and was sampled from 635.44 meters through to 703.51 meters down the hole. Some selective highlighted values obtained from the sampling include: 0.29% Ni, 0.23% Cu, 0.018% Co, and 0.64 grams combined Au, Pt, and Pd over 2.33 meters. This interval includes: 0.41% Ni, 0.25% Cu, 0.025% Co and 0.53 grams combined Au, Pt, and Pd over 1.33 meters.

For specific sample – sample intervals, assay result details and the like please refer to Appendix I (diamond drill core logs) and or Appendix IV (assay certificates) to review the results of the sampling as indicated within the official assay certificates.

10.0 URSA Major Minerals Incorporated QA / QC Program

A combined total of 196 samples were collected in three specific sample batches – streams for diamond drill holes U-08-01, U-08-02 and U-08-03. As part of these efforts, 44 samples were collected for DDH U-08-01, 64 samples were collected for DDH U-08-02 and 88 samples were collected from DDH U-08-03. Several barren field blanks, ¼ duplicate samples and standard reference materials were also included within the sample streams.

As part of the core logging process, the various samples numbers, sample lengths marked out and recorded onto an Xcel spread sheet specially set up for each of the drill holes. Recorded sample lengths were nominally in the order of 1 meters or as close to that length as practical. In some instances where warranted, shorter sample intervals would be marked out where there might be some interesting looking – more intense looking sulphide mineralization as an example.

Each assay sample tag was located at the ends of each sample prior to sample cutting.

The marked out core samples were cut using a 14 inch diameter, gasoline powered, diamond saw. A wooden jig device has been mounted on the cutting table to accommodate lengths of core ranging from a few cm's to as long as 30 or so cm's. Sawing core samples does were well to be able to obtain and preserve in most cases a consistent ½ core.

For these particular efforts, ½ of the core gets sampled, the opposing half remains in the core box for the records and potential future referencing and so on.

Included within the sample stream of core samples typically one sometimes two barren quartzite field blanks are used to start out a particular sample stream. Typically one barren field blank material is included at the very end of a sample stream. The placement of such samples is sometimes a good way to determine if there might be any samples that may have been mixed up – switched around and so. Barren field blanks are often strategically positioned in a number of different ways within the sample stream so as to check in on how well the lab cleans up after each sample. At times field blanks are inserted immediately after a high grade sample. If the preparation machines are not being properly cleaned, then the field blank may become contaminated.

¼ duplicate samples at selective locations are also collected to check previously sample assays. Materials chosen for such samples may range from very low grade to some higher grade materials. Materials which exhibit particularly erratic characteristics may not be chosen, as in some instances it might be quite evident that sending in a ¼ duplicate to check the values against an original ½ core sample may give highly variable results. Such is sometimes evident in areas of more scattered blebby sulphide mineralization.

Standard reference materials have also been included within the sample streams. Currently the OGS LDI-1 standard reference materials are being used. Nominally 100 grams of these very fine grained materials are measured out and secured into a small, new Kraft paper sample bags and numbered accordingly to their position within the sample stream. These sample material are secured into plastic sample bags prior to shipment.

No metal jewelry or the like is worn by any persons conducting core logging, sample cutting, bagging and so on.

The core logging and sampling efforts and the like are managed and closely monitored by the assigned project Q.P.

Prior to collecting the sample, the sample numbers are written with indelible marker on both sides of a 6 mil plastic sample bag. There is no pre numbering of any of the sample bags. Samples materials cut are collected into sample bags, and each sample bag is immediately secured with a nylon zip tie or wrapped tight with a length of vinyl flagging tape. All samples collected get entered into a tracking spread sheet which includes the sample number, the hole and box number and the name of the person collecting the samples.

Bagged samples are organized into rows of 9 samples each, prior to being placed into rice bag. Clean – new rice bags are used to hold the various samples to be shipped to the assayer's preparation lab. Each rice bag is labeled with who the samples are from, name and telephone number of the contact person, the sequence of sample numbers contained within the rice bag, and the bag number. The sequence of sample numbers and bag numbers are recorded in the tracking spread sheet including the name of the person who inserted the samples. Each of the rice bags are secured with zip ties prior to being loaded for shipment.

Prior to delivery to the preparation laboratory the required chain of custody forms are filled out specifically listing the samples and the metals analyses requested, number of bags in the shipment. Once the shipment arrives and is handed over to the preparation lab, typically the lab manager signs and dates the assay requisition forms acknowledging receipt of shipment at the lab. Copies of the forms and signatures are maintained as part of the required QA / QC records.

Samples assayed for this diamond drilling exploration program were analyzed for Au, Pt, Pd, Ag, Ni, Cu and Co., using traditional fire assaying and wet chemistry dissolution methods with atomic absorption finish.

Assay results from the lab are received in an Excel spreadsheet format. Received assay data is brought into a pre established spreadsheet format for which it is then possible to match up the various sample numbers with the various intervals down the hole. The assay data is reviewed, which includes reviewing values obtained for the field blanks, ¼ duplicate and standard reference materials. These various samples are arranged in such a fashion so as to be able to quickly assess the values obtained. If no issues have been identified then it is possible to proceed with the processing of various weighted average grade scenarios. Entire spreadsheets containing an assortment of WAG scenarios are provided to the company president for review, comment and ultimate decision as to specific intervals that might be included within a company press release.

All records of these efforts are currently being maintained for future referencing purposes.

11.0 Conclusions

From late November of 2010 to mid March of 2011 and June 2011, URSA Major Minerals Incorporated carried out exploration diamond drilling exploration on what has been referred to as the Shakespeare East Down Plunge area to extend the results of previous geological, geophysical and diamond drilling exploration in the area to the west of the current target.. The Shakespeare East Down Plunge area is located in Shakespeare, Porter, Baldwin and Dunlop Townships

The URSA – Xstrata Shakespeare East Down Plunge diamond drilling – exploration Joint Venture Project consisted of 2,278 meters of coring in 3 diamond drill holes (U-08-01, U-08-02 and U-08-03) were put down on the URSA Major/Xstrata Shakespeare Property, in Shakespeare Township, Ontario. The exploration efforts also included PEM borehole geophysical surveying performed in DDH's U-08-01 and U-08-02. The geophysical survey reports containing the specific details and results of borehole survey efforts can be found within the appendices at the back of this technical report.

The initial Joint Venture diamond drilling work began on November 29th., 2010 and was completed on March 11th., 2011. Subsequent to encouraging bore hole geophysical results indicated from DDH U-08-02, diamond drilling efforts on the Joint Venture Project were continued from June 17th., 2011 through to June 28th., 2011.

The recent Shakespeare East down plunge diamond drilling efforts continue to demonstrate the good continuity of the Shakespeare Intrusive suite and favourable mineralizing environment – mineralized horizon north east along strike and down dip.

Assay results obtained from the sampling of the mineralized intersections encountered in each of the drill holes returned metal values consistently lower metal values that the previous drilling efforts located along strike to the south west. Despite the overall lower grades of the widespread development of the sulphide mineralization, two of the holes exhibited isolated but quite narrow, higher grade sections. These isolated higher grade values are consistent with some of the higher grade sulphide intersections obtained in previous diamond drilling programs along strike to the south east.

Complete thickness of the sulphide bearing Shakespeare stratigraphy was encountered in two of the three holes put down on the section. In the first diamond drill hole of the program, a very significant thickness of the sulphide bearing stratigraphy has been dislocated due to a cross cutting structure.

Although the results of the assaying of the sulphide bearing intersections are relatively low, the overall width – distribution of the sulphide mineralization within the with the quartz gabbro and melagabbro is consistent with those thicknesses encountered in other parts of the Shakespeare East and West mineral deposits. The lower grade values may possibly represent a weaker part of a much larger scale mineralizing environment.

At present the full extent of such a favorable horizon has not been completely tested.

The results of the exploration efforts continue to suggest that the favorable target horizon remains open along strike and down dip and should be further explored in an attempt to locate higher grade intervals of nickel-copper and PGM mineralization.

Additional exploration work is being recommended to continue to explore and test the Shakespeare Intrusive suite for possible high grade nickel – copper and precious metal bearing sulphide deposits along strike – down dip and in the down plunge direction.

12.0 Recommendations

Any further considerations – recommendations, would need to first include an assessment of the potential dislocation complexities associated with structural zones and the like which have in the case of DDH U-08-01 significantly dislocated a substantial part of the sulphide bearing Shakespeare Stratigraphy.

Attempts should be made so as to assess the particular three dimensional distribution characteristics of the quality and grades of the sulphide mineralization so as to possibly define any particular thickening trend – vector which may point exploration efforts towards possible higher grade opportunities.

The results of the exploration efforts would clearly suggest that the prospective favourable metal bearing within the Shakespeare Intrusive suite remains open along strike and down dip.

Further exploration of these open areas would require potentially deeper diamond drilling, followed up with bore hole geophysical surveying.

The identification – assessment with respect to structural dislocation, and or a vector towards possible higher grade opportunities would be needed to define specific locations and drill requirements. It is quite likely that such programs would involve something in the order of 2,000 to 3,000 meters of diamond drilling to start.

An additional approach might include a 100 – 200 meter +/- step out north east along strike from the fence of three holes described in this report. Such efforts might include drilling possibly two holes in the order of 900 to 1000 meters each to further test and possibly extend the known limits of the Shakespeare Intrusive suite and any contained sulphide mineralization.

A third approach for possible future consideration, might involve the drilling of a deep “non traditional” hole well down dip from the previous drilling efforts. Such holes would hopefully encounter the full scale Shakespeare stratigraphy and sulphide mineralization. Such a drill could be utilized as a platform for borehole geophysics.

Depending on the results of the above recommendations, additional drilling and borehole geophysics maybe warranted,

13.0 Certificate of Qualifications

I, Harold Joseph Tracanelli, Getn, P.Geo., do hereby certify that:

I have provide geological related consultative services based from:
192 North Shore Road,
Onaping, Ontario.
~~POM 2R0.~~

I have graduated from Cambrian College of Applied Arts and Technology, in Sudbury, Ontario with a Geological Engineering Technician Diploma in 1986.

I have been actively involved in various prospecting efforts since 1976, and since 1983 have been actively engaged as an Exploration Geologist, performing many of the required duties and functions on gold, base metal and industrial mineral exploration projects in Canada and Mexico.

I am a member of the Prospectors and Developers Association of Canada, the Sudbury Prospectors and Developers Association, and the Ontario Prospectors Association.

I am a member in good standing with the Associated Professional Geoscientists of Ontario (APGO) No. 1156, having attained the status of practicing member in November 2004.

I am responsible for compiling and preparing the report describing the Shakespeare East Down Plunge diamond drilling Joint Venture project on the URSA Major Shakespeare Property, in Shakespeare Township (G-3001) District of Sudbury, Ontario, Sudbury Mining Division.


I am not presently aware of any material fact or material change with respect to the subject matter as presented in the Executive Summary that is not reflected in the main body of the Technical Report.

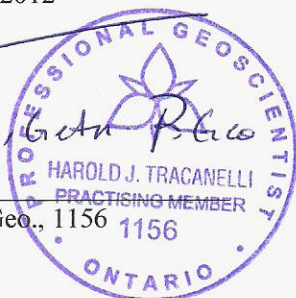
I have partaken and have been present for exploration related activities in the field on the URSA Major – Shakespeare Property from December 12th, 2010 to March 11th, 2011, and June 18th, 2011 to June 28th, 2011 and in addition have overseen, participated directly and have provided geological – exploration support while the Shakespeare East Down Plunge exploration Joint Venture Project was underway, the details of which have been described within the report.

I am independent of (URSA Major Minerals Incorporated) I presently neither retain, nor expect to retain any designated interest in any corporation involved in the described property, either directly or indirectly, nor do I currently own any interest or hold securities nor have been promised such equities or positions in the described corporation and or its affiliates.

As of this date hereof, to the best of my knowledge, information and belief, this report has been prepared and contains all of the scientific and technical information and items required and disclosed in such a manner so as to prevent such a report from being misleading.

Dated the 12th, day of January 2012


Harold J. Tracanelli, Getn, P.Geo., 1156



14.0 List of Reference Materials Used within this Report

2002; Eric Kallio, P.Geo., entitled “Technical Report for the Shakespeare Property, Shakespeare Township, Ontario, NTS 41I/5 for URSA Major Minerals Incorporated

2004; R.A. Sproule, R. Sutcliffe, H. Tracanelli, and C.M. Lesher; Palaeo Proterozoic Ni-Cu-PGE Mineralization in the Shakespeare Intrusion: A New Style of Nipissing Gabbro-Hosted Mineralization

2010 December 01st., URSA Major Minerals Press Release, URSA Major Minerals resumes exploration drilling at the Shakespeare Nickel Mine and targets resource expansion, Sudbury area, Ontario

2011 February 08th., URSA Major Minerals Inc., Press Release, URSA Major Minerals announces 2011 exploration plans for its Ontario Nickel-Copper and PGM projects and update on fourth quarter operations at Shakespeare Mine

2011 June 08th., URSA Major Minerals Inc., Press Release, URSA Major Minerals' exploration drilling continues to expand Shakespeare nickel deposit, Sudbury area, Ontario

2011 March., Harold Tracanelli, Getn, P.Geo., Diamond drill core logging for the URSA / Xstrata Shakespeare East Down Plunge diamond drilling program, DDH U-08-01 and U-08-02

2011 August., Ian Dasti, Diamond drill core logging for the URSA / Xstrata Shakespeare East Down Plunge diamond drilling program, DDH U-08-03

APPENDIX I

Diamond Drill Hole Core Logs and Associated Supporting Documentation for Diamond Drill Holes U-08-01, U-08-02 and U-08-03

URSA Major Minerals Incorporated

Shakespeare East Down Plunge Diamond Drilling Program

Shakespeare Township, Ontario Sudbury Mining Division

URSA Diamond Drill Hole Number:

NAD 83 UTM Coordinate Location of the Diamond Drill Hole:

Diamond Drill Hole Collared on Mining Claim Number:

Date Diamond Drill Hole Started:

Drilling Halted Due To Diamond Drilling Accident:

Drilling Resumed After Diamond Drill Machine Modifications:

Date Diamond Drill Hole Completed:

Azimuth of Diamond Drill Hole:

Inclination of the Diamond Drill Hole:

Diamond Drilling Carried Out By:

Machine Type:

Diamond Drill Core Logging Carried Out By:

Diamond Drill Hole Objective:

Drill Hole Results:

Highlights:

Total Depth of Diamond Drill Hole:

Assay Laboratory Work Order Numbers:

**Shakespeare East Down Plunge
Diamond Drilling Joint Venture Project**

U-08-02

0437086E and 5134403N

S-1203118 Leased Claim

January 13th., 2011

January 18th., 2011 @ 42.00 meters

February 22nd., 2011 @ 42.00 meters

Friday March 11th., 2011 @ 717 meters

147 Degrees Az.

-69.5 degrees

George Downing Estate Drilling Ltd

VR-5000 Drill 43

Harold J. Tracanelli, Getn, P.Geo

To overcut the trace of diamond drill hole

U-08-01, and test for mineralization above interpreted structural zone.

Wide spread sulphide mineralization, typically low grade Ni, Cu and precious metals

0.71% Ni, 0.10% Cu, 0.48 grams Au, Pt, Pd over 0.35 meters

**0.43% Ni, 0.16% Cu, 0.03% Co and 0.52 grams combined Au, Pt, Pd over 1.30 meters
717 meters**

Job Number: 201110097

Date Received: 03/24/2011

Date Completed: 04/06/2011

<u>From</u> <u>Meters</u>	<u>To</u> <u>Meters</u>	<u>Distance</u> <u>Meters</u>	<u>Litho</u> <u>Code</u>	<u>Discription</u> <u>Major Interval</u>	<u>Code</u>	<u>Description</u> <u>Minor Internal Interval</u>	<u>Measured</u> <u>Feature</u>	<u>Alignment</u> <u>TCA</u>	<u>From</u> <u>Meters</u>	<u>To</u> <u>Meters</u>	<u>Distance</u> <u>Meters</u>
0.00	3.14	3.14	OB	Casing, dirt overburden materials.	OB				0.00	0.00	0.00
3.14	535.73	532.59	1a / 1b	Quartzite's and quartz arenites to bedded quartzite's with siltstone interbeds.							

The quartz rich sediments are typically fine to medium grained, light grey to light beige in color. Some locally coarser grained 1mm to 2 mm grains of grey - blue grey quartz can be seen in some places. The typical thickness of the quartzite beds varies from approximately 300 mm's to approximately 1,000 to 2,000 mm's. In many places visible cross bedding has been developed. The thickness and orientation of the thicker quartzite sediments are often defined and marked by many narrow, sometimes quite thin 3mm's to 5mm's to 40 mm's and 50 mm up to locally larger scale more common 200 mm to 400 mm to less common and rare 1,000 mm to 1,350 mm fine grained grey brown siltstone interbeds. The sedimentary rocks exhibit rather consistent bedding inclinations. In a few places it would appear that the interbeds and the overlying and underlying coarser grained sediments have been locally distorted due to possible soft sediment loading deformation. With the injection - intrusion of the Shakespeare Intrusive Suite rocks into the sedimentary rocks, the associated forces of such an event may have resulted in the mild steepening of the sedimentary rocks. From approximately 495 m's., through to 535.73 m's., the quartzite sediments exhibit some visible blue grey spotted and streaky hornfels alteration. In general the rocks look to have been cooked. The possible cooking of the quartzite's by the Shakespeare intrusion may have resulted in the generation of a few narrow 8 mm and 10 mm up to mm quartz rich veins developed both within the quartzites and the siltstones.

For the most part the sedimentary rocks look to be quite solid - intact with little or no indications of any significant dislocation like fracturing, shearing like deformation, the development of fault gouge and or alteration typically associated with some structural zones.

				0.00
Bedding	56	123.80	123.80	0.00
Bedding	59	255.00	255.00	0.00

From: 255.36 m's., to 256.09 m's., a series of 2 mm to 12 mm up to 40 mm white grey quartz and iron carbonate bearing veins with 2 mm up to 7 mm., spider web like fine grained pyrite, marasite and pyrrhotite and similarly shaped clots of fine grained green chlorite minerals. The veins have principally developed within a fine grained grey brown, larger scale 1,460 mm siltstone interbed.

Quartz Veining with py, mar, po	61 and sinuous 21	255.36	256.09	0.73
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From the Surface at: 3.14 meters down to 77.65 m's., exhibits some localized mild to moderate fracturing, much of which appears to have developed along some of the cross bedding surfaces. Many of the fracture surfaces have been well coated with yellow-orange limonite and less - minor hematite staining. The extent of the rusty fracturing attest to the depth extend of surface oxidation deep into the sedimentary rocks. In several places the oxidation efforts have migrated outwards from the various cracks and so on.

Bedding	67	318.14	318.14	0.00
Bedding	57	389.90	389.90	0.00
Bedding	67	479.12	479.12	0.00
Bedding	73	527.40	527.40	0.00
Surface Oxidization of Fractures	63 less common 18	3.14	77.65	74.51

Below the surface weathered fractures, there are a few scattered zones of visibly broken - fractured sediments. Many of the fracture surfaces in these isolated fracture zones have been coated with fine grained hematite, limonite, carbonate minerals of light blue green chlorite minerals.

Fractured Core	45 and less commonly 25	348.35	351.59	3.24
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At: 304.16 m's., to 304.21 m's., a narrow, isolated intense fracturing with a 3 mm chlorite rich fault gouge, appears to have developed within a thin siltstone interbed.

Fractured Core	33 and 5, less commonly 9	447.41	452.29	4.88
Fault Gouge	69	304.16	304.21	0.05

				From approximately 485.00 m's., down to the top of the Shakespeare Intrusive Suite at 535.73 m's., there are several narrow 30 mm to 70 mm up to 1,300 mm fracturing of the sediments, seem to be particularly developed along thin siltstone interbeds and cross beds in the quartzite's.		Fractured Core	67	485.00	535.73	50.73
533.60	535.73	2.13	1a / 1b	Quartzite, light to dark grey, typically fine grained, bedded and cross bedded, with typically < 1mm to local rare 40 mm dark chlorite rich - altered siltstone interbeds.	Many of the fracture surfaces of the sediments contain micro thin visible marcasite and or pyrite.	Bedding - xbedding	85	534.60	534.60	0.00
					Somewhat irregular, 40 mm dark grey, chl bearing - alt'd silt stone interbed.	siltstone interbed	78	534.49	534.49	0.00
535.73	538.92	3.19	4d	Shakespeare Intrusive Suite quartz diorite - roof zone, suspect represents a possible individual seperate pulse - phase of the quartz diorite part of the intrusion. Within the broader interval from: 535.73 m's to 538.92 meters, there are what look to be 4 identifiable injections of this possible later phase of Shakespeare quartz diorite, which would seem to have intruded - overprinted onto the original, larger scale intrusive mass of Shakespeare quartz diorite. The orientation of the contacts of this possible younger phase would seem to suggest an irregular shape.	Upper contact, is fairly visible associated with iron carboante and fine grained chl., minerals.	Upper Contact	75	535.73	535.73	0.00

				<p>Rocks are typically grey brown, fine grained, contain the visible feldspar - quartz and biotite constituents. The intrusive contacts are visibly sharp, with the surrounding quartzites. The rocks near the contacts are fine grained. This intrusive phase has picked up 3% to 5% of small 1mm up to 20mm elongated xenoliths of a very fine grained sediment materials likely quartzite. In places the rocks show signs of undergoing some visible deformation as can be clearly seen with the stretching - alignment of the xenoliths. In places the rocks exhibit streaks and spots of butter yellow iron carbonate. Iron carbonate is prevalent near the intrusive contacts. Small 1mm to 2 mm spots of iron carbonate as pressure shadows around some of the xenoliths. In places visible fine grained stretched out grains of py have been observed.</p>	<p>Lower contact, visibly deformed - sheared over about 25 mm's, with some micro brecciation, iron carb, calc carb, chl alt'n, fe carb streaks contain rare < 1mm grains of cpy.</p>	Lower contact	39	538.92	538.92	0.00
					<p>At: 538.00 m's, moderate to well developed stretching - foliation</p>	Foliation	45	538.00	538.00	0.00
					<p>From: 538.70 m's to 539.21 m's., a relatively narrow broken core fracture zone.</p>	Broken fracture zone	56 and 2	538.70	539.21	0.51
548.92	581.21	32.29	4d / 1a	<p>Shakespeare Intrusive Suite quartz diorite roof zone materials with abundant quartzite xenoliths. The interval consists of several narrow 20 mm to 25 mm up to 1,110 mm, grey - light olive green, somewhat visibly altered, fine to medium grained quartz diorite materials injected within a fine grained quartzite materials. As a result of the intruding quartz diorite, the intruding mass has incorporated - contains many small 15 mm to 110 mm with several 400 mm to 800 mm, to as large and seemingly rare 4,000 mm, typically fine grained blue grey - hornfels altered quartzite xenoliths.</p>	<p>From: 562.95 m's to 565.50 m's. Similar part of the quartz diorite intrusive phase as that which has been described from: 535.73 m's to 538.92 m's</p>	Upper Contact / Lower Contact	46 and 60	562.95	565.50	2.55

Much of the entire interval seems to have been at least mildly altered. In places such alteration would seem to be evident as with the development of localized fe carb alterations particularly evident within some of the quartz diorite injections. Within the central part of the interval there is some fine grained chlorite alterations evident.

Trace amounts of small <1mm to 1mm grains of po and cpy are quite common within the quartz diorite injections. Several of the quartz diorite injections contain possibly 1% to 2% of some stretched out small 1mm to 2 mm grains and small 2mm to 3mm blebs of po with traces of cpy. In places some of these localized sulphide materials exhibit weak to strong conductivity - connectivity.

From: 566.84 m's to 567.86 m's. Similar part of the quartz diorite intrusive phase as that which has been described from: 535.73 m's to 538.92 m's. At the upper contact, particular visible fine grained chl alteration.	Upper Contact / Lower Contact	52 and 65	566.84	567.86	1.02
From: 569.18 m's to 573.43 m's. Similar part of the quartz diorite intrusive phase as that which has been described from: 535.73 m's to 538.92 m's. The upper contact is sharp but undulating like with some fe carb - calc carb mat'ls.	Upper Contact / Lower Contact	31 and 41	569.48	573.43	3.95
From: 575.71 m's to 581.75 m's., mega xenolith of blue grey altered quartzite with some quite faint, narrow 5 mm to 40 mm poorly developed injections of Shakespeare like quartz diorite materials, into the sedimentary rocks.	Megalith		575.71	581.75	6.04
At: 546.37 m's., mild but visible stretching - foliation like fabric.	Foliation	72	546.37	546.37	0.00
At 543.67 m's, example of a typical narrow 1 mm to 4 mm yellow orange fe carb, with some qtz, and fine grained chl mineral bearing fracture filling veins, cutting - developed within both the quartzite xenoliths and the quartz diorite injections. Some of these fracture fillings contain fine grained po and cpy.	Fe carb - qtz fracture fill veins	32 less common 56 to 83	543.67	578.75	35.08
From: 548.80 m's to 549.41 m's., pervasive, wide spread fe carb alteration of a solide - intact deformed looking mix of quartz diorite and quartzite. Quartz diorite contains visible small < 1mm grains of po.	Fe carb alt'n		548.80	549.41	0.61
Crude fabric alignment weak foliation as evident from the fe carb	Foliation	69	549.33	549.33	0.00

At: 549.00 m's., 5 mm x 10 mm pear shaped bleb of po rimmed on one edge by cpy.	Bleb po with cpy	549.00	549.00	0.00
1% -2% of scattered small 1mm to 2mm local mild interconnected po with traces cpy in QD injection.	Diss'd Po, tr cpy	544.82	545.51	0.69
1% - 2% possible 3% scattered small 1mm to 2mm local mild interconnected po with traces of cpy in QD injection	Diss'd Po, tr cpy	545.51	546.03	0.52
Pervasive fe carb alt's of QD inject'ns, rare 5 mm x 10 mm blebs po rimmed with some cpy.	Diss'd Po, tr cpy	548.80	549.41	0.61
Blue grey, hornfels altered quartzite materials. May contain faint visible traces of sulphide minerals.	Diss'd Po, tr cpy	549.41	550.15	0.74
1% to 3% of small < 1mm grains and 2 mm x 10 mm stretched blebs of po with some cpy in 10 mm to 230 mm QD inject'ns	Diss'd Po, tr cpy	550.15	550.60	0.45
1/2% to 1% of disseminated small < 1mm grains of po in a series of 10 mm to 230 mm injections of QD.	Diss'd Po, tr cpy	550.60	551.56	0.96
1% to local 2% small < 1mm grains, to rare interconnected collection of po with some minor cpy in QD injections.	Diss'd Po, tr cpy	551.56	552.00	0.44
1% - 2% possibly 3% of small <1mm grains to 3mm - 3mm x 25 mm stretched - interconnected blebs po in the QD inject'ns.	Diss'd Po, tr cpy	552.00	552.74	0.74
Blue grey, hornfels altered quartzite materials. May contain faint visible traces of sulphide minerals.	Diss'd Po, tr cpy	552.74	553.65	0.91
1% to local 2% small < 1mm grains, to rare interconnected collection of po with some minor cpy in QD injections.	Diss'd Po, tr cpy	553.65	554.65	1.00

581.21	618.18	36.97	4c	Shakespeare quartz gabbro. Typically massive looking, mottled light-dark grey to grey white, medium to locally coarse grained to noticeably varitextured towards the upper part of the interval. The upper contact with the hornfels altered quartzite sediments is ragged looking with alteration to f.grn'd brown mica - chlorite minerals distinct across 3mm's to 5mm's. The lower contact of the unit appears to be somewhat gradational. Some visible deformation - alignment fabric is visibly evident in the immediate contact area.	Upper ragged like contact with localized mica-chl alteration.	Upper Contact	51	581.21	581.21	0.00
					Lower contact of the unit is gradational and may in part be marked by visible alignment deformation-stretching.	Lower contact	37	618.18	618.18	0.00
					From: 581.21 m's to 593.08 m's., massive medium to coarse grained, with many scattered 15mm to 1,100 mm irregular coarse grained varitextured subgranophyric clots of coarse grained feldspars, grey to blue grey quartz with needle like intergrowths of green to black needle like amphiboles. The anhedral like feldspar and quartz materials up to collected as 10mm to 25 mm masses. Intergrowths of amphiboles to 7mm to 9 mm's. Some of the quartz materials are visibly quite blue in color.					0.00
					These coarse grained rocks are typically quite intact like, with only a few natural breaks. There are a few narrow 1mm to 7mm fecarb-quartz-chlorite fracture filling veins.					0.00
					At: 591.44 m's., 7 mm fecarb - grey qtz fracture filling vein containing mm scale concentrations of f.grn'd po with visible traces of cpy.	Qtz-Fecarb Fract Fill V.	31	591.44	591.44	0.00
					Uncommon, fairly rough joints in the massive rocks.	Joints	35	583.50	583.50	0.00

From: 593.08 m's to 618.18 m's., massive medium grained, mottled grey white salt and pepper textured Shakespeare quartz gabbro. These materials are more consistently finer grained than the quartz gabbro above. Near the upper part of this interval there are a number of scattered small <1mm to 3mm disseminated grains, and small 3mm x 3mm round to somewhat ragged blebs of po with lesser cpy.					0.00
1/2 - 1% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, 1mm to 20 mm qtz - fe carb chl fract fill viens	Diss'd to blebs of po and cpy	593.38	594.38	1.00	
1/2 - 1% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, <1 -1mm up to 2mm qtz - fe carb chl fract fill v's	Diss'd to blebs of po and cpy	594.38	595.38	1.00	
1 - 2% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, <1 - 1mm qtz - fe carb chl fract fill v's	Diss'd to blebs of po and cpy	595.38	596.38	1.00	
1 - 2% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, po cpy bearing <1 -1mm qtz - fe carb chl fract v's	Diss'd to blebs of po and cpy	596.38	597.38	1.00	
Near the lower most part of the interval the massive quartz diorite contains appreciable small 3mm round like to 10mm x 15 or 20mm ragged like blebs of fine to medium grained po with visibly lesser cpy. There are short 100 mm to 150 mm parts of the sulphide bearing materials which exhibit connectivity. The bulk of the blebby sulphide minerals appear to be concentrated at or near the base of the shakespeare quartz gabbro unit.					0.00

From: 615.91 m`s to 618.15 m`s., The highest concentrations of typically 7 to 10%, locally 25 to 30% of sattered - isolated, locally interconnected blebs of po with visibly much less cpy. The cpy content would appear to be typically in the 1/2 to 1% to locally 1.5 to possibly 2% of contained cpy.	Blebbly po and cpy	615.91	618.15	2.24	
Rare visible tr's sulph in f.gr'd shakespeare qtz gabbro, py bearing ,<1mm to 2mm qtz-calc carb fecarb - chl fract fill v's	Blebbly po and cpy	614.82	615.82	1.00	
15% - 30% of 3mm to 10mm x 15mm blebs po with 1 - 1.5% cpy in f.gr'd - med gr'd shake qtz gab, local 1 -2mm fecarb fract v's	Blebbly po and cpy	615.82	616.24	0.42	
1 - 5% 3mm to rare lrg 30mm irreg blebs po with 1/2 -1% cpy, 3 - 5%, <1 - 1mm grains ilmenite in shake qtz gabbro	Blebbly po and cpy	616.24	616.85	0.61	
15 - 25% irreg 3 - 10mm x 30mm, some interconnected blebs po with 1% possible 1.5 -2% cpy in med gr'd shake qtz gabbro	Blebbly po and cpy	616.85	617.80	0.95	
7-10% local 25-30% collect'n 3mm - 10mm x10mm some interconected bleb po, 1/2 - 1% possible 2% cpy, fabric aligm'nt of sulph's	Blebbly po and cpy	617.80	618.15	0.35	
Somewhat stretched remnants 3-5% po with 1/2 - 1% cpy, @ contact shake qtz gab - melagab, 1 up to 20mm po-cpy, qtz-carb v's	Blebbly po and cpy	618.15	618.54	0.39	
Within this quartz gabbro unit there are a few scattered <1 mm to 1 mm and 2 mm, upt to 14 mm and 18 mm grey - white quartz - carb - chlorite fracture filling veins.				0.00	
At : 593.94 m's., 22 mm fecarb - calcarb - grey qtz - chlorite fracture filling vein.	Fecarb-calcarb-qtz-chl fracture fill vein	31	593.94	593.94	0.00

					At:602.24 m`s., 17 mm blue grey quartz fracture filling vein with visible fine grained po and cpy.	Qtz fracture fill vein	36	602.24	602.24	0.00
					612.78 m`s., 14 mm blue grey qtz with minor fecarb fracture filling vein.	Qtz fracture fill vein	31	612.78	612.78	0.00
					From 602.50 m`s to 608.78 m`s., a particular section of the qtz gabbro for which there seems to be an abundance of knife like fractures sub parallel to the long axis of the core. The materials are moderately well intact but exhibit extensional-visible opening up. Many of the fracture surfaces are coated with thin film of chl-calcarb - less fecarb, with minor marcasite and pyrite.	Broken Core Fracture Zone.	2 to less common 10	602.50	608.78	6.28
					Throughout the lower 1/2 of the shakespeare quartz gabbro unit the rocks show a number of orthagonal joint sets.	Joints	44 less common 31	597.00	618.15	21.15
618.18	662.00	43.82	4b	Shakespeare melagabbro, typically massive medium to medium coarse grained materials consisting of essentially a massive medium grained, spotted ilmenite bearing melagabbro, a medium to medium fine grained rock fragment bearing melagabbro, to a massive medium to medium coarse grained equigranular melagabbro at the lower most part of the interval unit. The rocks typically contain small scattered blebs and disseminated grains of fine grained po and lesser amounts of cpy. It would seem evident that there would appear to be an increase in the cpy content relative to the po content in the lower most part of the melagabbro interval. Minor later secondary calc carb - fe carb - qtz and chl fracture filling veins contain some fine grained cpy with typically lesser po.						0.00
			4b	From: 618.18 m's to 626.06 m's., Fine to medium grained, slightly more felsic - feldspar, ilmenite bearing version - phase of the shakespeare melagabbro.	Mela gabbro subunit			618.80	626.06	7.26

The spotted ilmenite bearing melagabbro phase maybe a transitional phase between the Shakespeare quartz gabbro and the Shakespeare melagabbro.						0.00
The rocks are typically massive, medium to fine grained, mottled green white grey with 60 to 70% of mafic minerals <amphiboles - pyroxenes>. These rocks also contain 20 or 30% of white grey feldspars, 3% possibly up to 5% of grey quartz and 3 to 5% of round to irregular aggregate grains of ilmenite. These rocks also contain visible brownto black platy mica minerals. These rocks also contain scattered small belbs of po with lesser cpy.						0.00
At: 624.08 m's., developed in the massive rocks a narrow 25 mm wide isolated shear with fine grained mica and chlorite minerals. Sheared materials also include a narrow 5 mm to 8 mm tigmatically folded quartz - carbonate fracture filling which contains very fine grained cpy and lesser po.	Shear	18	624.08	624.08		0.00
2-3% poss up 5% f.gr'd po , 1-1.5 cpy, 1-3% grains ilmenite, some po-cpy remobed into 1-5mm q-carb frac fill v's in shake melagab	Blebby - Diss'd Po and Cpy		618.54	619.56		1.02
1-2% poss up 3%, 3mm - 5mm blebs po, tr-1/2% cpy, 3-5% 3mm grains ilmenite, 1-3mm qtz-calcarb fract fill v's shake melagab	Blebby - Diss'd Po and Cpy		619.56	620.56		1.00
1-2% , 3mm - 5mm blebs po, tr-1/2% cpy, 3-5% 3mm grains ilmenite, cpy-po bearing 1-3mm qtz-calcarb fract fill v's, shake melagab	Blebby - Diss'd Po and Cpy		620.56	621.56		1.00
1/2-1% 1-2mm gr'ns - 3mm round blebs po, tr-1/2% cpy, 3-5% gr'ns ilmenite, 1-2mm sharp qtz-calcarb fract fill v's, shake melagab	Blebby - Diss'd Po and Cpy		621.56	622.56		1.00

	1/2-1% 1-2mm gr'ns - 3mm round blebs po, tr cpy, 3-5% gr'ns ilmenite, 1-2mm sharp qtz-calcarb fract fill v's, shake melagab	Blebby - Diss'd Po and Cpy	622.56	623.56	1.00
	rare tr's po - cpy, 3-5% 2-3mm gr'ns ilmenite in mass f.- med gr'd shake melagab.	Blebby - Diss'd Po and Cpy	623.56	624.56	1.00
	rare tr's po - cpy, rare 1-2mm gr'ns po, 3-5% 2-3mm gr'ns ilmenite, 1mm po-cpy bearing q-carb v's in mass f.- m gr'd shake melagab.	Blebby - Diss'd Po and Cpy	624.56	625.56	1.00
	rare tr's po - cpy, rare 1-2mm gr'ns po, 3-5% 2-3mm gr'ns ilmenite, 1mm po-cpy bearing q-carb v's in mass f.- m gr'd shake melagab.	Blebby - Diss'd Po and Cpy	625.56	626.06	0.50
4e	From 626.06 m's to 627.83 m's, Vari textured gabbro < shakespeare melagabbro, abundant blue quartz eyes, cpy grains and small blebs > po content, c.grn'd layer?. For the most part these materials look to be a more felsic looking version of gabbro as compared with the surrounding melagabbro rocks. The developement of such coarse grained to vari textured version of the of this part of the intrusion maybe indicative of the top of a particular phase of part of the Shakespeare intrusion.	Vari Textured gabbro - melagab sub unit	626.06	627.83	1.77
	rare 3-5mm faint irreg blebs po less cpy, med-c.grn'd shake melagab to vari text gab with 5mm x 10mm irreg to round blue qtz eyes	Blebs of cpy < po	626.06	627.00	0.94
	local rare <1mm-1mm with cpy rich with less po, vari text'd gab layer(?) in shake melagab with 3-5% up to 5mm x 7mm blue qtz eyes	Blebs of cpy < po	627.00	627.83	0.83

4f	<p>From: 627.83 m's to 641.83 m's., Shakespeare rock fragment bearing melagabbro phase of the Shakespeare Intrusive Suite. The rocks are typically massive, medium grained, light to medium green in color with with some lighter colored feldspars. The interval contains a number of small 3 mm to 5 mm up to 20 mm partially assimilated felsic like somewhat round - subround rock fragments. Some of the rock fragments may be remnants of former potentially older quartzite, quartz diorite and or quartz gabbro rocks. Some of the larger scale rock fragments somewhat resemble, maybe highly cooked versions of gabbroic rocks. The rocks typically contain and vary from traces to 1/2 % to commonly 1% to 3% occasionally up to 4% of 1 mm to 3 mm grains of fine grained po and lesser cpy. Throughout the interval there are several narrow 1 mm to 3 mm grey qtz-cal carb-fe carb fracture filling veins. Some of these veins contain fine grained cpy with lesser po.</p>	Rock fragment bearing sub unit	627.83	641.83	14.00
	<p>At: 640.64 m's., a rather interesting looking 5 mm x 30 mm possible remnant rock fragment possibly derived from the coarse grained varitextured gabbro - melagabbro sub unit. The bulk of the rock fragment consists of a blue grey quartz very similar in appearance to the blue grey quartz observed within the varitextured sub unit. The quartz rich rock fragment also contains visible intergrowths of platy mica minerals, as compared with intergrowths of needle like amphiboles in the vari textured gabbro.</p>				

At: 640.75 m's., and at: 640.94 m's, there are a couple of typical narrow 1 mm to 3 mm qtz - carb fracture filling veins containing fine grained cpy and lesser po	Cpy - po bearing fracture fill veins	29 and less commonly 85	640.75	640.94	0.19
tr-1/2-1%, rarely local 2% v.f.grn'd po with <r cpy 3mm-5mm irreg blebs po with some cpy in f.m.grn'd shake rx frag phase melagab			627.83	628.83	1.00
tr- 1/2% up to 1 or 2% small 1-2mm grains po less cpy, rare 5mm irreg blebs po -cpy, f.m.grn'd shake rx frag phase melagab.			628.83	629.83	1.00
tr-1/2 poss 1% fine diss'd po with some cpy, massive f.m.grn'd shake rx frag phase melagabbro			629.83	630.83	1.00
3-5% diss'd to 5-10mm high irreg blebs po - cpy, rare cpy bearing <1-1mm q-carb-ep fract fill v's shake rx frag phase melagab			630.83	631.83	1.00
1-3% poss up to 4% small ,1-3mm grains po-cpy, some local 3mm blebs po-cpy, med grn'd shake rx frag melagab			631.83	632.83	1.00
1-3% poss up to 4% small ,1-3mm grains po-cpy, 3mm blebs po-cpy, 1mm po -cpy q-carb fract fill v's m. grn'd shake rx frag melagab			632.83	633.83	1.00
3-5% diss'd to 5-10mm high irreg blebs po - cpy, shake rx frag phase melagab			633.83	634.83	1.00
2-4% diss'd to 5-10mm high irreg blebs po - cpy, cpy bearing 3 mm q-carb fract fill v's shake rx frag melagab up 10mm x 25mm rx frags			634.83	635.83	1.00
1-2% diss'd 1-3mm grn's po - cpy local 5mm x 7mm ireg blebs po with cpy, <1-5mm cpy bearing q-carb-chl frac fill v's rx frag melagab			635.83	636.83	1.00
1/2-1% diss's 1-3mm grn's po less cpy, several <1-1mm cpy-po bearing q-carb-fecarb fract fill v's, med grn'd shake rx frag melagab.			636.83	637.83	1.00

1-3% diss'd 1-3mm grn's po less cpy, scattered 5mm x 7mm irreg blebs po with cpy, cpy-po in 1-3mm carb-q fract fill v's rx frag melagab	637.83	638.83	1.00	
1-3% diss'd 1-3mm grn's po less cpy, scattered 3mm irreg blebs po with cpy, cpy-po in 1-3mm carb-fecarb-q fract fill v's rx frag melagab	638.83	639.83	1.00	
1-3% diss'd 1-3mm grn's po 1/2-1% cpy, scattered 3mm irreg blebs po with cpy, cpy-po in 1-3mm carb-fecarb-q fract fill v's rx frag melagab	639.83	640.83	1.00	
1-3% diss'd 1-3mm grn's po 1/2-1% poss 1.5% cpy, scattered 3mm irreg blebs po with cpy, 1mm carb-q fract fill v's rx frag melagab	640.83	641.83	1.00	
From: 641.83 m's to 657 m's +/-, consists of a massive medium green colored equigranular melagabbro phase of the Shakespeare Intrusive Suite. It would appear that change over from Shakespeare melagabbro through to the Nipissing type gabbro is gradational and not at all visibly - macroscopically very well defined. The melagabbro rocks are typically quite massive - solid looking, broken in a few places with some orthagonal joints. The rocks contain from trace to 1/2%, more commonly 1% to 3% occasionally up to 5% and rarely 7% to 10% of disseminated grains of po and cpy. Towards the lower limit of the interval the cpy seems to have increased relative to the po content. Towards the lower most part of the interval the overall sulphide content drops off to trace amounts. It is suspected that the massive equigranular melagabbro extends beyond the limits of the visible contained sulphides.	Equigranular melagabbro sub unit	641.83	657.00	15.17

In places the equigranular melagabbro contain scattered 1 mm to 8 mm to 10 mm Qtz-cal carb-fe carb fracture filling veins. Some of these veins contain fine grained cpy and lesser po.	49 to less commonly 11				0.00
From: 643.30 m's., to 643.42 m's., an isolated narrow shear with abundant fine grained chlorite developed within a deformed broken apart Fe carb-cal carb-grey quartz fracture filling vein materials. The isolated shear is developed within the massive melagabbro rocks. Some thin 3 mm to 5 mm chloritic fault gouge materials are evident, and as such would suggest some physical dislocation of the rocks.	Shear with fault gouge	24	643.30	643.42	0.12
tr-1/2% <1-1mm grn's po <cpy, multiple 1-3mm Fe carb-carb-q with f; grn'd cpy and po in mass f.m.grn'd equigranular shake melagab	Diss'd Po and cpy		641.83	642.83	1.00
tr-1/2% <1-1mm grn's po <cpy, multiple 1-40 mm shear Fe carb-carb-q with f; grn'd cpy and po in mass f.m.grn'd equigran shake melagab	Diss'd Po and cpy		642.83	643.83	1.00
tr-1 poss 2-3% small <1mm diss'd grn's po with tr'c cpy, local 10-15mm cloudy collect'n grn's po- cpy f.m.grn'd equigran shake melagab	Diss'd Po and cpy		643.83	644.83	1.00
tr-1/2% - 1 or 2% f.grn'd diss'd po with tr - 1/2% f.grn'd diss'd cpy, rare <1mm carb-q with po- cpy f.m.grn'd equigran shake melagab	Diss'd Po and cpy		644.83	645.83	1.00
1-3% f.grn'd po with 1/2-1% poss 1.5% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, f.m.grn'd equi shake melagab	Diss'd Po and cpy		645.83	646.83	1.00
1-3% f.grn'd po with 1/2-1% poss 1.5% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, f.m.grn'd equi shake melagab	Diss'd Po and cpy		646.83	647.83	1.00

					1-3% f.grn'd po with 1/2-1% poss 1.5-2% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, m.grn'd equi shake melagab	Diss'd Po and cpy	647.83	648.83	1.00
					1-5% f.grn'd po with 1/2-1% poss 1.5-2% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, m.grn'd equi shake melagab	Diss'd Po and cpy	648.83	649.83	1.00
					1- 5% local 7-10% po,1/2-1% poss 2% 1-2mm grn's cpy, <1-8mm fecarb-carb-q fract fill v's with cpy-po, m.grn'd equi shake melagab	Diss'd Po and cpy	649.83	650.83	1.00
					tr-1/2% small<1mm grn's diss'd po, tr cpy,<1-2mm fecarb-carb-q fract fill v's with v.f.grn'd cpy-po, m.grn'd equigran shake melagab	Diss'd Po and cpy	650.83	651.83	1.00
					tr- small<1mm grn's diss'd po, tr cpy,<1-1mm fecarb-carb-q fract fill v's with v.f.grn'd cpy-po, m.grn'd equigran shake melagab	Diss'd Po and cpy	651.83	652.83	1.00
					tr-rare 1/2% po tr-rare 1/2%cpy, <1-2mm carb-q fract fill v's f.m.grn'd shake melagabbro	Diss'd Po and cpy	652.83	653.83	1.00
					tr's v.f.grn'd po-cpy, several <1mm-2mm carb-fecarb-q fract fill v's with local abundant cpy-po, f.m.grn'd equigran shake melagabbro	Diss'd Po and cpy	653.83	654.70	0.87
					Typical sharp orthogonal joints developed within the massive and generally intact rocks	Joints	39		0.00
662.00	717.00	55.00	3a	Nipissing type gabbro, typically massive, medium to dark green, medium grained. The dry core of the Nipissing gabbro materials has a somewhat waxy appearance as compared to the the matte like - porous looking shakespeare melagabbro above.	From: 662.00 m's., to 717.00 m's., In some places it would appear that the gabbro rocks may have been subjct to visibly mild pervasive, local to wide spread alteration, as such imparting the somewhat waxy appearance.				0.00

The gabbro interval contains many small < 1mm to 5 mm, up to less commonly 30 mm to 40 mm, average typically 3 mm's to 5 mm's and rarely 100 mm and 110 mm, quartz-epidote-cal carbonate - fe carbonate late, sharp edged - contact fracture filling veins. Occasionally some of these fracture filling veins contain visible small < 1mm grains of cpy and po. The fracture filling veins seem to be commonly orientated at: 59 tca and seemingly less common at: 20 dtc

Late Fracture Filling Veins

59 less commonly 20

From: 700.58 m's., to 700.81 m's., blue grey qtz-cal carb and fine grained bearing light green chlorite fracture filling vein
 Fom: 701.00 m's., to 701.52 m's., isolated 10 mm to 10 to 20 mm flesh pink clots of granophyric materials developed within the gabbro,
 At: 691.00 m's +/- commonly developed orthagonal joint sets.

Fracture Filling Veins granophyre

15

700.58

700.81

0.00

0.23

701.00

701.52

0.52

Joints

55 and less common 11 and 24

691.00

691.00

0.00

717.00 717.00

0.00

EOH

End of Diamond Drill Hole U-08-02

Core logging carried out by: Harold Tracanelli, Getn, P.Geo

URSA Major Minerals Incorporated

Shakespeare East Down Plunge Diamond Drilling Program

Shakespeare Township, Ontario Sudbury Mining Division

URSA Diamond Drill Hole Number:

NAD 83 UTM Coordinate Location of the Diamond Drill Hole:

Diamond Drill Hole Collared on Mining Claim Number:

Date Diamond Drill Hole Spotted:

Date Diamond Drill Hole Lined Up:

Date Diamond Drill Hole Started:

Date Diamond Drill Hole Completed:

Azimuth of Diamond Drill Hole:

Inclination of the Diamond Drill Hole:

Diamond Drilling Carried Out By:

Machine Type:

Diamond Drill Core Logging Carried Out By:

Diamond Drill Hole Objective:

Total Depth of Diamond Drill Hole:

Assay Laboratory Work Order Numbers:

**DDH U-08-03 Shakespeare East Down
Plunge Drilling Joint Venture Project**

Shakespeare Township

U-08-03 Joint Venture Project

0437086E and 5134403N

S-1203118 Leased Mining Claim

Rough Spotted DDH U-08-03 , June 17th., 2011

Officially Spotted DDH U-08-03 , June 18th., 2011

Line Up of DDH U-08-03 , June 18th., 2011 By: Sylvain Bernache, Downing Drilling Foreman

June 18th., 2011

June 28th., 2011

147 Degrees Az.

-73 degrees head set with Flexit bore hole orientation device

George Downing Estate Drilling Ltd

VR-5000 Drill 43

Harold J. Tracanelli, Getn, P.Ge

To test a borehole geophysical response reported by Crone below DDH U-08-02

The diamond drill hole was designed to target the borehole response between DDH U-08-01 and U-08-02

763 Meters

Job Number:

<u>From Meters</u>	<u>To Meters</u>	<u>Distance Meters</u>	<u>Litho Code</u>	<u>Description Major Interval</u>	<u>Code</u>	<u>Description Minor Internal Interval</u>	<u>Measured Feature</u>	<u>Alignment TCA</u>	<u>From Meters</u>	<u>To Meters</u>	<u>Distance Meters</u>
0.00	0.10	0.10	Casing	Collared on, or very close to, bedrock	OB						
0.10	597.86	597.76	1a	Quartzite, light white – grey blue, overall fine to medium grained with common rhythmic coarsening followed by fining of grain size.. Commonly bedded in 610 mm to over 3000mm intervals (average 2000 mm). Individual beds are marked by a fine grained, laminated siltstone that sometimes exhibits evidence of ductile deformation (stretching, lineation of minerals) and is sometimes the target of limonite / hematite alteration. The siltstone varies from 3 mm to over 600mm, but is usually 50mm in thickness. Siltstone intervals increase in width down hole. Quartzite beds vary in purity, with occasional clean beds and more common beds with silt / mica impurities. Commonly dark, fine silt/mica bands cross bedding.			Joint with limonite on joint surface	58	18.48	18.48	0.00
				Cross bedding is also commonly observed, although in highly broken / altered areas it is weak to absent. Trough Cross Lamination is present in intervals up to 900mm, but more commonly 200 – 300 mm. Jointing is common within the quartzite, and seems to form parallel to bedding (pre existing planes of weakness?) but occasionally cross cuts the fabric of the quartzite (particularly in heavily jointed / broken zones)			Bedding	58	18.48	18.48	0.00
				Along many of the joint surfaces (and in alteration "zones") limonite and hematite occurs along joint surfaces. Sulfides are occasionally observed along joints (pyrite, much rarer chalcopryite). Limonite observed up to 114.5m depth in hole.			Joint with pyrrhotite and chalcopryite on surface	42	71.05	71.05	0.00
				Larger scale folding in the quartzite is evident from the changing bedding angles, and occasional S and Z folds within fracture fillings		Rubble ranging from 10 to 60mm diameter common just before 102m	Highly broken / jointed zone		101.00	102.00	1.00
				The grain size of the quartzite beds oscillates between fine and medium-coarse grained (rhythmic bedding)			Fault Gouge	54	165.00	165.01	0.01
				Quartz pebbles are commonly encountered, ranging in size from ~1mm up to 5mm, most commonly 2-3mm.			Joint	18	128.10	128.10	0.00

Within joints, thin (sub mm to 1mm) veinlet sulfides are present. Mostly Pyrite / Marcasite, but occasionally cpy and rarely po (when encountered, it is close to the Quartz Diorite contact)
clumpy oatmeal textured dark minerals observed up to 61m depth

	Joint	48	156.36	156.36	0.00
	quartz vein	48	156.39	156.39	0.00
From 222.85m's to 222.93m's Small structure (shear?), broken ~10 cm to either side. Mineral foliation and waxy joint surfaces.	Shear?, Mineral foliation	32 and 23	222.85	222.93	0.08
	Joint	58	218.46	218.46	0.00
	Cross Bedding	31	253.5	255.00	1.50
Trough Cross Stratification			270.10	270.75	0.65
	Joint with pyrrhotite on the surface	39	275.75	275.75	0.00
	Joint with pyrite and chlorite	59	290.07	290.07	0.00
	Joint, cross bedding	39	299.89	299.89	0.00
	Joint, bedding	34	302.85	302.85	0.00
From 314.22m's to 314.60m's Broken zone with hematite staining, chip sized pieces of core			314.22	314.60	0.38
From 359.70m's to 359.84m's Broken zone with hematite staining			359.70	359.84	0.14
From 364.87m's to 364.97m's Microfolding and small folded quartz veins with pyrite and chalcopyrite	Microfolding		364.87	364.97	0.10
	Joint, bedding	43	378.78	378.78	0.00
	Joint	40	417.68	417.68	0.00
	Joint	42	420.25	420.25	0.00
From 486.78m's to 474.40m's Broken zone with quartz vein infillings (3-15cm), Broken pieces are chip sized. Hem staining on joint surfaces			474.40	486.78	12.38
	Fault Gouge		468.82	468.82	0.00
	Quartz Vein	48	474.20	474.30	0.10

Joint	31	519.37	519.37	0.00
Fault Gouge		535.53	535.60	0.00
Broken zone		541.18	542.34	0.00
/ highly jointed				
highly jointed (decompression?)		542.34	588.00	0.00
high jointing		552	564.00	0.00
mineral foliation		586.8	586.80	0.00
quartz vein		587.32	588.87	0.00
pyrrhotite stringer in quartz vein		588.75	588.75	0.00

At 528m's Contact between quartz diorite and quartzite xenos are wispy and sharp 528.00 528.00 0.00

From 590.75m's to 592.68m's Fault? Broken zone with lots of foliated silts within quartzite. fault? Highly broken / jointed zone contact 32 590.75 592.68 1.93
 At 593.38m's First shot of Quartz Diorite material, marks the approximate beginning of the roof zone – Shakespeare suite between Qtz Diorite injection and quartzite 44 593.38 593.38 0.00

597.76	603.00	5.24	7a	Lamprophyre – Fine grained, exhibiting mineral lineation (angle varies, obviously larger scale folding). Dark brown color, has Xenoliths? Of lighter colored aphanitic material (5mm to 25 mm). Rare pyrrhotite encountered in some fracture fillings.	At 603m contact is wavy and very sharp.	Contact between lamprophyre and quartzite	32	603.00	603.00	0.00
						Foliation of minerals within lamprophyre	32	597.86	603.00	5.14
					From 598.88m's to 598.96m's breccia zone (cream carbonate? Cement with angular lamprophyre fragments)	Fault Breccia	30	598.88	598.96	0.08
603.00	621.15	18.15	1a/1b	Quartzite – same as described above, except with much more blue hornfelsed quartz and occasional shots of Quartz Diorite material. Contact between Quartzites is gradational.						
621.15	622.67	1.52	4d	Quartz Diorite – Fine to medium grained (sub mm up to mm scale) quartz diorite varying slightly in color but overall lighter brown-green. Occasionally, relict sedimentary textures observable in xenoliths, but more commonly partial assimilation and baking have destroyed original sedimentary fabric. Mica and amphibole rich, commonly exhibiting a strong mineral fabric. Quartzite xenoliths are common and range in size from 46mm to over 3000mm, commonly over 800mm. Strong mineral lineation / fabric is commonly observed, especially around xenoliths						
622.67	665.66	42.99	4c	Quartz Gabbro – fine to medium grained with overall 5% quartz (less towards lower contact) and a “salt and pepper” texture. Very homogenous and consistent in regards to textural features and mineralogy. Rock fragments can be seen near the base of this unit and rarely throughout. Mafic minerals are predominantly amphibole and dark mica. Ilmenite common						

	Joint	24	620.72	620.72	5.54
	Joint	40	636.4	636.40	0.58
	Joint	12 and 34	654.60	654.60	0.78
					0.42
	Shear?, Mineral foliation	50	662.43	662.43	4.27
	Quartz Vein with Pyrrhotite	50	662.43	662.44	0.61
	Joint	50	662.43	662.43	0.57
trace pyrrhotite, locally up to 2% over 5 cm. Minor chalcopyrite found along rim of pyrrhotite grains.	minor disseminated pyrrhotite, trace chalcopyrite		646.40	651.94	0.29
1% disseminated pyrrhotite with trace chalcopyrite around grain edges	disseminated pyrrhotite		651.94	652.52	1.70
5-7% pyrrhotite and .5% chalcopyrite around grain edges. Sulfides are disseminated grains attempting to form blebs.	Disseminated (trying for blebs) pyrrhotite, chalcopyrite around edges		652.52	653.30	0.90
4% pyrrhotite and .5-1% chalcopyrite as large disseminated grains	large disseminated pyrrhotite and minor chalcopyrite		653.30	653.72	0.43
3-5% disseminated pyrrhotite and .5% chalcopyrite around disseminated pyrrhotite grains	disseminated pyrrhotite and minor chalcopyrite		653.72	657.99	3.17
7% pyrrhotite and .5% chalcopyrite	pyrrhotite and minor chalcopyrite		657.99	658.60	28.69

665.66	702.51	36.85	4b	Melagabbro – Dark green, medium grained melagabbro with approximately 20% plagioclase, minor (1% or less) quartz, and approximately 75-80% amphiboles and chloritized mafic minerals. Pyroxenes have undergone a high degree of replacement. In areas, the melagabbro looks “washed out” and crystal boundaries seem mushy. Ilmenite very common, grains almost exclusively 1x1mm to 4x4mm.	Fault breccia? Mineral lineation	41	680.45	680.61	0.16
					Mineral foliation	40	686.73	686.73	0.00
				6.5 - 9.5% pyrrhotite, .5% chalcopryrite (trying to become interconnected)	pyrrhotite attempting to become interconnected with minor chalcopryrite		658.60	659.17	0.00
				sulfides are lineated with foliated minerals. 15% pyrrhotite, .5% chalcopryrite	lineated and interconnected pyrrhotite with minor chalcopryrite		659.17	659.46	0.80
				3% pyrrhotite, .5% chalcopryrite as disseminated grains	disseminated pyrrhotite and minor chalcopryrite		659.46	661.16	1.10
				blebs / clumpy disseminated grains, 1-2% chalcopryrite, 3% pyrrhotite			661.16	662.06	0.65
				10% pyrrhotite, .5% chalcopryrite as interconnected sulfides			662.06	662.49	0.83
				3% pyrrhotite, trace to .5% chalcopryrite as irregular disseminated grains	disseminated pyrrhotite and minor chalcopryrite		662.49	665.66	0.44
			4f	From 665.66m's to 694.35m's Melagabbro Rock Fragment Phase – partially resorbed xenolithic fragments from 1mm x 1mm up to 90mm x 100mm, varying from rounded to angular/sub angular are commonly observed. Occasionally, fragments contain a high amount of sulfides, mostly chalcopryrite with pyrrhotite (no pyrite).			665.66	694.35	2.16

					0.52
3% pyrrhotite, trace to .5% chalcopyrite as irregular disseminated grains. Large chalcopyrite blebs in rock fragments from 666.36 to 666.46	disseminated pyrrhotite and minor chalcopyrite	665.66	666.46		0.78
2-3% pyrrhotite, .5% chalcopyrite as uncommon medium grained disseminations	disseminated pyrrhotite and minor chalcopyrite	666.46	667.56		0.66
4-4.5% pyrrhotite, .5-1% chalcopyrite as clumpy disseminations	disseminated pyrrhotite and minor chalcopyrite	667.56	668.21		0.87
3% pyrrhotite, .5% chalcopyrite as irregular disseminated grains	disseminated pyrrhotite and minor chalcopyrite	668.21	669.04		1.46
5% pyrrhotite, 1% chalcopyrite as disseminated grains	disseminated pyrrhotite and lesser chalcopyrite	669.04	669.48		0.73
2-3% pyrrhotite, trace to .5% chalcopyrite	disseminated pyrrhotite and minor chalcopyrite	669.48	671.64		2.09
5% pyrrhotite, 1% chalcopyrite as disseminated grains	disseminated pyrrhotite and lesser chalcopyrite	671.64	672.16		1.45
2-3% pyrrhotite, trace to .5% chalcopyrite	disseminated pyrrhotite and minor chalcopyrite	672.16	672.94		0.42
5% pyrrhotite, 1% chalcopyrite as disseminated grains	disseminated pyrrhotite and lesser chalcopyrite	672.94	673.60		0.47
3-4% pyrrhotite, .5% chalcopyrite	disseminated pyrrhotite and minor chalcopyrite	673.60	674.47		0.92

5% pyrrhotite, .5 to 1% chalcopyrite as disseminated grains	disseminated pyrrhotite and minor chalcopyrite	674.47	675.93	4.19
5% pyrrhotite, 1% chalcopyrite	disseminated pyrrhotite and lesser chalcopyrite	675.93	676.66	2.82
3-5% pyrrhotite, .5 to 1% chalcopyrite as disseminated grains	disseminated pyrrhotite and lesser chalcopyrite	676.66	678.75	5.33
3-4% pyrrhotite, .5% chalcopyrite, disseminated	disseminated pyrrhotite and minor chalcopyrite	678.75	680.20	8.16
.5 pyrrhotite, .5 chalcopyrite in foliation (shear?)	rare pyrrhotite and chalcopyrite within foliation	680.20	680.62	0.00
3-5% pyrrhotite, 1-2% chalcopyrite	disseminated pyrrhotite and lesser chalcopyrite	680.62	681.09	8.16
3-5% pyrrhotite, .5 to 1% chalcopyrite as disseminated grains	disseminated pyrrhotite and lesser chalcopyrite	681.09	682.01	4.22
1-2%pyrrhotite, .5% chalcopyrite as irregular / scattered clumps of disseminations attempting to become blebs, and occasional fracture fillings	irregular disseminated pyrrhotite and minor chalcopyrite	682.01	686.20	0.00
1% pyrrhotite, .5% chalcopyrite	disseminated pyrrhotite and minor chalcopyrite	686.20	689.02	0.00
up to .5 % pyrrhotite and .5% chalcopyrite, commonly trace amounts of each.	Rare fine disseminated pyrrhotite and minor chalcopyrite	689.02	694.35	0.00

				From 694.35 to 702.51ms' is the Melagabbro Equigranular Phase - Melagabbro Equigranular phase – Rock fragments rare to absent, texturally equigranular pyroxenes (replaced), amphiboles, and plagioclase present. Semi-blocky grains common			694.35	702.51	0.00
				up to .5 % pyrrhotite and .5% chalcopyrite, commonly trace amounts of each.	Joint	25	701.00	701.00	0.00
					rare fine disseminated pyrrhotite and minor chalcopyrite		694.35	702.51	0.01
				From 702.51m's to 706.73m's is the admix zone between the Shakespeare melagabbro and nipissing materials. Quartz and feldspars increase significantly, but contributions from Shakespeare materials present in the form of blocky, darker amphiboles (not as green as nipissing)			702.51	706.73	0.00
702.51	763.00	60.49	3a/3b	Nipissing Gabbros and Quartz Gabbro - Fine to medium grained quartz gabbro with amphibole (actinolite?) replacing pyroxene. Biotite common. Occasional pyrrhotite / chalcopyrite disseminations with rarer pyrite. Quartz veining common	shear zone	18	727.65	728.50	0.85
					Fault Gouge	18	727.85	727.86	0.01
					Quartz vein with chalcopyrite and minor pyrrhotite blebs	42	755.70	756.00	0.30
					Pyrrhotite and chalcopyrite infillings	60	756.15	756.63	0.48
					Fault Gouge? Shear	52	757.95	757.95	0.00
763.00	763.00	0.00	EOH	End of Diamond Drill Hole U-08-03					

Core logging carried out by Ian Dasti.

URSA Major Minerals Incorporated

Shakespeare East Down Plunge Diamond Drilling Program

Shakespeare Township, Ontario Sudbury Mining Division

URSA Diamond Drill Hole Number:

NAD 83 UTM Coordinate Location of the Diamond Drill Hole:

Diamond Drill Hole Collared on Mining Claim Number:

Date Diamond Drill Hole Started:

Date Diamond Drill Hole Completed:

Azimuth of Diamond Drill Hole:

Inclination of the Diamond Drill Hole:

Diamond Drilling Carried Out By:

Machine Type:

Diamond Drill Core Logging Carried Out By:

Diamond Drill Hole Objective:

Total Depth of Diamond Drill Hole:

Assay Laboratory Work Order Numbers:

**Shakespeare East Down Plunge
Diamond Drill Joint Venture Project**

DDH U-08-01

0437086E and 5134403N

S-1203118 Leased Claim

Monday November 29th., 2010

Sunday December 12th., 2010

147 Degrees Azimuth

-77.0 Degrees

George Downing Estate Drilling Ltd

LF-70

Harold J. Tracanelli, Getn, P.Geo

**To drill test the down plunge along
strike extension of the Shakespeare East mineral deposit.
798 Meters**

Job Number: 201110051

<u>From</u> <u>Meters</u>	<u>To</u> <u>Meters</u>	<u>Distance</u> <u>Meters</u>	<u>Litho</u> <u>Code</u>	<u>Discription</u> <u>Major Interval</u>	<u>Code</u>	<u>Description</u> <u>Minor Internal Interval</u>	<u>Measured</u> <u>Feature</u>	<u>Alignment</u> <u>TCA</u>	<u>From</u> <u>Meters</u>	<u>To</u> <u>Meters</u>	<u>Distance</u> <u>Meters</u>
0.00	3.36	3.36	Casing	Larger scale quartzite rubble and smaller scale granite and gabbro strones and cobble like materials.					0.00	0.00	0.00

3.36	163.30	159.94	1a	<p>Quartzite, light grey, typically fine to locally medium grained, distinctly bedded in some places. Bedding of sediment rock varies from about 900 mm to 1.30m's to in excess of approximately 3 meters. The various quartzite beds are separated by thin 30mm to 110mm light green grey, typically fine grained micaceous - silty materials. In places some of the sediments exhibit local spotty dark grey - blue tinge hornfels alteration.</p>	Bedding	58	15.82		-15.82
				<p>Many of the quartzite beds exhibit distinct cross bedding.</p>	X bedding	43	19.80		-19.80
				<p>In some locations the quartzite have been fractured, some breakage would seem evident along pre existing joints. Many of the joints appear to have developed parallel to the primary sedimentary fabric, while some less common joints have developed cross cutting the sediment fabric.</p>	Fracture Zone	45	3.36	10.31	6.95
				<p>Many of the joint surfaces exhibit micro thin to sub mm scale coatings consisting of typically marcasite - pyrite, less commonly chalcopyrite and rare pyrrhotite. Many of the sulphide bearing coatings have been reduced to dusty like orange - yellow limonite and less common hematite coatings. In many places the rusty weathering - alteration has infiltrated into some of the surrounding quartzites.</p>					0.00
				<p>In places the quartzite sediments have become increasing in grain size with local small pebbles to 3mm x 4mm</p>	Joint	43	39.00		-39.00
				34.49 m's narrow 10mm limonite - hematite fault gouge					
				40.48 m's 15 - 20 mm limonite - sericite fault gouge	Joint	55	42.10		-42.10
				44.98 m's, 20mm, quartz vein, white grey q.v, knife sharp contacts, vein contain traces of po or asp.	interbed	53	57.23	57.27	0.04
				45.60 to 46.10 m's fracture zone, somewhat open, strong limonite on fracture surfaces.	interbed	50	60.29	60.41	0.12
				49.30 m's narrow 10mm white q.v	interbed	41	61.31		-61.31
				72.16 to 79.55 m's, increase abundance of narrow 3mm to 390mm silt interbeds separating 50mm to 690mm quartzite beds	gouge	35	34.49		-34.49
				84.93 - 84.96 m's blue grey quartz vein, sharp contacts, fine grained py along some parts of the contact.	gouge	57	40.48		-40.48

89.37 - 90.79 m's there are several local 1mm to 3mm up to 4mm to 5mm somewhat irregular fracture fillings - stringers of py with some po and traces of cpy, stretched out, associated with silty interbeds and cross bed plains in quartzite's	q.v	56	44.98		-44.98
At 99.10 m's, several small 2mm x 8mm to 4mm x 17mm irregular intergrowths between the cross bed plains.	fracture zone	53	45.60	46.10	0.50
122.78 - 123.54 coarser grained, grit - small up to 3mm x 4mm grey to blue pebbles, complex looking light and dark colored cross beds.	q.v	57	49.3		-49.30
146.75 m's, 15mm blue grey q.v with small 1mm grains of po near center of vein.	Joint	31	62.35		-62.35
157.16 - 157.31m's partial weak development of isolated shearing of the quartzites, visible thin <1mm to 3mm ribbon like veins of white carbonatenwith some fine grained chlorite minerals.	Joint	54	62.46		-62.46
	interbed	54	75.42	78.78	3.36
	Joint	9	80.75		-80.75
	xbed	39	77.60		-77.60
	Joint	23	63.20		-63.20
	q.v	51	84.93	84.96	0.03
	sulp	59, 43	89.37	90.79	1.42
	fracture fillings				
	Joint	10	96.25		-96.25
	xbeds	49	99.60		-99.60
	xbeds	59, 57	122.78	123.54	0.76
	gouge	62	119.50	119.51	0.01
	q.v	57	107.98	107.99	0.01
	Joint	48, 6	111.00		-111.00
	interbed	53	138.12	138.26	0.14
	q.v	60	146.75		-146.75
	shear	23	157.16	157..31	#VALUE!
	xbeds	41	162.50		-162.50
	interbed	56	161.87		-161.87

163.30	244.88	81.58	1a	Quartzites, in many places the bedding looks to to have been disrupted. Silt partings seem still mark the boundaries between many of the beds.	interbed	42	161.18	161.22	0.04
					xbeds	63	180.00		-180.00
					interbed	43	197.93		-197.93
				221.55 - atleast 244.88 m's, numerous disrupted beds at highly variable angles to the core axis					0.00
				184.78 m's, <1mm to 5mm concentration of small <1mm visibly elongated grains of po, tr., cpy dev'd along xbed plain.	Po and cpy	49	184.78	184.79	0.01
				190.28m's, 20mm irregular mass, grey white quartz with visible po.	quartz vein	85	190.28	190.30	0.02
				217.34m's, 8mm grey white q.v.	q.v	83	217.34		-217.34
				218.46 m's, 12mm grey white q.v	q.v	40	218.46		-218.46
				233.75 - 233.80 m's, grey white subvitrious q.v, has been disrupted, 2mm x 15 mm f.gr'd py into late fracture in vein.	q.v	51	233.75	233.80	0.05
				243.50 - 244.04 m's, somewhat minor fracture zone, minor alteration of sediments, fine grained chlorite on fracture surfaces. 2mm chlorite rich gouge at lowest edge of fracture zone.	fracture zone	50 and 05	243.50	244.04	0.54
				At: 244.03 m's 2-3mm chlorite rich gouge materials	gouge	63	244.03	244.04	0.01
				At: 241.00 typical orthogonal joints	Joint	53	241.00	241.00	0.00

244.88	326.21	81.33	1a	<p>Quartzites. Down to approximately 315 m's, would appear to be consistently bedded, xcross bedding in many places quite distinct. Less finer grained silt interbeds evident, overall the quartzite - quartz grains are visibly coarser grained up to 2mm to 3mm +/- . In many parts of the interval the cross bedding looks to be consistently developed. At one location the coarser grained sediments looked to have been significantly tilted - folded relative to the adj sediments. Near the upper part of the interval it would appear that the sediments have been locally mild to moderately deformed - foliated. Near the lower parts of the interval the sediments have been moderately to strongly broken then subject to widespread alteration with fine grained hematite, with lesser fine grained chlorite. Locally wave like visible deformation - stretching alignment would suggest some movement - dislocation of the sediments in this particular area. Some of the fracture surfaces have micro thin coatings of marcasite, pyrite and rare cpy.</p> <p>Below approximately 315 m's +/- the sediments appear to have become finer grained.</p>	<p>263.53 - 263.61 m's a rare interbed 83 and 33 263.53 263.61 0.08</p> <p>example of a silt interbed in the coarser grained quartzites. It would appear that the interbed has been mildly deformed - stretched out.</p>
				<p>263.40 - 267.19 m's, appears to be mild to moderate stretching like deformation - foliation of the sediments</p>	<p>Deformati on - Foliation 31 264.33 -264.33</p>
				<p>Highly visible in many places.</p>	<p>xbeds 56 279.00</p>
				<p>279.90 - 280.20 m's appears to be finer grained - chlorite altered top of a quartzite bed. There appears to have been some sorting of the finer grained chloritic materials, relative to the coarser grained fractions.</p>	<p>interbed 61 279.90 280.20 -279.00 0.30</p>
				<p>302.30 - 304.60 m's significant tilting, re alignment of the quartzite beds - xbeds. There may have been some reworking and sorting of the coarser grained sediments. Alignments is highly variable.</p>	<p>Bedding - Xbedding 25, 7 and 27 302.30 304.60 2.30</p>

					315.15 - 324.08 m's fracture and alteration zone developed in a finer grained, somewhat dirty looking quartzites. In many places the fractured rock surfaces have been coated with thin film of brown to red hematite. The hematite has also infiltrated into some of the surrounding materials, appears to have possibly replaced some minerals. In places the sediments also appear to have been altered with some fine grained, light green chlorite minerals. Some of the fractures surfaces coated with micro thin marcasite, pyrite and rarely cpy.	fracture zone	56 and 18	315.15	324-08	#VALUE!
					318.37 - 322.74 m's, particularly wide spread hematite coatings on fractures, hematite infiltration - staining out from fractures and local "spotty" hematite which in places seems to be associated with fine grained chlorite minerals.	Fracture zone - hematite staining	30	318.37	322.74	4.37
					318.53 - 318.85 m's, gentle Z folding evident fabric alignment near central - interior areas of the fracture zone. Possible parasitic folding associated with the Shakespeare East anticline.	Deformation - Foliation	2 and 14	318.53	318.85	0.32
					319.78 m's, 2mm - 3mm hematite chlorite gouge materials. There is possibly limited dislocation movement along these gouge plains.	gouge	54	319.78		-319.78
					323.34 m's, 2mm to 4mm chlorite rich gouge materials developed in 130 mm silt interbed.	gouge	55	323.34		-323.34
326.21	347.56	21.35	1a	Quartzite's, grey, visibly finer grained, overall quartzite beds appear to be thinner probably less than 1 meter thick, separated by several thin 1 to 2mm up to 40mm silt interbeds.	At: 327.35 m's, 40 mm silt interbed	Interbeds	43	327.30	327.34	0.04
					At: 339.99 m's, typical 2mm to 4mm silt interbed	Interbed	51	339.99	339.99	0.00
						knife joint	21	340.85	340.85	0.00

					At: 345.22 m's, typical orthogonal joints along bedding - xbedding, blue green carbonate, possible copper stained joint surface.	Joint	55	345.22	345.22	0.00
347.56	407.35	59.79	1a	Quartzite's, grey, visibly finer grained, overall quartzite beds appear to be thinner probably less than 1 meter thick.	At: 354 m's, faint but visible xbedding	xbeds	47	354.00		-354.00
				From: approximately 358.43 m's to approximately 397.47 m's there is a visible increase in thickness of silt interbeds, vary from 30mm's to 410 mm's, to a maximum of 500 to 525 mm's, average 200 mm's +/-.	At: 358.43 m's, an irregular 30 mm silt interbed	interbed	39	358.43		-358.43
					From: 360.94 m's to 361.34 m's, thick silt interbed. Some possible larger scale contorsion - folding would seem evident.	Interbed	57 to 81	360.94	361.34	0.40
					From: 359.45 m's to 366.16 m's, the quartzite sediments intermixed with thicker silt interbeds appear to have been noticeably disrupted. A lot of the xbedding has been clearly re aligned. The disruption of the quartzite sediments appears to have in places interacted with the finer grained silt interbeds.	xbeds	12	362.50		-362.50
					From: 360.93 m's to 365.09 m's, mild to moderate broken core, at least 3 sets of fractures, surfaces coated with fine grained hematite, chlorite and lesser carbonate. Hematite has stained some of the surrounding rocks.	Fracture Zone	62, 20 and 6	360.93	365.09	4.16
					At: 357 m's, 3mm to 4mm chlorite - carbonate rich fracture filling. May have potentially been some relatively minor small scale movement along such feature.	Fracture	15	357.00		-357.00
					From: 369.00 m's +/- to 402.00 m's +/-, visibly disrupted sedimentary beds, intermixed with deformed looking quartzite cross beds bound by several scattered 2 mm to 500 mm, visibly deformed - disrupted silt interbeds	Interbed	46	381.44		-381.44

					At: 414.30 m's, a 65 mm appears to be a reworked silt interbed, near a sulphide bearing carbonate vein.	Interbed	69	414.30	414.30	0.00
					From: 419.60 m's to 419.70 m's, relatively smaller scale silt interbed	Interbed	41	419.60	419.70	0.10
					From: 423.90 m's to 424.42 m's, a larger scale silt interbed.	Interbed	58	423.60	424.42	0.82
					From: 416.34 m's to 416.80 m's, local evidence of gentle "Z" folding.	Folding	3 to 5	416.34	416.80	0.46
					At: 425.00 m's, local evidence of small scale, gentle "Z" folding. Such is visible at top edge of silt interbed.	Folding	71	425.00	425.00	0.00
					At: 413.45 m's, an 18 mm to 20 mm grey white carbonate - lesser quartz fracture filling vein developed within a silt interbed. Vein contains some irregular 1mm to 3mm wide up to 15 mm long infillings of fine grained po with cpy along some of the edges.	Sulphide Bearing Fracture Filling Vein	61	413.45	413.45	0.00
					At: 424.00 m's, 1mm to 2 mm wispy blue grey quartz vein developed in the silt interbed	q.v	51	424.00	424.00	0.00
333.21	472.10	138.89	1a	<p>Quartzite's, noticeably reduced thicknesses and frequency of silt interbeds, would seem evident from 432.48 meters. In this interval the silt interbeds vary from 2 mm's to 5 mm's and 20 mm's to 40mm's, to rare well developed 160 mm to rare poorly developed - poorly sorted 270 mm interbed. Some of the silt interbeds and the quartzite beds seem to have been mildly disrupted in places.</p> <p>For the most part the sediments are fairly intact. In places some well developed orthogonal joints have been developed. Many of the joint surfaces exhibit thin to micro thin waxy coatings - films of chlorite minerals, sometimes associated with thin coatings of marcasite, pyrite, po and rarely less common cpy.</p>	From: 432.31 m's to 432.48 m's, well developed silt interbed.	Interbed	50	432.31	432.48	0.17
					At: 445.45 m's, thin 2 mm to 3 mm silt interbed.	Interbed	53	445.45	445.45	0.00
					At: 458.00 m's +/-, well developed cross beds	xbeds	33	458.00	458.00	0.00
					At: 441.00 m's +/-, example of orthogonal jointing.	Ortho Joints	42 and 37	441.00	441.00	0.00

					At: 448.37 m's, a 70 mm to 80 mm part of a poorly developed silt interbed which contains locally and rarely abundant 1% to maybe 3% of fine grained po with lesser cpy. The sulphide minerals appear to have been stretched out along possible foliation	Sulphides		448.35	448.42	0.07
					Possible minerallineation - alignment which maybe defined by the highly visible sulphide minerals.	Lineation ?	28	448.37	448.37	0.00
					At: 438.47 m's, a narrow 7mm blue grey subvitreous q.v	q.v	80	438.47	438.47	0.00
					At: 455.15 m's knife joint	knife joint	15	455.15	455.15	0.00
					At: 468.55 m's knife joint	knife joint	15	468.50	468.50	0.00
					At: 437.75 m's knife joint, maybe part of an orthogonal set.	knife joint	15	437.75	437.75	0.00
472.10	487.16	15.06	1a / 2a	A mixture of multiple intercalated beds of poorly to well laminated silt interbeds amongst somewhat dirty looking quartzite's to possibly arkosic like sediments materials. The intercalated siltstone beds vary in thickness from 5 mm's to 15 mm's to 230 mm's up to 890 mm's. Most of the siltstone beds appear to have been very well laminated or exhibit well developed foliation parallel to the laminated sediment materials.						0.00
										0.00
					At: 480.00 m's +/-, a good example of possible sediment laminations or moderately to well foliated siltstone sediments.	Foliation ? / Bedding	55	480.00	480.00	0.00
				These areas of highly abundant, finer grained, typically soft intercalated sedimentary beds, represent a local area of differential weakness relative to the surrounding quartzite rich sediments. In this particular interval it is quite evident that a structure has moderately to strongly broken up large portions of the rock within the interval. Associated with the structure is some wide spread alteration with the emplacement of silica - carbonate and chlorite to produce a series of irregular to sharp injections of quartz - carbonate - chlorite and feldspar bearing veins within the broken - structural zone. Later hematite alteration penetrated into some of the surrounding rocks, commonly developed along the many fracture surfaces.	From: 473.32 m's to 487.16 m's, broken fracture - structural zone. In places the fracturing would seem to be highly variable. Some of the fracturing appears to have developed parallel pre existing bedding / foliation, while other fractures less commonly cross cut the rock fabric. In a rare instance it would appear that some fracturing may have also occurred parallel to some gentle "Z" folding.	Structure	39, 57, 13 and 5			0.00

					From: 474.94 m's to 487.16 m's, there are a scattered number of 10 mm to 15 mm to 25 mm up to 40 mm, and rarely 100 mm, grey light white - sub vitreous, quartz rich, pink feldspar, chlorite and carbonate bearing sharp to irregular like vein injections, which for the most part appear to have developed more or less parallel to the rock fabric. The bulk of the veins appear to have been developed from: 477.43 m's to 480.60 m's. In places it would seem that some of the quartz veins may have developed into a fairly soft, possibly warm - hot host rock. In places it looks like the intruding silica materials cooked and altered some of the surrounding siltstone materials before the veins solidified.	q.v's	35, 47, and less common 56	474.94	487.16	12.22
					Although no visible sulphide minerals were observed within the quartz veins, marcasite, pyrite and lesser microthin coatings of sulphide minerals commonly developed on many of the waxy chlorite fracture surfaces.	Sulphides on Chlorite Fractures	76 and 53	485.85	485.85	0.00
487.16	537.72	50.56	1a	Quartzite's, with several thin, <5 mm to 30 mm and 90 mm, up to 260 mm and 830 mm, light ash grey brown silt stone interbeds. The somewhat dirty fine to medium grained quartzite beds vary in thickness from 130 mm's to 1,200 mm's. In several places it would appear that the silt interbeds may have been partially cooked and show signs of stretching like deformation, as would seem evident in the development of fine grained coffee brown mica minerals and lighter green chlorite minerals. In places some of the quartzites appear to have been somewhat disrupted.	From: 494.74 m's to 494.80 m's, moderately well developed silt interbed.	Interbed	65	494.74	494.80	0.06

At: 497.98 m's, a good example of a 25 mm interbed which has been moderately to strongly altered with fine grained mica and chlorite minerals. These materials show signs of being stretched out.	Interbed	54	497.98	497.98	0.00
At: 497.51 m's, some visible cross bedding.	xbedding	23	497.51	497.51	0.00
From: 524.57 m's to 525.77 m's, an example of a large scale siltstone interbed.	Interbed	47	524.57	525.77	1.20
From: 509.78 m's to 510.22 m's, narrow, moderately to badly broken core. The fracturing appears to have developed within a siltstone interbed.	Fracture Zone	37	509.78	510.22	0.44
From: 515.67 m's to 517.00 m's, a very badly broken section of core - angular like rubble. The fracturing appears to have developed exclusively within quartzites.	Fracture Zone	55	515.67	517.00	1.33
From: 525.38 m's to 525.72 m's, an isolated, fairly intact fracture zone developed within a large scale siltstone interbed.	Fracture Zone	77	525.38	525.72	0.34
At: 525.41 m's 5 mm's to 7 mm's dark grey quartz vein with scattered fine grained pyrite and possibly lesser cpy	Suphide Bearing q.v	46	525.41	525.41	0.00
At: 527.74 m's, narrow 8 mm blue grey q.v.	q.v	59	527.74	527.74	0.00
From: 527.27 m's to 527.44 m's, an isolated broken core - fracture zone.	Fracture Zone	42 and 24	527.27	527.44	0.17
From: 530.52 m's to 531.00 m's, moderately broken fractured core zone.	Fracture Zone	28	530.52	531.00	0.48

537.72	589.34	0.00	1a / 1b	<p>Quartzite's with many siltstone interbeds through out. Typically fine to medium grained to rarely visibly coarser grained quartzite's with some noticeably thicker light beige to brown typically massive fine grained to thinly laminated siltstones. The siltstone interbeds vary in thickness from as narrow as 5 mm's to 10 mm's and 30 mm's to 50 mm's, up to 120 mm's through to 400 mm's to approximately 600mm's at their maximum thickness. The quartzite beds seem to vary in thickness from: 60 mm's to 570 mm's to greater than 1,500 mm's</p>	<p>From: 531.34 m's to 531.47 m's, relatively narrow siltstone interbed.</p>	Interbed	70	531.34	531.47	0.13
					<p>From: 542.15 m's to 542.68 m's, somewhat well developed siltstone interbed with faint but visible laminations, There maybe some weakly developed foliation developed parallel to the laminations, some micro thin, waxy chlorite commonly developed on some of those surfaces.</p>	Interbed	62	542.15	542.68	0.53
					<p>From: 544.51 m's to 544.81 m's, well developed, with 2 mm's to 5mm silt laminations, some of which seem to have been mildly disturbed.</p>	Interbed	53	544.51	544.81	0.30
					<p>From: 548.31 m's to 548.53 m's. some erosion of top of quartzite bed and some re worked siltstone interbed materials. Some of these materials have been altered with some very fine grained brown mica and green chlorite minerals. Light butter yellow iron carbonate and white carbonate developed along some of the silt laminations. Such carbonate alteration 1 mm to 3 mm's.</p>	Interbed	56	548.31	548.53	0.22
					<p>From: 543.13 m's to 543.30 m's, isolated broken core zone. A few of the fracture surfaces show micro thin pyrite and some cpy.</p>	Fracture Zone	37	543.13	543.30	0.17

From: 550.01 m's to 558.55 m's, broad extent of a mild to moderate to locally strongly broken core fracture - structural zone. In some locations within the zone there is the local development of some kinked - waxy chloite schist materials, narrow isolated occurrences of brecciated quartzites healed up with chlorite and narrow remnants of thin <5 mm chlorite fault gouge materials that have since been badly broken apart. Many of the fracture surfaces seem to be coated with a sugary - granular like coating of carbonate minerals. Some dusty fine grained chlorite minerals are also present on many fracture surfaces. Some of the earlier fractures have been infilled with 1 mm to 3 mm white carboante.						0.00
From: 550.47 m's to 550.52 m's, angular brecciated quartzite's, 1 mm to 8 mm x 15 mm breccia fragments healed with fine grained chlorite.	Breccia	53	550.47	550.52		0.05
At: 557.60 m's, local chlorite schist.	Schist	61	557.60	557.60		0.00
At: 558.60 m's, 2 mm's to 4 mm grey white quartz vein running nearly parallel to the long axis of the core. The quartz vein has developed in a visibly cooked quartzite. Locally the q.v contains small < 3mm collections of po grains. Locally 3 mm to 5 mm collections of po noted immediatly adjacent to the vein in the host rock quartzite.	q.v	7	558.60	558.60		0.00
At: 557.00 m's, remnant of orthogonal joints.	Joint	41	557.00	557.00		0.00
From: 560.40 m's, to 561.00 m's, two narrow, 90 mm's and 160 mm broken core fracture zone.	Fracture Zone	18	560.40	561.00		0.60

					At: 580.16 m's a narrow 2 mm blue grey quartz vein in a blue grey cooked quartzite.	q.v	19		508.16	508.16	
					From: 581.81 m's to 584.80 m's, there maybe present a series of narrow parrallel 2 mm's to 8 mm wide blue grey quartz veins which contain local scattered concentrations of up to 5 mm's x 12 mm's of irregularly shaped po, and iron carbonate minerals.	q.v's	3	581.81	584.80	2.99	
589.34	592.94	3.60	2b	Siltstone, grey to light beige brown, thin, < 1mm to 5 mm's, up to 3 mm to 15 mm, slightly coarser grained, possibly quartz feldspar bearing laminations.	At: 590.75 m's, very well developed , thin 1 mm's to 3 mm laminations. In many places the thin laminations are coated	Bedding	59	590.75	590.75	0.00	
592.94	602.15	9.21	7a	Lamprophyre intrusion, light to medium grey, typically fine to medium grained. The upper part of the intrusion is in contact with the well laminated siltstones, the lower part of the intrusion is in contact with a fine to medium grained quartzite. The upper and lower contacts of the intrusion exhibit a thin 100 mm to 130 mm finer grained chill like interior margin. The intrusion has incorporated with in it 2% to 3% of small light grey to white rounded to angular xenolithic 2mm to 10 mm x 30 mm rock fragments, suspected to be possible remnant bits of quartzite material derived from the local surroundings. In a few places the intrusive rocks and the xenolithic fragements look to have been stretched out - foliated like. At the uppper contact and somewhat into the adjacent overlying sediments, there are a number of narrow 1mm to 10mm	At: 602.00 m's, near the contact the intrusive rocks appear to have been mildly but visibly stretched out.	Foliation	53	602.00	602.00	0.00	
					At: 600.00 m's, in a number of places the intrusive rocks exhibit some well developed knife joints, which seem to be associated with some local broken core. Some of the joint surfaces coated with thin waxy chlorite - carbonate coatings.	Knife Joint	13	600.00	600.00	0.00	
602.15	609.67	7.52	1a / 1b	Quartzite with increased mix of thinly laninated siltstone materials with the quartzite's.						0.00	
					From: 602.15 m's, to 608.00m's Principally fine grained dirty quartzite's	Bedding / xbedding	67	607.00	607.00	0.00	

					From: 608.00 m's to 609.67 m's, principally well lamminated 3 mm to 15 mm siltstone beds amongst 5 mm to 45 mm dirty quartzite beds.	Bedding	56	608.00	609.67	1.67
					From: 606.76 m's to 608.04 m's, possible series of narrow, parallel 1mm to 5mm grey light blue quartz veins with small < 3mm rare concentrations of po.	q.v's	3 to 16	606.76	608.04	1.28
					At: 608.00 m's, somewhat rough, coated with thin chlorite.	Knife Joint	11	608.00	608.00	0.00
609.67	621.15	11.48	2b	Siltstone, grey to light beige brown, thin, < 1mm to 5 mm's, up to 3 mm to 20 mm, slightly coarser grained, possibly quartz feldspar bearing laminations. In a number of places there are indications of possible soft sediment deformation, disruption followed by reconsolidation of the various lamminations of silt materials. In the upper part of the interval there may have been some mild stretching deformation - foliation as would seem evident in some locally broken core sections and waxy chlorite developed on some surfaces.	From: 608.40 m's to 611.28 m's, locally broken sections of core.	Fracture Zone	43	608.40	611.28	2.88
						Foliation Contact	43	608.40	611.28	2.88
621.15	622.67	1.52	4d	Quartz diorite, mottled grey white, massive fine to medium grained, visible sharp upper and lower contact. Intrusive rock incorporated within it a few small 8 mm x 8 mm to 50 mm and up to 90 mm partially assimilated xenoliths of fine grained siltstone materials. Intrusive rocks contain visible scattered traces of small po grains.	At: 621.15 m's, upper contact	Contact	61	621.15	621.15	0.00
						Contact	57	622.67	622.67	0.00
622.67	645.83	23.16	1b	Quartzite's intermixed with fine grained laminated and more massive, thicker deposited siltstone materials. The siltstone materials vary in thickness from < 1 mm to 9 mm's consisting of many - multiple laminations to much thicker depositions of 1,900 mm's to 2,000 mm's where it would appear that some original fine grained quartz sediments may have been highly contaminated with fine grained silty fractions.	At: 624.45 m's, well developed 1 mm to 7 mm laminations	Bedding	68	634.45	624.45	-10.00
						Bedding	72	627.90	627.90	0.00

At 640.00 m's less well developed, disturbed like 1 mm to 3 mm silt laminations. There are signs of local soft sediment deformation.	Bedding	76	640.00	640.00	0.00
From: 622.67 m's to 626.71 m's, zone of moderate to locally intense intact micro fracturing - micro brecciation - visible breakage and disruption - dislocation. This occurrence, the rocks have been well healed up with fine grained chlorite -mica <biotite and sericite> and possibly carbonate minerals. It is not overly uncommon to observe small < 1mm up to 1 mm to 2 mm grains of po and cpy occurring within the chlorite - mica bearing materials in the fracture - brecciation zone. The healing process minerals contain scattered sulphides particularly po and lesser cpy.	Breccia Zone	15	622.67	626.71	4.04
At: 624.38 m's to 624.41 m's, a somewhat irregular injection aof fine grained white carbonate minerals associated with brown mica and chlorite alteration has developed parallel to the siltstone laminations which immediately adjacent to brecciated quartzite - siltstone materials. The carbonate portion of the vein contains an estimated 30% to 40 of fine grained po with lesser cpy.	Po - Cpy Bearing Carb Vein	70	624.38	624.41	0.03

					From: 628.00 m's to 628.19 m's, an irregular looking injection of carbonate injected into the quartzite - siltstone materials. The vein like materials contain a large 110 mm irregular - wispy clot of fine grained chlorite seeminly developed into later fractures, followed by the implacement of fine to coarse grained po. The irregular shaped concentrations of po vary from: 1 mm x 1 mm up to 10 mm's x 50 mm's.	Po Bearing Carb Vein	86	628.00	628.19	0.19
					At: 627.30 m's, local knife joints	Knife Joint	10	627.30	627.30	0.00
					At: 629.24 m's, 2 mm to 3 mm, blue grey quartz vein with some minor butter yellow iron carbonate.	q.v	15	629.24	629.24	0.00
645.83	662.88	17.05	4d / 1a / 1b	Quartz diorite roof zone materials. Faint visible remnants of fine grained sedimentary rocks amongst what appears to have been originally multiple narrow to potentially large scale injection of Shakespeare quartz diorite into the surrounding sediments. Throughout much of the interval the rocks have been moderately stretched out - clearly deformed, and as such can make it difficult to fully appreciate the extent of the intrusive nature of the quartz diorite and so on. In some places it is still possible to examine the faint remnants of the original sedimentary - depositional fabric, which has been overprinted with a distinct structural fabric. The orientation of the deformation alignments seems to be somewhat variable in places						0.00
649.00	684.00	35.00	Structural Zone - Large Dislocating Type Structure	This structural zone appears to have developed within the upper part of the Shakespeare intrusive suite quartz diorite roof zone, <4d> unit, including the upper part of the Shakespeare quartz gabbro <4c> unit. It would appear that such a structure has significantly dislocated the lower parts of the Shakespeare intrusive suite stratigraphy. The dislocated Shakespeare quartz gabbro <4c>, is in structural contact with the underlying varitextured Nipissing type quartz gabbro <3b> unit.	From: 649.00 m's +/- to 684.00 m's, relatively intact structural - mylonitic zone.	Foliation	13 to 44			0.00

					From: 645.83 m's to 647.03 m's, it is only the very upper portion of the roof zone interval which seems to have been untouched by the adjacent deformation. The rocks are quite massive medium to fine grained quartz diorites.					0.00
					At: 649.00 m's +/-, appears to be originally a coarse grained quartz diorite which contain remnant visible elongated 70 mm to 150 mm xenolithic fragments of a fine grained laminated sediment. The intrusive and sedimentary rocks have since been moderately deformed.	Foliation	13	649.00	649.00	0.00
					From: 657.76 m's to 658.15 m's, isolated local fracturing with thin < 5 mm dusty chlorite fault gouge materials have developed.	Foliation	17	657.76	658.15	0.39
					< 5 mm chlorite gouge materials	Gouge	17	657.76	657.76	0.00
					< 5 mm chlorite gouge materials	Gouge	17	658.15	658.15	0.00
					At: 662.26 m's, appears to be nearly the last of the faint remnants of the primary sedimentary fabric which has been overprinted by the structural fabric.	Bedding	28	662.26	662.26	0.00
662.88	674.58	11.70	4d	Quartz diorite, these rocks appear to form a more continuous interval of what appears to be principally the igneous intrusive rock. The rocks have been moderately to strongly deformed and as such due to the stretching and some alteration are beginning to look mylonitic. Near the lower part of the interval there are what appear to be very faint remnants of possibly originally highly assimilated xenolithic rock fragments.		Foliation	13	662.26	662.26	0.00
					From: 662.88 m's to 674.58 m's, these rocks have been moderately to well stretched out - foliated.	Foliation	21	667.03	667.03	0.00
					At: 666.35 m's, narrow 5 mm blue grey quartz vein.	q.v	71	666.35	666.35	0.00
					At: 666.00 m's a rather rough knife joint with dusty chlorite coatings.	Knife Joint	5	666.00	666.00	0.00

674.58	684.00	9.42	4c	<p>Quartz Gabbro, from the present characteristics it would appear that the original intrusive rocks were possibly quite massive and coarse grained. The contact between the overlying quartz diorite and the underlying quartz gabbro is clearly visible but has likely been re aligned due to the overprinting deformation. The rocks have been very moderate to very strongly deformed - stretched out and have a distinct mylonitic texture - appearance. These rocks have also been moderately to strongly altered. It would appear that most if not all of the original mafic minerals appear to have been altered to chlorite. Some carbonate alteration also seems evident. Secondary sulphide minerals, principally pyrite appears to have developed during the alteration - secondary remobilization mineralization. Some highly stretched out or broken remnants of original primary grains and or blebs of po with some cpy can be observed in a number of locations throughout the interval.</p>	At: 674.58 m's visible but deformed contact between the Shakespeare quartz diorite and the Shakespeare quartz gabbro.	Contact	28	674.58	674.58	0.00
					At: 678.12 m's, strongly developed foliation.	Foliation	25	678.12	678.12	0.00
					At 682.00 m's, strongly developed foliation.	Foliation	27	682.00	682.00	0.00
					At:683.96 m's., the "bottom" of the described structural zone, which may have cut into the lower parts of the Shakespeare quartz gabbro, possibly through part of the interconnected sulphides.	Foliation	11	683.96	683.96	0.00
					At: 679.81 m's, 3 mm blue grey quartz vein with some po and traces of cpy.	q.v	57	679.81	679.81	0.00
					From: 681.77 m's to 682.97 m's, possible series of narrow 5 mm to 7 mm somewhat sinuous grey blue to dark blue, possible multiple parallel q.v's which contain visible fine grained po and lesser cpy.	Sulphide Bearing Q.V's	1	681.77	682.97	1.20
					At: 683.09 m's, a narrow 3 mm blue grey quartz - iron carbonate vein.	q. carb v	76	683.09	683.09	0.00

					From: 683.62 m's to 683.97 m's, at this location there would appear to be the remnants of what could possibly be part of what may have once been interconnected - net textured concentrations of fine grained po. Seems to be but a small remnant of the top of the Shakespeare East mineral deposit which has been dislocated.	Interconn ected - Net Textured Sulphides				0.00
684.00	719.73	35.73	3a / 3b	Nipiissing type gabbro to quartz gabbro, typically mottled grey - white green, massive, typically coarse to medium grained varitextured in some places. In many places the gabbro contains some visible disseminated and locally more intense development - alteration - with mineral grains of brown - black mica minerals, possibly biotite. Throughout the interval there are several narrow blue grey quartz veins which have developed with the gabbro. Some of these veins also contain some local minor amounts of butter yellow to yellow orange iron carbonate with some light grey to white ca carbonate. In some instances the quartz - carbonate veins contain traces to locally abundant po and cpy. Lower down in the interval the quartz veins seem to contain more cpy as compared with the po content in the veins.						0.00
					From: 684.47 m's to 685.40 m's, quite visible fine grained alteration of the gabbro with mica <biotite> and chlorite.					0.00
					At: 684.73 m's, a somewhat irregular 3 mm to 15 mm carbonate rich fracture filling vein with abundant fine grained po.	Sulp Bearing Carb Vein	45	684.73	684.73	0.00

From: 685.51 m's to 686.11 m's, in this interval there are two quartz - carbonate veins, one 130 mm's the second 30 mm's, separated by 330 mm's of gabbro. The veins contain appreciable of upwards of 20% to 30% of fine to medium grained po with lesser cpy. The bulk of sulphide minerals appear to be concentrated within the interior of the vein, less common towards the edges.	Sulp Bearing q.v's	20 and 59	685.51	686.11	0.60
At: 686.40 m's, orthogonal joints	Joint	55 and 29	686.40	686.40	0.00
From 687.30 m's to 687.41 m's, light blue grey quartz - carbonate vein with no visible sulphides.	q - carb v	74	687.30	687.41	0.11
From: 688.55 m's to 692.64 m's, there is a series of possible parallel, rough - undulating like fractures in the core, coated with fine grained chlorite and carbonate. There is some fractuing of the core .	Joint	7	688.55	692.64	4.09
From: 691.31 m's to 717.73 m's, a particular distinct zone - development of blue grey quartz carbonate veins. Some of these veins contain disseminated and local larger scale concentrations of cpy and lesser po. The quartz - carbonate veins vary in thickness from: 1mm to 15 mm's, to 180 and mm's, 230 mm's. Some of the veins have sharp contacts, some of the veins are quite irregular in nature. The butter to yellow - orange iron carbonate tends to occur as thin < 1mm to 5 mm inclusions and ribbon like streaks associated with the large scale quartz veins.	Q - carb v's				0.00
Many of the veins exhibit typically fine grained cpy with visibly less po.					0.00

					Many of the tight mm scale slips - joint like fractures have been coated with thin cpy and lesser po.					0.00
					In amongst the sulphide bearing veins and slips the gabbro has often been found to contain fine traces of disseminated - small grains of cpy and po. It would seem that where ever the gabbro rocks have undergone some visible alteration, it would appear that the sulphide content would increase.					0.00
					Selective intervals shall be chosen for which to conduct assaying. If there are any encouraging results then it will be possible to return to the location and tighten up the sampling etc.					0.00
719.73	798.00	78.27	3a	Nipissing type gabbro, typically dark green to brown green, massive medium to fine grained locally altered gabbro materials. In a number of places the gabbro shows signs of fine grained alteration with what appears to be a combination of fine grained mica and chlorite minerals. Through out this interval down to approximately 780.00 m's +/- there are a number of thin <1mm to 15 mm's with several in the order of 20 mm's to 30 mm's to 35 mm, blue grey quartz - fe carb - cal carb and minor chlorite fracture filling veins. The orientation of many of these veins appear to be quite variable.						0.00
					From: 719.73 m's to 789.00 m's, there are several narrow, up to 30 mm's and 35 mm's, qtz, fe - cal carb - chlorite fracture filling veins. These veins seem to less commonly contain cpy or po than the similar like veins above.	q-fe-cal carb-chl v's with rare sulph's	46 to 18	719.73	789.00	69.27
					These multi mineralic fracture filling veins less commonly contain the cpy and po mineralization as commonly observed in the similar looking fracture filling veins above.					0.00
					From: 749.05 m's to 750.65 m's., broken core fracture zone, moderate to very badly broken up core	Fracture zone	36	749.05	750.65	1.60
798.00	798.00	0.00	EOH	End of Diamond Drill Hole U-08-01						0.00
				Diamond drill core logging carried out by:						0.00
				Harold Tracanelli, Getn, P. Geo						0.00
				Diamond drill core logging completed on Monday						0.00
				February 07th., 2011						0.00
				At: the Shakespeare East core logging tent facility in Shakespeare Township, Ontario.						0.00

APPENDIX II

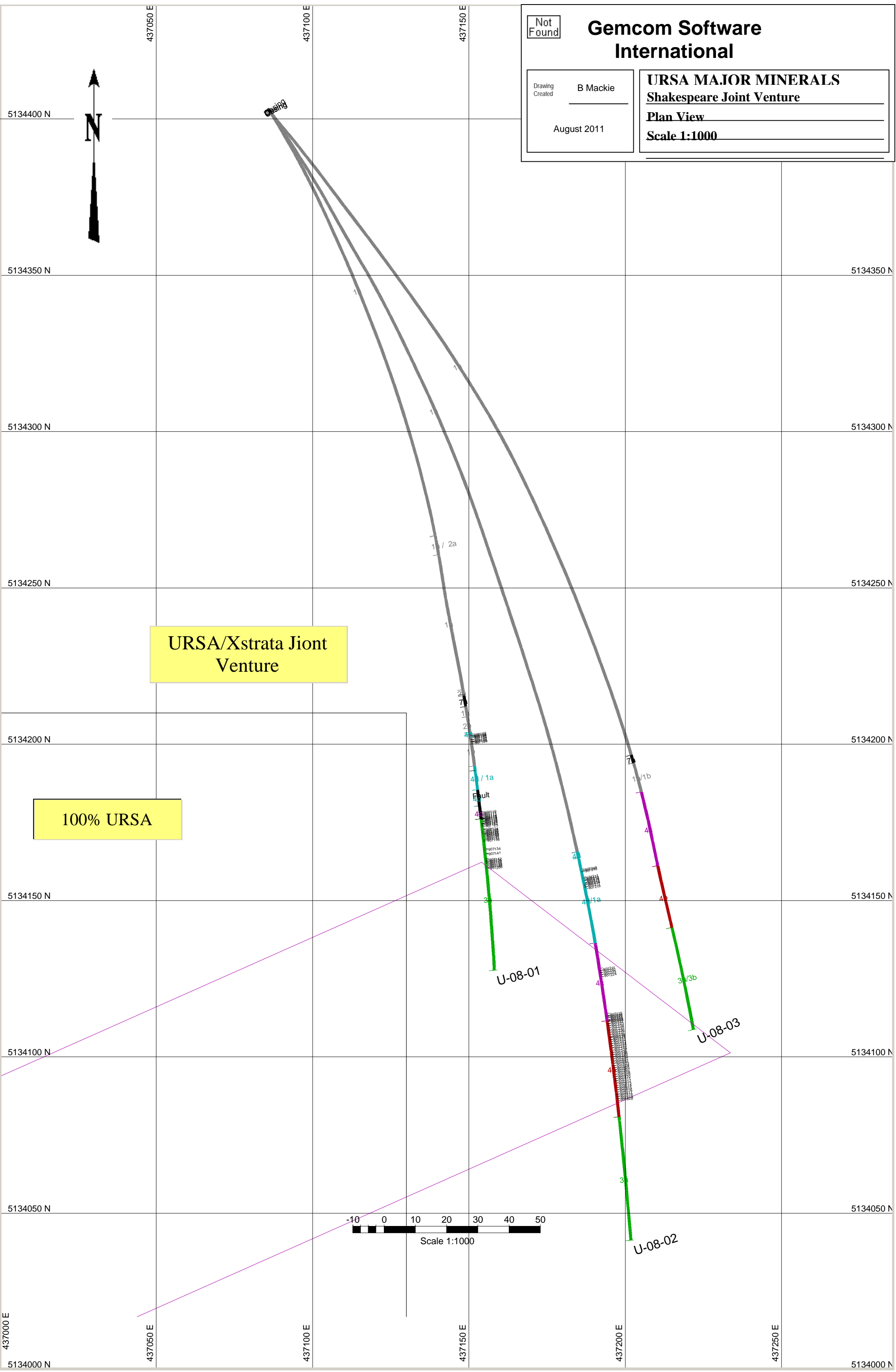
Cross Section and Plans for Diamond Drill Holes U-08-01, U-08-02 and U-08-03

Not Found

Gemcom Software International

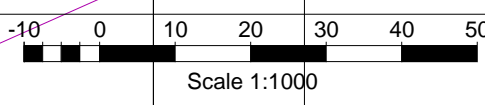
Drawing Created
B Mackie
August 2011

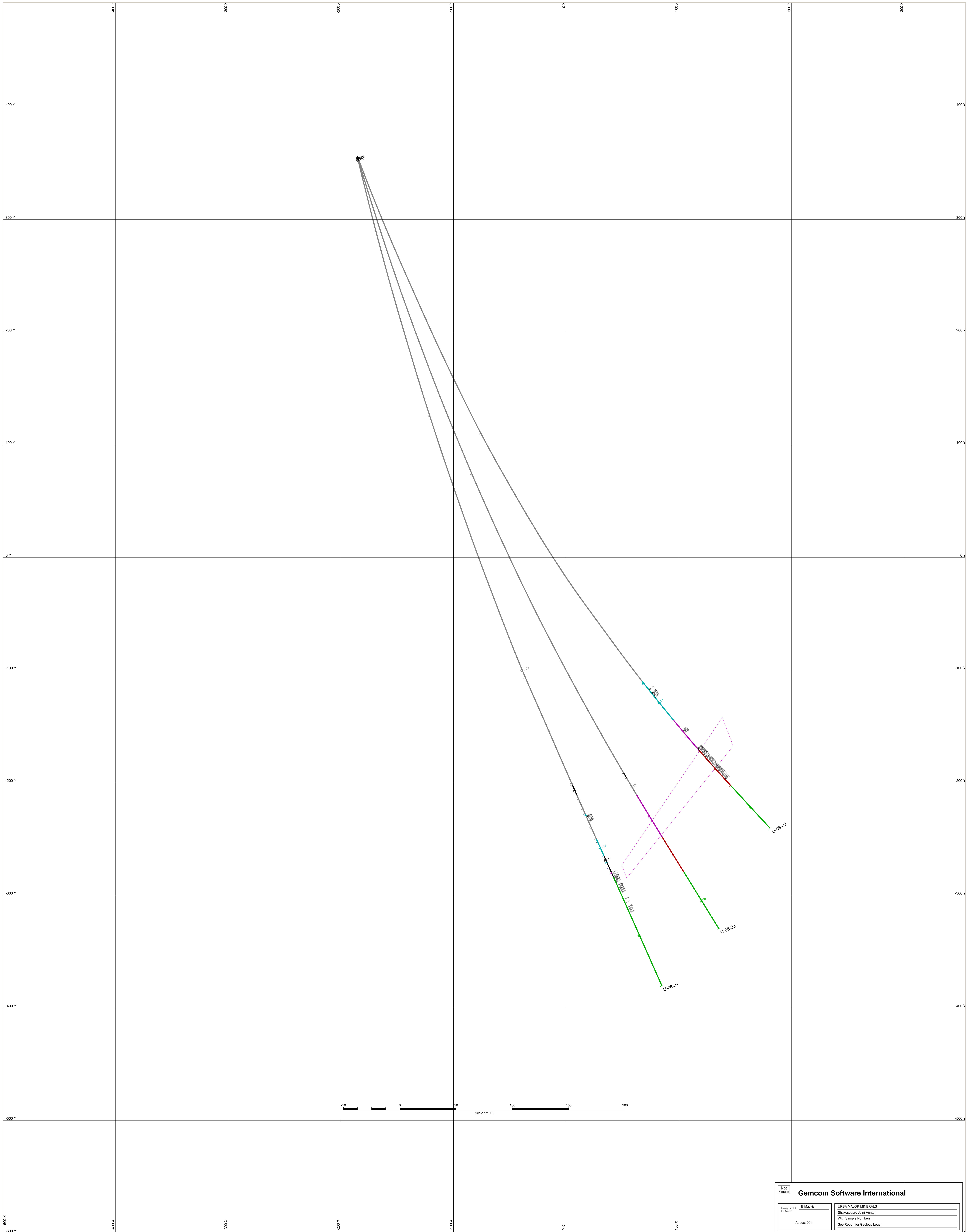
URSA MAJOR MINERALS
Shakespeare Joint Venture
Plan View
Scale 1:1000



URSA/Xstrata Jiont Venture

100% URSA





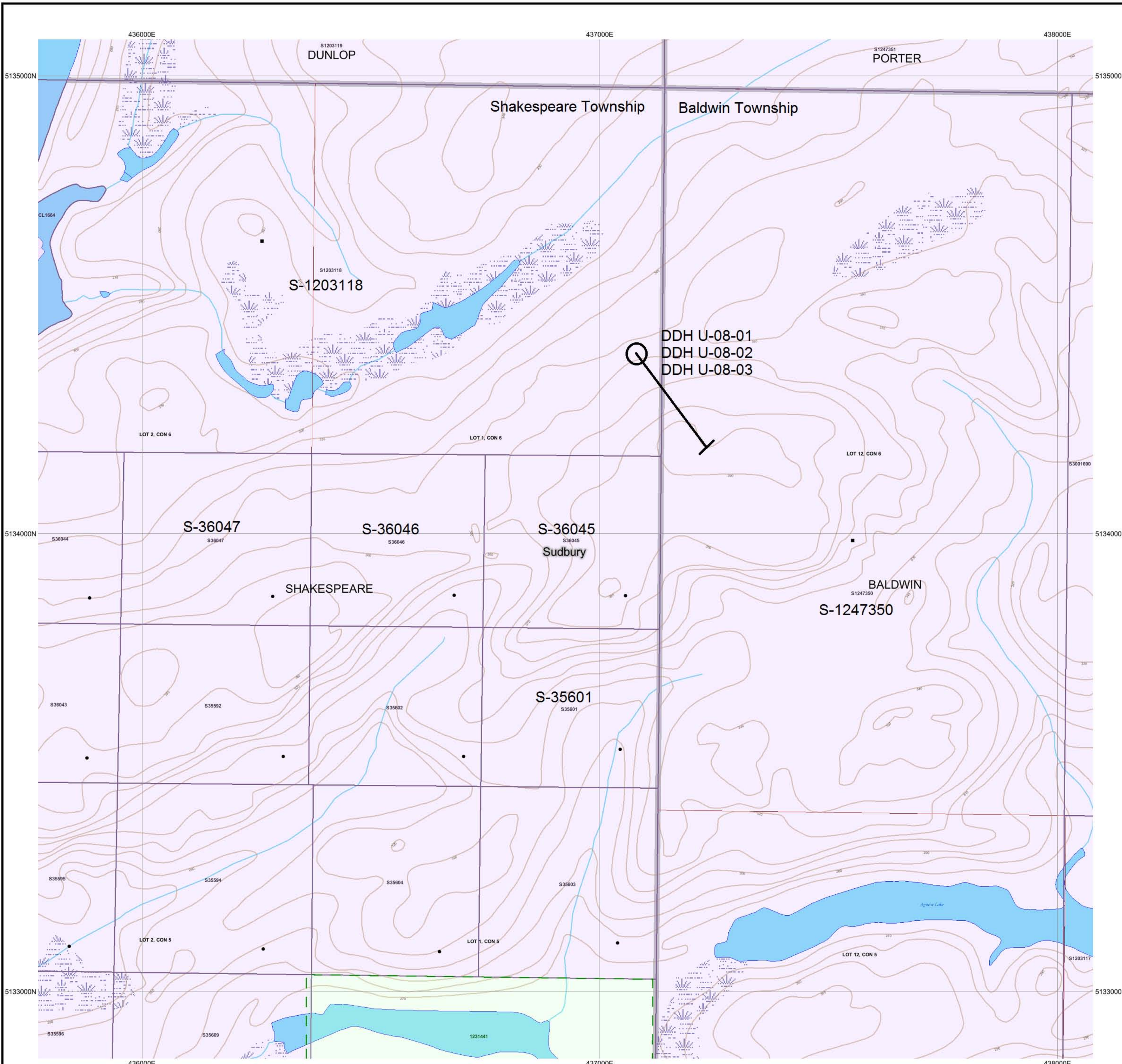
Gemcom Software International	
Drawing/Client: B Mackie Dr. Bollen August 2011	URSA MAJOR MINERALS Shakespeare Joint Venture With Sample Number See Report for Geology Legend

Date / Time of Issue: Thu Jan 05 16:37:12 EST 2012

TOWNSHIP / AREA SHAKESPEARE PLAN G-3001

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division Sudbury
 Land Titles/Registry Division SUDBURY
 Ministry of Natural Resources District SUDBURY



TOPOGRAPHIC

- Administrative Boundaries
- Township
- Concession, Lot
- Provincial Park
- Indian Reserve
- Cliff, Pit & Pile
- Contour
- Mine Shafts
- Mine Headframe
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Utilities
- Tower

Land Tenure

- Freehold Patent
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Leasehold Patent
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Licence of Occupation
 - Uses Not Specified
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Land Use Permit
- Order In Council (Not open for staking)
- Water Power Lease Agreement
- Mining Claim
- Filed Only Mining Claims

WEEKS	ADAMSON	VENON	EMMERSON
WEEKS	EMERSON	VENON	EMMERSON
EMERSON	DUNLOP	PORTER	WYKAM
DOONAN	SHAKESPEARE	BALDWIN	NARIN
WAT	HULLMAN	BERNATT	PORTER
HARRISON	MCNEILSON	WINDSOR	GORTON

LAND TENURE WITHDRAWALS

- 1234 Areas Withdrawn from Disposition
- Mining Acts Withdrawal Types
 - Wsm Surface And Mining Rights Withdrawn
 - Ws Surface Rights Only Withdrawn
 - Wm Mining Rights Only Withdrawn
- Order In Council Withdrawal Types
 - W'sm Surface And Mining Rights Withdrawn
 - W's Surface Rights Only Withdrawn
 - W'm Mining Rights Only Withdrawn
- IMPORTANT NOTICES

LAND TENURE WITHDRAWAL DESCRIPTIONS

Identifier	Type	Date	Description
7603	Wsm	Jan 1, 2001	W.P.L.A. NO 110, FILE 9214 SURFACE RIGHTS WITHDRAWN

UTM Zone 17
 1000m grid
 Drawing Prepared By: Harold Tracanelli, Getn, P.Geo
 Thursday January 12th., 2012

General Information and Limitations

Those wishing to stake mining claims should consult with the Provincial Mining Recorder's Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data available in the Provincial Mining Recorder's Office at the time of downloading from the Ministry of Northern Development and Mines web site.

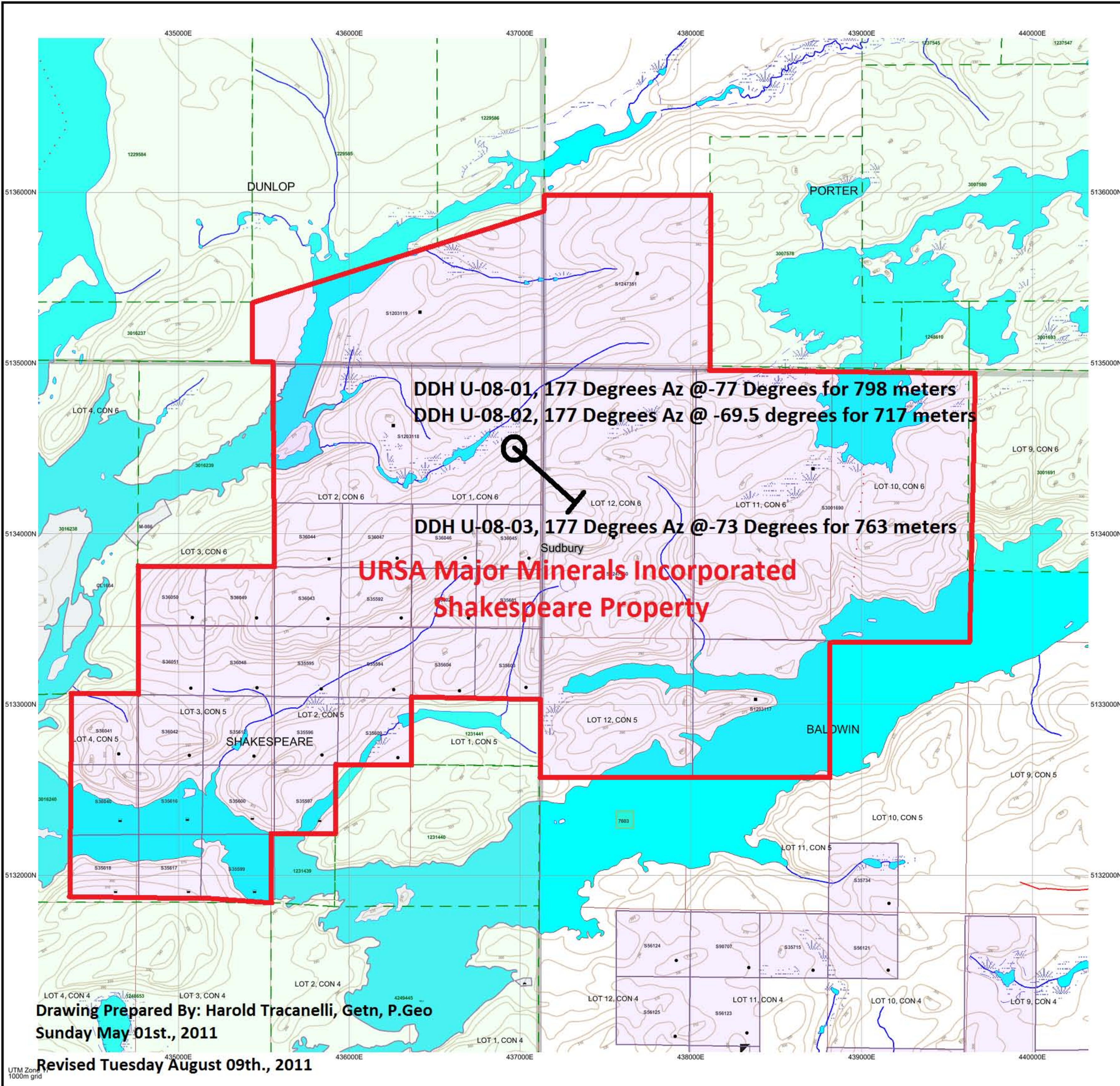
Contact Information:
 Provincial Mining Recorder's Office
 Wilket Green Miller Center 933 Ramsey Lake Road
 Sudbury ON P2E 6E5
 Home Page: www.mndm.gov.on.ca/MNDMMINES/LAND/Smitsmappage.htm

Toll Free
 Tel: 1 (888) 415-9845 ext 5742
 Fax: 1 (877) 670-1444

Map Datum: NAD 83
 Projection: UTM (6 degree)
 Topographic Data Source: Land Information Ontario
 Mining Land Tenure Source: Provincial Mining Recorder's Office

This map may not show unregistered land tenure and interests in land (including certain patents, leases, easements, right of ways, flooding rights, licenses, or other forms of disposition of rights and interest from the Crown). Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be illustrated.

Date / Time of Issue: Wed Apr 27 12:03:24 EDT 2011
TOWNSHIP / AREA PLAN
BALDWIN **G-3003**
ADMINISTRATIVE DISTRICTS / DIVISIONS
 Mining Division Sudbury
 Land Titles/Registry Division SUDBURY
 Ministry of Natural Resources District SUDBURY



TOPOGRAPHIC

- Administrative Boundaries
- Township
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- Trail
- Natural Gas Pipeline
- Utilities
- Tower

Land Tenure

Freehold Patent

- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Leasehold Patent

- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

License of Occupation

- Uses Not Specified
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only
- Land Use Permit
- Order In Council (Not open for staking)
- Water Power Lease Agreement

Mining Claims

- 1234567
- 1234567

Filed Only Mining Claims

LAND TENURE WITHDRAWALS

1234 Areas Withdrawn from Disposition

Mining Acts Withdrawal Types

- Surface And Mining Rights Withdrawn
- Surface Rights Only Withdrawn
- Mining Rights Only Withdrawn

Order In Council Withdrawal Types

- Surface And Mining Rights Withdrawn
- Surface Rights Only Withdrawn
- Mining Rights Only Withdrawn

IMPORTANT NOTICES

1234

LAND TENURE WITHDRAWAL DESCRIPTIONS

Identifier	Type	Date	Description
7564	Wsm	Jan 1, 2001	W.P.L.A. NO 110, FILE 9214 SURFACE RIGHTS WITHDRAWN
7653	Wsm	Jan 1, 2001	W.P.L.A. NO 110, FILE 9214 SURFACE RIGHTS WITHDRAWN
W-30311	Wsm	Mar 15, 2011	-> Issue: http://www.mndm.gov.on.ca/mines/landtitles/withdrawals/2011/w3-3111.pdf -> Issue: http://www.mndm.gov.on.ca/mines/landtitles/withdrawals/2011/w3-3111.pdf
W-30311	Wsm	Apr 4, 2011	-> Issue: http://www.mndm.gov.on.ca/mines/landtitles/withdrawals/2011/w3-3111.pdf -> Issue: http://www.mndm.gov.on.ca/mines/landtitles/withdrawals/2011/w3-3111.pdf
W-482	Ws	Jul 14, 1982	SEC. 30(9) W.482 140782 S.R.O. 137635

Drawing Prepared By: Harold Tracanelli, Getn, P.Geo
Sunday May 01st., 2011
Revised Tuesday August 09th., 2011

General Information and Limitations

Contact Information:
 Provincial Mining Recorder's Office
 Wilket Green Mills Centre 933 Ramsey Lake Road
 Sudbury ON P2E 6E5
 Home Page: www.mndm.gov.on.ca/MNDM/ENGLISH/landtitles.aspx.htm

Toll Free:
 741 1 (888) 415-0845 ext 5742
 Fax: 1 (877) 670-1444

Map Datum: NAD 83
 Projection: UTM (6 degree)
 Topographic Data Source: Land Information Ontario
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APPENDIX III

Crone Geophysics, Borehole Geophysical Reports

Geophysical Survey Report

covering

Borehole Pulse EM Surveys

over the

Shakespeare Project

for

Ursa Major Minerals Inc.

during

December 2010

by

CRONE GEOPHYSICS & EXPLORATION LTD.

Survey Area:	Shakespeare East Property, Webbwood, Ontario
Survey Type:	Borehole Pulse EM Surveys
Survey Operators:	Marcel Field
Borehole Surveys:	U-08-01, U-03-112
Survey Period:	December 2010
Report By:	A.M.Khan
Report Date:	January 2011

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PULSE ELECTROMAGNETIC SURVEY

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2.0	PROPERTY LOCATION
3.0	PERSONNEL
4.0	SURVEY METHODS
5.0	SURVEY PARAMETERS
6.0	PRODUCTION SUMMARY

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1.0 INTRODUCTION

Crone Geophysics & Exploration Limited was contracted by Ursa Major Minerals Inc. to conduct Borehole Pulse Electromagnetic Surveys on its Shakespeare East Property located in Shakespeare Township, near the village of Webbwood, Ontario. This report summarizes the geophysical work carried out in December 2010.

Two (2) holes covering one (1) surface loop were surveyed during the survey period 14th to December 20th, 2010. The appendices to this report contain page size plan maps, PEM profiles (linear 5-axis and logarithmic scale), step response profiles, and instrument specifications

2.0 PROPERTY LOCATION AND ACCESS

The Shakespeare property is located, immediately north and east of Agnew Lake, near the village of Webbwood, Ontario. The property is approximately 70 km west-southwest of Sudbury, Ontario, about one hour by road from Sudbury. The closest towns are Webbwood, which is 9 km southwest of the property, and Espanola, which is 11 km southeast. (Figure-1)

Access into the Shakespeare Property will be from northeast via a secondary road branching north from the Trans Canada Highway # 17 approximately 7.5 km east of Nairn Center. An existing logging road connects to the west side of the secondary road, approximately 13 km from Highway 17 and allows access to the property (Figure-2). For much of its length, this existing logging road is considered to be suitable for site access.

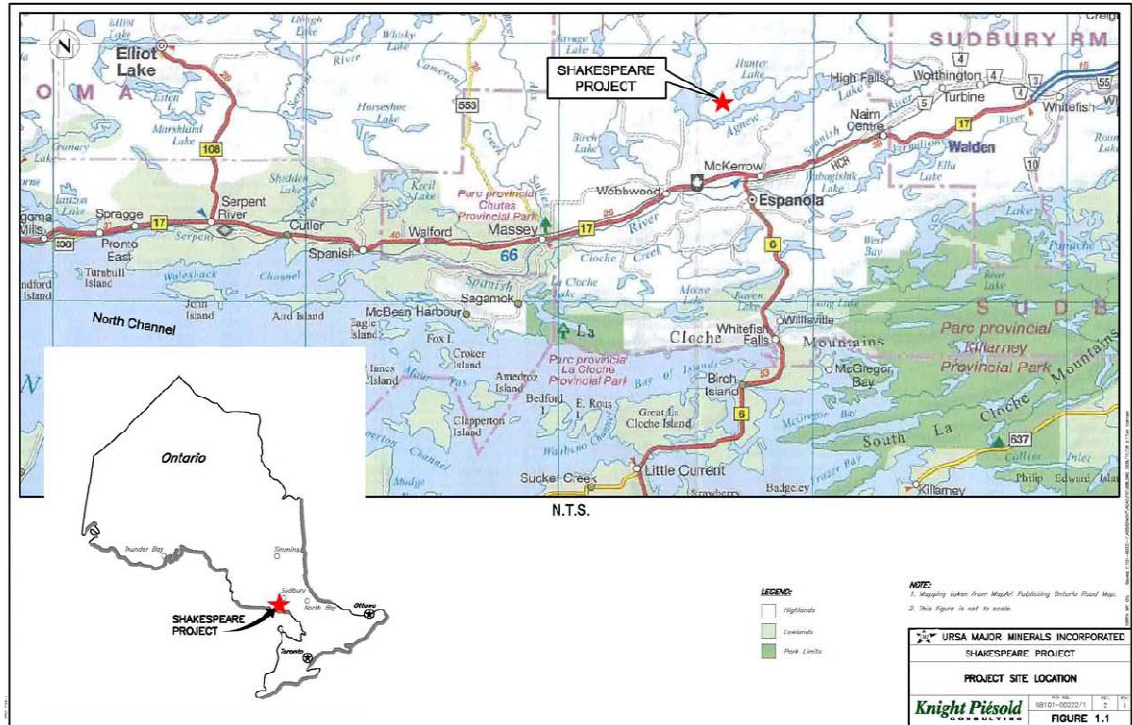


Figure 2: Property location and Access Map

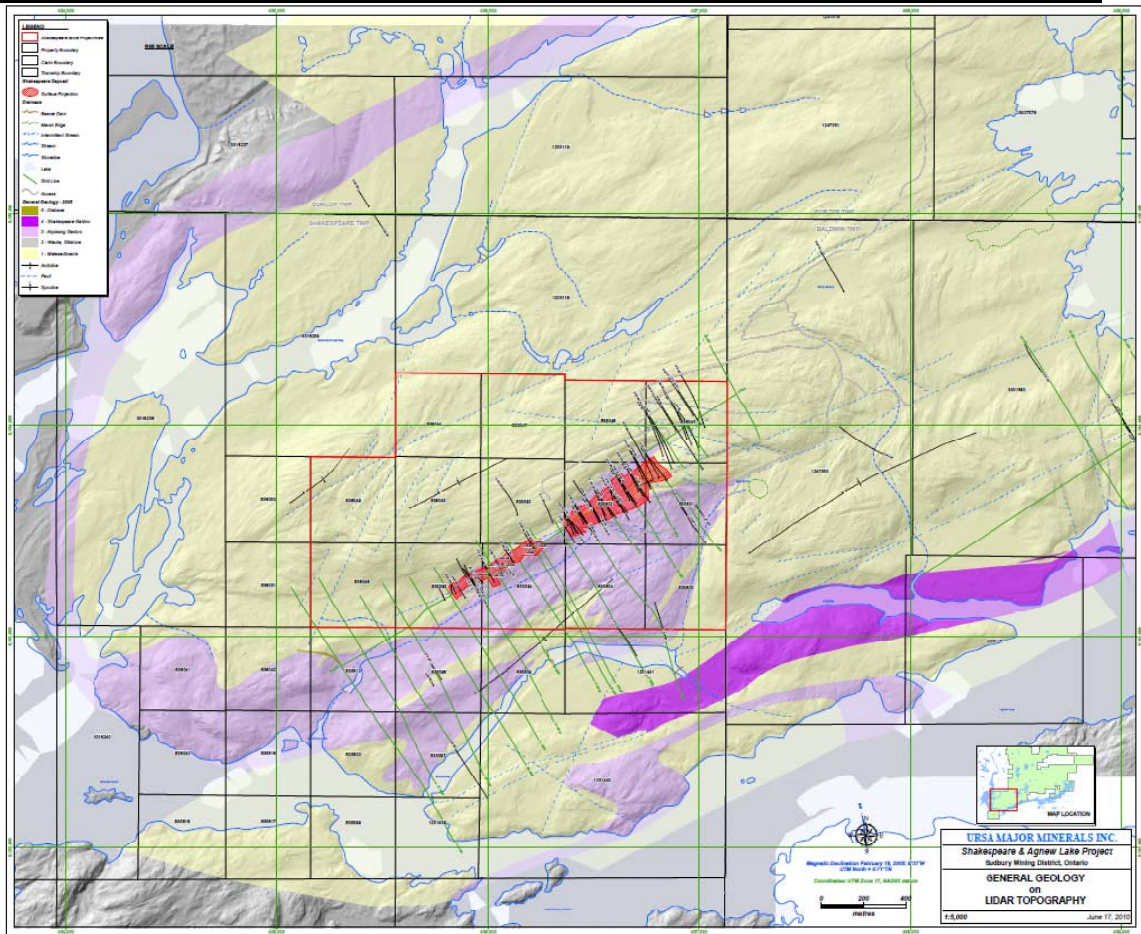


Figure 3: Local Geology Map



Figure 4: Hole Location Map

3.0 PERSONNEL

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

Survey Operators: Marcel Field

Data Processing: Kevin Ralph

Report: A.M.Khan

4.0 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 of the induced secondary field is measured across a series of time windows during the off-time. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic 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.

On this project, a 3D Borehole Pulse EM system was assembled in which an axial component (Z) probe and a cross component (XY) probe were used to measure the three components of the induced secondary field. The first pass with the 'Z' probe detects any in-hole or off-hole anomalies and gives information on size, conductivity, and distances to the edge of conductors. The second pass with the 'XY' probe measures two orthogonal components of the EM field in a plane orientated at right angles to the borehole. These results give directional information to the center of the conductive body. Data is usually collected at a nominal sample interval of 10m.

In addition to measuring the standard Primary Pulse channel on the ramp and 24 off-time channels, the Step Response may also be calculated. Step Response requires accurate geometrical control in which the loop position and the hole geometry are accurately determined. In the current surveys positional information was collected by Crone using a sub-meter capable GPS and regional base station. Positional information is provided in the UTM projection (zone 17 North), utilizing the NAD 1983 Canada datum. Elevations are given relative to Mean Sea Level based on the EGM96 Global geoids model.

The calculated Step Response values are binned into an S1 channel (from 0.5T to T), 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, where T is the time base). 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 exactly equal the theoretical field for a given component. In the case of generally resistive host and poorer conductors the S1 value will be very close or equal to the theoretical field for a given component

The equipment used on this project was a Crone Pulse EM Borehole system. This includes a 4.8 kW transmitter with a 220V voltage regulator which is powered by an 11 hp motor generator. The Crone Digital Receiver was used to collect the field

data. The synchronization between the Transmitter and the Receiver was maintained by either a crystal-clock or direct cable link

Data units are nT/s.

5.0 SURVEY PARAMETERS

Table I: Transmitter Loop Coverage

Loop	Property	Size (meters)	Corner Coordinates UTM NAD83 Canada Zone 17N
Tx Loop 1	Shakespeare East Property	~1000x1000	436705E, 5133928N 437518E, 5134348N 436248E, 5134806N 437047E, 5135230N

Table II: Borehole Survey Coverage

Hole	TX loop Shakespeare East	Timebase (ms)	Ram p (ms)	Current (Amps)	Station		Comp
					From	To	
U-08-01	Tx Loop 1	16.66	1.5	14	10	770	XYZ
U-03-112	Tx Loop 1	16.66	1.5	16	10	540	XYZ

The following table shows the various time gates that constitute the channel configurations set up in the Crone PEM Receiver used in the surveys discussed in this report. The 16.66 ms timebase uses off-time channels 1 – 20

Table III: Channel Configuration

Channe l	Start	Finish	Channe l	Start	Finish
PP	-200 μ s	-100 μ s			
1	48 μ s	64 μ s	2	64 μ s	84 μ s
3	84 μ s	112 μ s	4	112 μ s	152 μ s
5	152 μ s	204 μ s	6	204 μ s	268 μ s
7	268 μ s	360 μ s	8	360 μ s	480 μ s
9	480 μ s	640 μ s	10	640 μ s	848 μ s
11	848 μ s	1.128 ms	12	1.128 ms	1.496 ms
13	1.496 ms	1.992 ms	14	1.992 ms	2.644 ms
15	2.644 ms	3.512 ms	16	3.512 ms	4.664 ms
17	4.664 ms	6.192 ms	18	6.192 ms	8.22 ms
19	8.22 ms	10.92 ms	20	10.92 ms	14.4 ms

6.0 PRODUCTION SUMMARY

Table IV: Production Summary

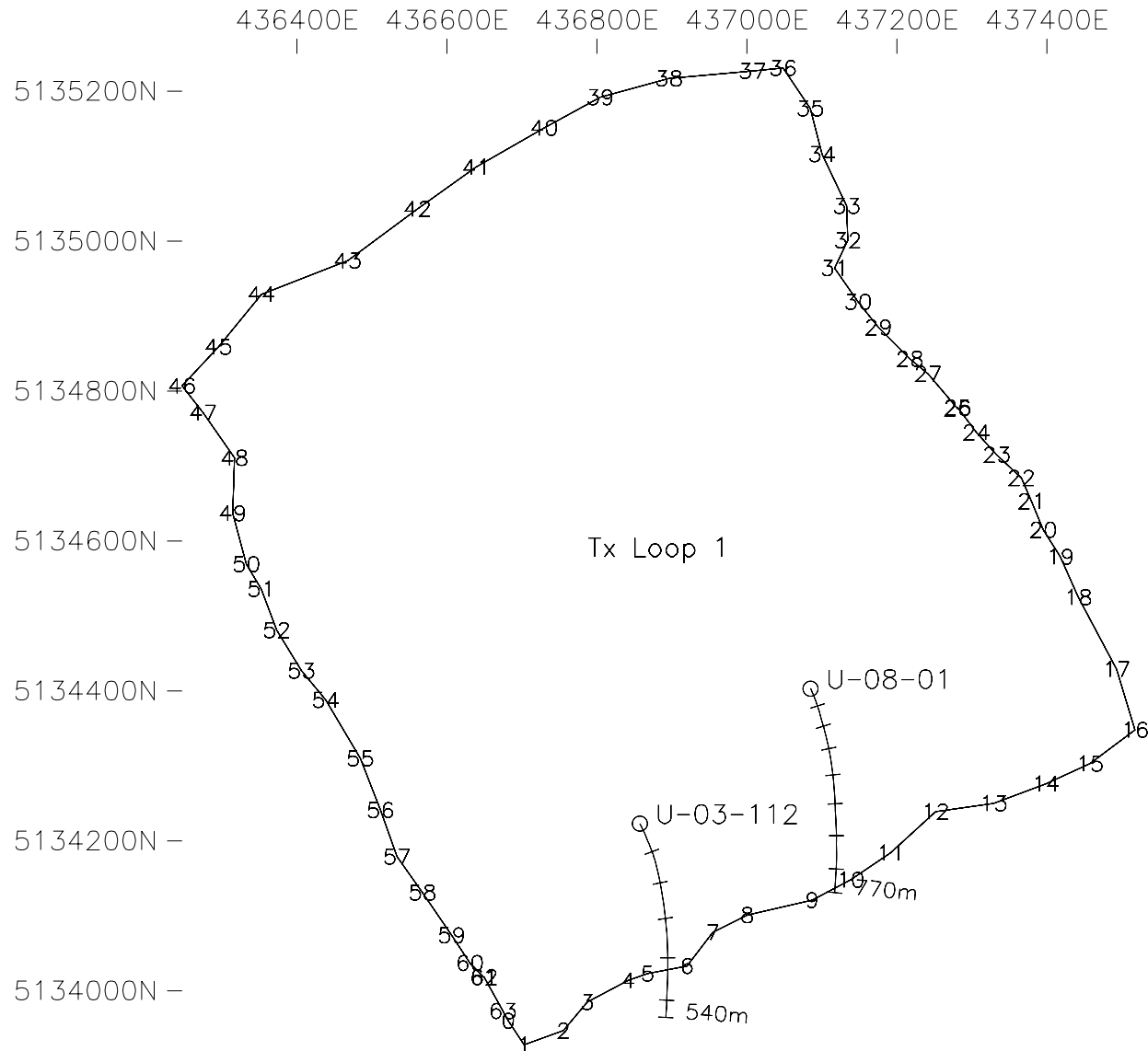
14-Dec-2010	MOB
15-Dec-2010	Discussed the upcoming job. Picked up the loop for the Survey.
16-Dec-2010	Went to the location of hole and laid half of the loop
17-Dec-2010	Finished putting out of loop.
18-Dec-2010	Surveyed U-03-01.
19-Dec-2010	Surveyed U-03-112.
20-Dec-2010	Packed up the gear.

Respectfully submitted,

A.M.Khan
Crone Geophysics & Exploration Ltd.

APPENDIX I
PLAN AND SECTION MAPS

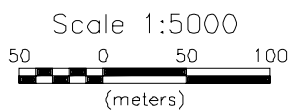
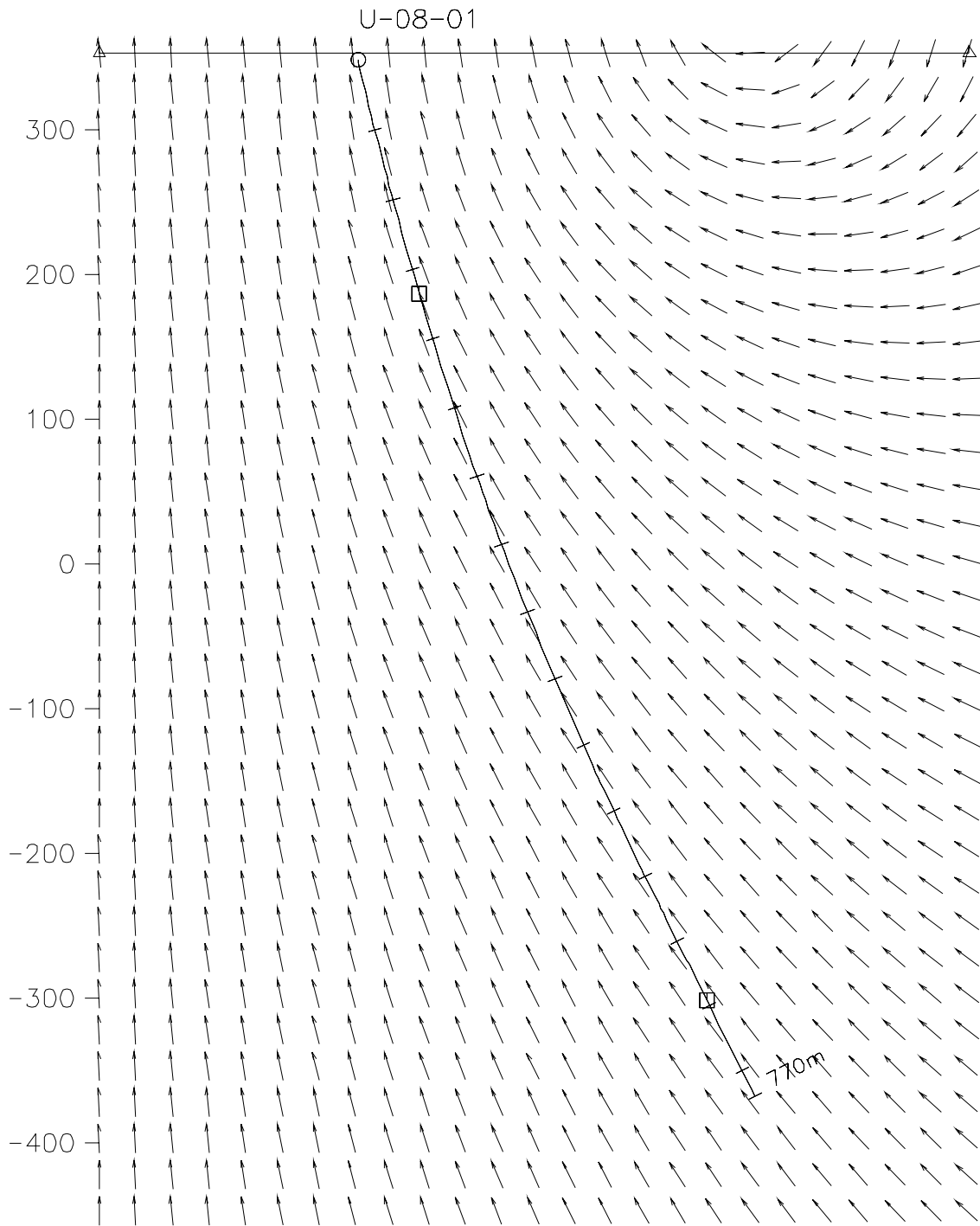




<i>Ursa Major Minerals Inc.</i> Shakespeare East Property
3-D Borehole Pulse EM Survey Borehole & Loop Location Map
Hole: U-08-01 Survey Date: December 18, 2010
<i>Crone Geophysics & Exploration Ltd.</i>

437077E, 513458N

437137E, 5133983N



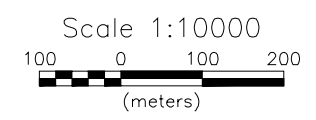
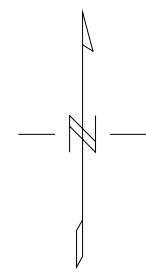
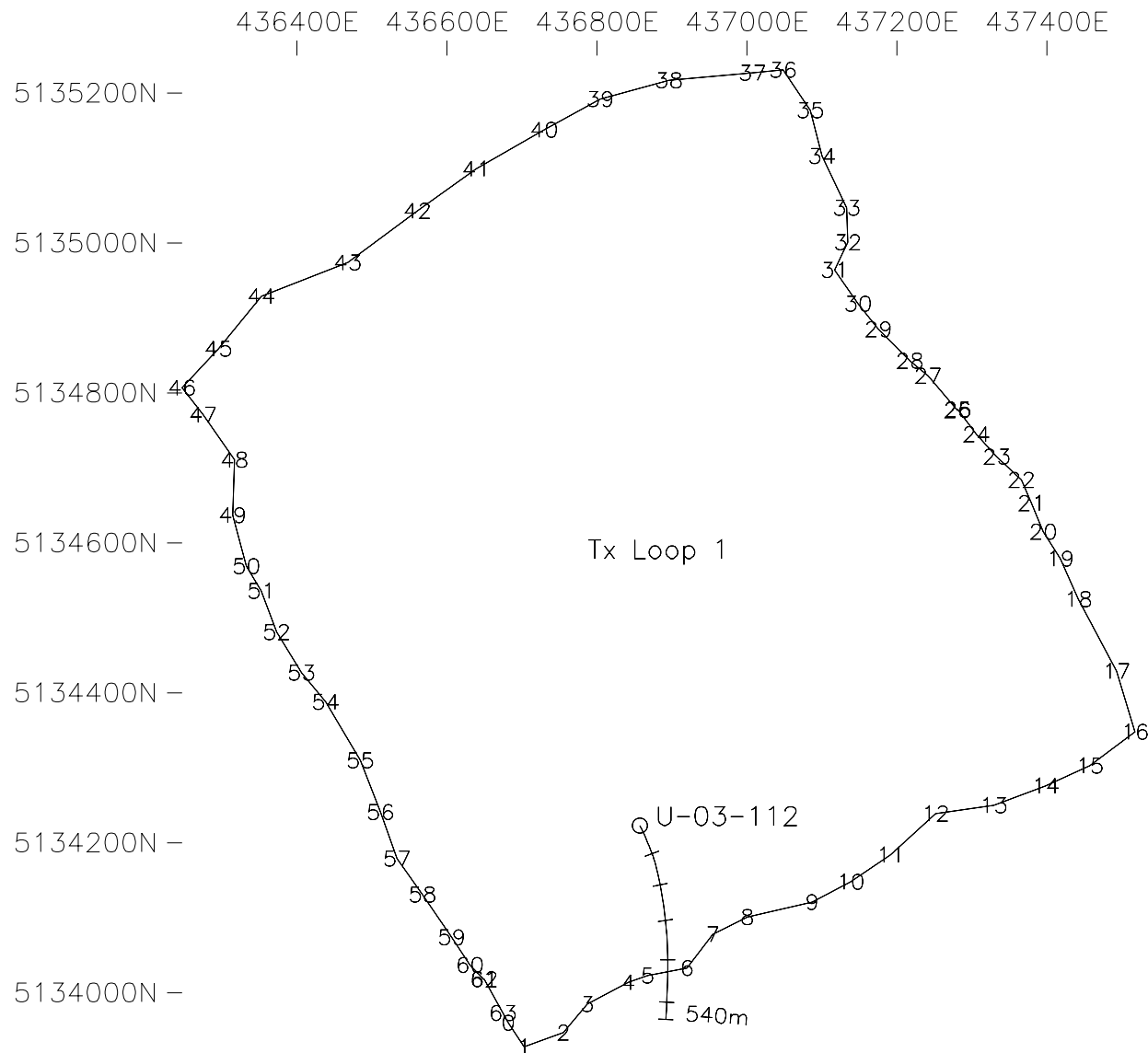
Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-08-01

Survey Date: December 18, 2010

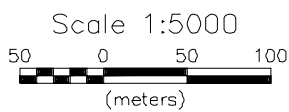
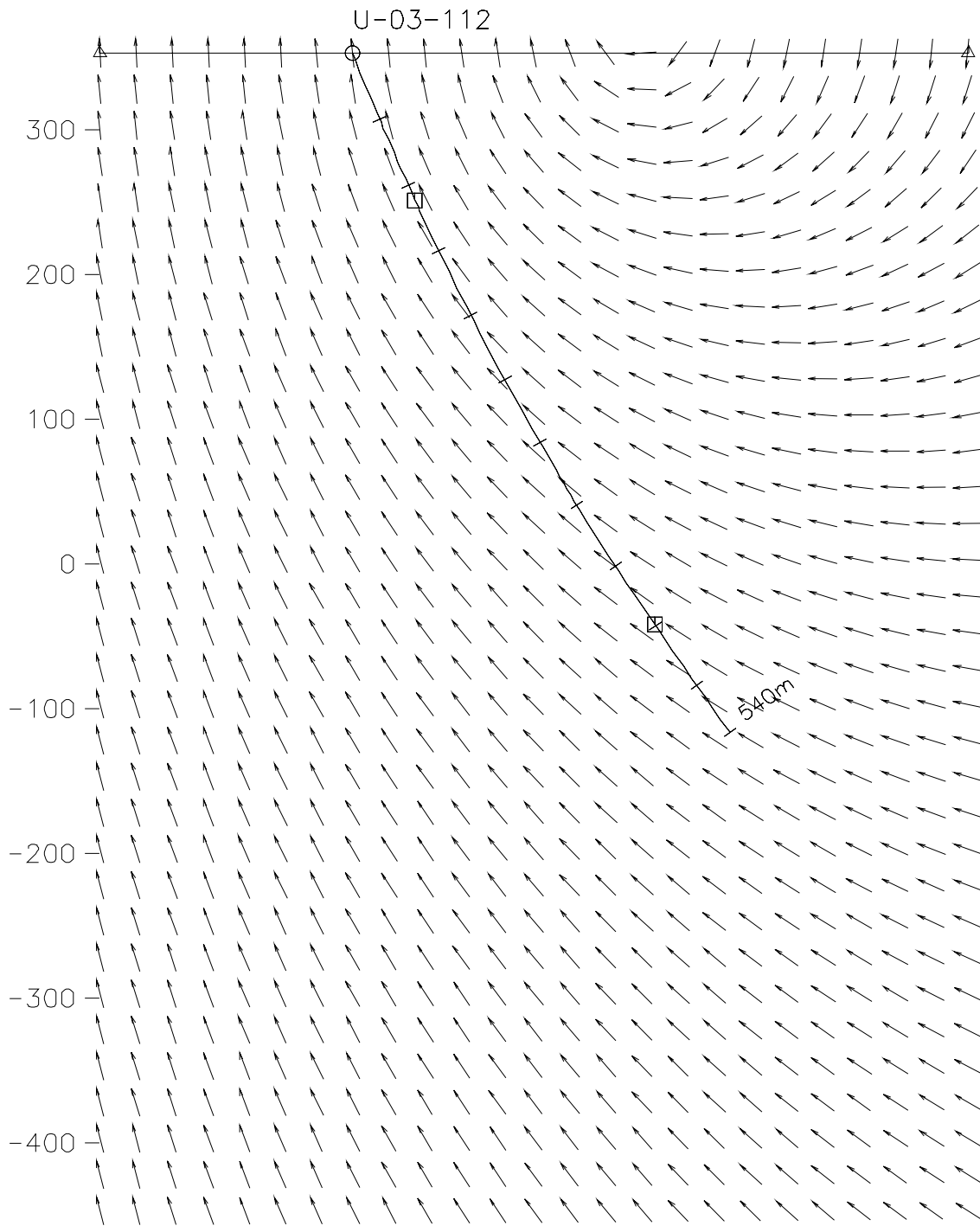
Crone Geophysics & Exploration Ltd.



<i>Ursa Major Minerals Inc.</i> Shakespeare East Property
3-D Borehole Pulse EM Survey Borehole & Loop Location Map
Hole: U-03-112 Survey Date: December 19, 2010
<i>Crone Geophysics & Exploration Ltd.</i>

436849E, 5134397N

436919E, 5133801N



Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

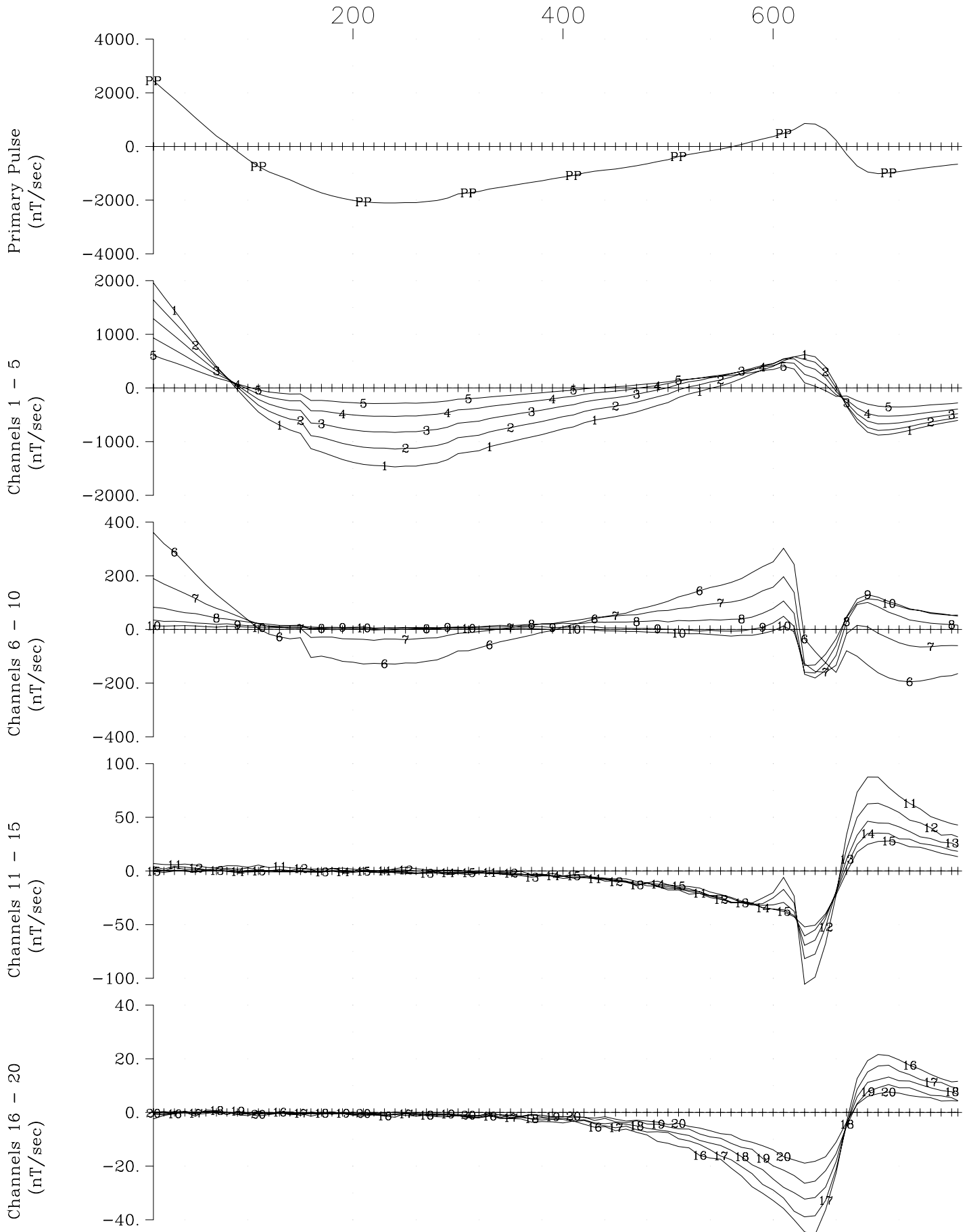
Hole: U-03-112

Survey Date: December 19, 2010

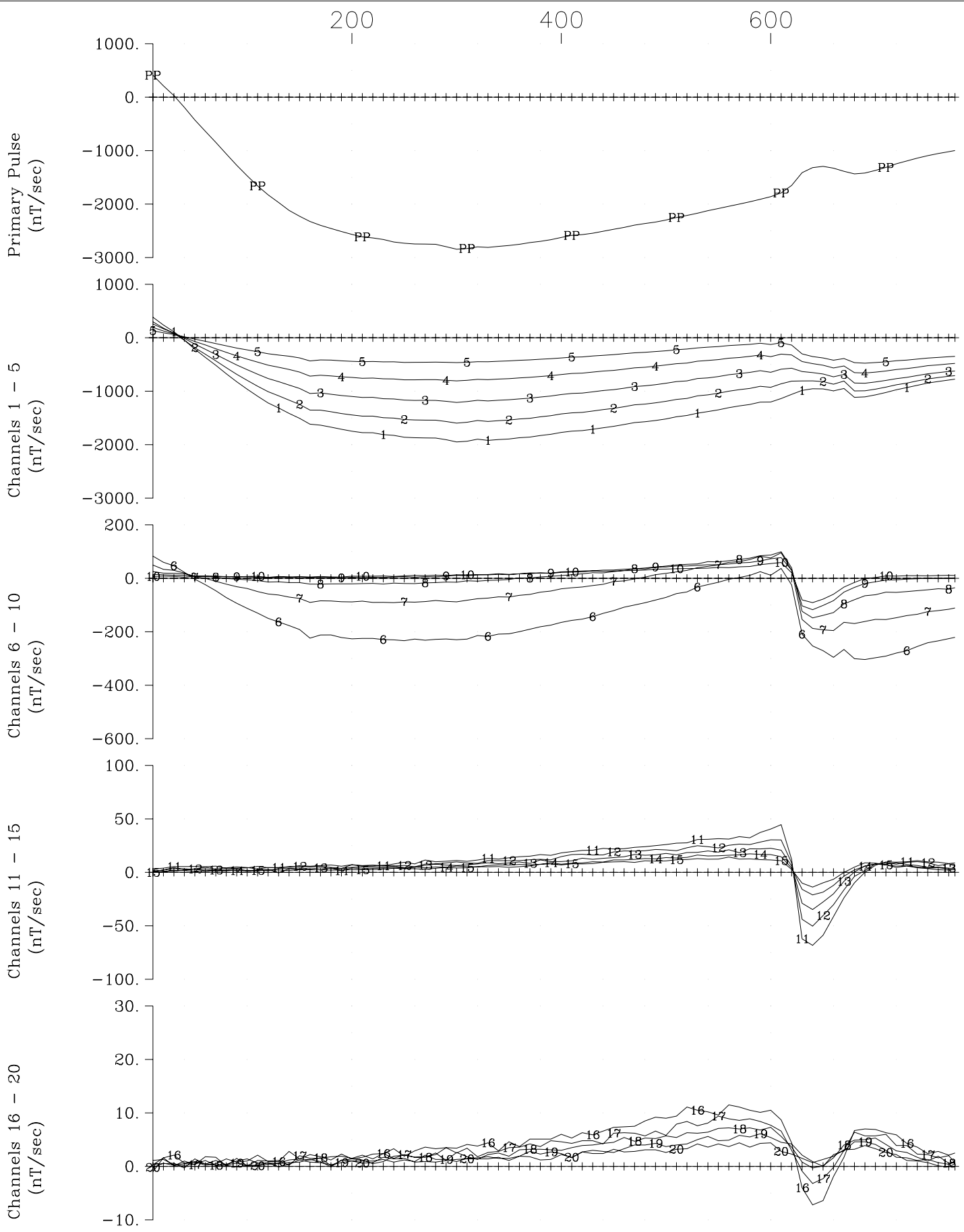
Crone Geophysics & Exploration Ltd.

APPENDIX II
LINEAR (5-AXIS) PULSE EM DATA PROFILES





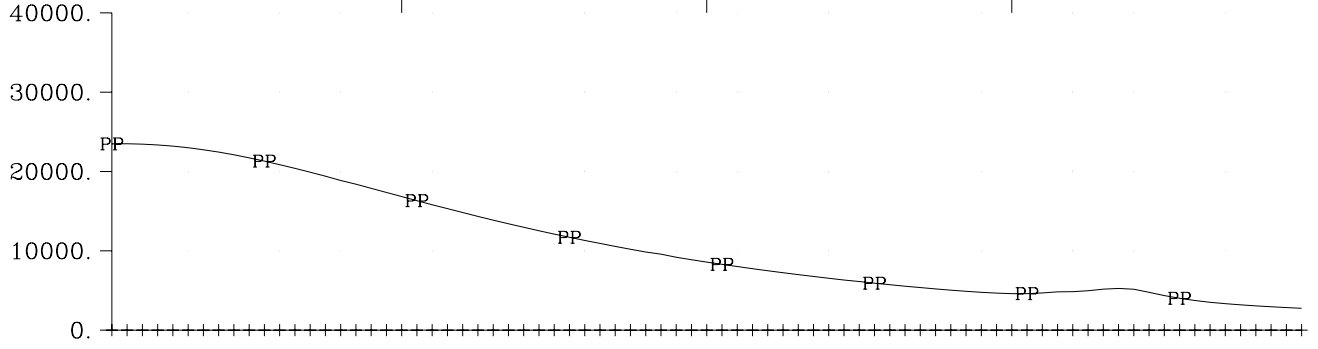
Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-08-01 X Component
 Crone Geophysics & Exploration Ltd.



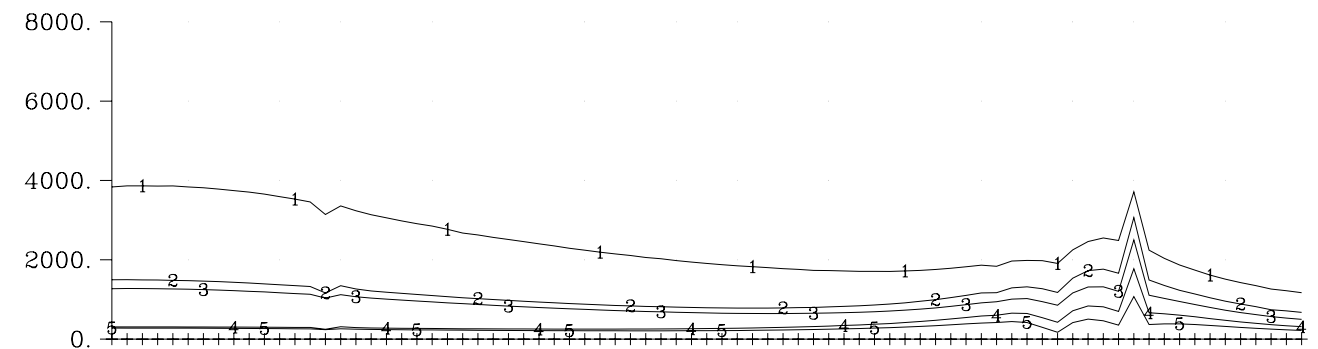
Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-08-01 Y Component
 Crone Geophysics & Exploration Ltd.

200 400 600

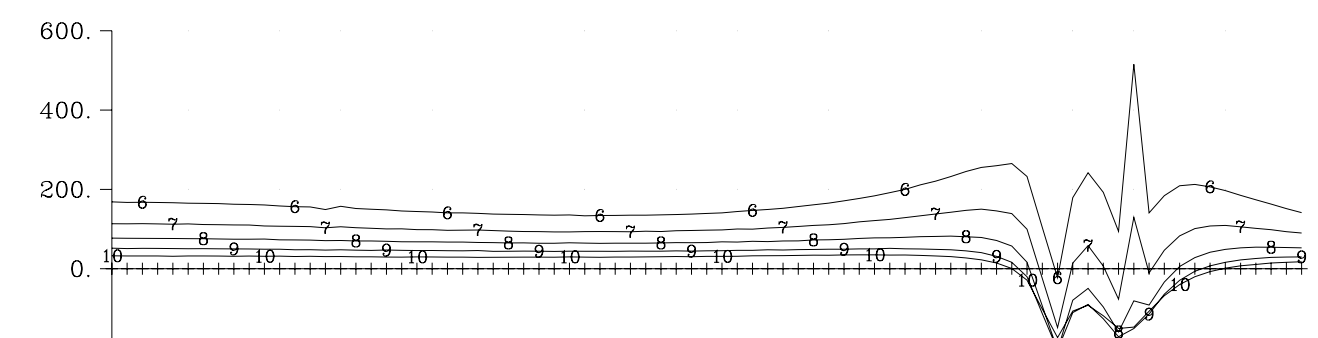
Primary Pulse
(nT/sec)



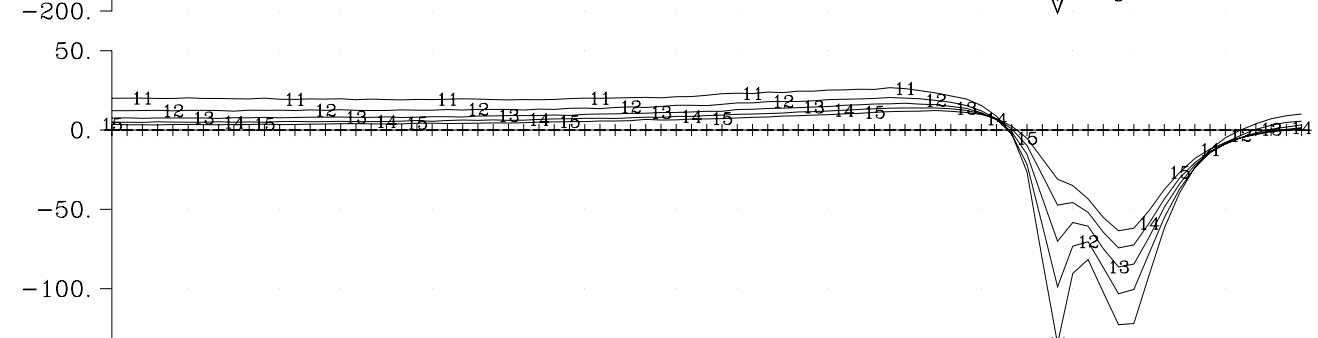
Channels 1 - 5
(nT/sec)



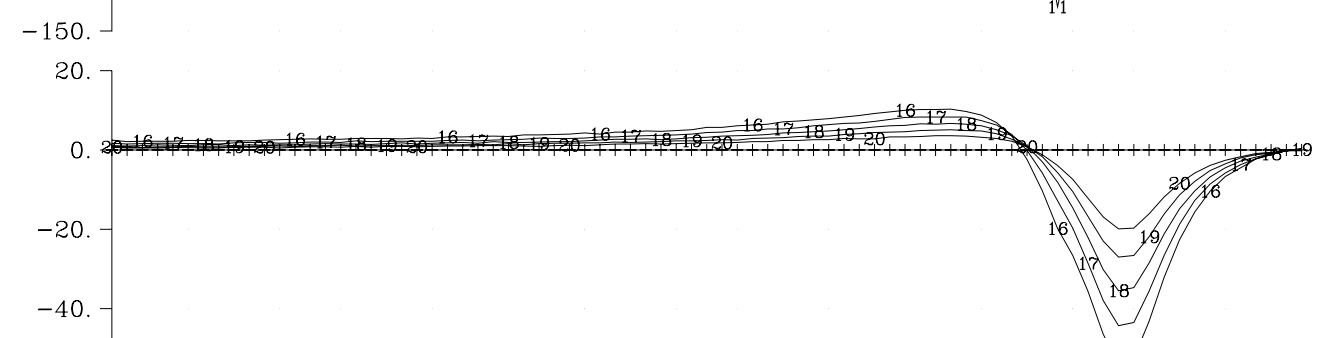
Channels 6 - 10
(nT/sec)



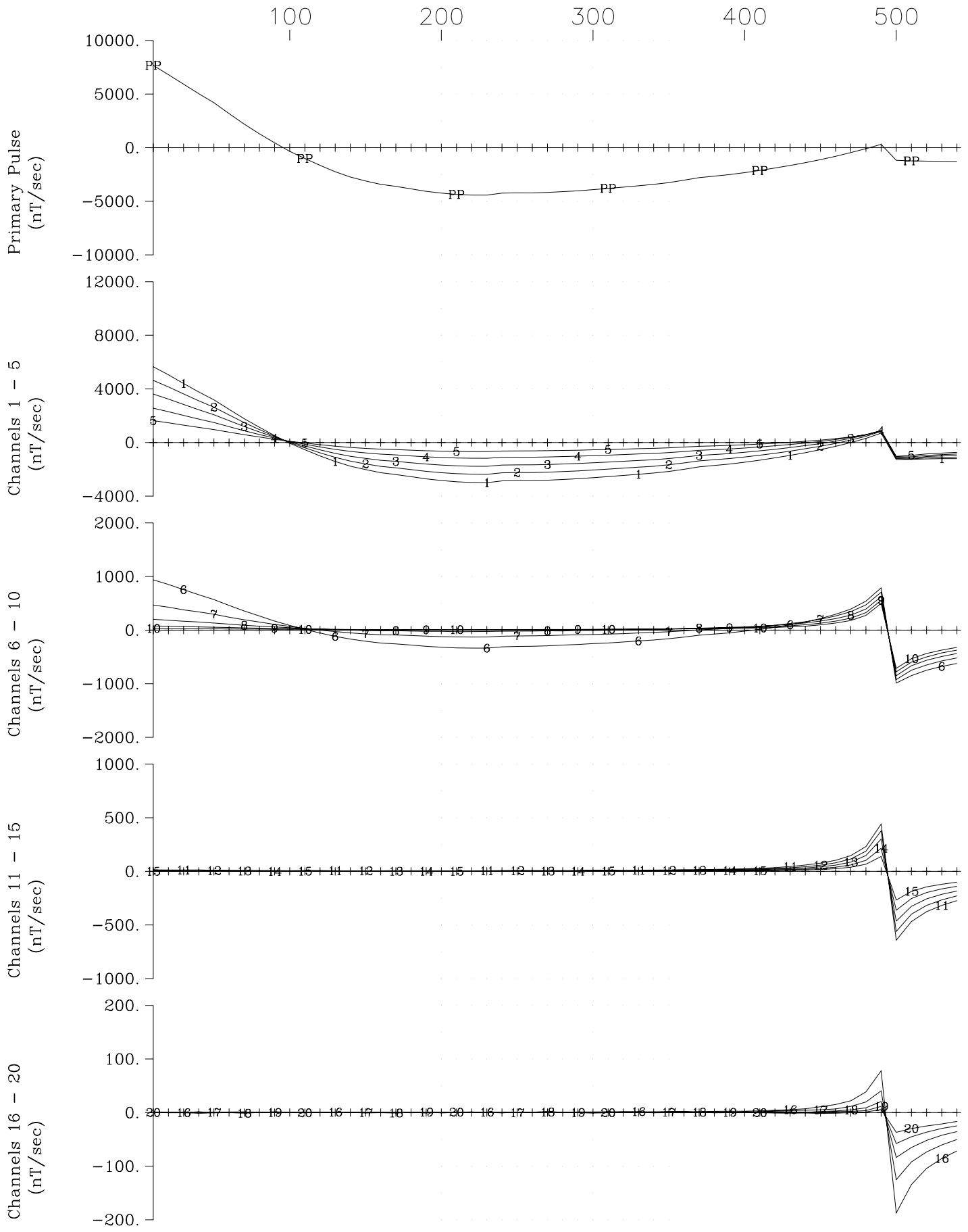
Channels 11 - 15
(nT/sec)



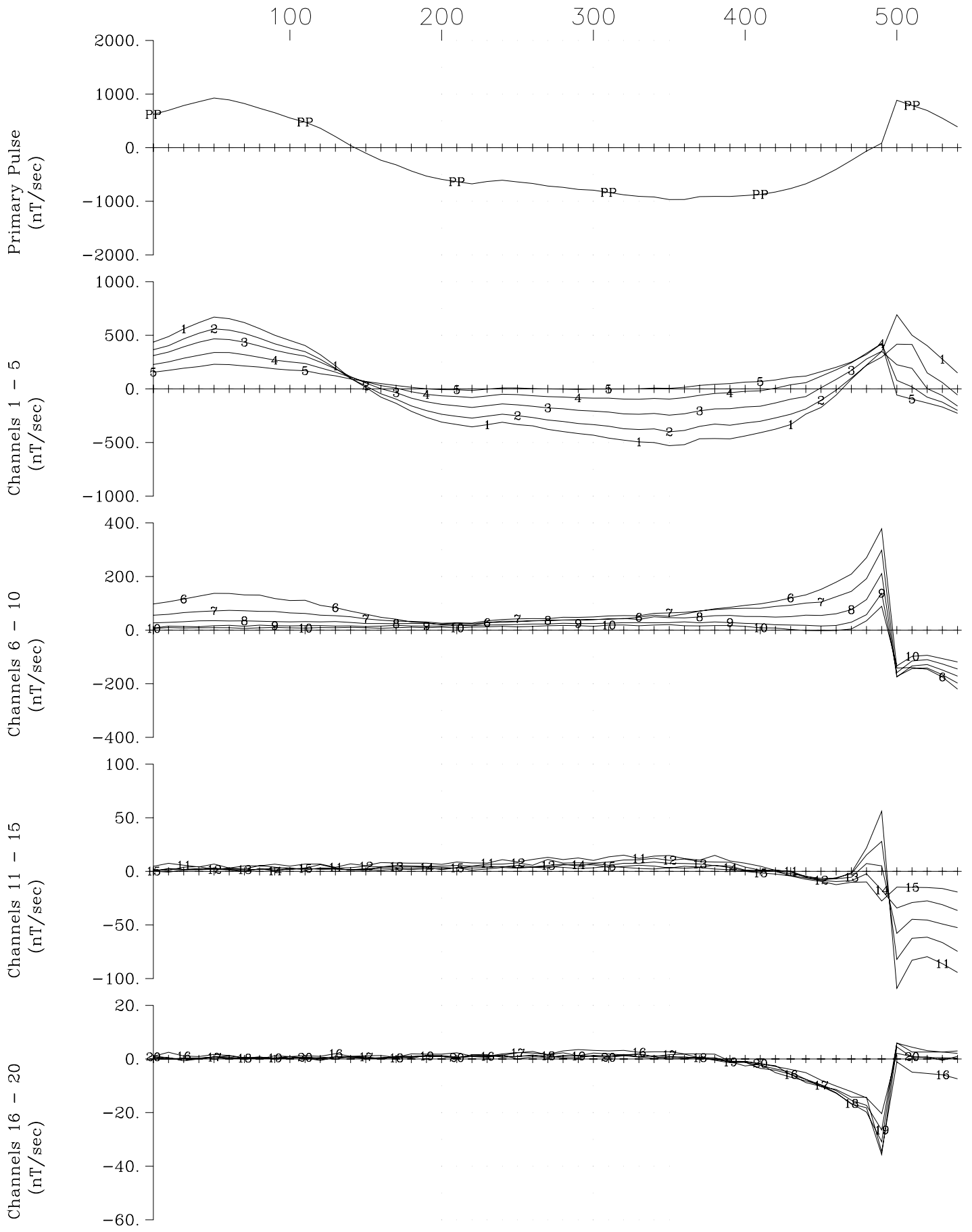
Channels 16 - 20
(nT/sec)



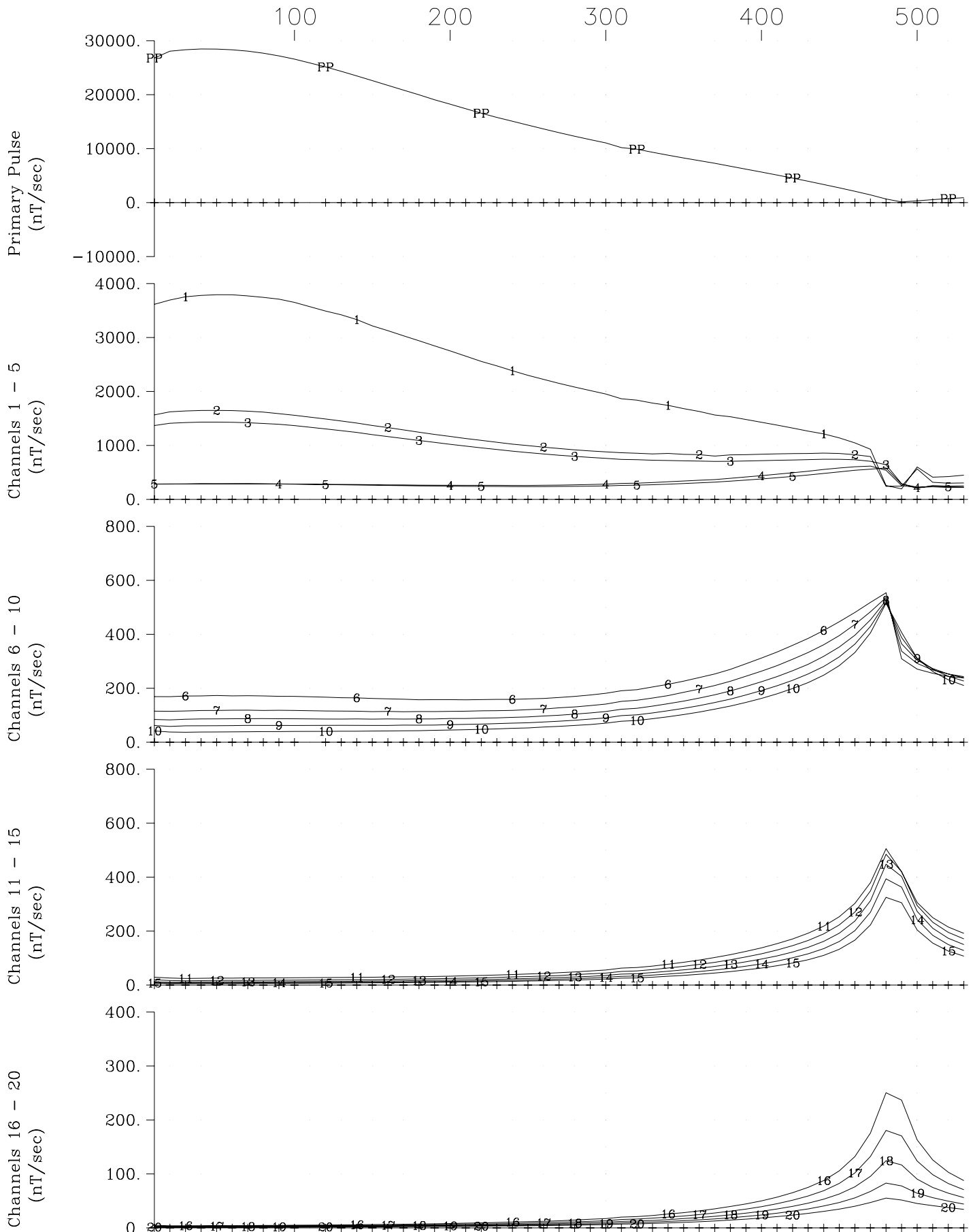
Ursa Major Minerals Inc. Shakespeare East Property
Hole U-08-01 Z Component
Crone Geophysics & Exploration Ltd.



Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-03-112 X Component
 Crone Geophysics & Exploration Ltd.



Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-03-112 Y Component
 Crone Geophysics & Exploration Ltd.



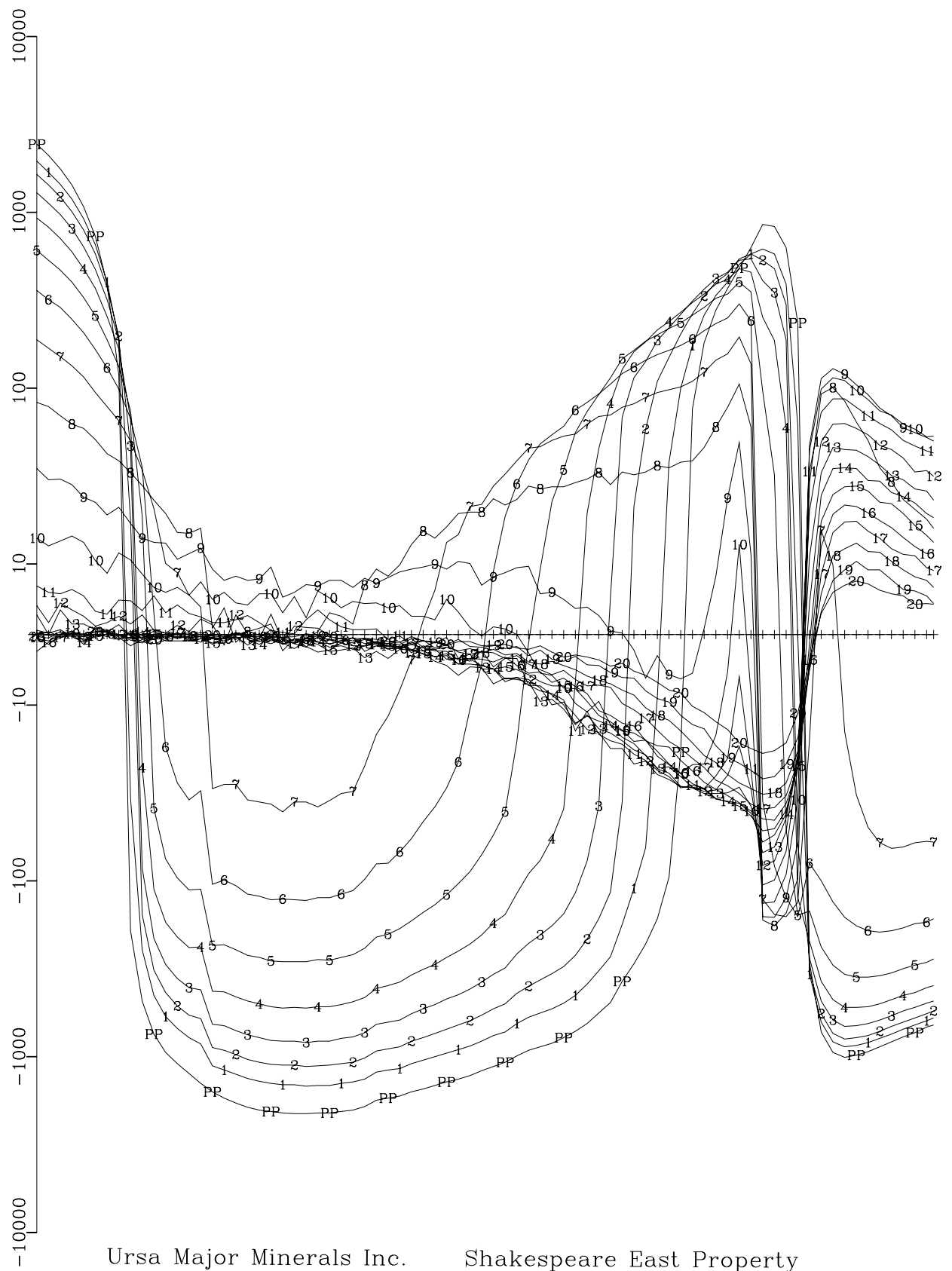
Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-03-112 Z Component
 Crone Geophysics & Exploration Ltd.

APPENDIX III

PULSE EM DATA PROFILES (LIN-LOG SCALE)

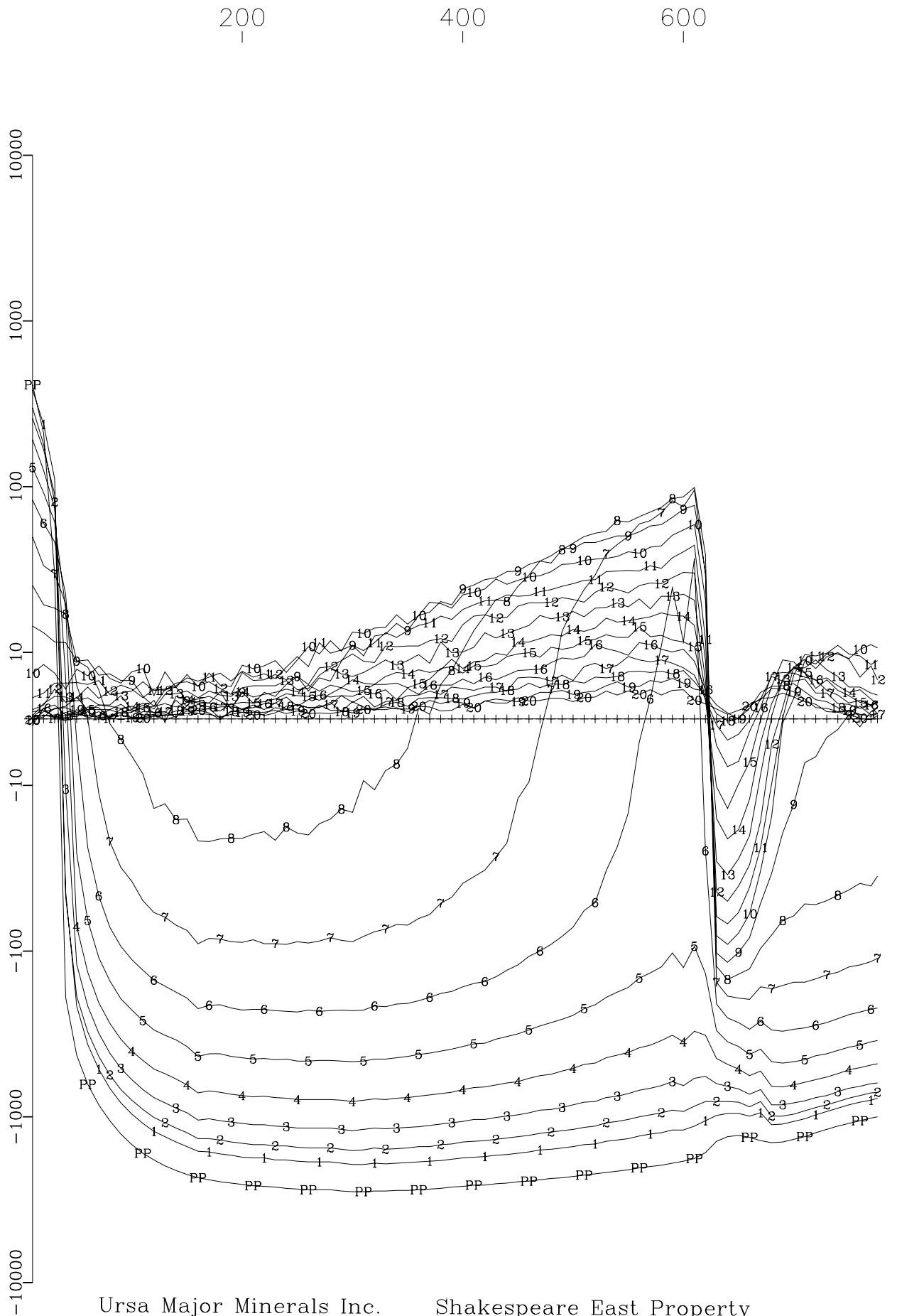
200 400 600

Primary Pulse and 20 Off-time Channels
(nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
Hole U-08-01 X Component
Crone Geophysics & Exploration Ltd.

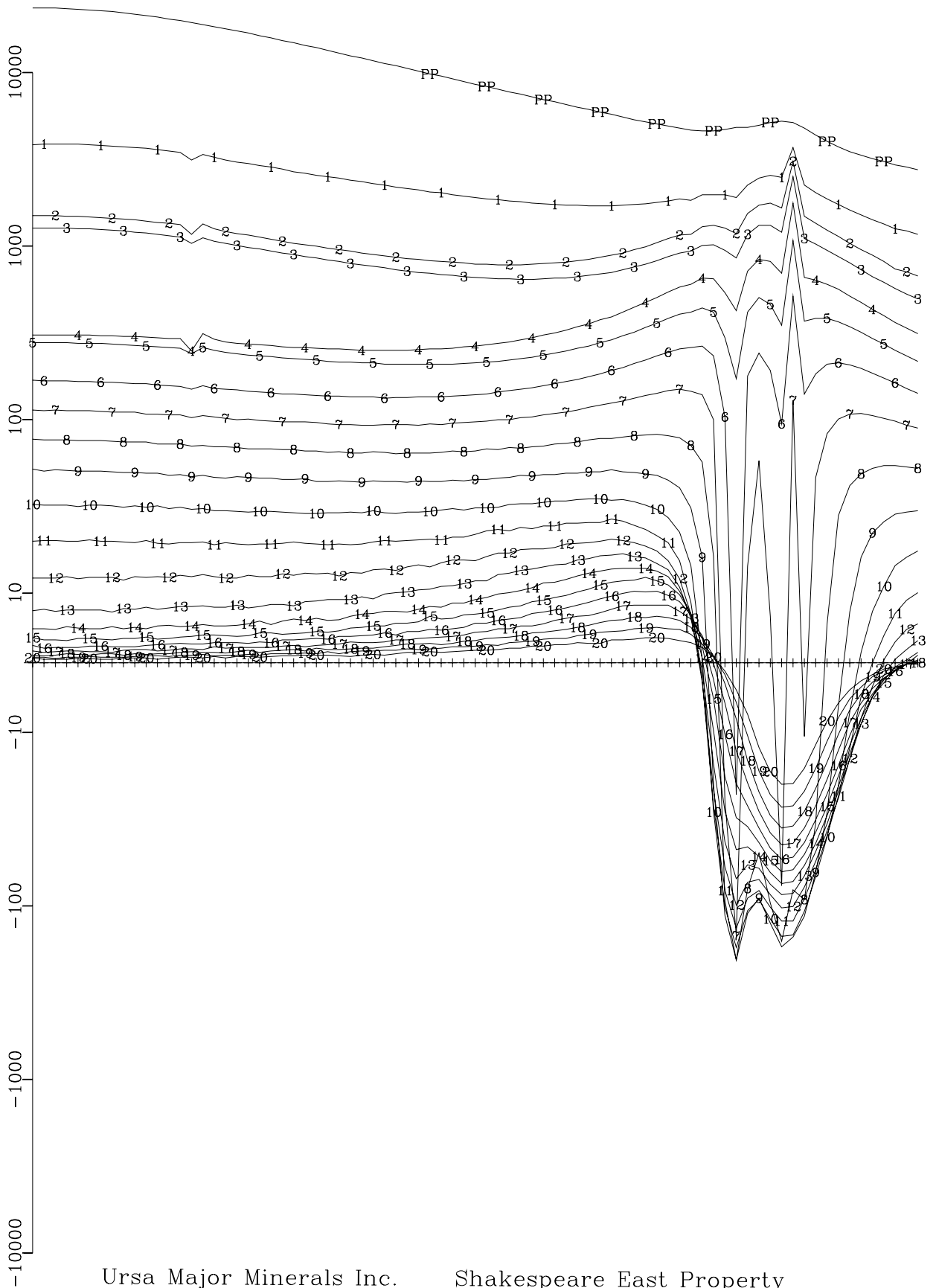
Primary Pulse and 20 Off-time Channels
(nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
Hole U-08-01 Y Component
Crone Geophysics & Exploration Ltd.

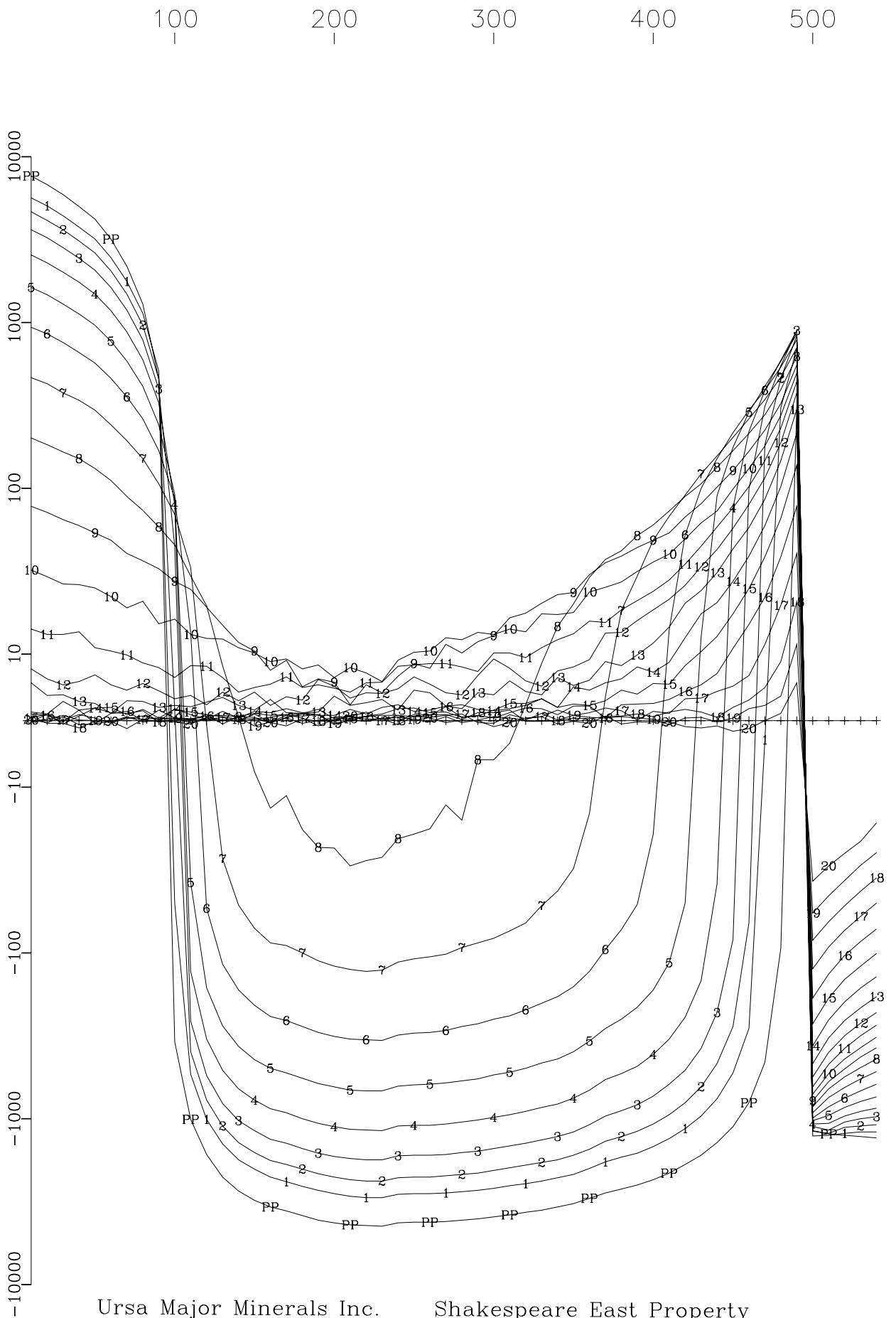
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Primary Pulse and 20 Off-time Channels
(nT/sec)



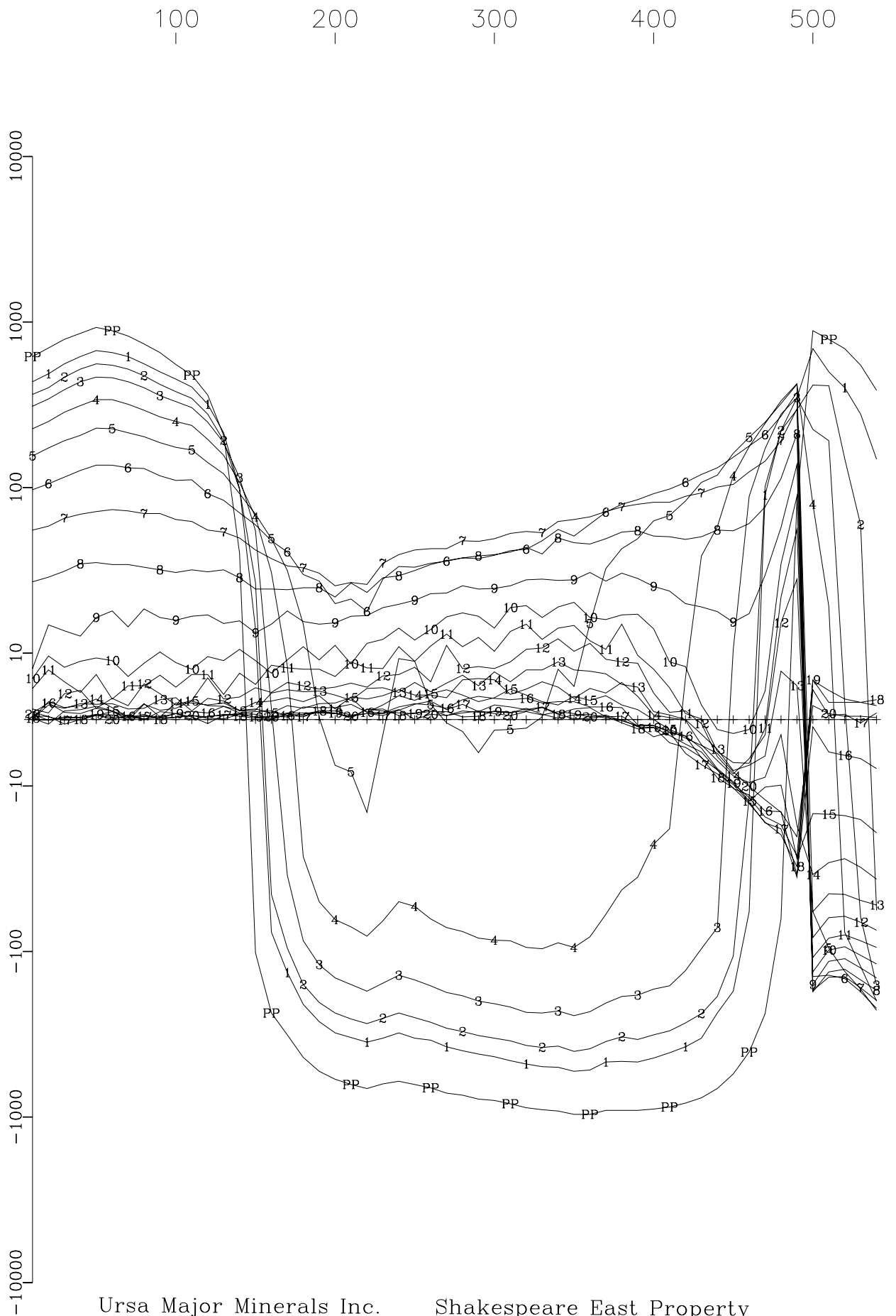
Ursa Major Minerals Inc. Shakespeare East Property
Hole U-08-01 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)



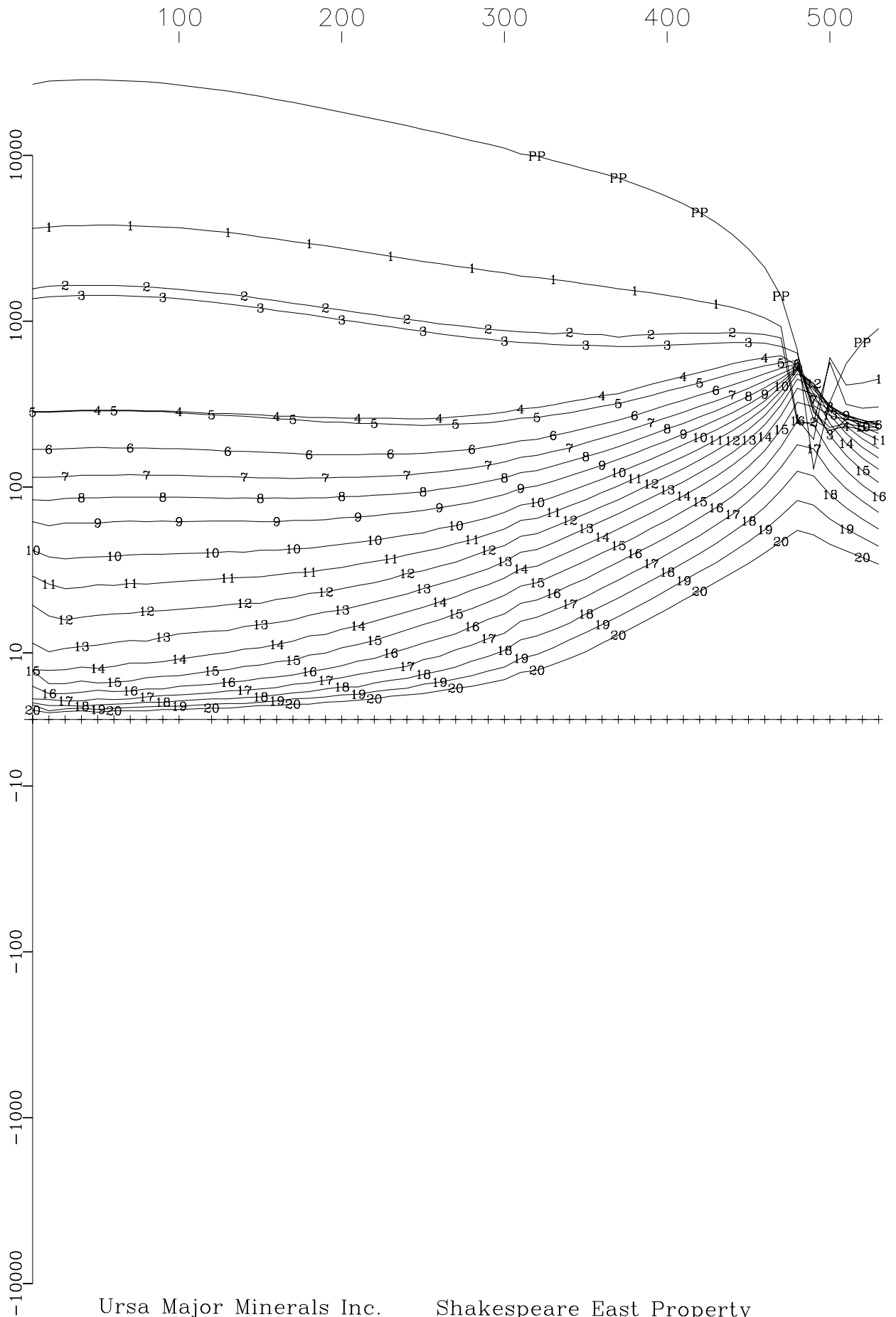
Ursa Major Minerals Inc. Shakespeare East Property
Hole U-03-112 X Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
Hole U-03-112 Y Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)

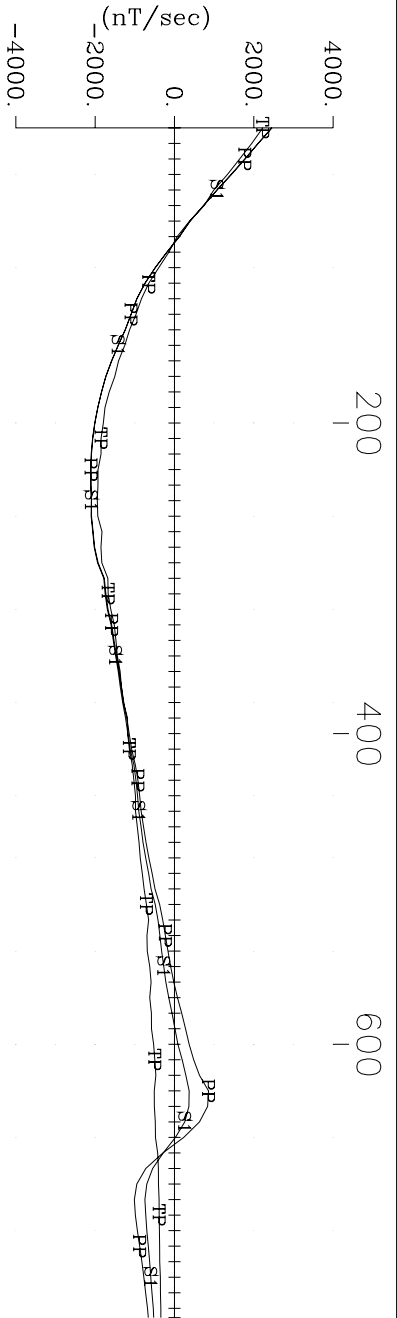


Ursa Major Minerals Inc. Shakespeare East Property
Hole U-03-112 Z Component
Crone Geophysics & Exploration Ltd.

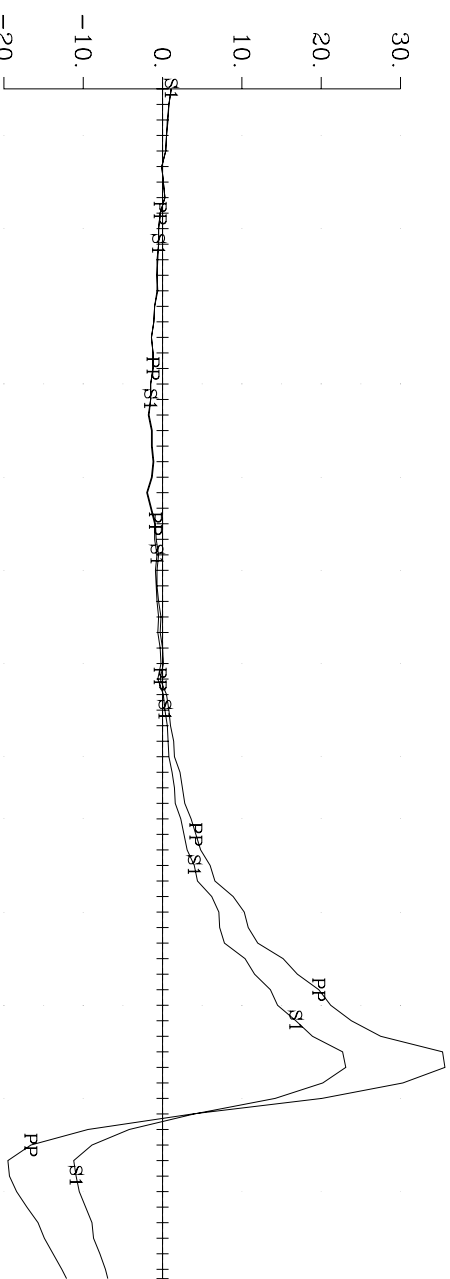
APPENDIX IV
STEP RESPONSE DATA PROFILES



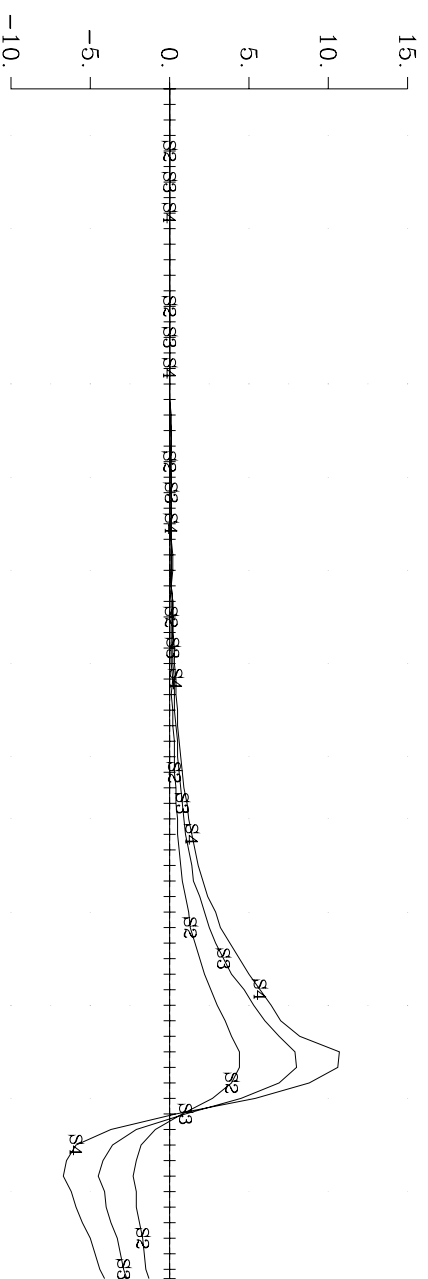
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



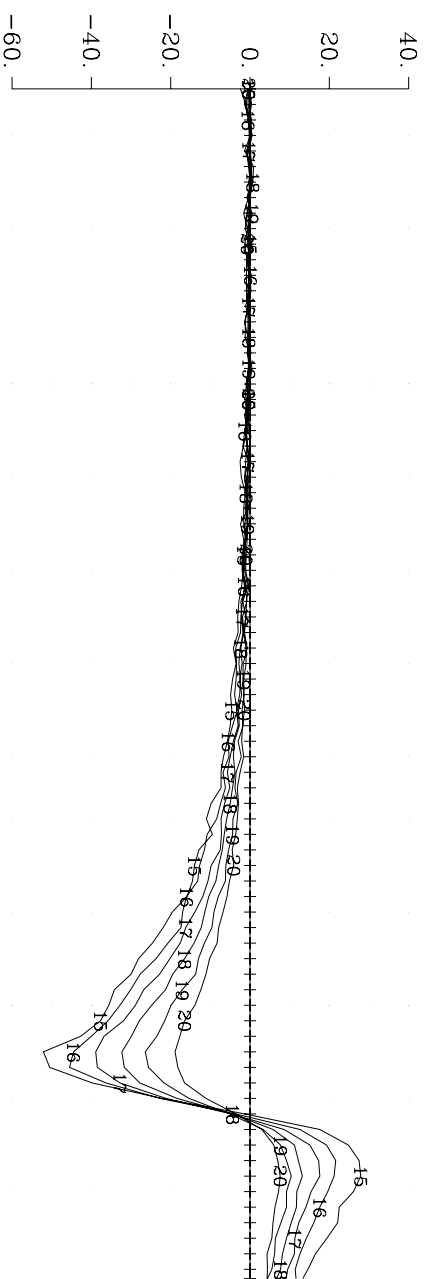
Deviation from TP.
 (% Total Theoretical)



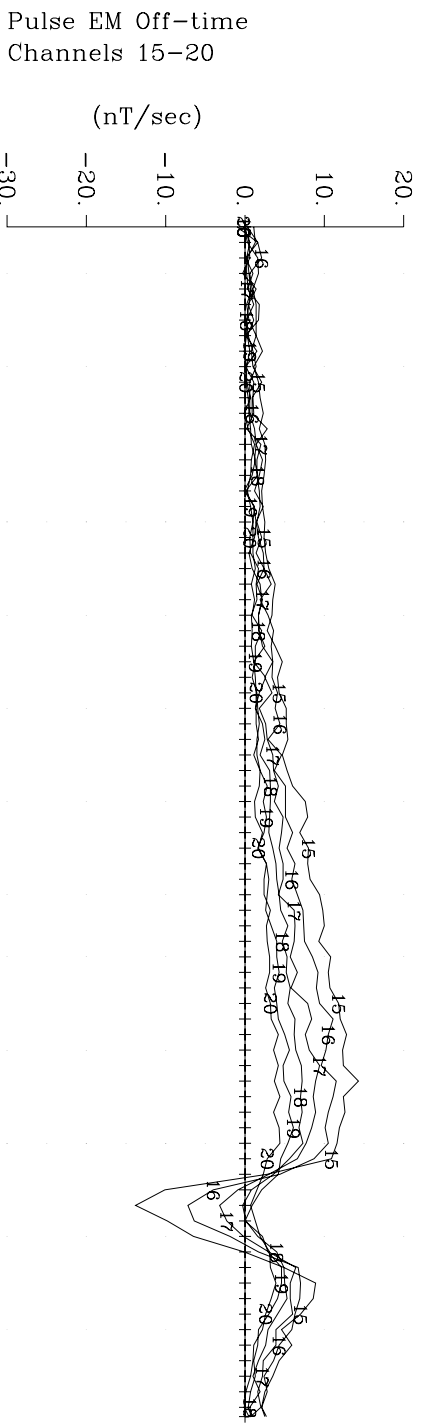
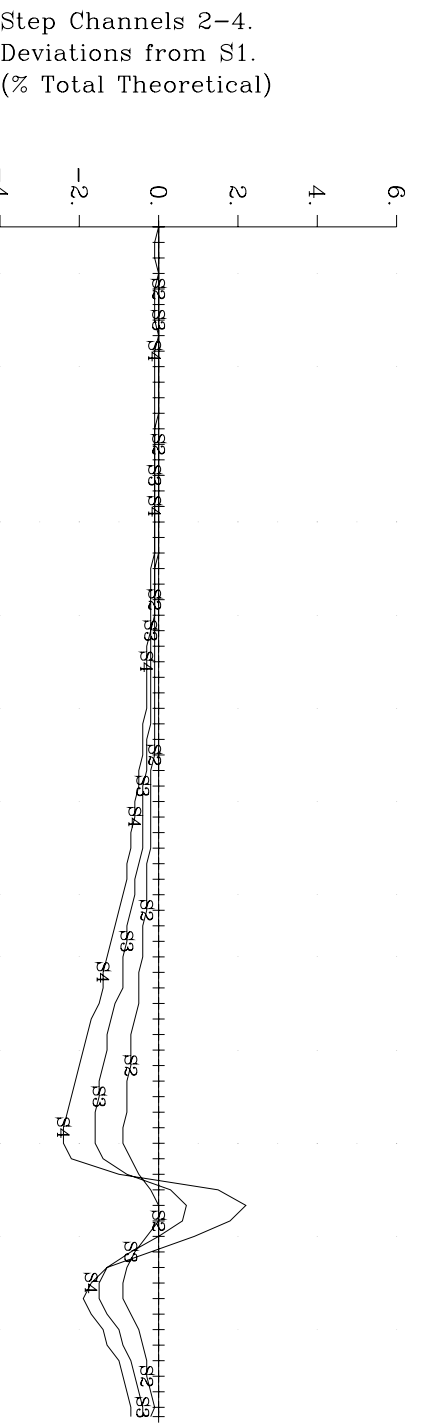
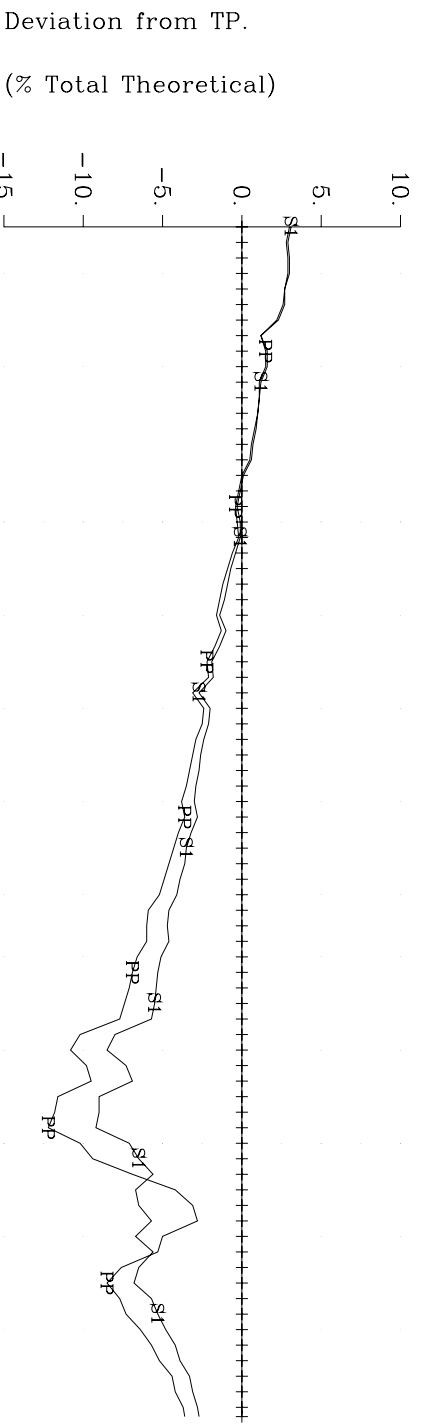
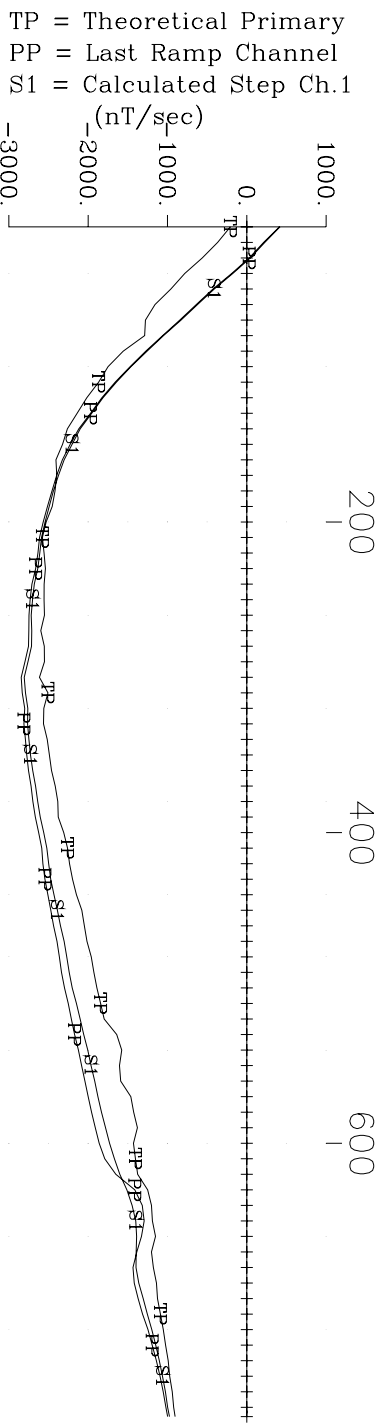
Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 15-20
 (nT/sec)

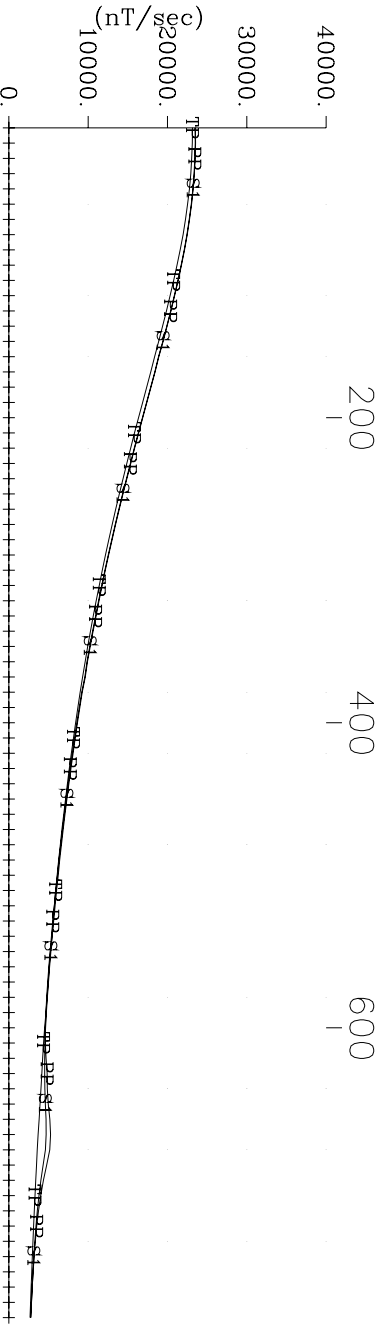


Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-08-01 X Component
 Crone Geophysics & Exploration Ltd.

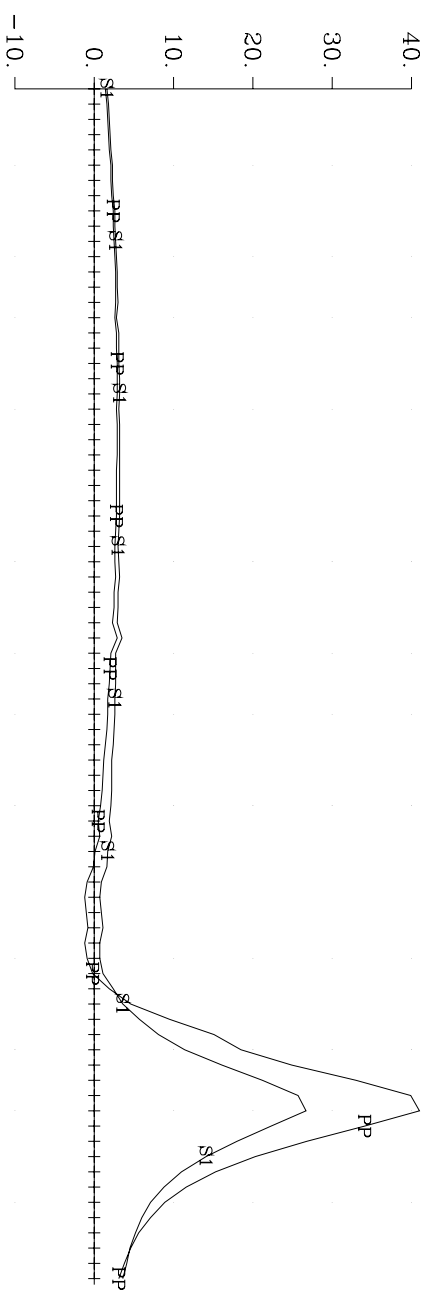


Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-08-01 Y Component
 Crone Geophysics & Exploration Ltd.

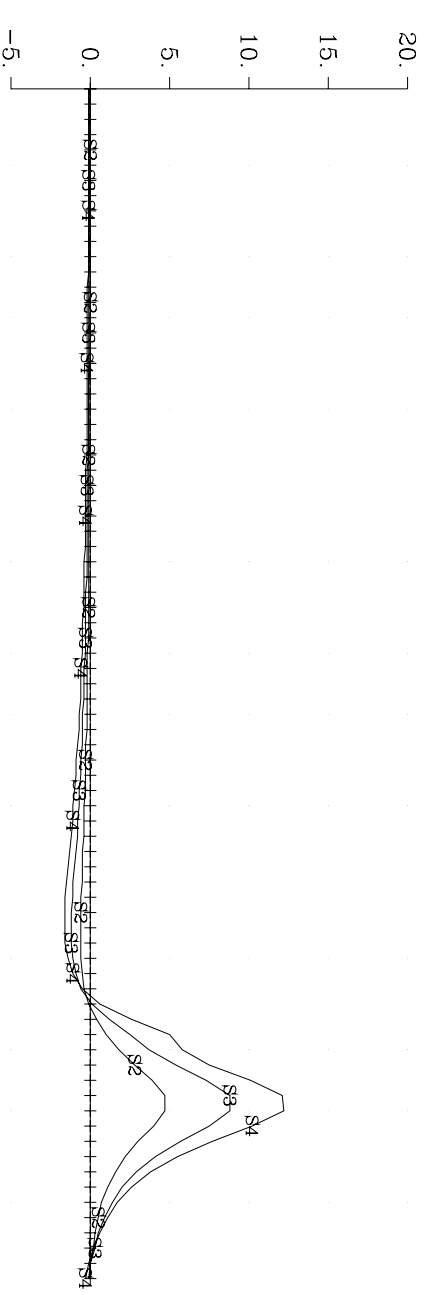
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



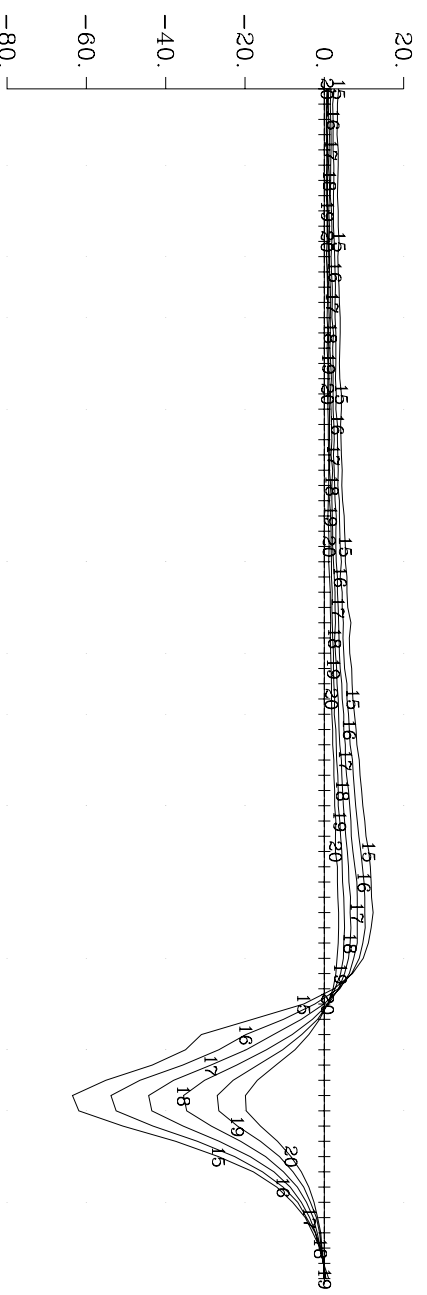
Deviation from TP.
 (% Total Theoretical)



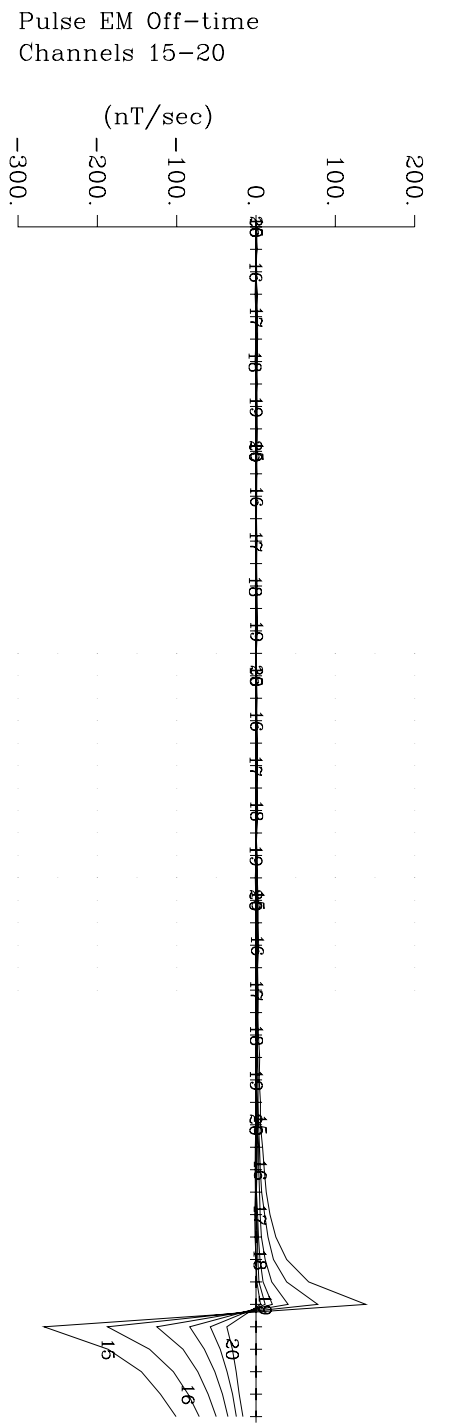
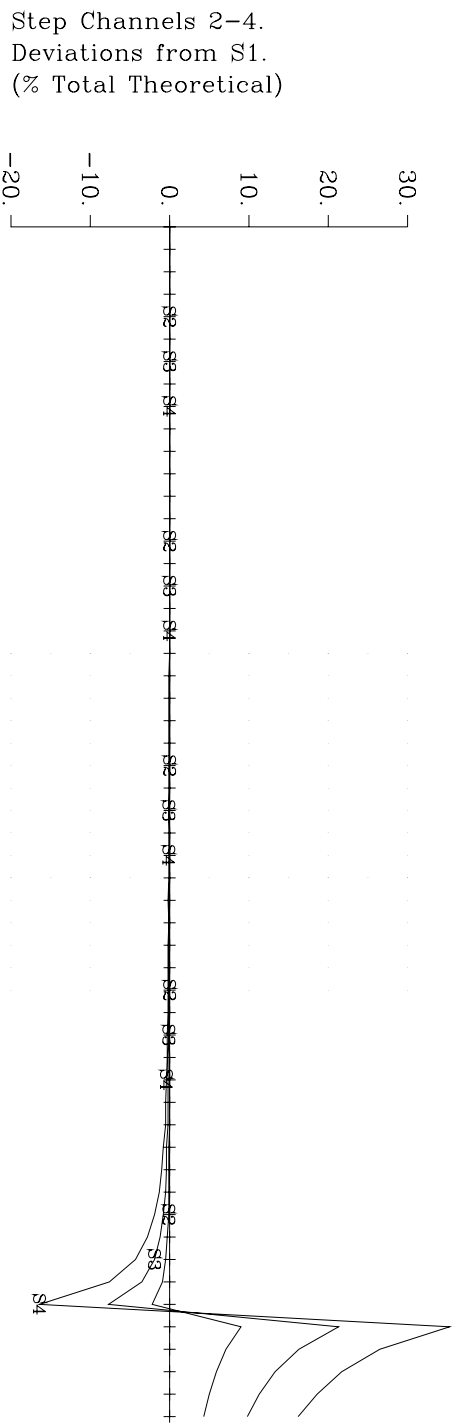
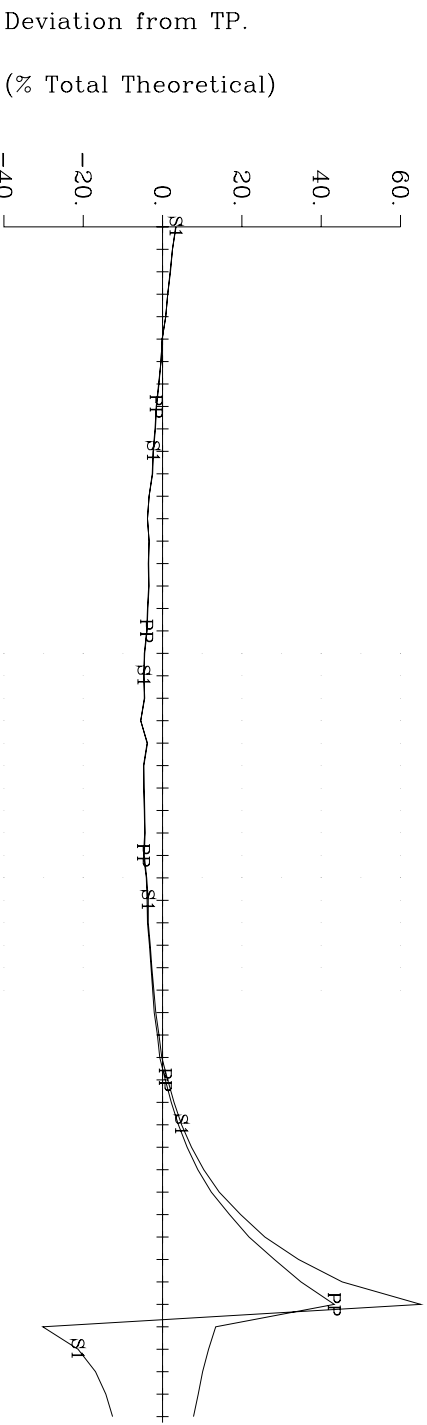
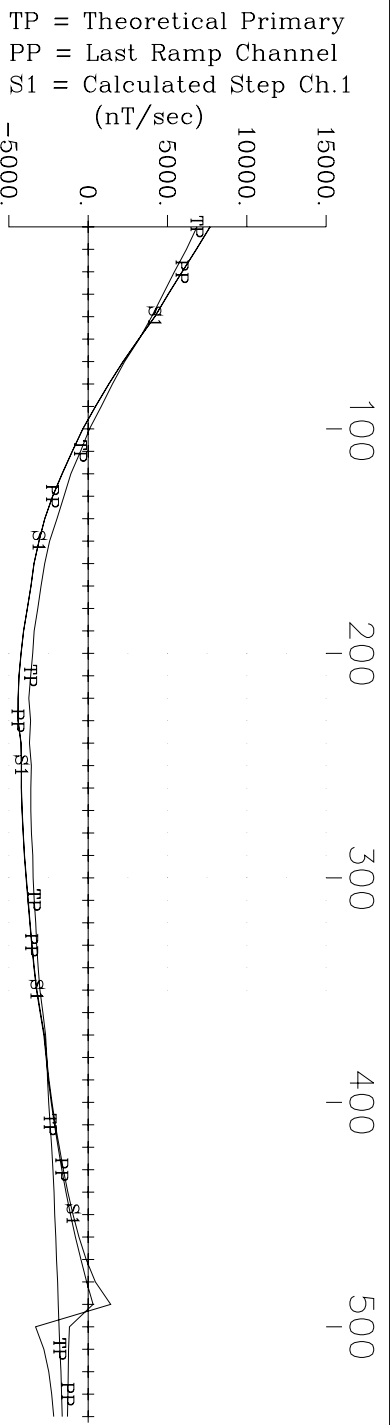
Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 15-20
 (nT/sec)

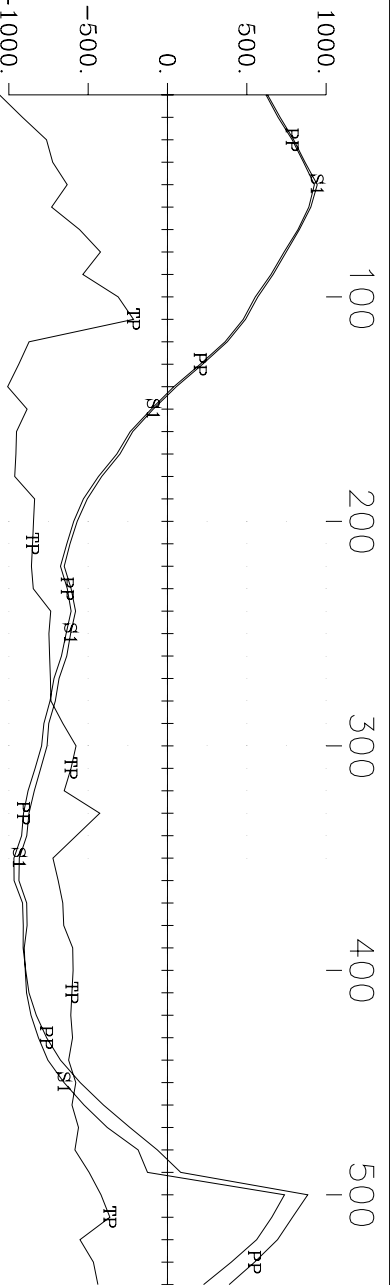


Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-08-01 Z Component
 Crone Geophysics & Exploration Ltd.

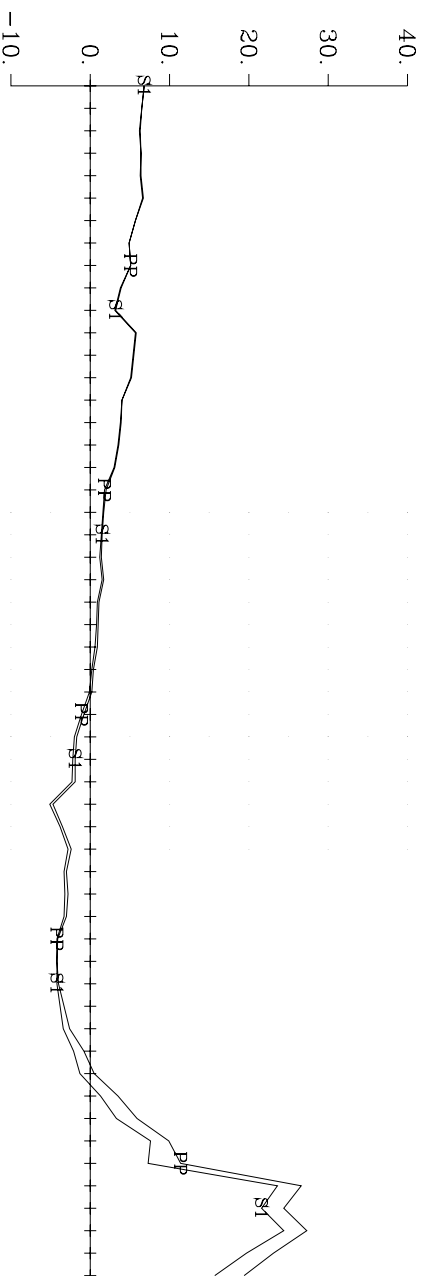


Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-03-112 X Component
 Crone Geophysics & Exploration Ltd.

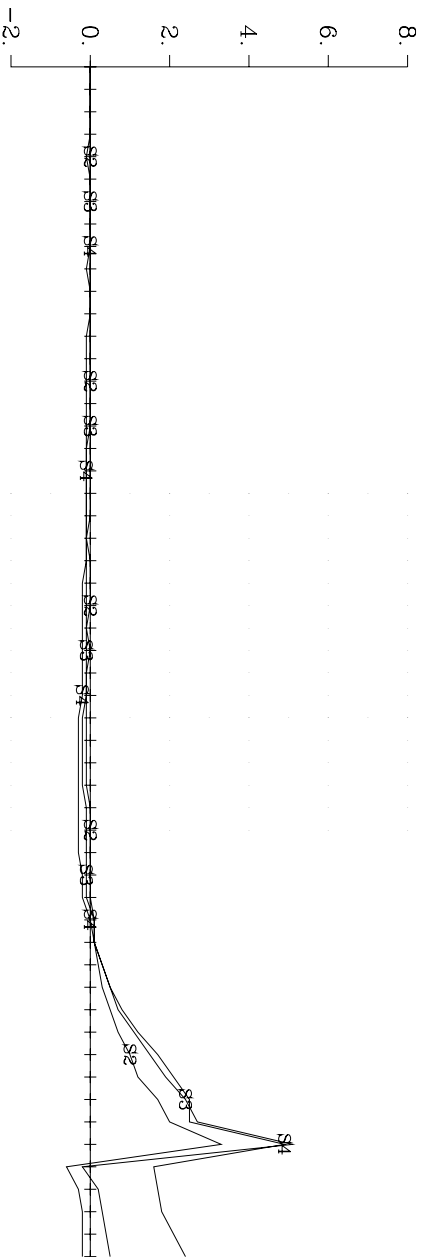
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



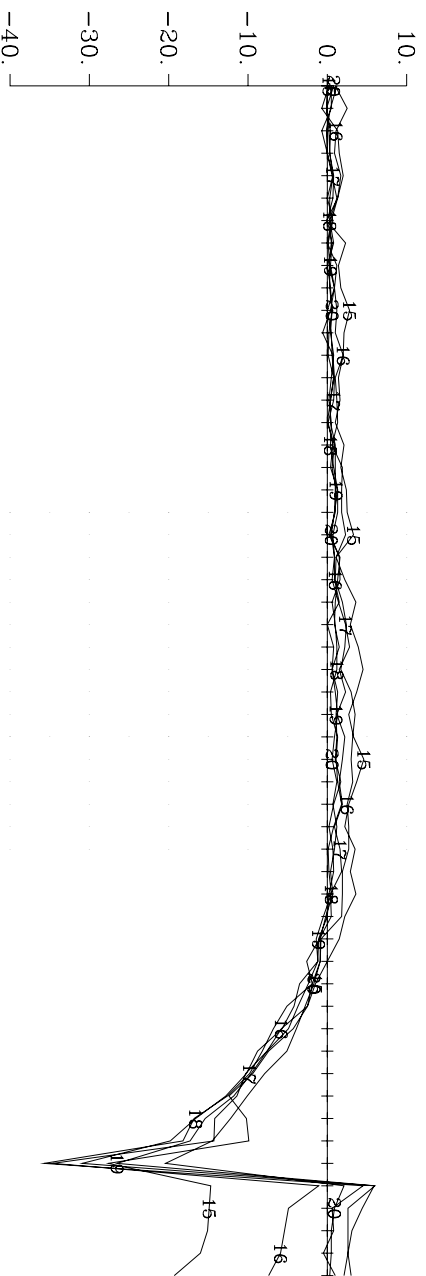
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

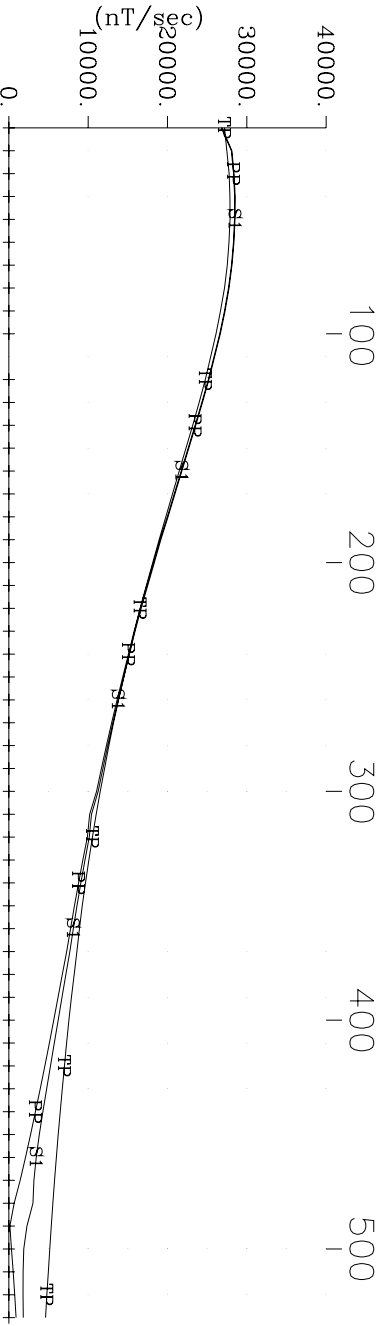


Pulse EM Off-time
 Channels 15-20
 (nT/sec)

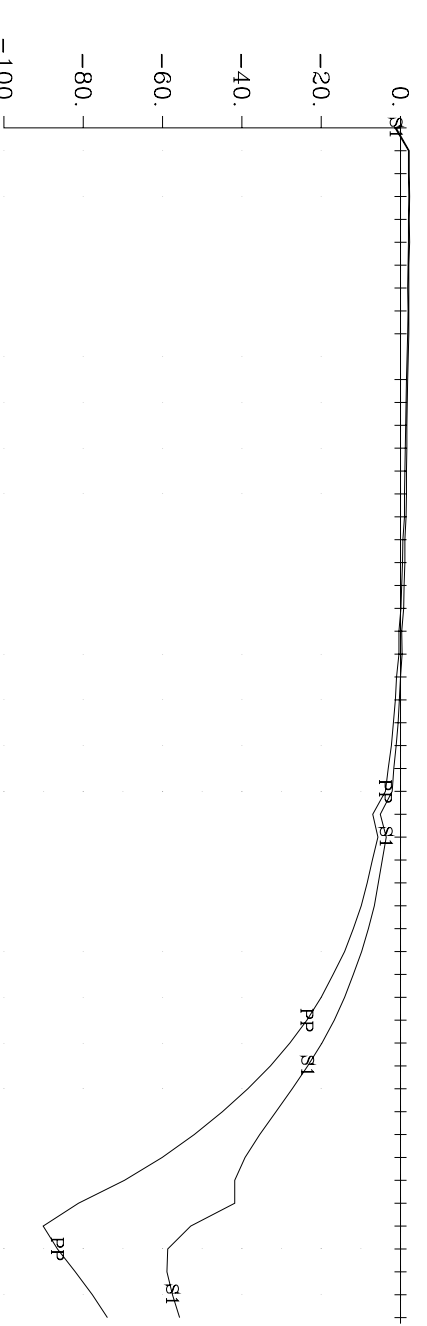


Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-03-112 Y Component
 Crone Geophysics & Exploration Ltd.

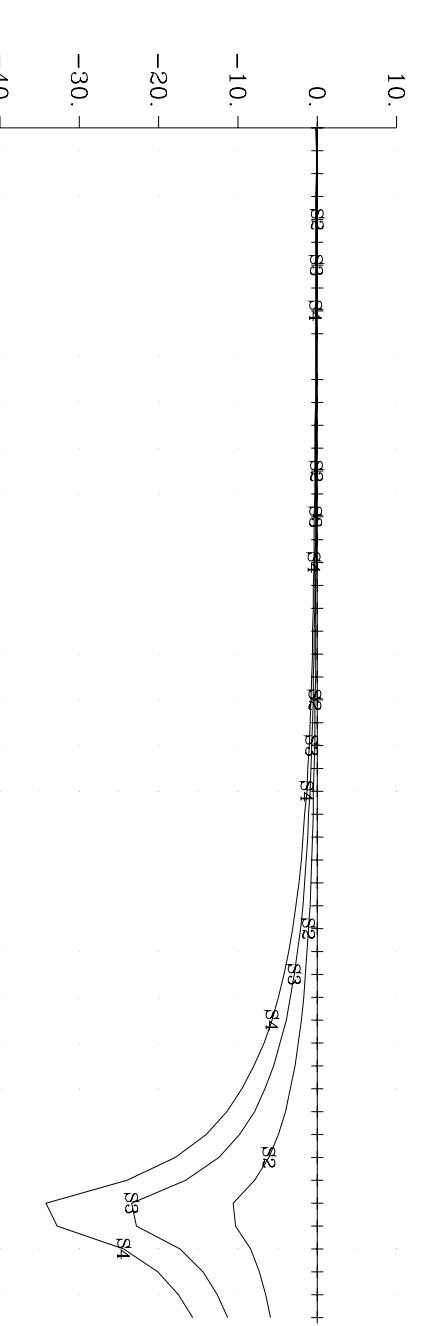
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



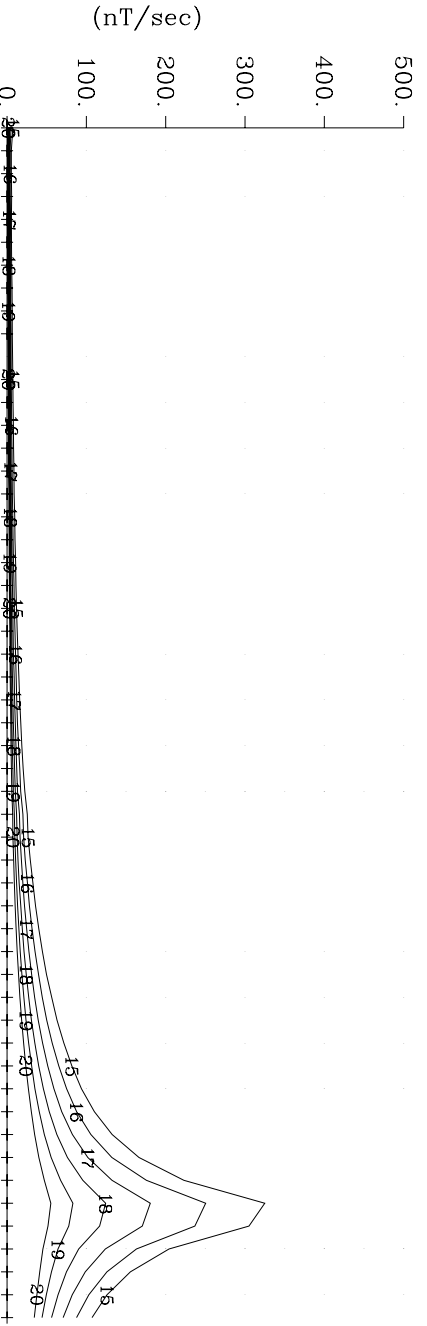
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 15-20
 (nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
 Hole U-03-112 Z Component
 Crone Geophysics & Exploration Ltd.

APPENDIX V
CRONE INSTRUMENT SPECIFICATIONS



Crone Pulse EM System Description

SYSTEM DESCRIPTION

The Crone Pulse EM system is a time domain electromagnetic method (TDEM) that utilizes an alternating pulsed primary current with a controlled shut-off and measures the rate of decay of the induced secondary field across a series of time windows during the off-time. The system uses a transmit loop of any size or shape. A portable power source feeds a transmitter which provides a precise current waveform through the loop. The receiver apparatus is moved along surface lines or down boreholes.

The transmitter cycle consists of slowly increasing the current over a few milliseconds, a constant current, abrupt linear termination of the current, and finally zero current for a selected length of time in milliseconds. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic 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. The receiver, which is synchronized to the off-time of the transmitter, measures this transient magnetic field where it cuts the surface coil or borehole probe. These readings are across fixed time windows or "channels".

SYSTEM TERMINOLOGY

Ramp Time

"Ramp time" refers to the controlled shut-off of the transmitter current. Three ramp times are selectable by the operator; 0.5ms, 1.0ms, and 1.5ms. By controlling the shut-off rather than having it depend on the loop size and current ensures that the same waveform is maintained for different loops so data can be properly compared.

The 1.5ms ramp is the normally used setting for good conductors. It keeps the early channel responses on scale and decreases the chance of overload. The faster ramp times of 1.0ms and 0.5ms will enhance the early time responses. This can be useful for weak conductors when data from the higher end of the frequency spectrum is desired.

Time Base

Time base is the length of time the transmitter current is off (it includes the ramp time). This also equals the on time of the current. Time bases are available for both 60Hz and 50Hz noise rejection respectively:

- 8.33ms (30Hz), 16.66ms (15Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)
- 10ms (25Hz), 20ms (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)

Since readings are taken during the off cycles, the time base will have an effect on the receiver channels. Normally, a standard time base is selected for the type of system and survey being used, but this can be changed to suit a particular situation. A longer time base is preferred for conductors of greater time constants, and in surveys such as resistive soundings where more channels are desired.

Zero Time Set

The term "zero time set" or "ZTS" refers to the starting point for the receiver channel measurements. It is manually set on the receiver by the operator thus allowing adjustments for the ramp times and fine tuning for any fluctuations in the transmitter signal.

Receiver Channels

The rate of decay of the secondary field is measured across fixed time windows which occupy most of the off-time of the transmitter. These time windows are referred to as "channels". These channels are numbered in sequence with "1" being the earliest. The analog and datalogger receivers measured eight fixed channels. The digital receiver, being under software control, offers more flexibility in the channel positioning, channel width, and number of channels.

PP Channel

The PEM system monitors the primary field by taking a measurement during the current ramp and storing this information in a "PP channel". This means that data can be presented in either normalized or normalized formats, and additional information is available during interpretation. The PP channel data can provide useful diagnostic information and helps avoid critical errors in field polarity.

Synchronization

Since the PEM system measures the secondary field in the absence of the primary field, the receiver must be in "sync" with the transmitter to read during the off-time. There are three synchronization methods available: cable connection, radio telemetry, and crystal clock. This flexibility enhances the operational capabilities of the system.

SURVEY METHODS

The wide frequency spectrum of data produced by a Pulse EM survey can be used to provide structural geological information as well as the direct detection of conductive or conductive associated ore deposits. The various types of survey methods, from surface and borehole, have greatly improved the chances of success in deep exploration programs. There are eight basic profiling methods as well as a resistivity sounding mode.

Moving Coil

A small, multi-turn transmitter loop (13.7m diameter) is moved for each reading while the receiver remains a fixed distance away. This method is ideal for quick reconnaissance in areas of high background conductivity.

Moving Loop

Same as Moving Coil method, but with a larger rectangular transmit loop (100 to 300 meters). This method provides deeper penetration in areas of high background conductivity, and works best for near-vertical conductors. This method can be used in conjunction with the Moving In-loop survey for increased sensitivity to horizontal conductors.

Moving In-Loop

A rectangular transmit loop of size 100 to 300 meters is moved for each reading while the receiver remains at the center of the loop. This method provides deep penetration in areas of very high background conductivity, and works best for near-horizontal conductors. It can be used in conjunction with the Moving Loop survey.

Large In-Loop

A very large, stationary transmit loop (800m square or more) is used, and survey lines are run inside the loop. This mode provides very deep penetration (700m or more) and couples best with shallow dip conductors (<45 deg.) under the loop.

Deep EM

A large, stationary transmit loop is used, and survey lines are run outside the loop. This mode provides very deep penetration, and couples best with steeply dipping conductors (>45 deg.) outside the loop.

Borehole (Z Component only)

Isolated Borehole: A drill hole is surveyed by lowering a probe down a hole and surveying it with a number of transmit loops laid out on surface. The data from multiple loops gives directional information on the conductors.

Multiple Boreholes: One large transmit loop is used to survey a number of closely spaced holes. The change in anomaly from hole to hole provides directional information. These methods have detected conductors to depths of 2500m from surface and up to 200m from the hole.

3-D Borehole

Drill holes are surveyed with both the Z and the XY borehole probes. The X and Y components provide accurate direction information using just one transmit loop. Since the probe rotates as it moves down the hole a correction is required for the X-Y data. This is accomplished in one of two ways. The measurement of the primary field from the "PP" channel can be used to apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation tool for the X-Y probe. This attachment uses dip meters to calculate the probe rotation. A third method uses another rotation tool with integrated 3-axis accelerometers and 3-axis magnetometers which can be used to correct rotation on steeply dipping holes including vertical.

Underground Borehole

Underground drill holes can be surveyed in any of the above mentioned borehole methods with one or more transmit loops on the surface. Near-horizontal holes can be surveyed using a push-rod system.

Resistivity Soundings

By reading a large number of channels in the centre of a transmit loop it is possible to perform a decay curve analysis giving a best-fit layer earth model using programs such as ARRTI or TEMIX.

EQUIPMENT

Transmit Loops

The PEM system can operate with practically any size of transmit loop, from a multi-turn circular loop 13.7m in diameter, to a 1 or 2 turn loop of any shape up to 1 or 2 kilometers square using standard insulated copper wire of 10 or 12 gauge. The multi-turn loop is made in two sections with screw connectors. The 10 or 12 gauge loop wire comes on spools in either 300m or 400m lengths. The spools can be mounted on pack frame wire winders for laying out or retrieving.

Power Supply

The PEM system has been produced in 2 varieties: high power (4.8 KW), and low power (2.4 KW). The low power PEM system normally operates with an input voltage from 24V to 240V with a maximum output current of 20 amps. For very low power surveys a 20amp/hr 24V battery can be used. The high power system operates on a continuously variable voltage input up to 240V with a maximum output current of 30 amps. The power supply requires a motor generator and a voltage regulator to control and filter the input voltage to the transmitter.

Specifications: PEM Motor Generator

- (2.4 KW) 4.5 hp Robin EH34 engine, 120V 3-phase alternator
- (4.8 KW) 11 hp Robin RGV6100 240V/120V generator (1-phase)
- cable output to regulator
- fuse type overload protection
- steel frame
- external gas tank

- optional packframe for low-power generator
- wooden shipping box
- unit weight: 33kg (2.4 KW); 81kg (4.8 KW)
- shipping weight: 47kg (2.4 KW); 100kg (4.8 KW)

Specifications: PEM Variable Voltage Regulator

- High Power
 - Continuously variable voltage output up to 240V
 - 30 amp maximum current
 - Integrated sealed aluminum case ruggedized for shipping
 - Shipping weight 18kg
- Low Power
 - selectable voltage between 24v and 120v
 - 20amp maximum current
 - anodized aluminum case
 - padded wooden shipping box
 - unit weight 10kg; shipping weight 18kg
- fuse and internal circuit breaker protection
- cable connections to motor generator and transmitter

Specifications: PEM Transmitter

- High Power
 - Timebases
 - ♦ 8.33ms (30Hz), 10ms (25Hz), 16.66ms (15Hz), 20ms, (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)
 - ramp times: 0.5ms, 1.0ms, 1.5ms
 - operating voltage: continuously variable input up to 240V
 - output current up to 30amp maximum
 - optional current control feedback system features constant current output with ± 0.1 amp precision
 - integrated sealed aluminum case ruggedized for shipping with shock protection
- Low Power
 - Timebases
 - ♦ 8.33ms (30Hz), 10ms (25Hz), 16.66ms (15Hz), 20ms, (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz)
 - operating voltage: 24v to 120v
 - output current: 5amp to 20amp
 - anodized aluminum case
 - optional pack frame
 - unit weight 12.5kg; shipping weight 22kg
 - padded wooden shipping box
- monitors for input voltage, output current, shut-off ramp, tx loop continuity, instrument temperature, and overload output current
- automatic shut-off for open loop, high instrument temperature, and overload
- fuse and circuit breaker overload protection
- three sync modes:
 - built-in radio and antenna
 - cable sync output for direct wire link to receiver or remote radio
 - crystal clock connection with built-in optical isolation

Receiver

The receiver measures the rate of decay of the secondary field across several time channels. The Crone Digital Receiver, in use since 1987 uses software control, offering a variety of programmable channel configurations.

Specifications: Digital PEM Receiver

- 26 bit (156dB) dynamic range
- operating temperature -40°C to 50°C
- built-in non-volatile memory
- optional pack frame
- unit weight 15kg; shipping weight 25.5kg
- padded wooden shipping box
- Menu driven operating software system offering the following functions:
 - controls channel positions, channel widths, and number of channels
 - Timebases: 8.33ms (30Hz), 10ms (25Hz), 16.66ms (15Hz), 20ms, (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)
 - ramp time selectable
 - sample stacking from 1 to 65536
 - automatic gain and spike rejection
 - scrolling routines for viewing data
 - graphic display of decay curve and profile with various plotting options
 - routines for memory management
 - control of data transmission
 - provides information on instrument and operating status

Sync Equipment

There are three modes of synchronization available; radio, cable, and crystal clock. The radio sync signal can be transmitted through a booster antenna from either the PEM Transmitter internal radio or through a Remote Radio.

Specifications: Sync Cable

- 2 conductor, 24awg, Teflon coated
- approx. 900m per aluminum spool with connectors

Specifications: Remote Radio

- operating frequency 27.12mhz
- 12V rechargeable gel cell battery supply
- fuse protection
- sync wire link to transmitter
- coaxial link to booster antenna
- anodized aluminum case
- unit weight 2.7kg

Specifications: Booster Antenna

- 8m, 4 section aluminum mast
- guide rope support
- ¼ wave CB fiberglass antenna
- range up to 2km
- coaxial connection to transmitter or remote radio

Specification: Crystal Clocks

- heat stabilized crystals
- 24V rechargeable gel cell battery supply

- anodized aluminum case
- rx unit can be separate or housed in the receiver
- outlet for external supplementary battery supply

Surface PEM Receive Coil

The Surface PEM Receive Coil picks up the EM field to be measured by the receiver. The coil is mounted on a tripod that can be positioned to take readings of any component of the field.

Specifications: Surface PEM Receive Coil

- ferrite core antenna
- VLF filter
- 10khz bandwidth
- two 9v transistor battery supply
- tripod adjustable to all planes
- unit weight 4.5kg; shipping weight 13.5kg
- padded wooden shipping box

Surface SQUID sensor

CSIRO 1-, 2- or 3- axis high-sensitivity superconducting sensor measures magnetic field in the sub-pT range.

Specifications: Surface SQUID sensor

- liquid nitrogen cooled, 12 hour operation between reservoir refills
- low-noise floor $\sim 350\text{fT}/\sqrt{\text{Hz}}$
- man-portable sensor and control system
- moving loop, or large loop survey configuration
- solid teflon non-magnetic housing
- operational temperature range: -40°C to 40°C
- total system packaged shipping weight (without liquid nitrogen): 62kg

Borehole PEM Z Component Probe

The Z component probe measures the axial component of the EM field. The Z component data is not affected by probe rotation so no correction is required.

Specifications: Borehole PEM Z Component Probe

- ferrite core
- dimensions: length - 1.6m; dia - 3.02cm (3.15cm for high pressure tested probes)
- internal rechargeable NiCd battery supply
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths 1300m, 2000m, and 2800m
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total weight 17kg

Borehole PEM XY Component Probe

The XY probe measures two orthogonal components of the EM field perpendicular to the axis of the hole. Correction for probe rotation can be achieved by mathematical theoretical primary field reduction or more commonly with an attached orientation tool sensor.

Specifications: Borehole PEM XY Component Probe

- ferrite core
- dimensions: length - 2.01m; dia - 3.02cm
- internal rechargeable ni-cad battery supply

- selection of X or Y coils by means of a switch box on surface or automatic switching with Digital receiver
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths to 2800m
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 20kg

Specifications: Orientation Tool

- 2 axis tilt sensors
- accuracy ± 0.1 deg.
- operating range -88 to -10 deg.
- dimensions: length - 0.94m; dia - 28.5mm
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 14kg

Specifications: Rotation Angle Direction (RAD) Tool

- integrated 3-axis accelerometers and 3-axis magnetometers
- dip and roll accuracy: $\pm 0.5^\circ$, azimuth accuracy: $\pm 1.0^\circ$
- operating range: all
- simultaneous 3D magnetometer borehole survey by station
- optional continuous logging mode
- dual 3-axis sensors provide an alternative complete borehole Dip-Azimuth measurement
- dimensions: length - 0.75m; dia - 31.8mm
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 14kg
- NiCd battery provides all-day operation
 - ♦ Length - 0.93m; dia - 28.6mm
 - ♦ Packaged in padded cover and aluminum tube
 - ♦ Shipped in padded wooden box; total shipping weight 14kg

Borehole Equipment

To lower the probe down a drill hole requires a cable and spool, winch assembly frame and cable counter. Borehole surveys also require equipment to "dummy probe" the hole before doing the survey.

Specifications: Borehole Cable

- two conductor shielded cable
- kevlar strengthened
- lengths are available up to 2600m on three sizes of spools
- shipped in wooden box

Specifications: Slip Ring

- attaches to side of borehole cable spool providing a connection to the receiver while allowing the spool to turn.
- VLF filter
- pure silver contacts

Specifications: Borehole Winch Frame

- welded aluminum frame
- removable axle
- chain driven, 3 speed gear box
- hand or optional power winding
- hand brake and lock

- optional chain-gear safety cover
- two sizes: standard for up to 1300m cable; large for longer cables
- shipped in wooden box

Specifications: Borehole Counter

- attaches to the drill hole casing
- calibrated in meters
- shipped in wooden box; total weight 13kg

Specifications: Dummy Probe and Cable

- solid steel or steel pipe
- same dimensions as borehole probe
- shear pin connection to dummy cable
- steel dummy cable on aluminum spool
- cable mounts on borehole frame
- various lengths to 2600m on 3 spool sizes.

Geophysical Survey Report

covering

Borehole Pulse EM Surveys

over the

Shakespeare Project

for

Ursa Major Minerals Inc.

during

June 2011

by

CRONE GEOPHYSICS & EXPLORATION LTD.

Survey Area:	Shakespeare East Property, Webbwood, Ontario
Survey Type:	Borehole Pulse EM Surveys
Survey Operators:	Andy Sewap
Borehole Surveys:	U-03-08, U-03-113, U-03-114, U-03-116, U-03-118, U-03-120, U-03-121
Survey Period:	June 2011
Report By:	A.M.Khan
Report Date:	June 2011

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1.0 INTRODUCTION

Crone Geophysics & Exploration Limited was contracted by Ursa Major Minerals Inc. to conduct Borehole Pulse Electromagnetic Surveys on its Shakespeare East Property located in Shakespeare Township, near the village of Webbwood, Ontario. This report summarizes the geophysical work carried out in June 2011.

Seven (7) holes covering two (2) surface loops were surveyed during the survey period June 1st to 23rd, 2011. The appendices to this report contain page size plan maps, PEM profiles (linear 5-axis and logarithmic scale), step response profiles, and instrument specifications.

2.0 PROPERTY LOCATION AND ACCESS

The Shakespeare property is located, immediately north and east of Agnew Lake, near the village of Webbwood, Ontario. The property is approximately 70 km west-southwest of Sudbury, Ontario, about one hour by road from Sudbury. The closest towns are Webbwood, which is 9 km southwest of the property, and Espanola, which is 11 km southeast.

Access into the Shakespeare Property will be from northeast via a secondary road branching north from the Trans Canada Highway # 17 approximately 7.5 km east of Nairn Center. An existing logging road connects to the west side of the secondary road, approximately 13 km from Highway 17 and allows access to the property (Figure-2). For much of its length, this existing logging road is considered to be suitable for site access.

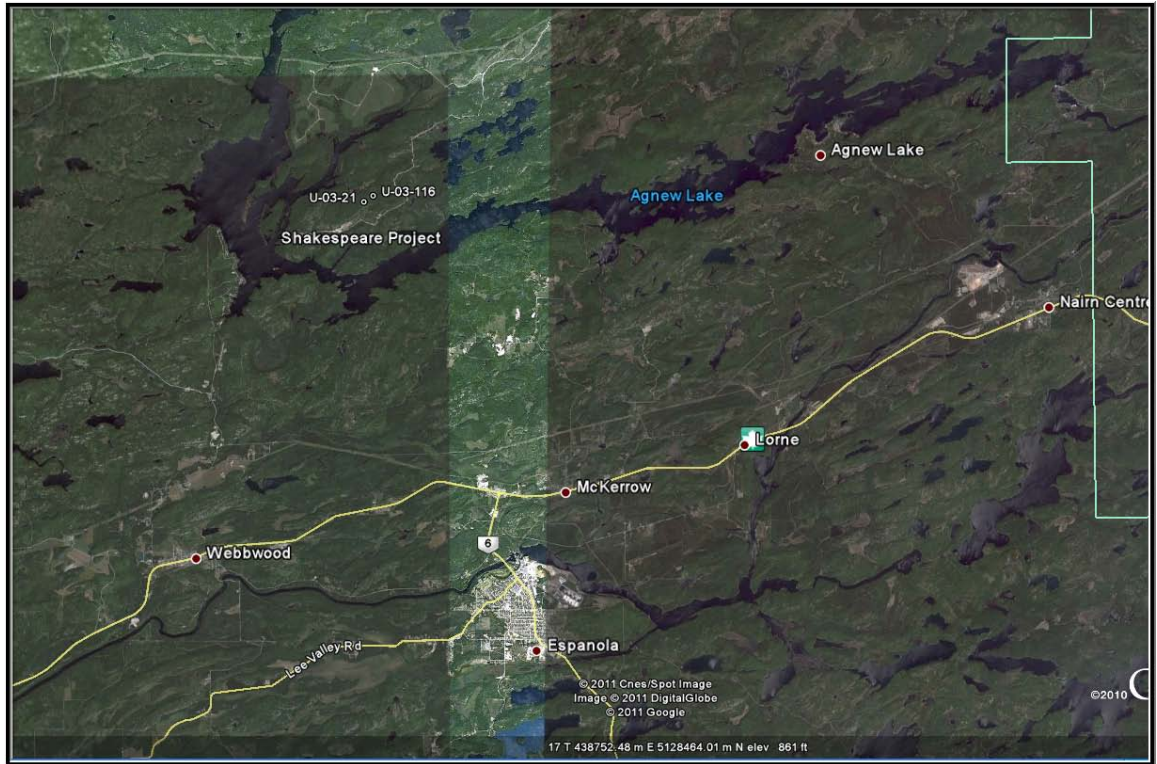


Figure 1: Shakespeare Project General Location Google Map

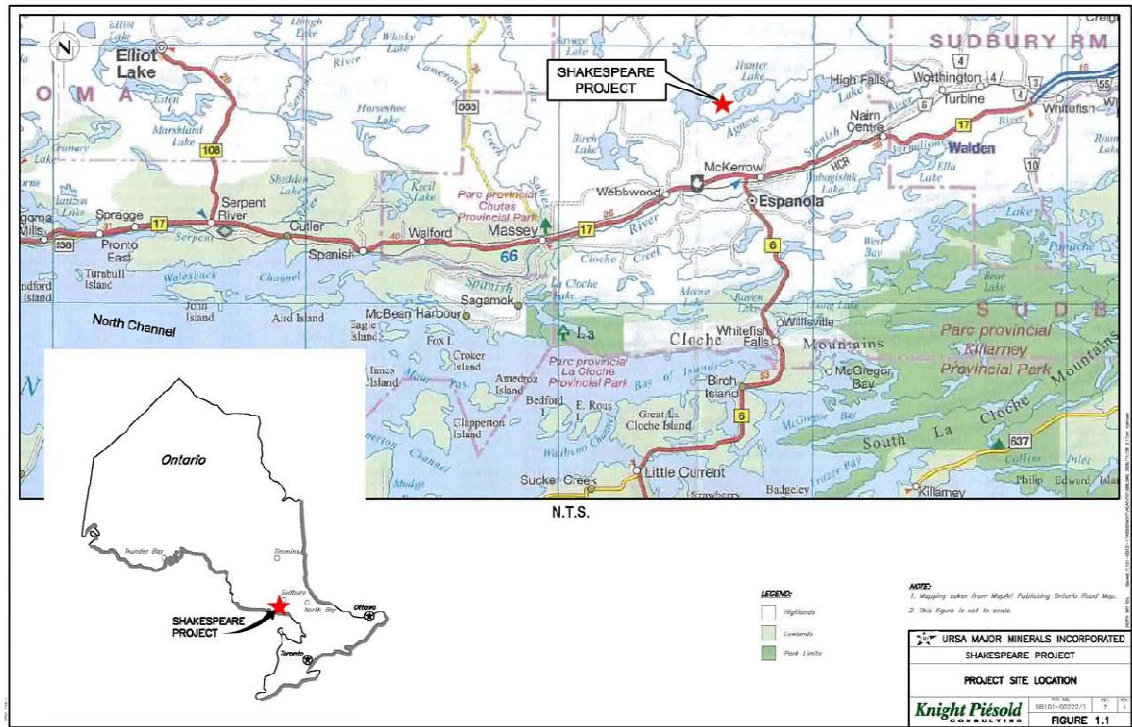


Figure 2: Property Location and Access Map

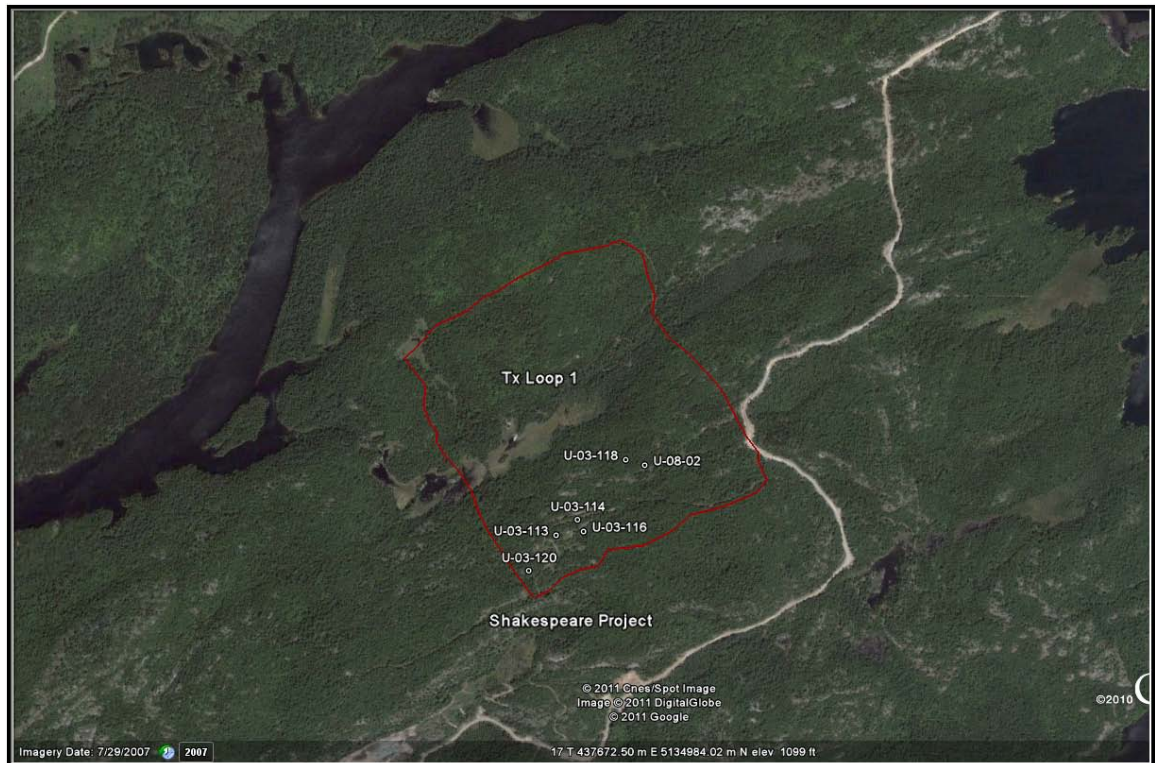


Figure 3: Loop1, Hole U-08-02, U-03-113, U-03-114, U-03-116, U-03-118, U-03-120 Location Map



Figure 4: Loop2, Hole U-03-21 Location Map

3.0 PERSONNEL

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

Survey Operators: Andy Sewap

Data Processing: Kevin Ralph

Report: A.M.Khan

4.0 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 of the induced secondary field is measured across a series of time windows during the off-time. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic 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.

On this project, a 3D Borehole Pulse EM system was assembled in which an axial component (Z) probe and a cross component (XY) probe were used to measure the three components of the induced secondary field. The first pass with the 'Z' probe detects any in-hole or off-hole anomalies and gives information on size, conductivity, and distances to the edge of conductors. The second pass with the 'XY' probe measures two orthogonal components of the EM field in a plane orientated at right angles to the borehole. These results give directional information to the center of the conductive body. Data is usually collected at a nominal sample interval of 10m.

In addition to measuring the standard Primary Pulse channel on the ramp and off-time channels, the Step Response may also be calculated. Step Response requires accurate geometrical control in which the loop position and the hole geometry are accurately determined. In the current surveys positional information was collected by Crone using a sub-meter capable GPS and regional base station. Positional information is provided in the UTM projection (zone 17 North), utilizing the NAD 1983 Canada datum. Elevations are given relative to Mean Sea Level based on the EGM96 Global geoids model.

The calculated Step Response values are binned into an S1 channel (from 0.5T to T), 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, where T is the time base). 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 exactly equal the theoretical field for a given component. In the case of generally resistive host and poorer conductors the S1 value will be very close or equal to the theoretical field for a given component

The equipment used on this project was a Crone Pulse EM Borehole system. This includes a 4.8 kW transmitter with a 220V voltage regulator which is powered by

an 11 hp motor generator. The Crone Digital Receiver was used to collect the field data. The synchronization between the Transmitter and the Receiver was maintained by either a crystal-clock or direct cable link

Data units are nT/s.

5.0 SURVEY PARAMETERS

Table I: Transmitter Loop Coverage

Loop	Property	Size (meters)	Corner Coordinates UTM NAD83 Canada Zone 17N
Tx Loop 1	Shakespeare East Property	~1000x1000	436248E, 5134807N 436705E, 5133928N 437530E, 5134371N 437004E, 5135231N
Tx Loop 2	Shakespeare East Property	~1100x1000	436020E, 5134707N 436427E, 5133859N 437522E, 5134370N 437008E, 5135241N

Table II: Borehole Survey Coverage

Hole	TX loop Shakespeare East	Timebase (ms)	Ram p (ms)	Current (Amps)	Station		Comp
					From	To	
U-08-02	Tx Loop 1	16.66	1.5	13.0	30	710	XYZ
U-03-113	Tx Loop 1	50.00	1.5	11.0	20	340	XYZ
U-03-114	Tx Loop 1	50.00	1.5	10.5	20	350	XYZ
U-03-116	Tx Loop 1	50.00	1.5	12.0	20	620	XYZ
U-03-118	Tx Loop 1	16.66	1.5	13.0	20	615	XYZ
U-03-120	Tx Loop 1	50.00	1.5	11.0	20	470	XYZ
U-03-121	Tx Loop 2	50.00	1.5	9.5	20	490	XYZ

The following table shows the various time gates that constitute the channel configurations set up in the Crone PEM Receiver used in the surveys for the hole U-03-113, U-03-114, U-03-116, U-03-120 and U-03-121. The 50.00 ms (5Hz) timebase uses off-time channels 1 – 24.

Table III: Borehole Channel Configuration 50.00 ms

Channel	Start	Finish	Channel	Start	Finish
PP	-200 μ s	-100 μ s			
1	48 μ s	64 μ s	2	64 μ s	84 μ s
3	84 μ s	112 μ s	4	112 μ s	152 μ s
5	152 μ s	204 μ s	6	204 μ s	268 μ s
7	268 μ s	360 μ s	8	360 μ s	480 μ s
9	480 μ s	640 μ s	10	640 μ s	848 μ s
11	848 μ s	1.128 ms	12	1.128 ms	1.496 ms
13	1.496 ms	1.992 ms	14	1.992 ms	2.644 ms
15	2.644 ms	3.512 ms	16	3.512 ms	4.664 ms
17	4.664 ms	6.192 ms	18	6.192 ms	8.22 ms
19	8.22 ms	10.92 ms	20	10.92 ms	14.4 ms
21	14.4 ms	17.7 ms	22	17.7 ms	27.7 ms
23	27.7 ms	37.7 ms	24	37.7 ms	47.7 ms

The following table shows the various time gates that constitute the channel configurations set up in the Crone PEM Receiver used in the surveys for the hole U-08-02 and hole U-03-118. The 16.66 ms timebase uses off-time channels 1 – 20

Table IV: Channel Configuration 16.66 ms

Channel	Start	Finish	Channel	Start	Finish
PP	-200 μ s	-100 μ s			
1	48 μ s	64 μ s	2	64 μ s	84 μ s
3	84 μ s	112 μ s	4	112 μ s	152 μ s
5	152 μ s	204 μ s	6	204 μ s	268 μ s
7	268 μ s	360 μ s	8	360 μ s	480 μ s
9	480 μ s	640 μ s	10	640 μ s	848 μ s
11	848 μ s	1.128 ms	12	1.128 ms	1.496 ms
13	1.496 ms	1.992 ms	14	1.992 ms	2.644 ms
15	2.644 ms	3.512 ms	16	3.512 ms	4.664 ms
17	4.664 ms	6.192 ms	18	6.192 ms	8.22 ms
19	8.22 ms	10.92 ms	20	10.92 ms	14.4 ms

6.0 PRODUCTION SUMMARY

Table V: Production Summary

01-June-2011	MOB
02-June-2011	MOB
03-June-2011	MOB
04-June-2011	Located drill holes and Loop wire.
05-June-2011	Walked to the loop to look for open splices, repaired 6. Surveyed hole U-08-02, Z component.
06-June-2011	Surveyed hole U-08-02, XY components.
07-June-2011	Headed out to grid and took gps coordinates of drill collars.
08-June-2011	Bridge replacement.
09-June-2011	Resurveyed hole U-08-02 XY components.
10-June-2011	Surveyed hole U-03-118, XYZ components.
11-June-2011	Started surveying hole U-03-116 got to 330m on the Z-component when the keypad froze up, perhaps because of moisture. It started to rain.

12-June-2011	Tried RX this am, keypad is still froze, tried doing different things to get it going but did not work.
14-June-2011	Surveyed hole U-03-116, XYZ components.
15-June-2011	Surveying hole U-03-120, Z-component.
16-June-2011	Started surveyed on hole U-03-120, XY components.
17-June-2011	Surveyed hole U-03-120, XY components.
18-June-2011	Surveyed hole U-03-113, XYZ components.
19-June-2011	Surveyed hole U-03-114, XYZ components.
20-June-2011	Hole 03-122 was blocked at 37m so I talked to Client about it. Decided to survey hole 03-121. Started the surveying after 1:00pm and finished off the z-component. Laid Loop2.
21-June-2011	Surveyed hole U-03-121, XY components.
22-June-2011	Picked up 1.1kmx1km loop and packed out the gear, loaded quads.
23-June-2011	DEMOB

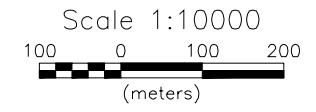
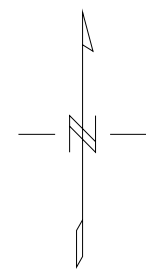
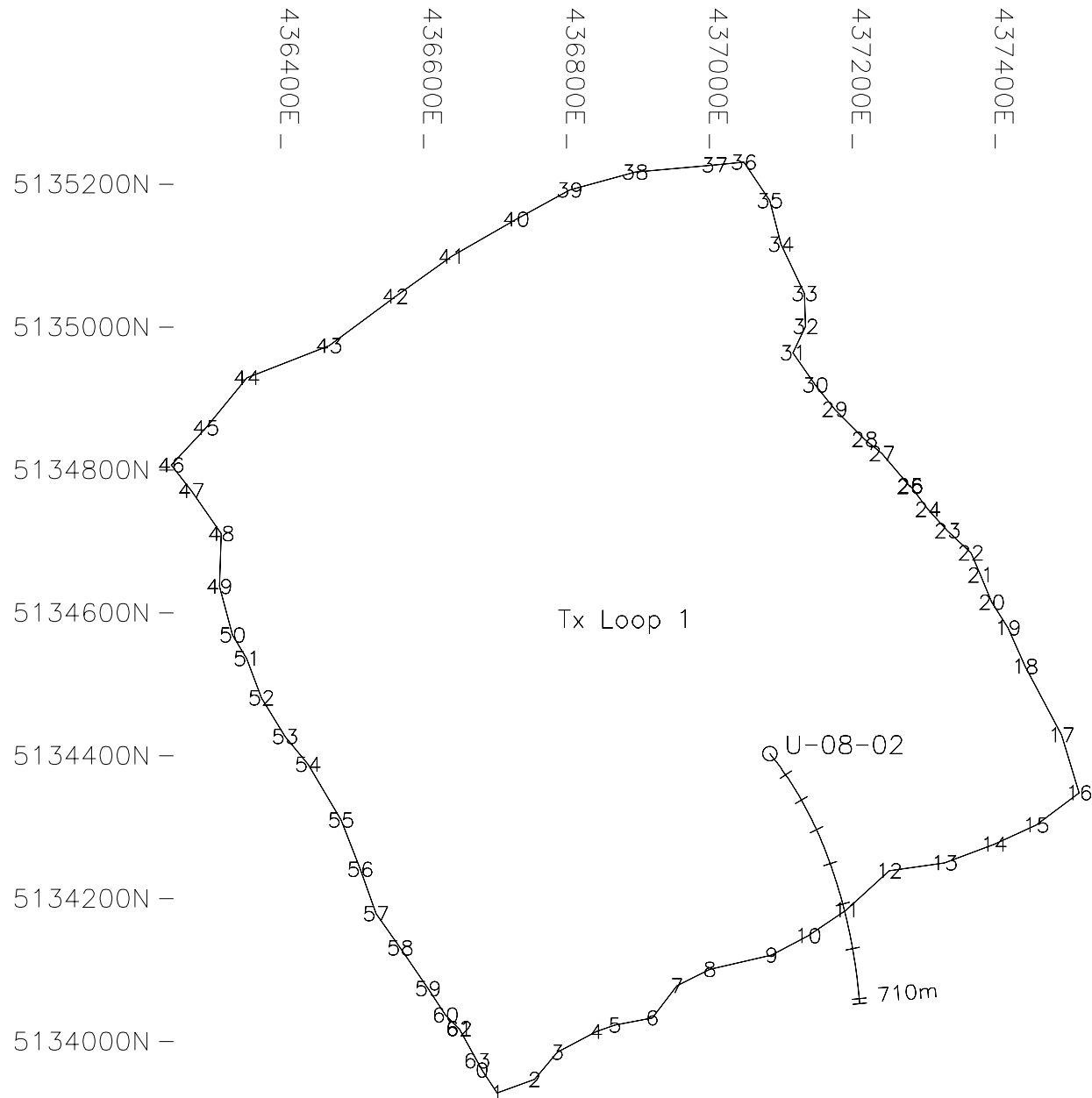
Respectfully submitted,

A.M.Khan
Crone Geophysics & Exploration Ltd.



APPENDIX I
PLAN AND SECTION MAPS



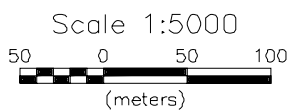
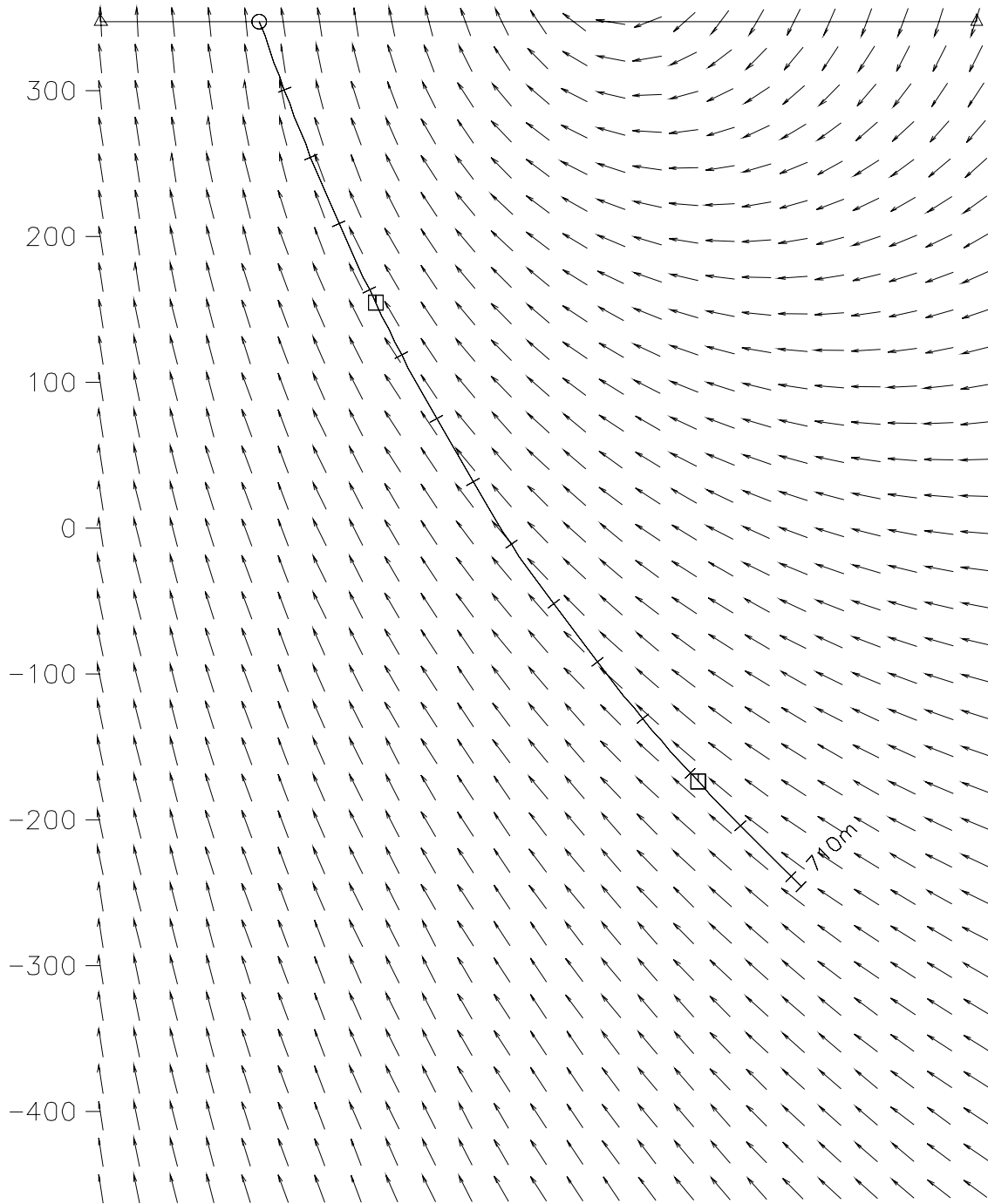


<p><i>Ursa Major Minerals Inc.</i> Shakespeare East Property</p>
<p>3-D Borehole Pulse EM Survey Borehole & Loop Location Map</p>
<p>Hole: U-08-02 Survey Date: June 09, 2011</p>
<p><i>Crone Geophysics & Exploration Ltd.</i></p>

437070E, 5134512N

U-08-02

437262E, 5133943N



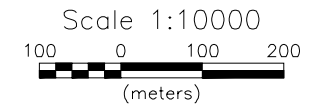
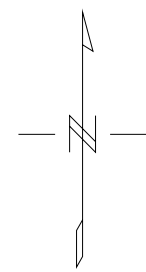
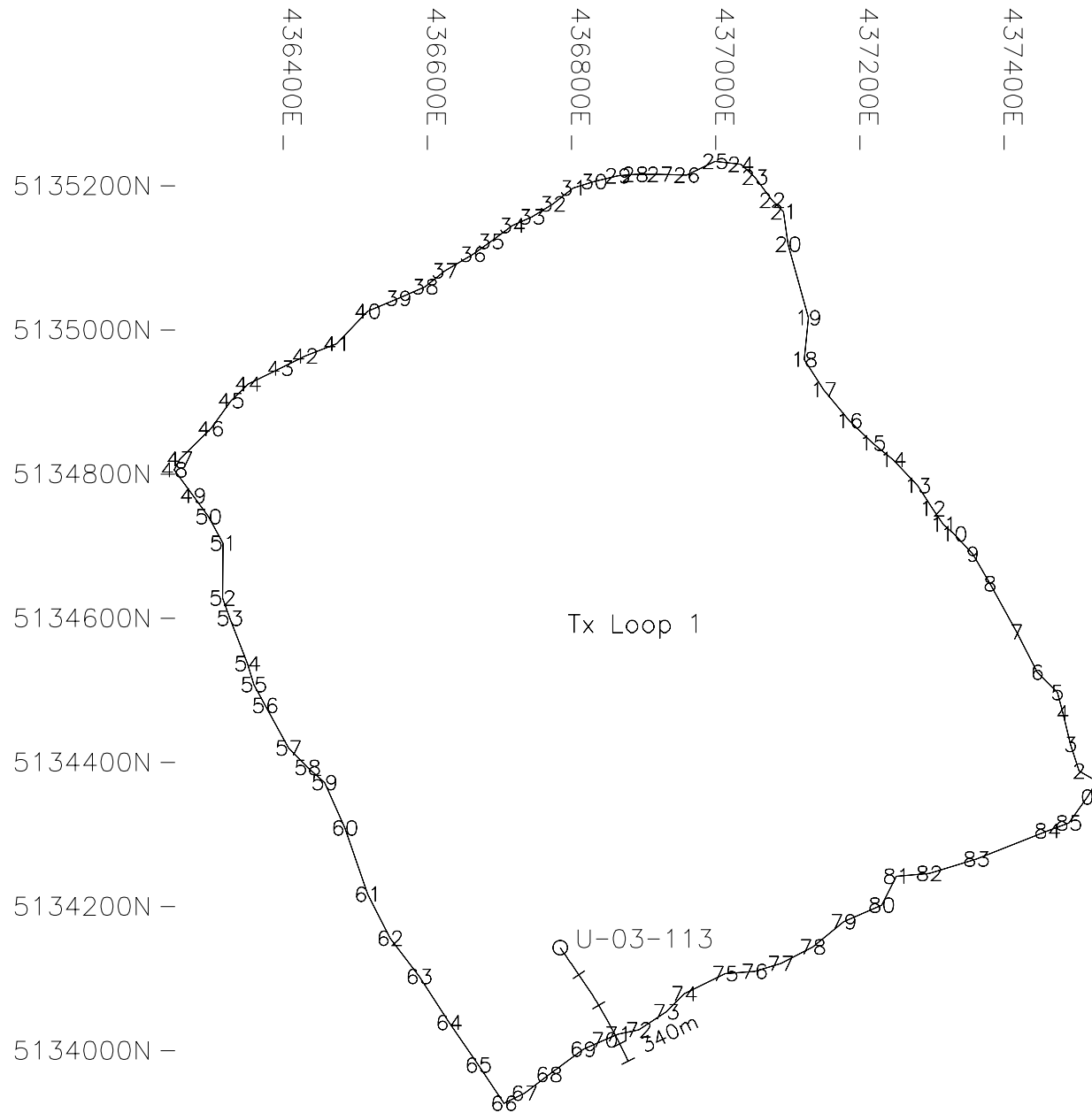
Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-08-02

Survey Date: June 09, 2011

Crone Geophysics & Exploration Ltd.

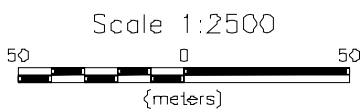
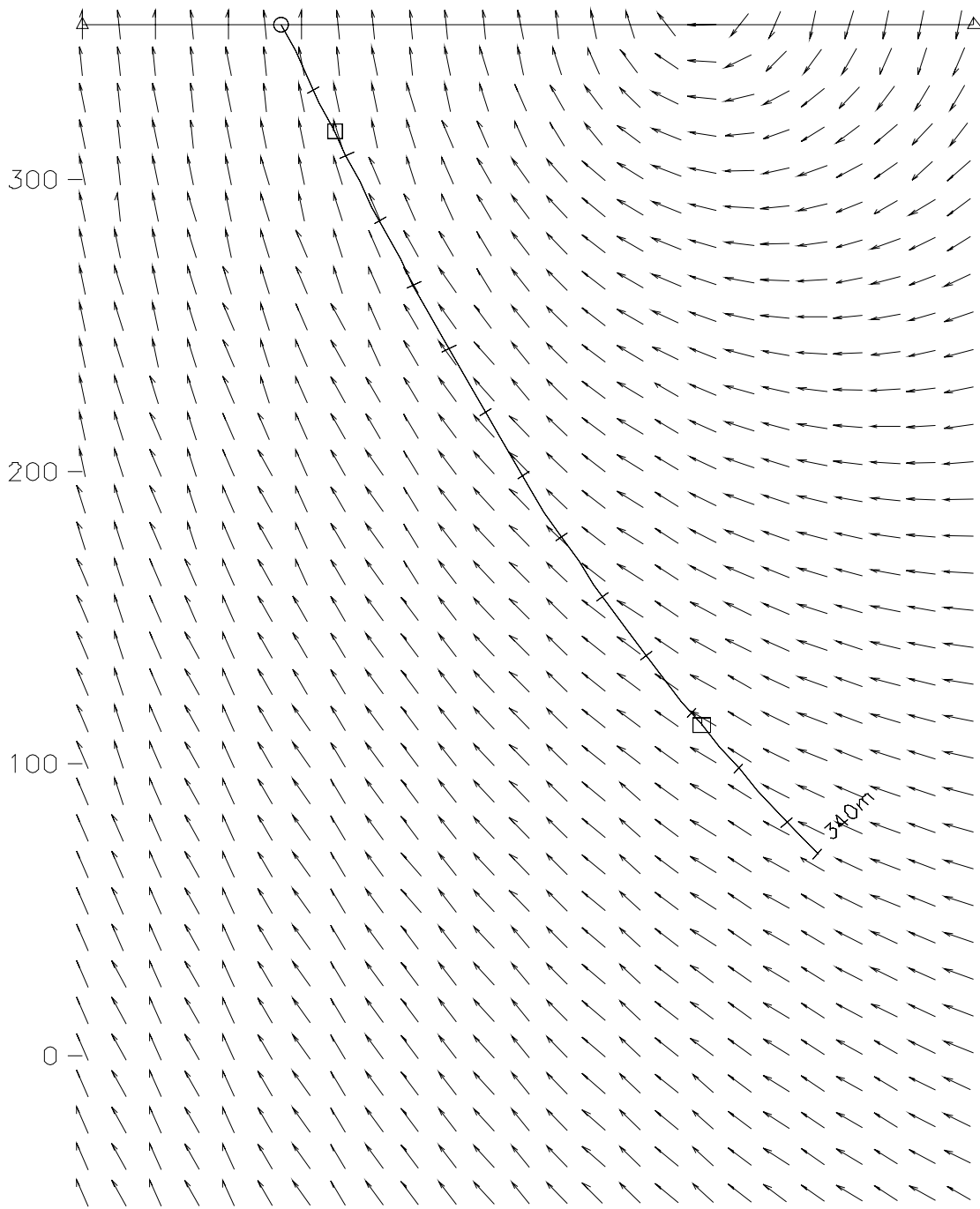


<p><i>Ursa Major Minerals Inc.</i> Shakespeare East Property</p>
<p>3-D Borehole Pulse EM Survey Borehole & Loop Location Map</p>
<p>Hole: U-03-113 Survey Date: June 18, 2011</p>
<p><i>Crone Geophysics & Exploration Ltd.</i></p>

436749E, 5134201N

436910E, 5133941N

U-03-113

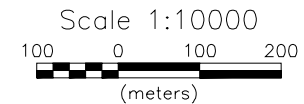
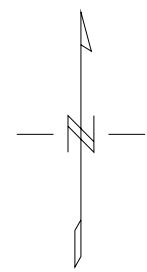
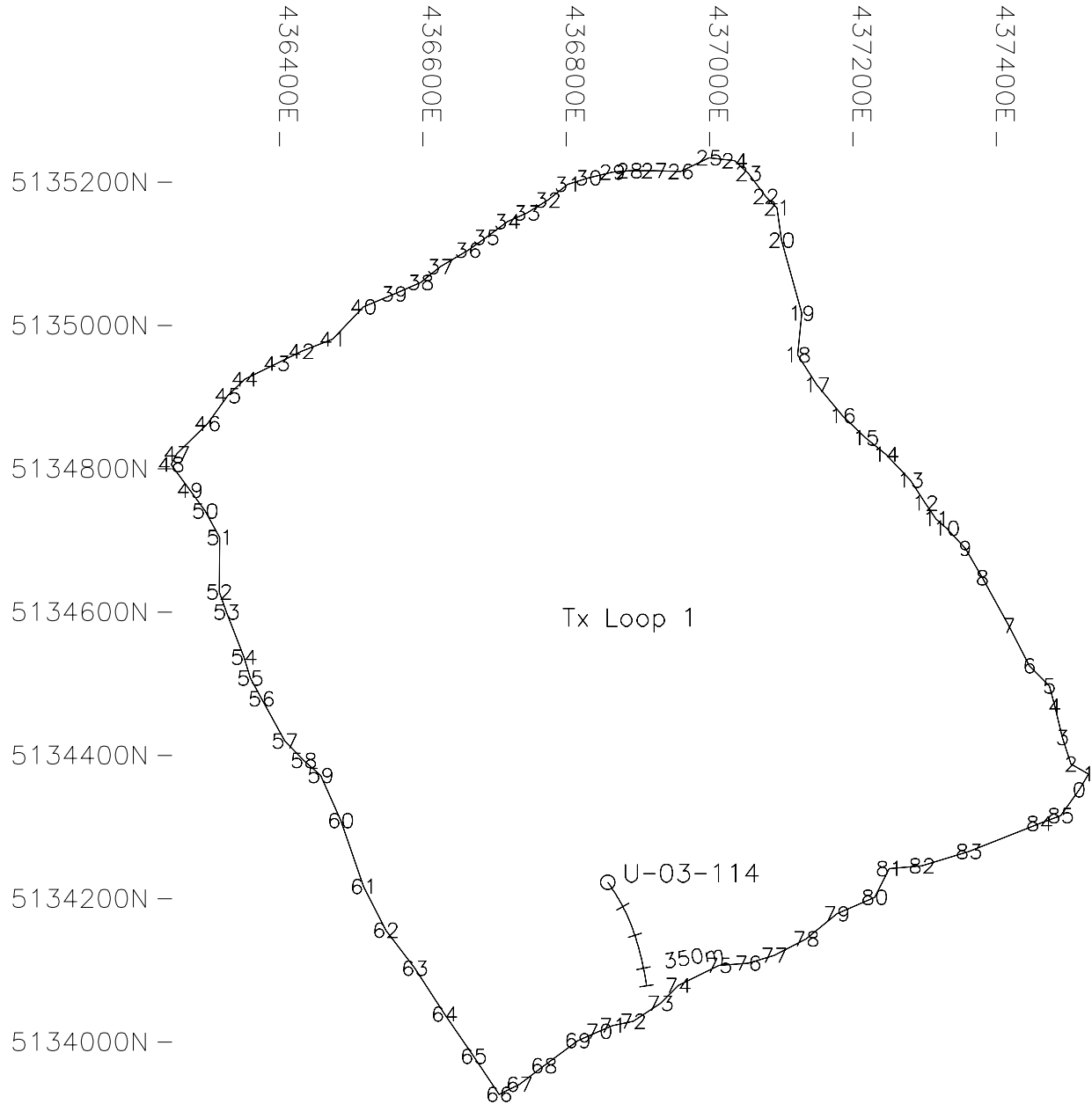


Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-03-113
Survey Date: June 18, 2011

Crone Geophysics & Exploration Ltd.

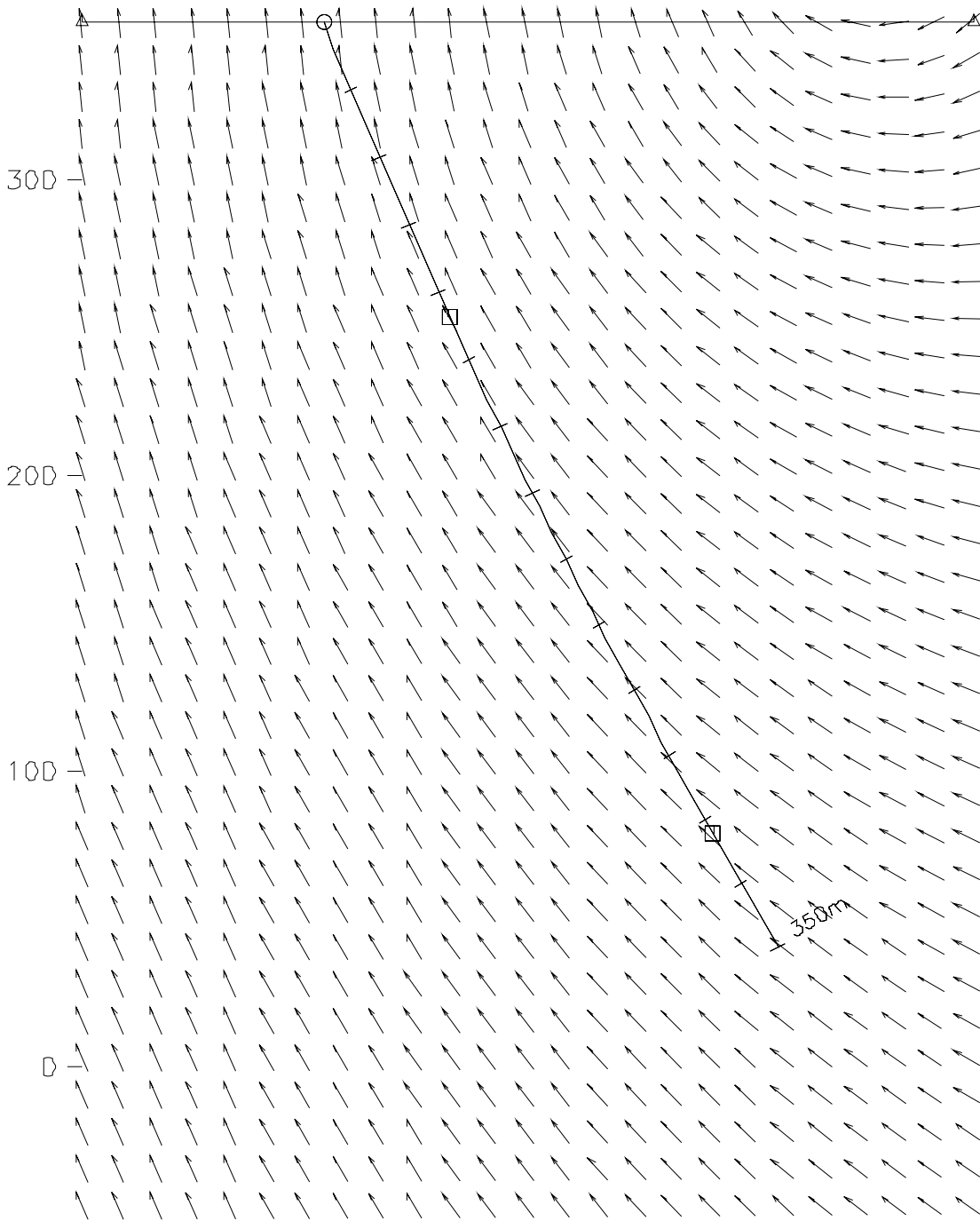


<p><i>Ursa Major Minerals Inc.</i> Shakespeare East Property</p>
<p>3-D Borehole Pulse EM Survey Borehole & Loop Location Map</p>
<p>Hole: U-03-114 Survey Date: June 19, 2011</p>
<p><i>Crone Geophysics & Exploration Ltd.</i></p>

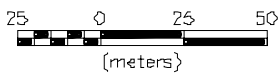
436842E, 5134303N

U-03-114

436935E, 5134016N



Scale 1:2500



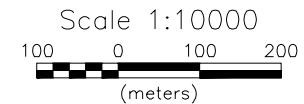
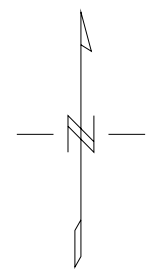
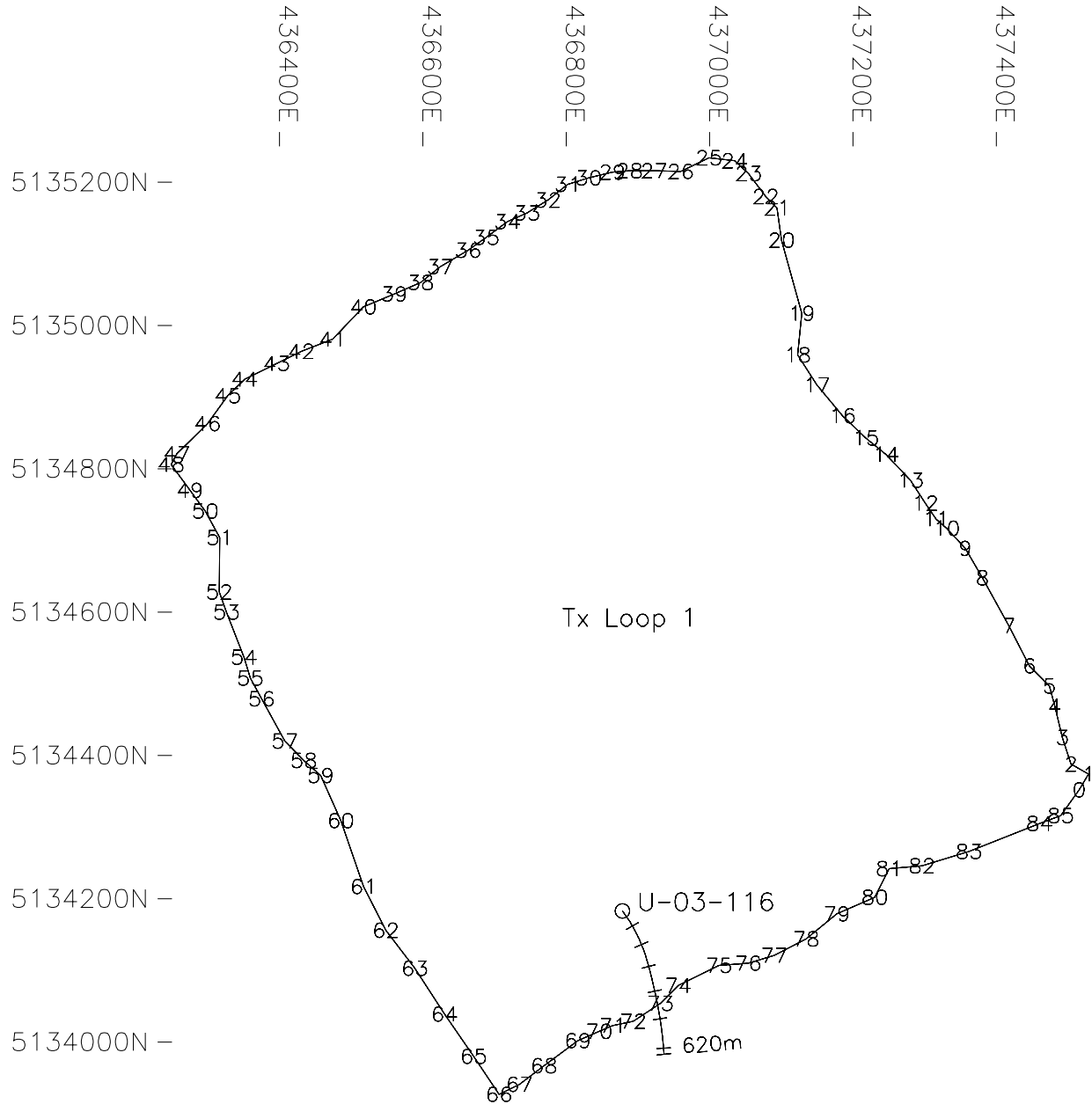
Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-03-114

Survey Date: June 19, 2011

Crane Geophysics & Exploration Ltd.



Ursa Major Minerals Inc.
 Shakespeare East Property

3-D Borehole Pulse EM Survey
 Borehole & Loop Location Map

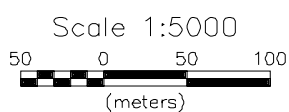
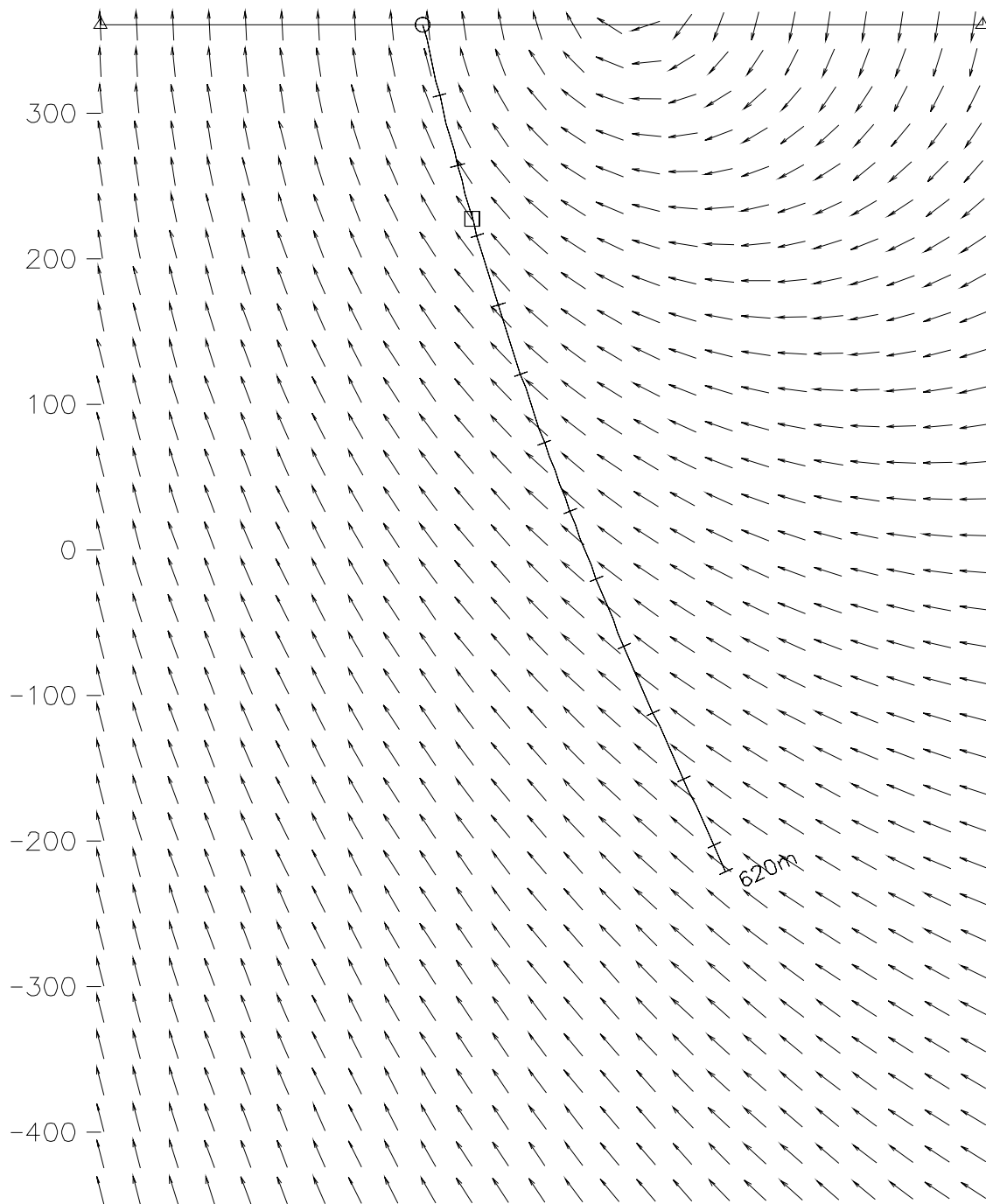
Hole: U-03-116
 Survey Date: June 14, 2011

Crone Geophysics & Exploration Ltd.

436843E, 5134402N

U-03-116

436971E, 5133810N



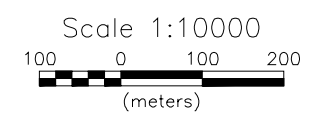
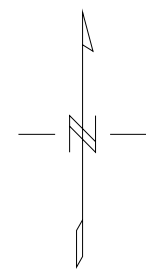
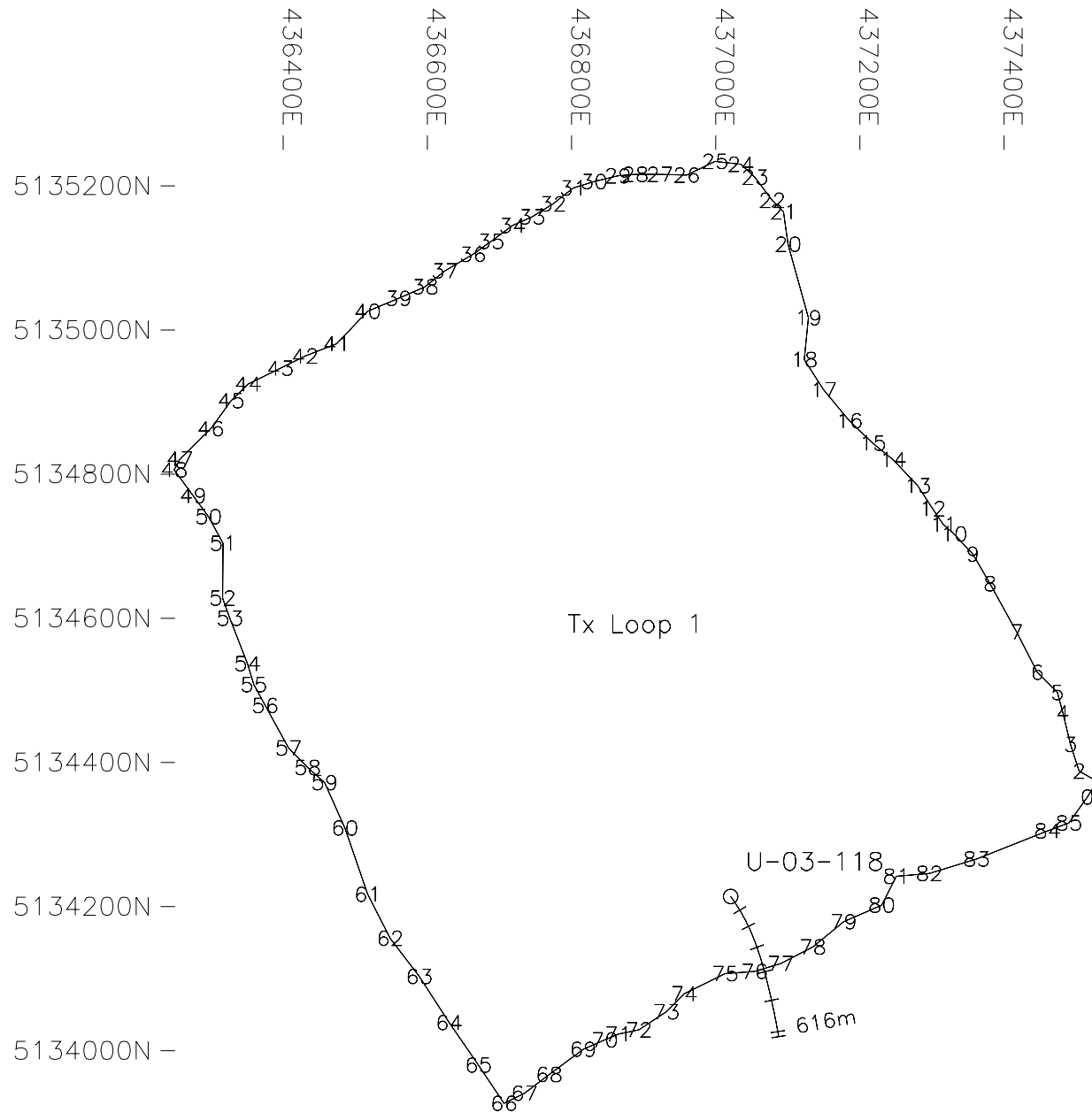
Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-03-116

Survey Date: June 14, 2011

Crone Geophysics & Exploration Ltd.

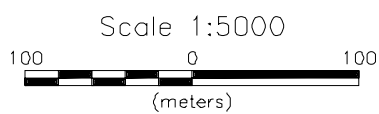
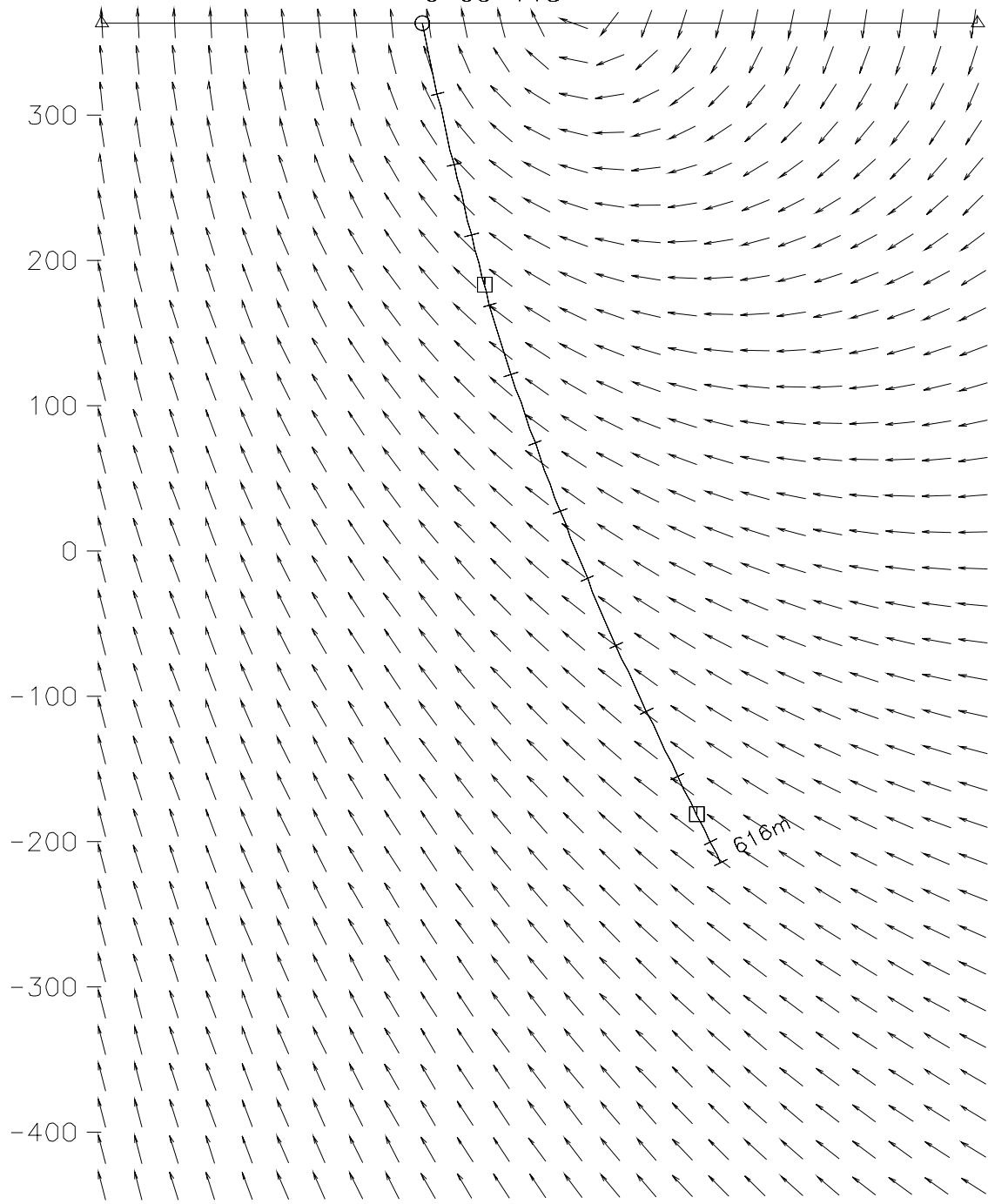


<p><i>Ursa Major Minerals Inc.</i> Shakespeare East Property</p>
<p>3-D Borehole Pulse EM Survey Borehole & Loop Location Map</p>
<p>Hole: U-03-118 Survey Date: June 10, 2011</p>
<p><i>Crone Geophysics & Exploration Ltd.</i></p>

436970E, 5134428N

U-03-118

437138E, 5133849N



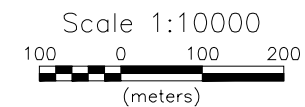
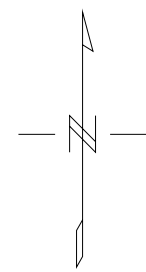
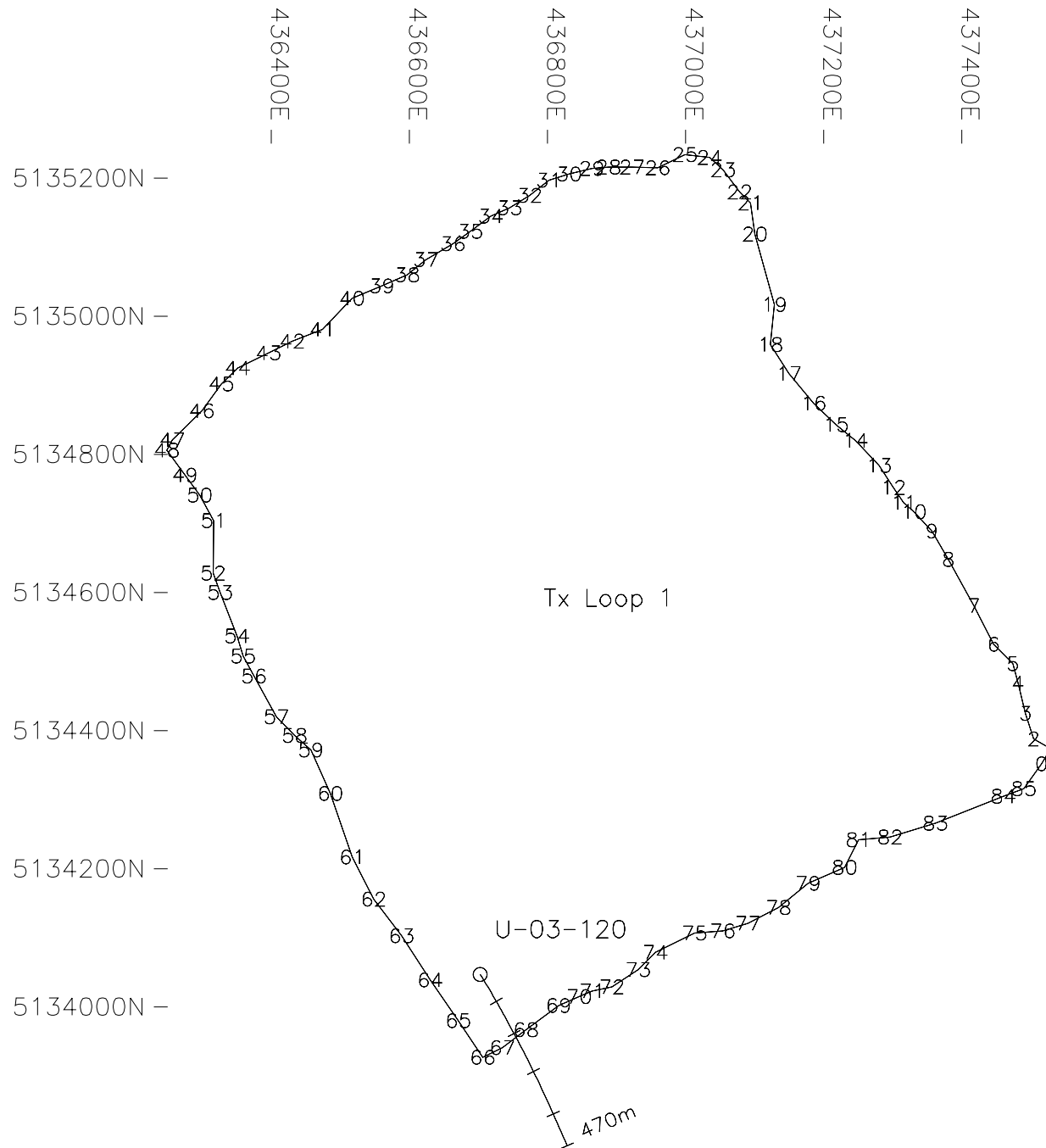
Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-03-118

Survey Date: June 10, 2011

Crone Geophysics & Exploration Ltd.

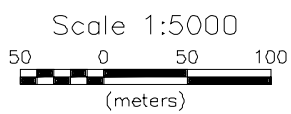
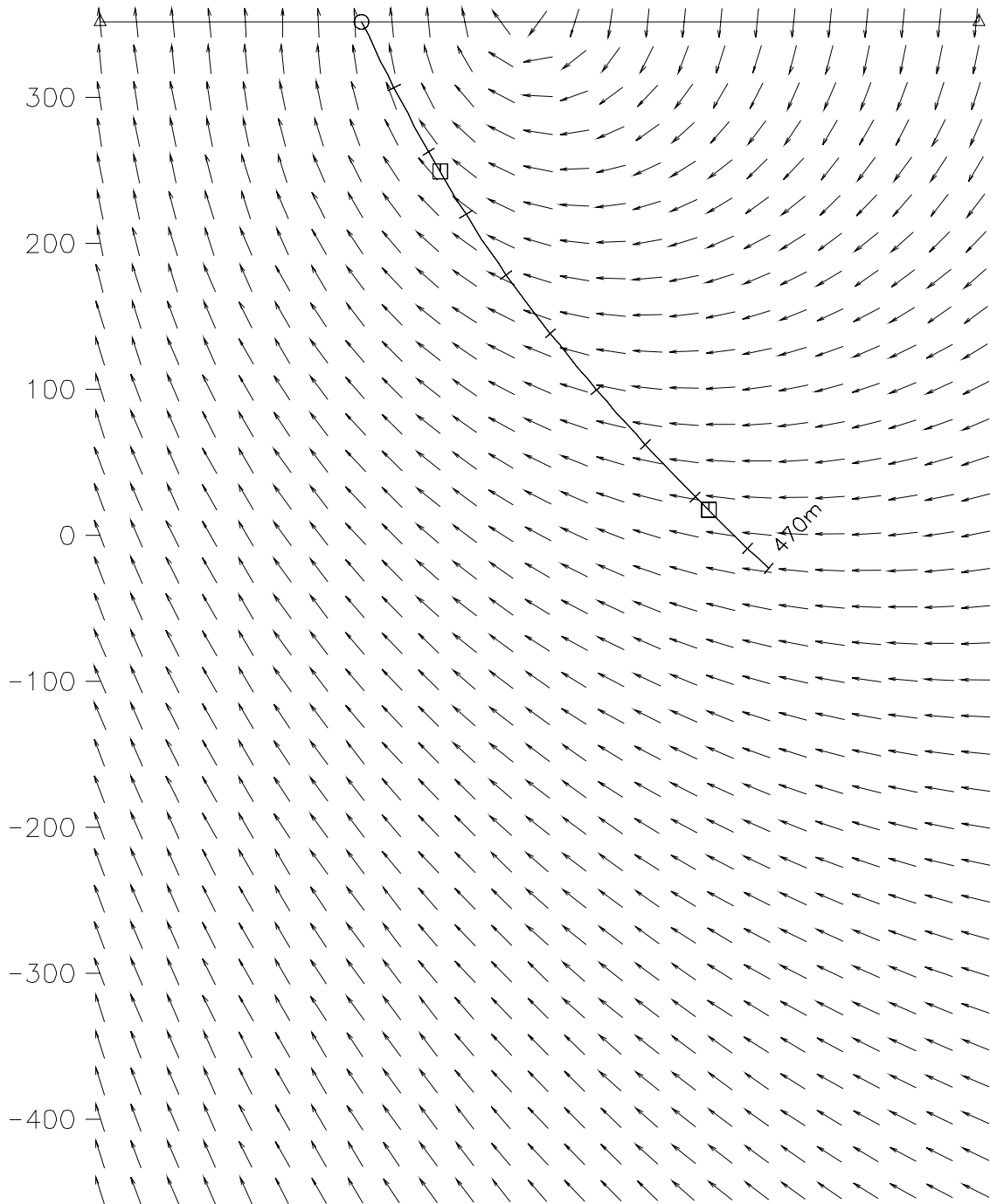


<p><i>Ursa Major Minerals Inc.</i> Shakespeare East Property</p>
<p>3-D Borehole Pulse EM Survey Borehole & Loop Location Map</p>
<p>Hole: U-03-120 Survey Date: June 15, 2011</p>
<p><i>Crone Geophysics & Exploration Ltd.</i></p>

436625E, 5134209N

U-03-120

436894E, 5133671N



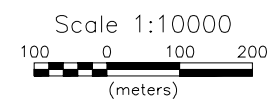
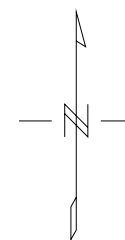
Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: U-03-120

Survey Date: June 15, 2011

Crone Geophysics & Exploration Ltd.

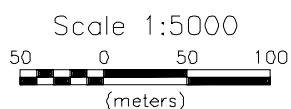
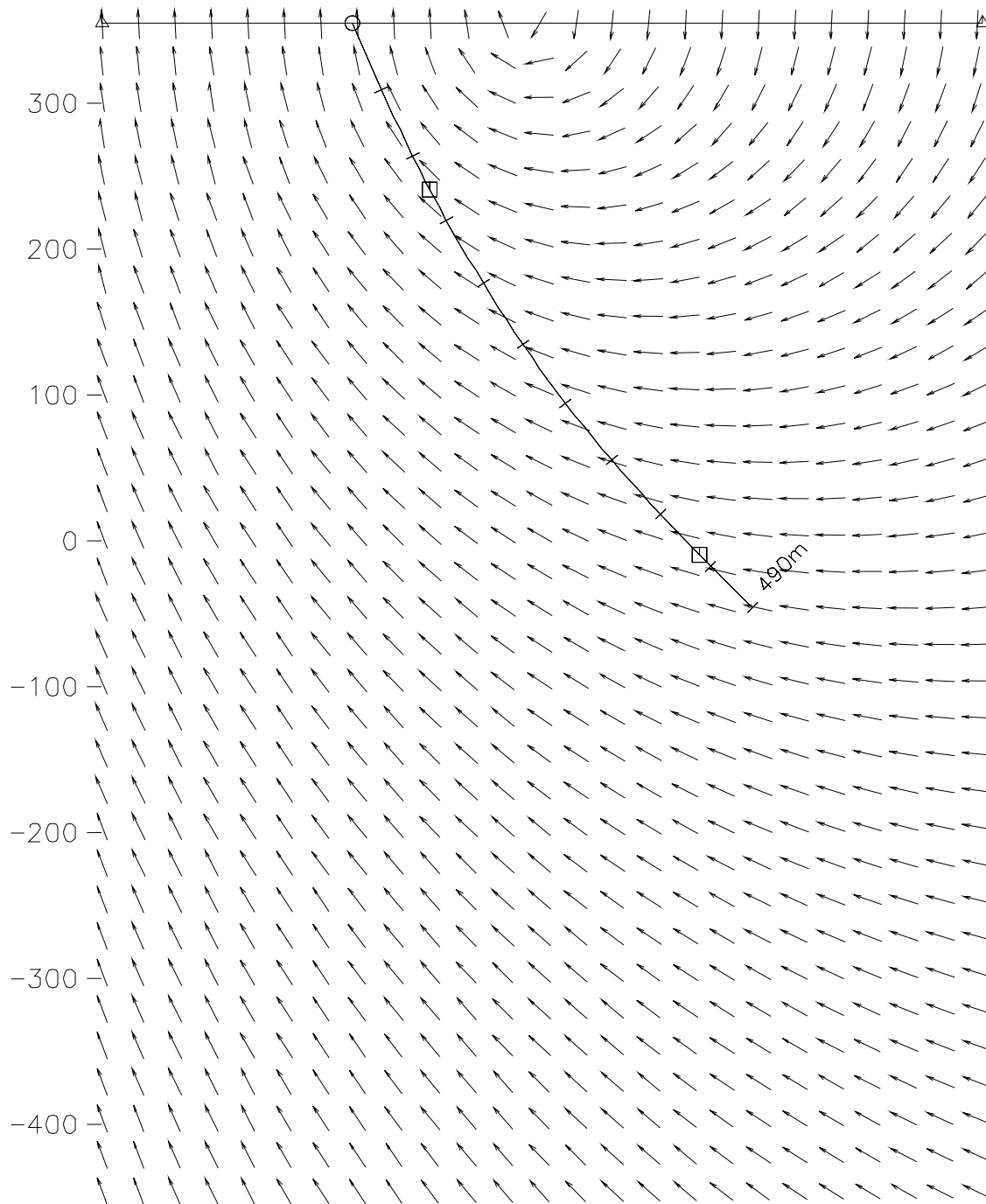


<p><i>Ursa Major Minerals Inc.</i> Shakespeare East Property</p>
<p>3-D Borehole Pulse EM Survey Borehole & Loop Location Map</p>
<p>Hole: U-03-121 Survey Date: June 20, 2011</p>
<p><i>Crone Geophysics & Exploration Ltd.</i></p>

436579E, 5134187N

U-03-121

436766E, 5133612N



Ursa Major Minerals Inc.
Shakespeare East Property

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

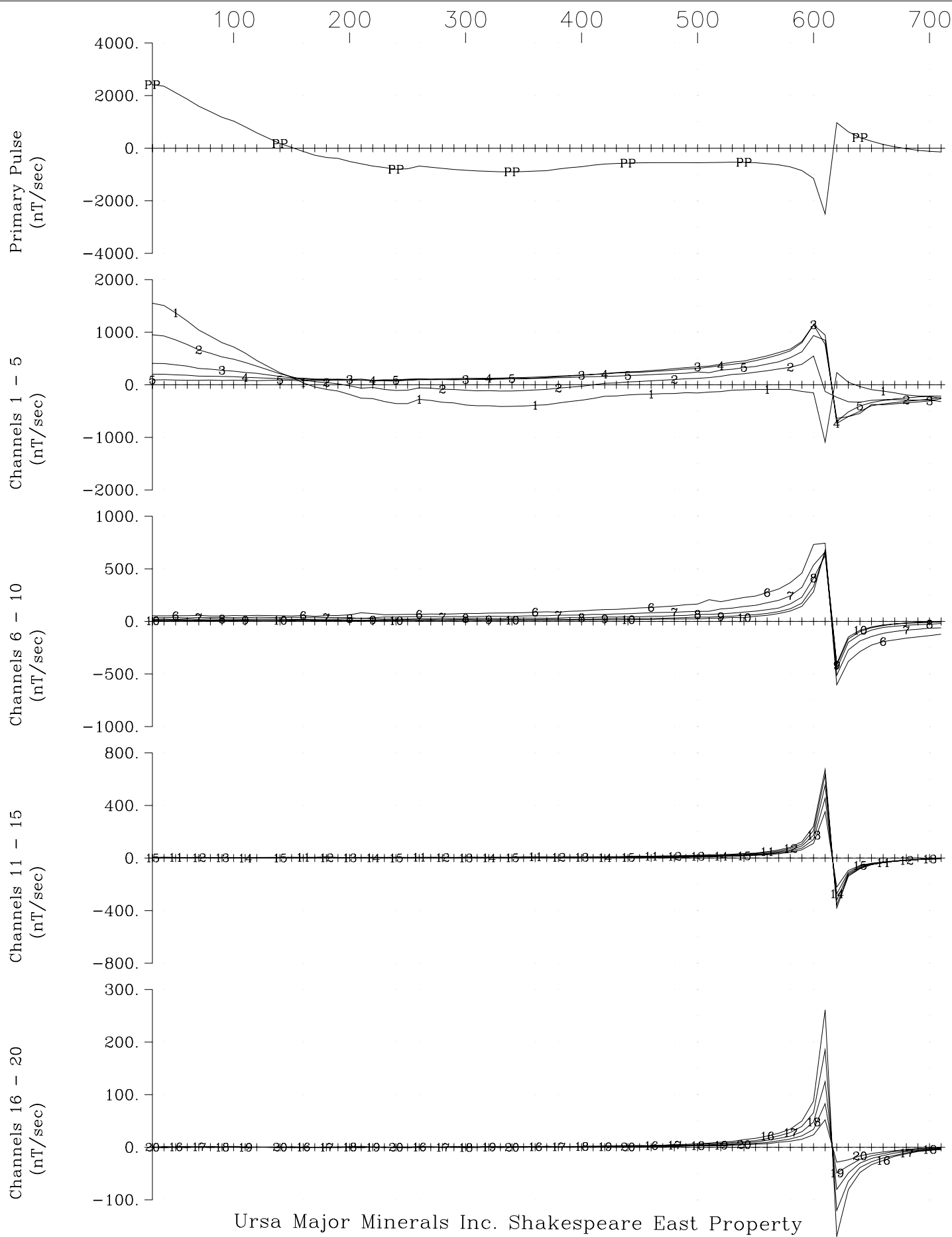
Hole: U-03-121

Survey Date: June 20, 2011

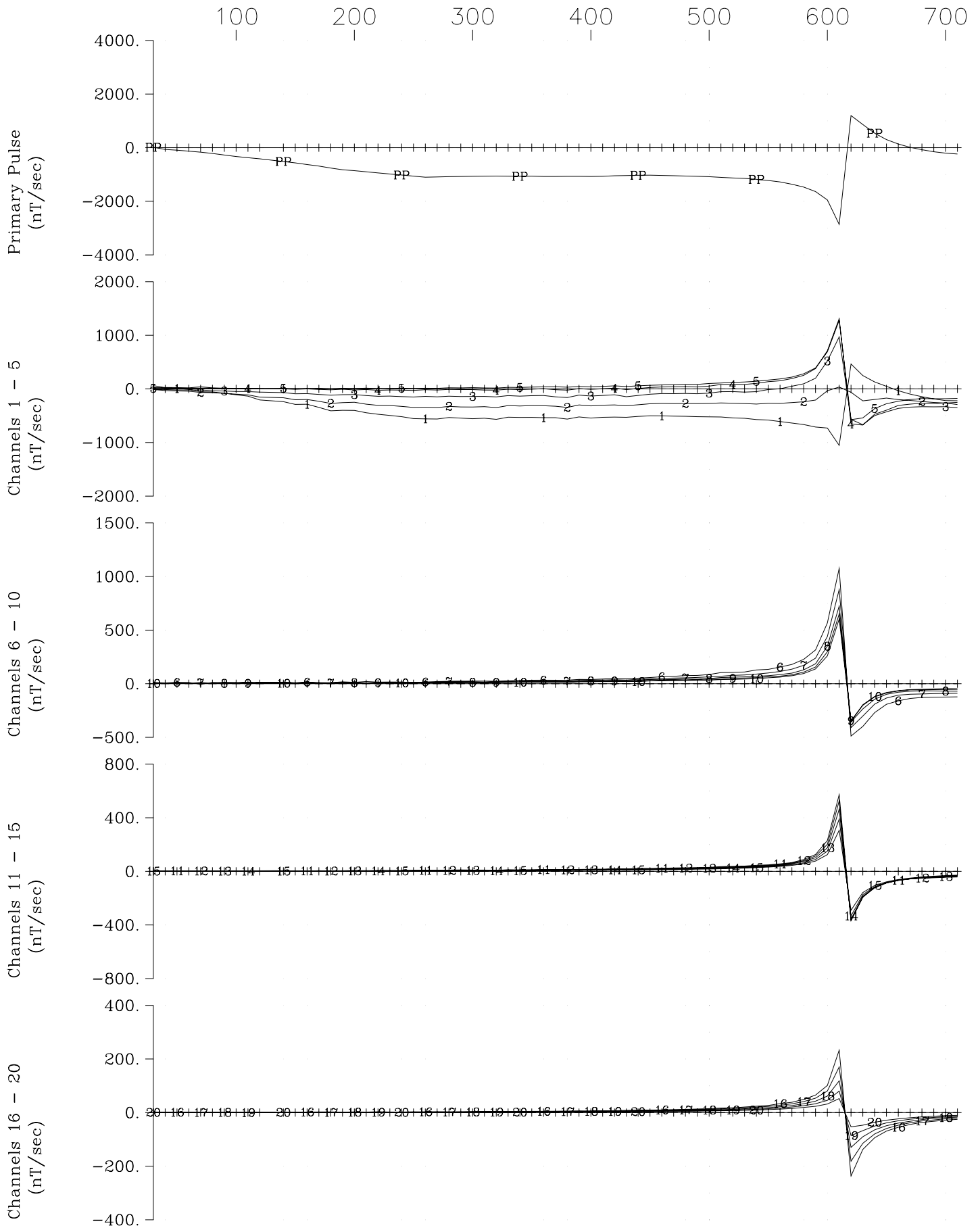
Crone Geophysics & Exploration Ltd.

APPENDIX II
LINEAR (5-AXIS) PULSE EM DATA PROFILES

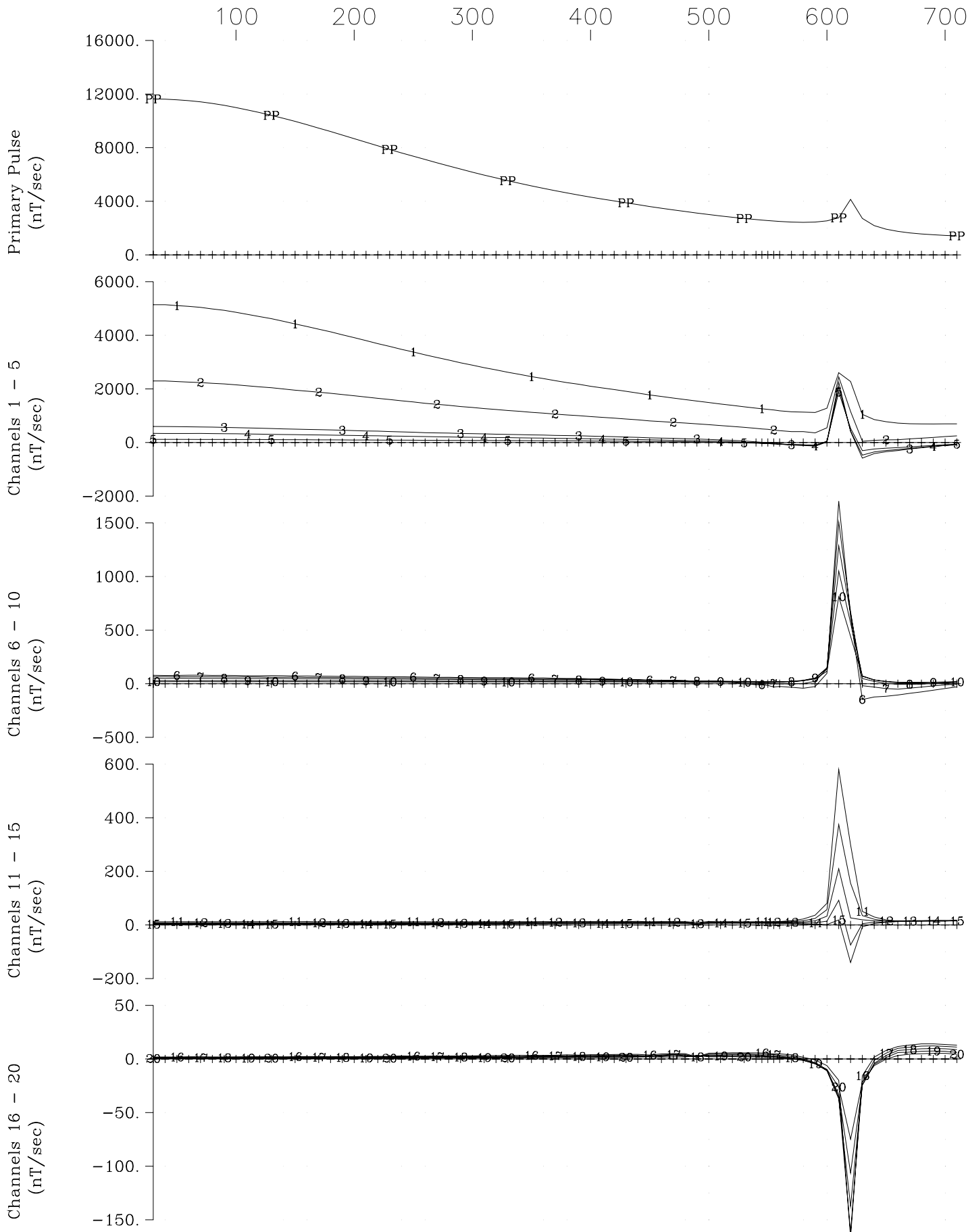




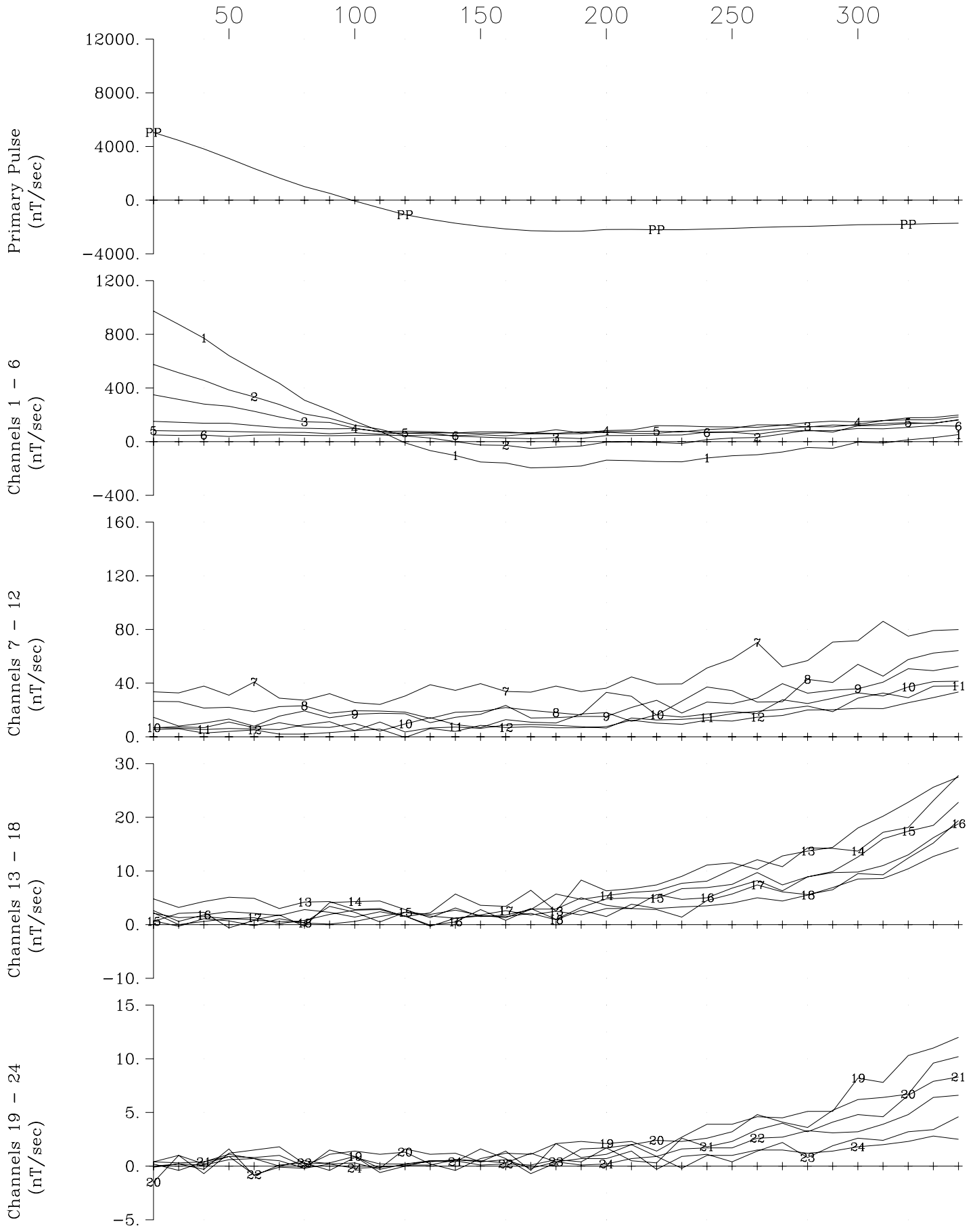
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-08-02 X Component
 Crone Geophysics & Exploration Ltd.



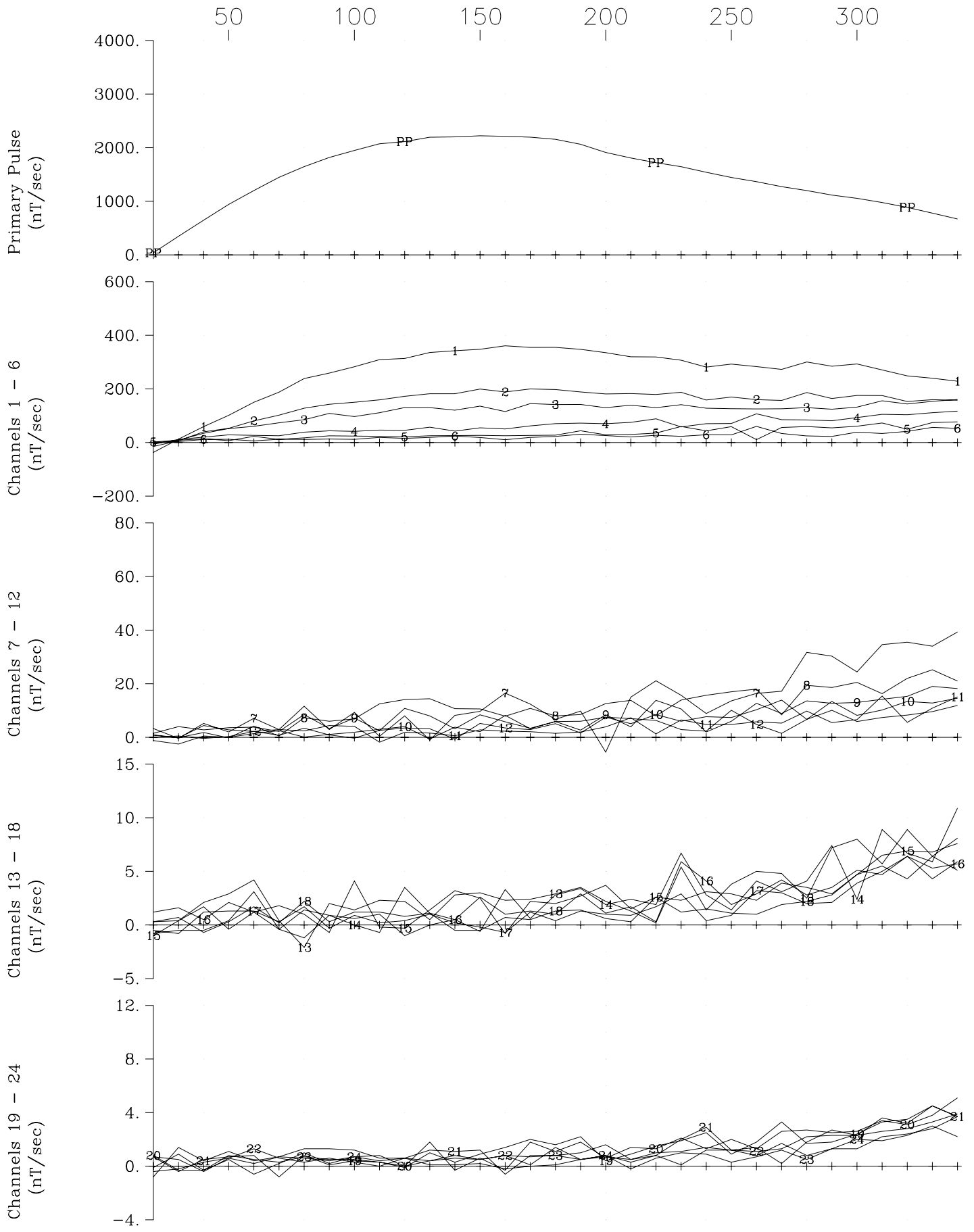
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 Loop 1, Hole U-08-02 Y Component
 Crone Geophysics & Exploration Ltd.



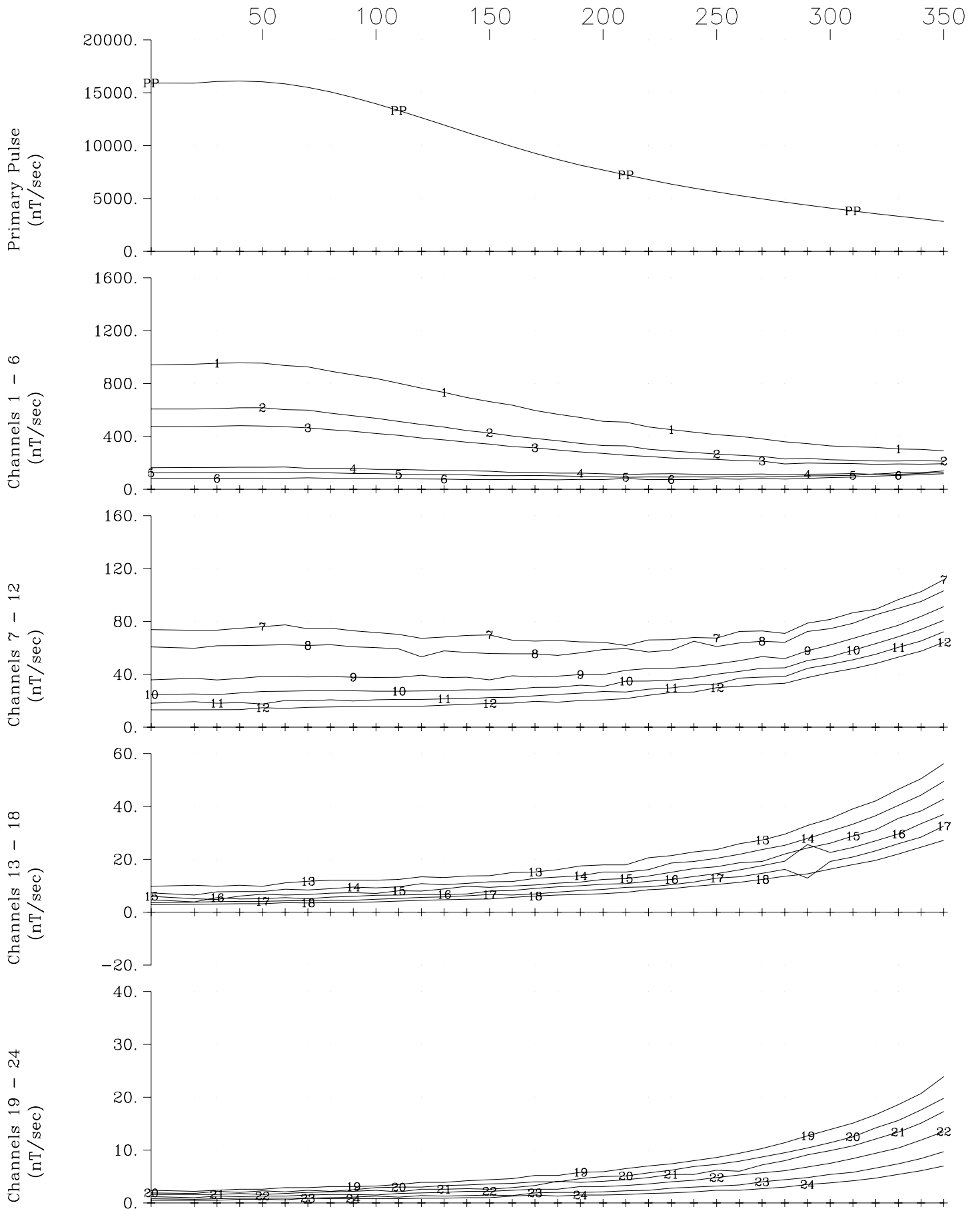
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-08-02 Z Component
 Crone Geophysics & Exploration Ltd.



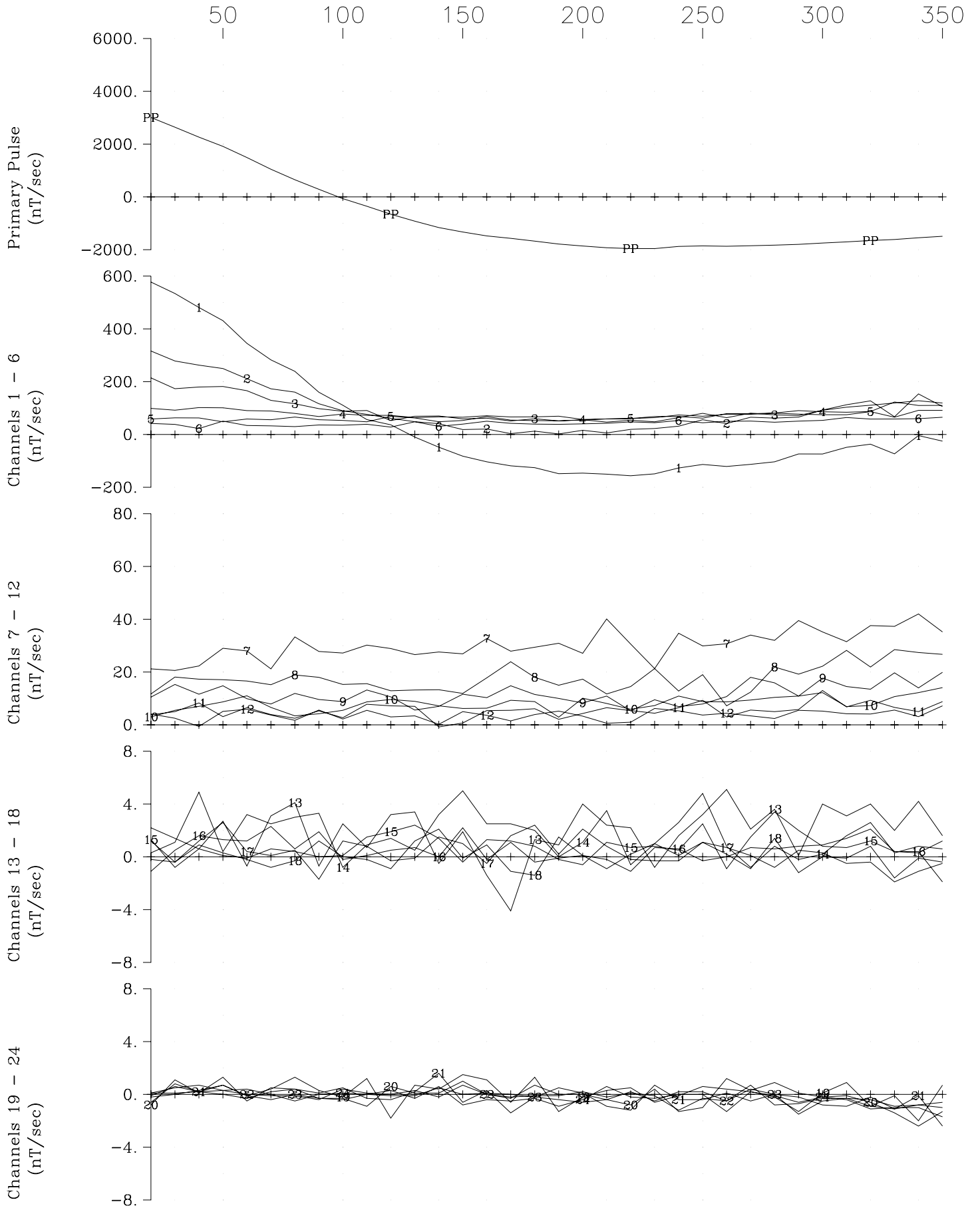
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-113 X Component
 Crone Geophysics & Exploration Ltd.



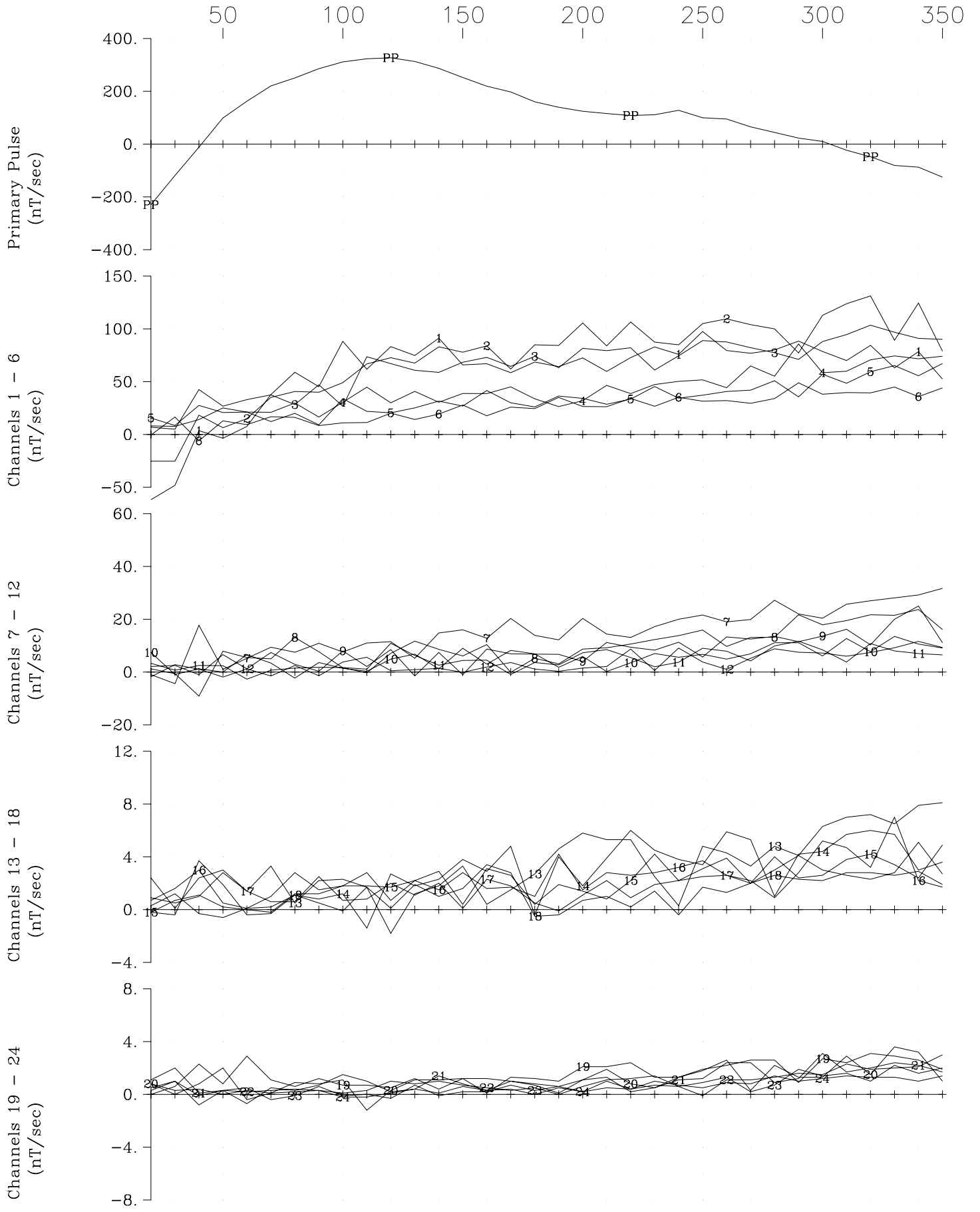
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-113 Y Component
 Crone Geophysics & Exploration Ltd.



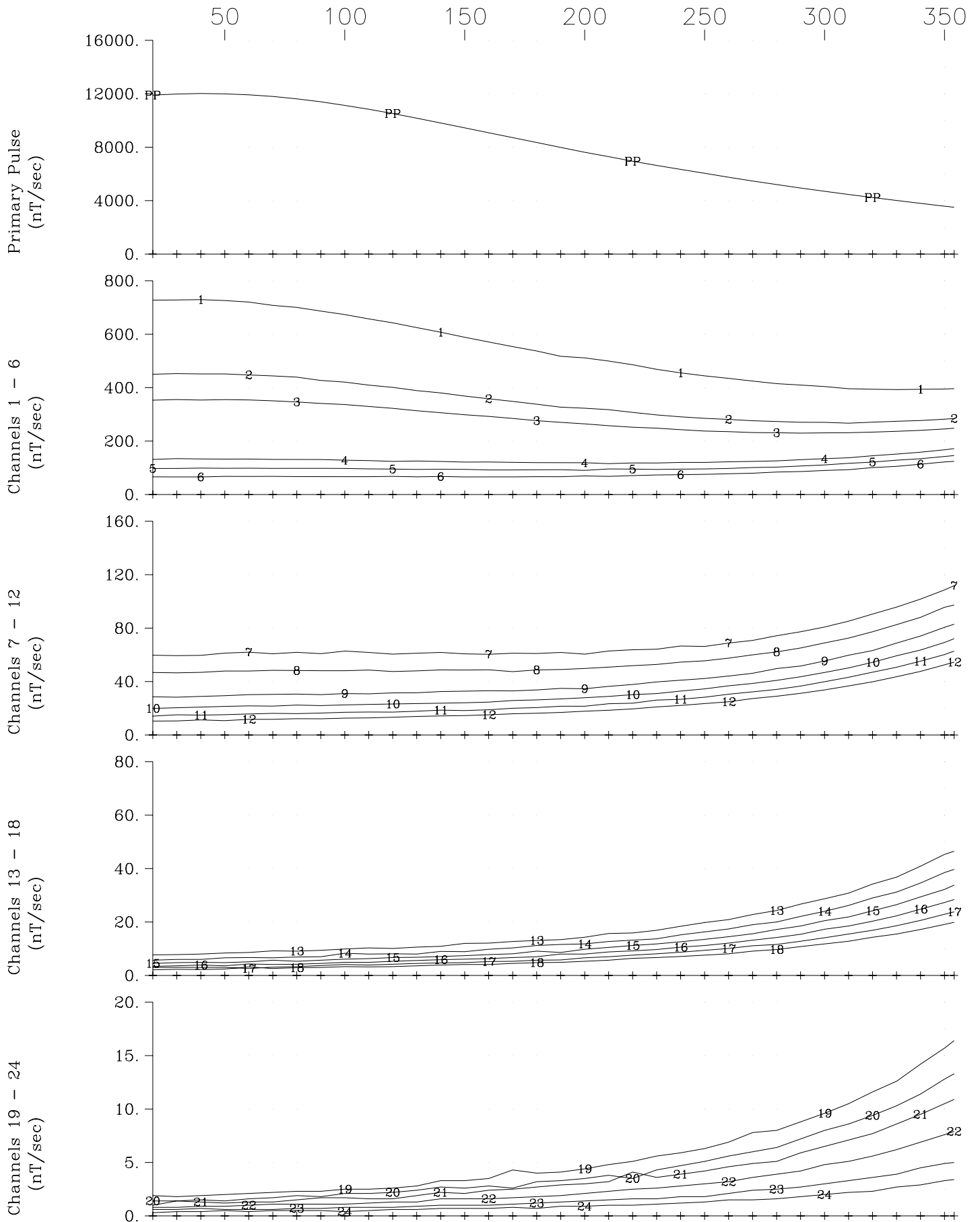
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-113 Z Component
 Crone Geophysics & Exploration Ltd.



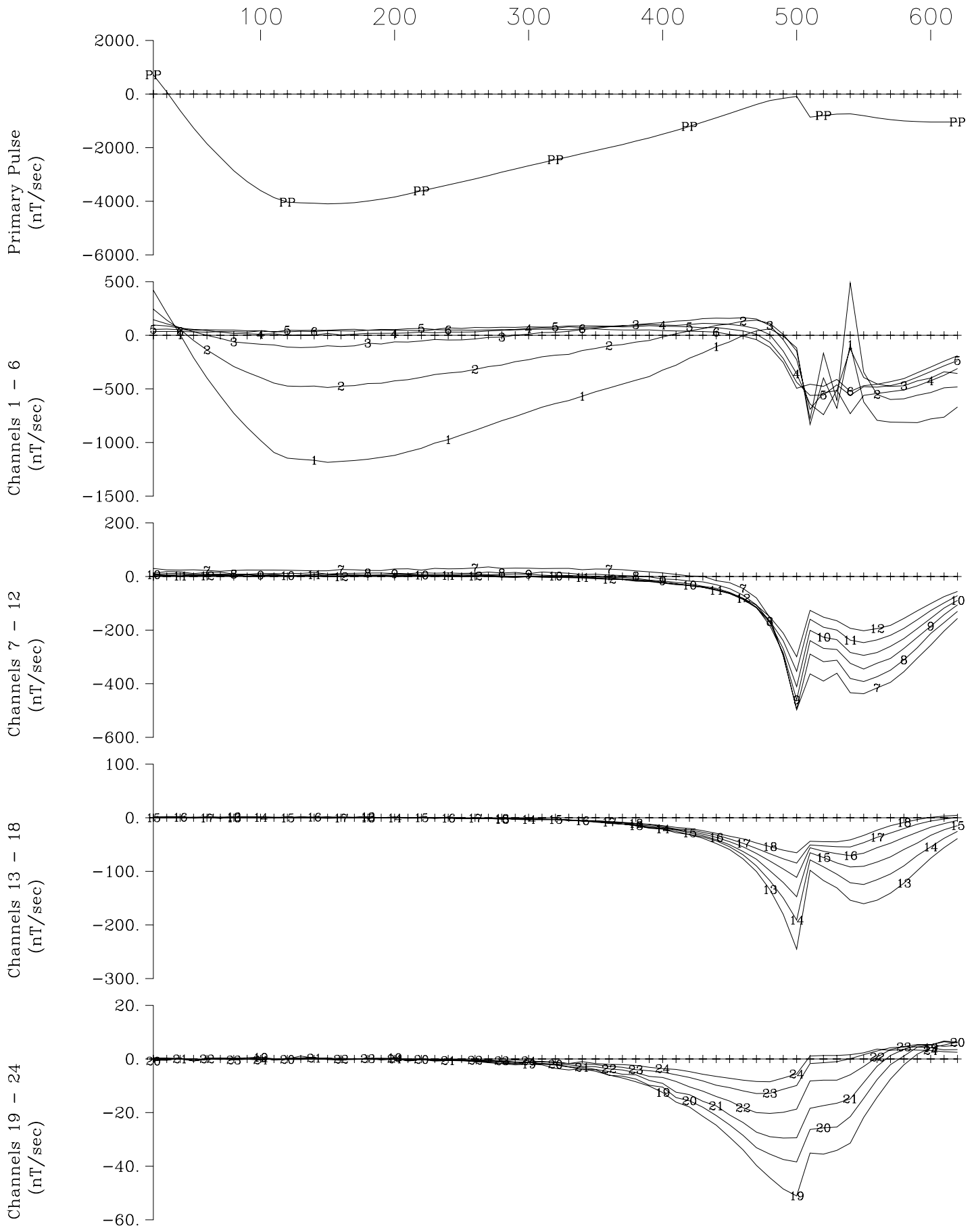
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-114 X Component
 Crone Geophysics & Exploration Ltd.



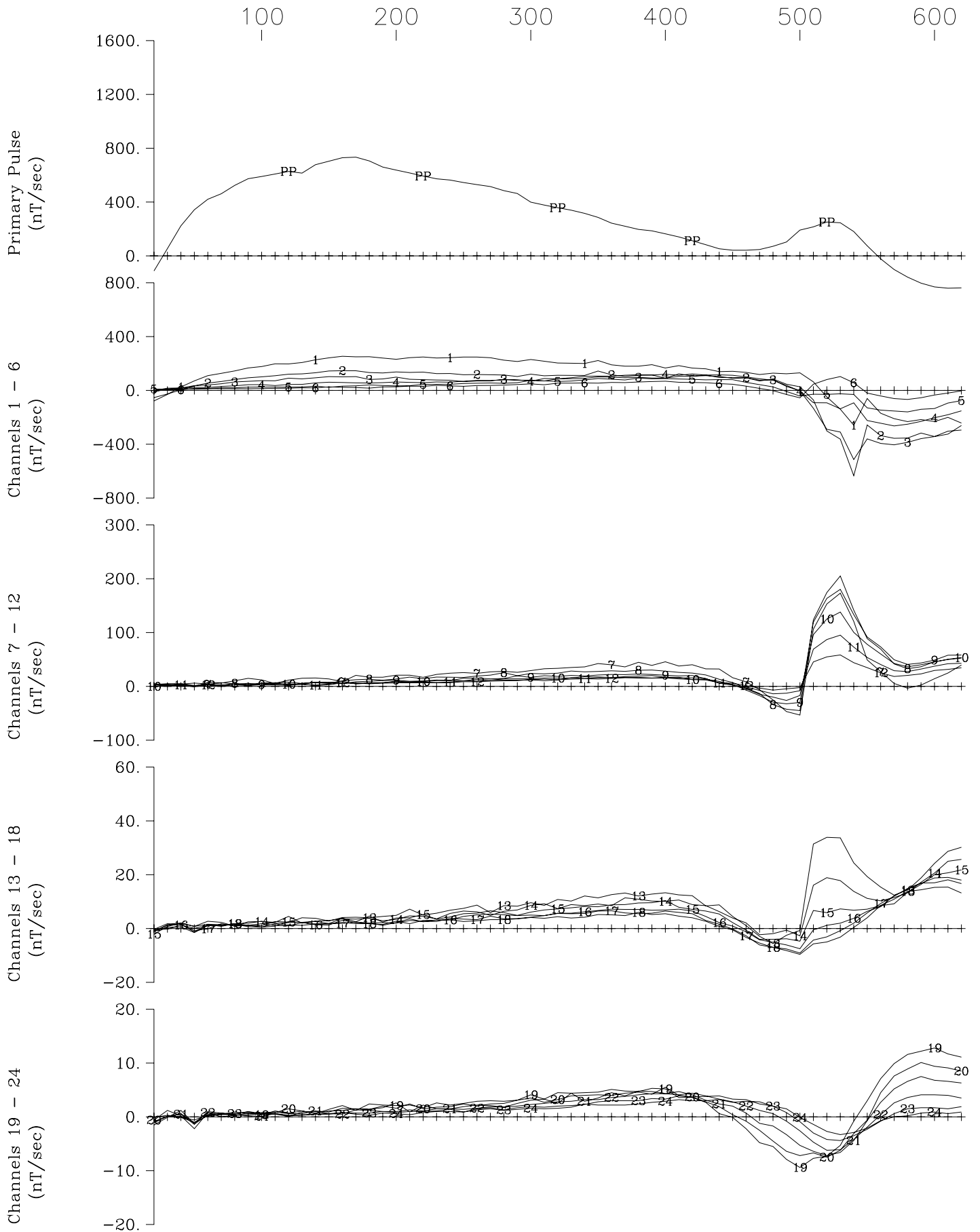
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-114 Y Component
 Crone Geophysics & Exploration Ltd.



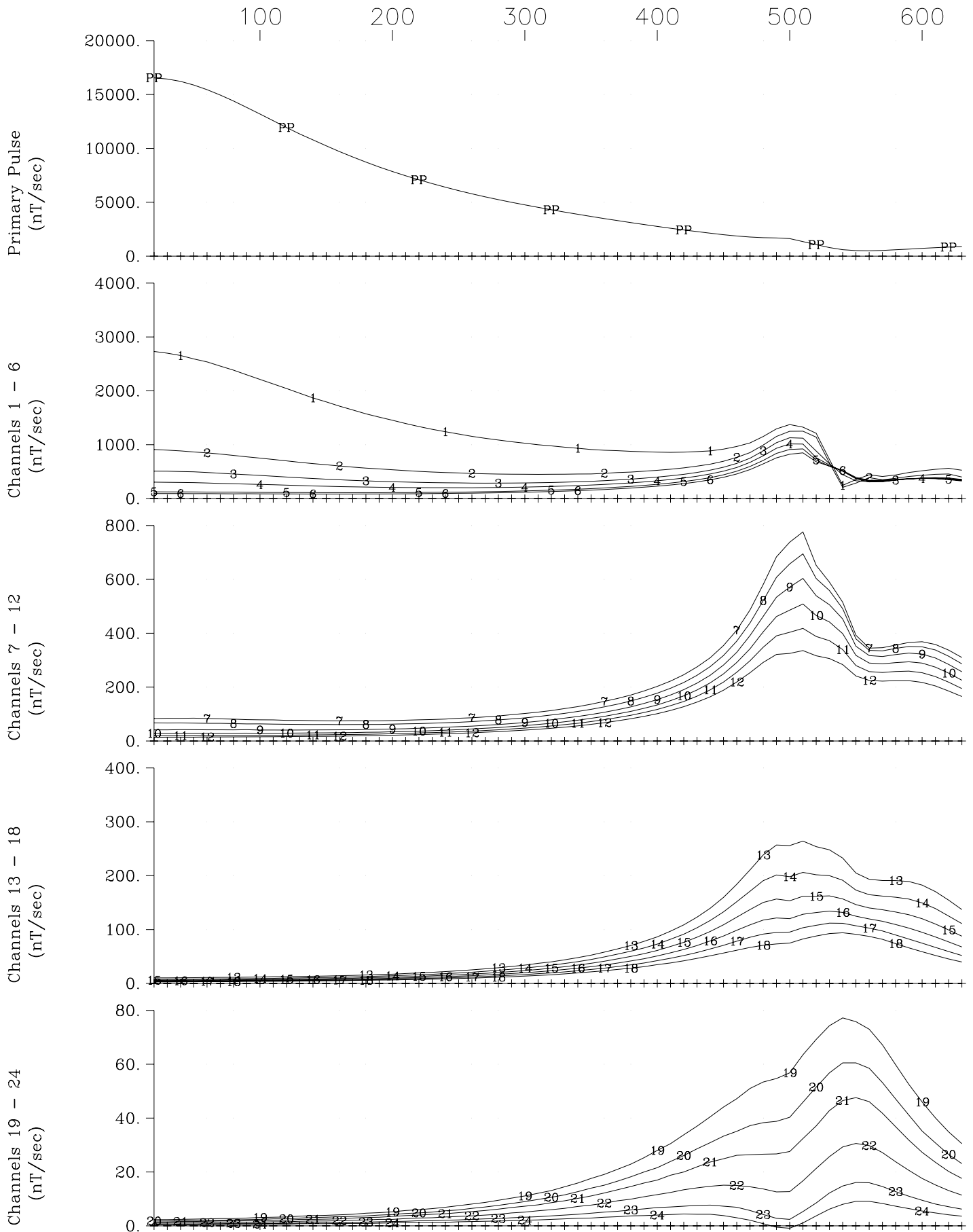
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-114 Z Component
 Crone Geophysics & Exploration Ltd.



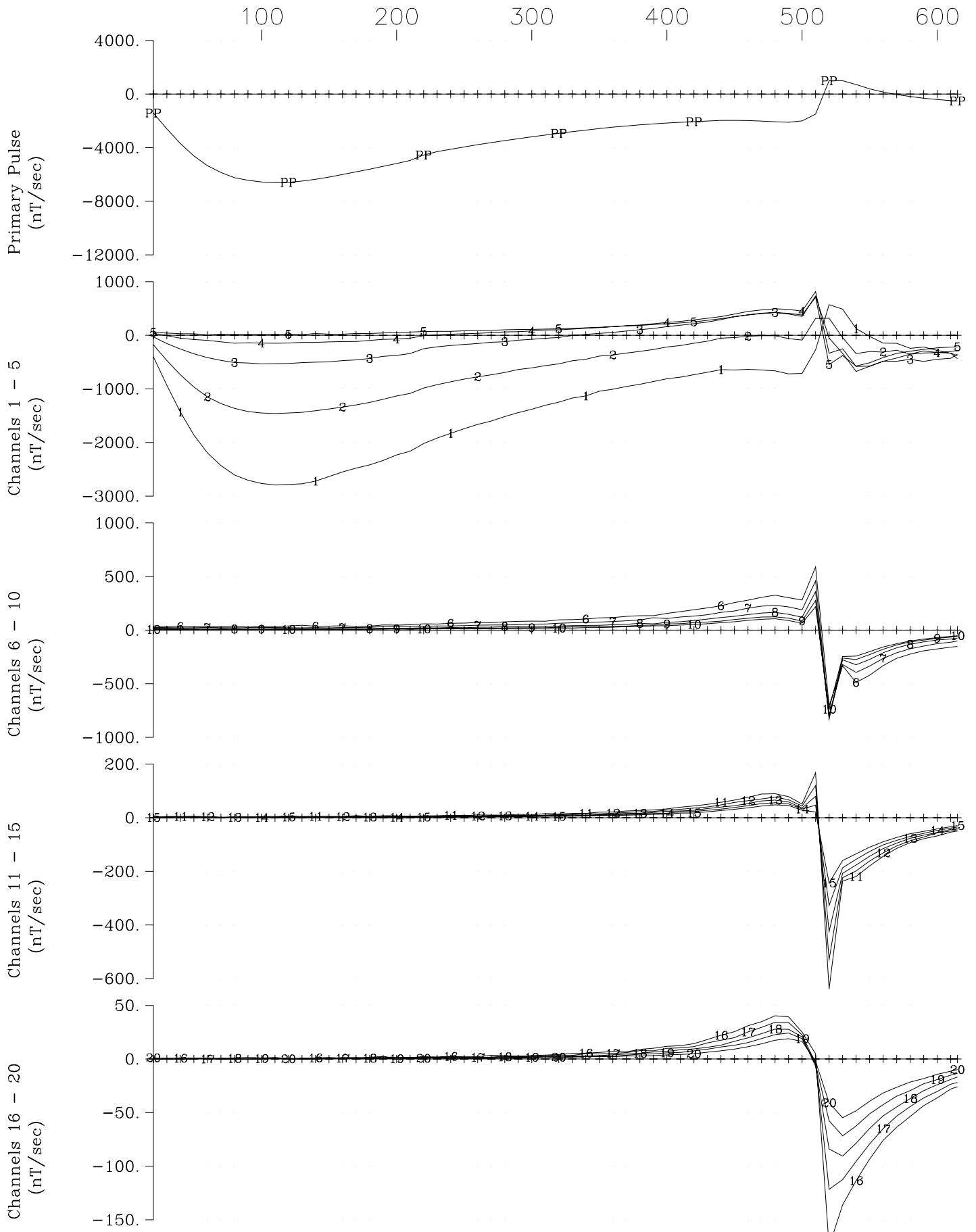
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-116 X Component
 Crone Geophysics & Exploration Ltd.



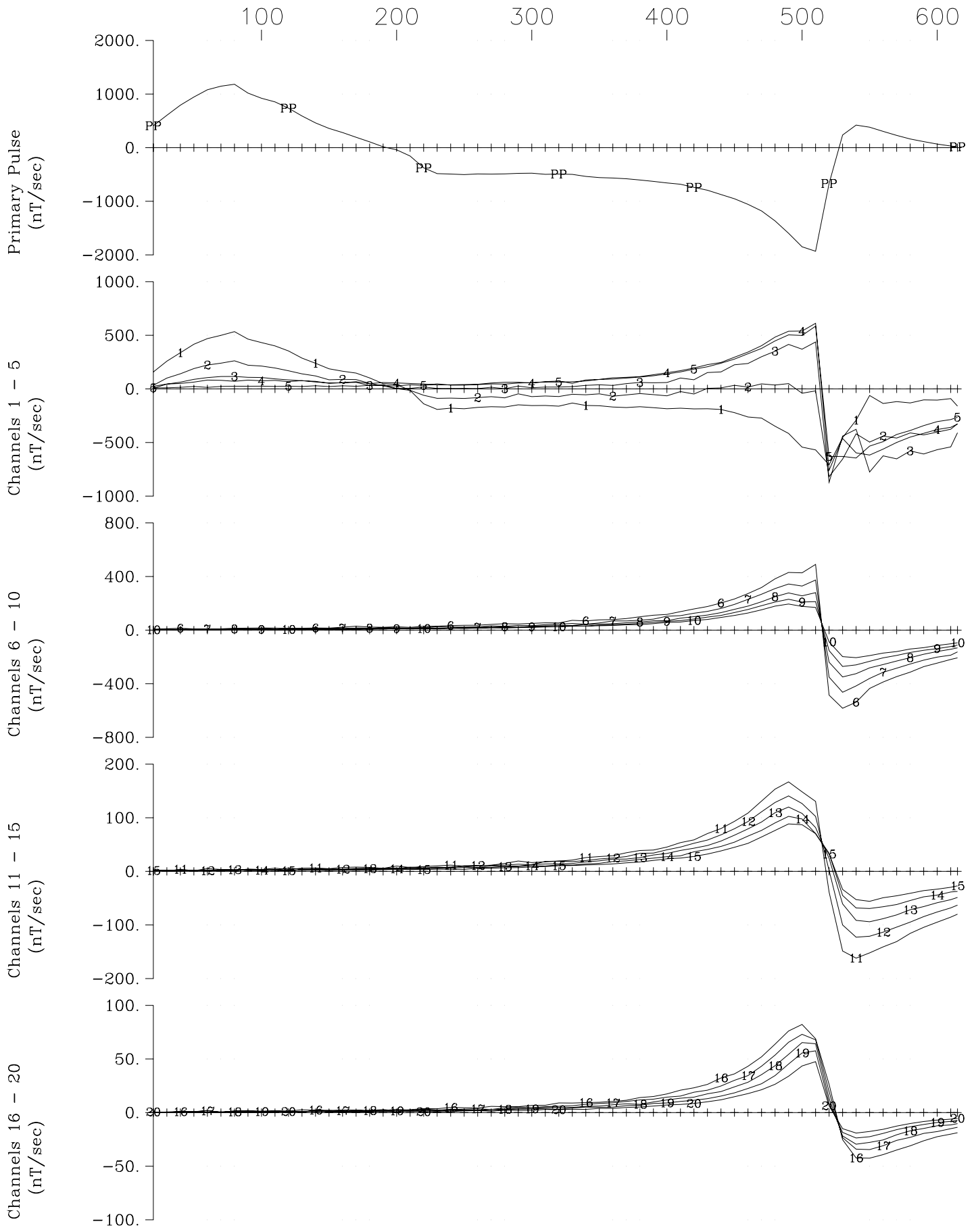
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-116 Y Component
 Crone Geophysics & Exploration Ltd.



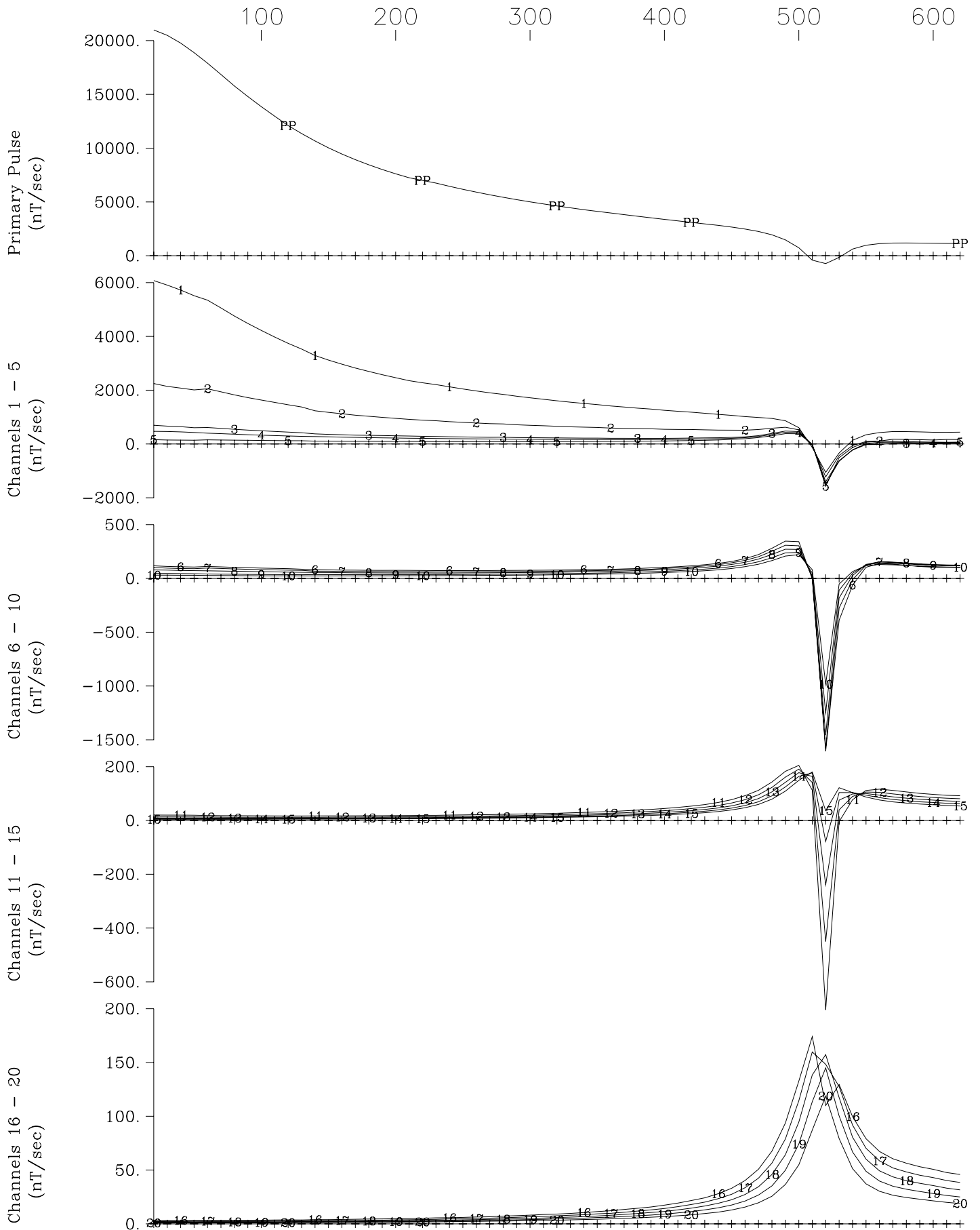
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-116 Z Component
 Crone Geophysics & Exploration Ltd.



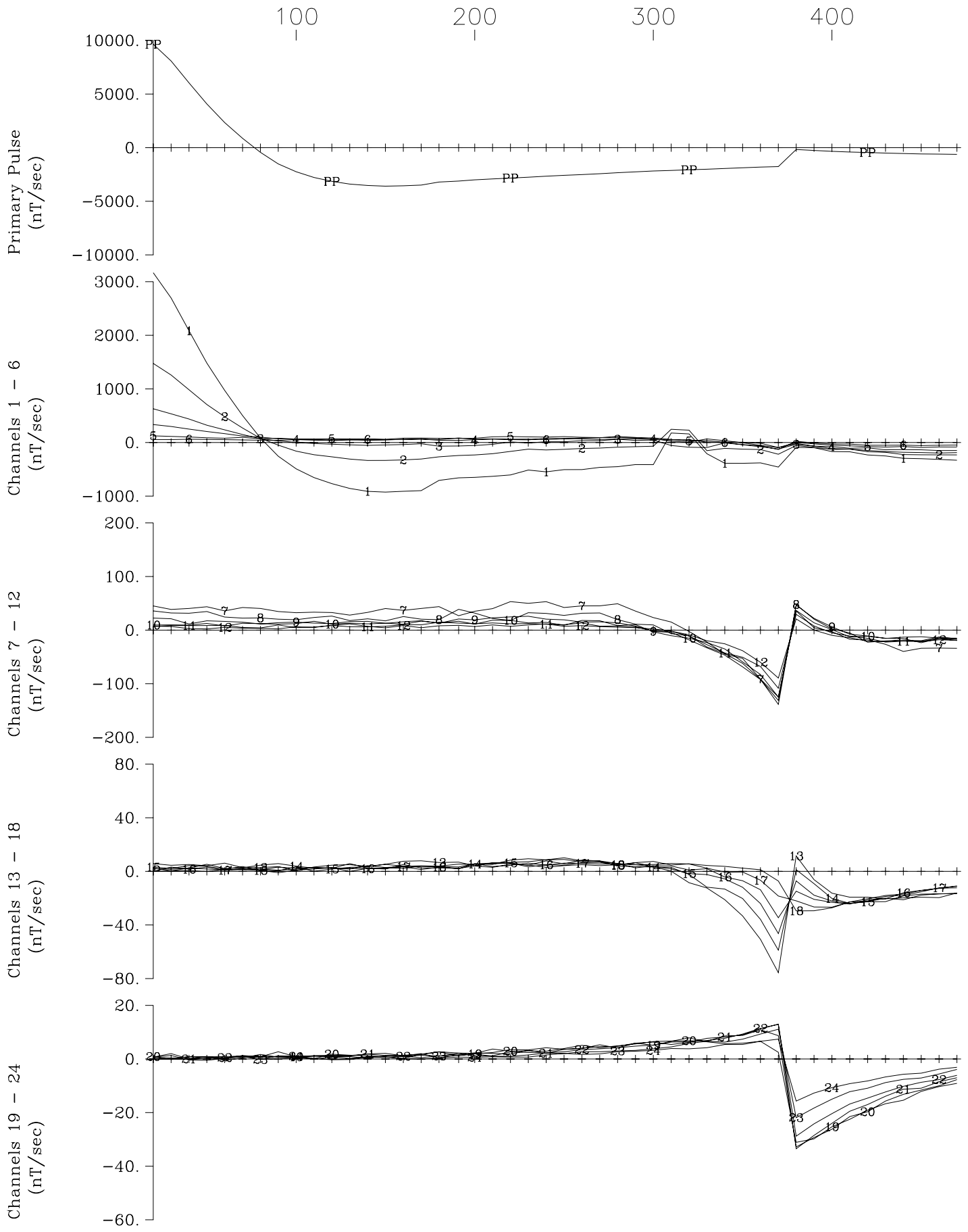
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 X Component
 Crone Geophysics & Exploration Ltd.



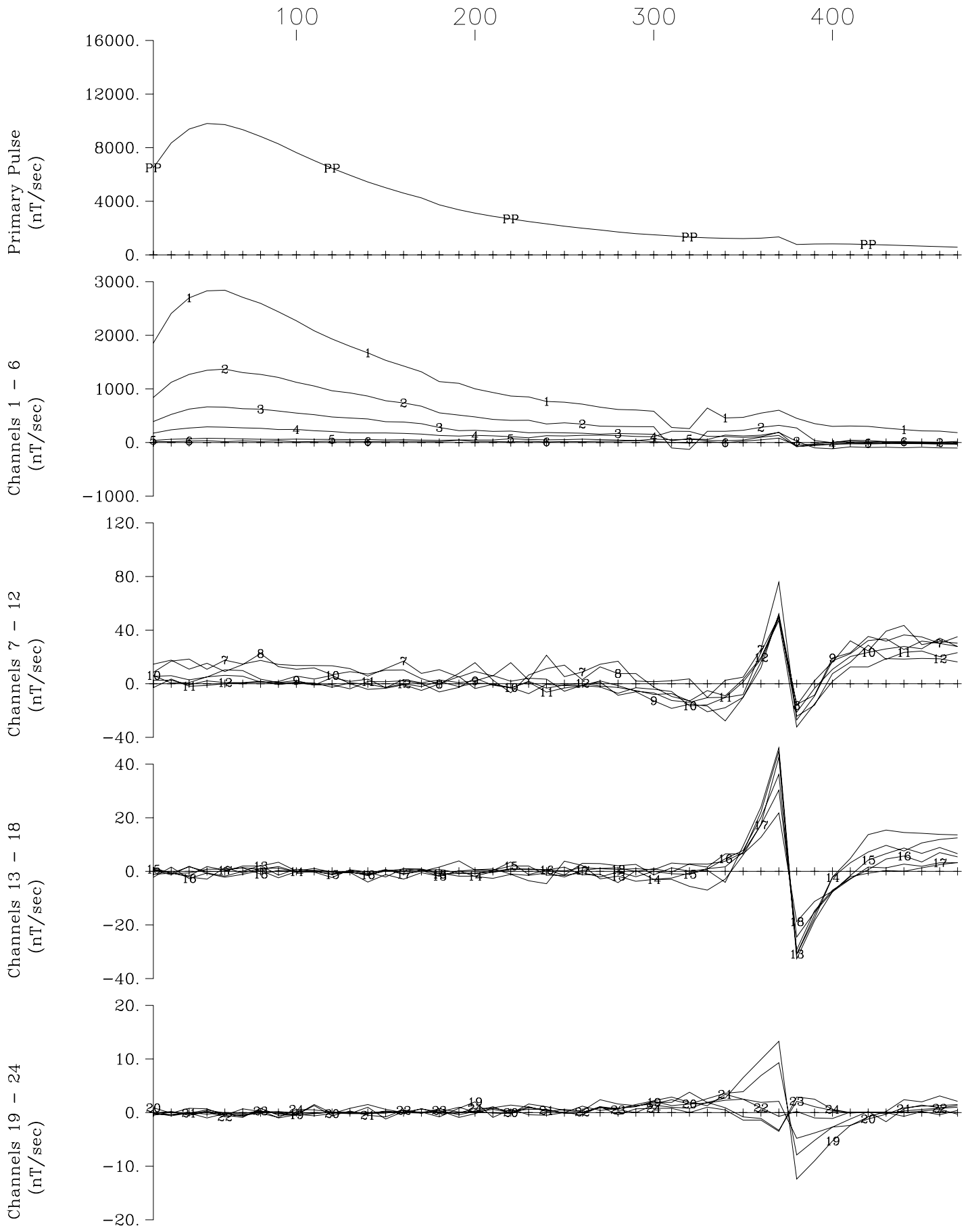
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 Y Component
 Crone Geophysics & Exploration Ltd.



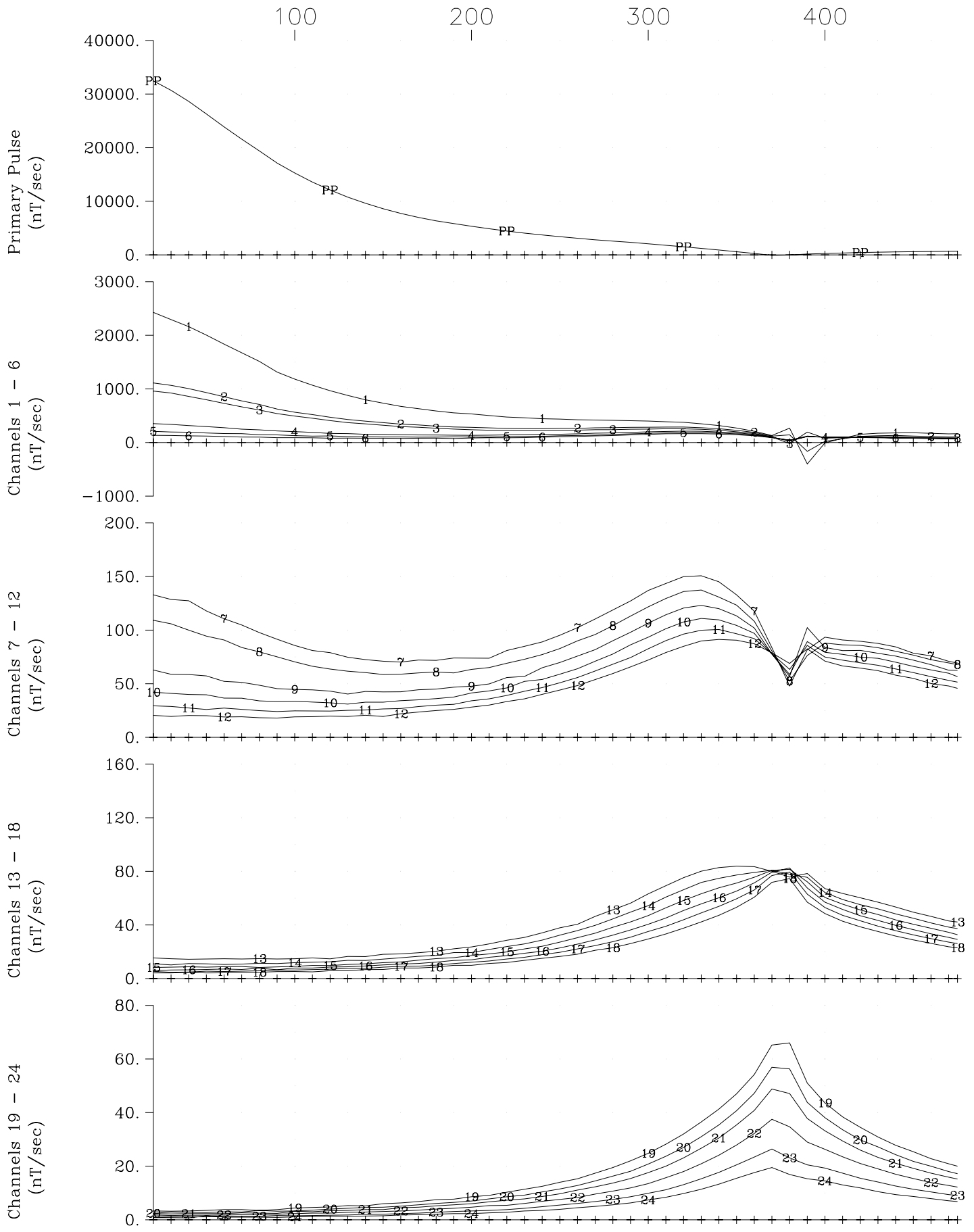
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 Z Component
 Crone Geophysics & Exploration Ltd.



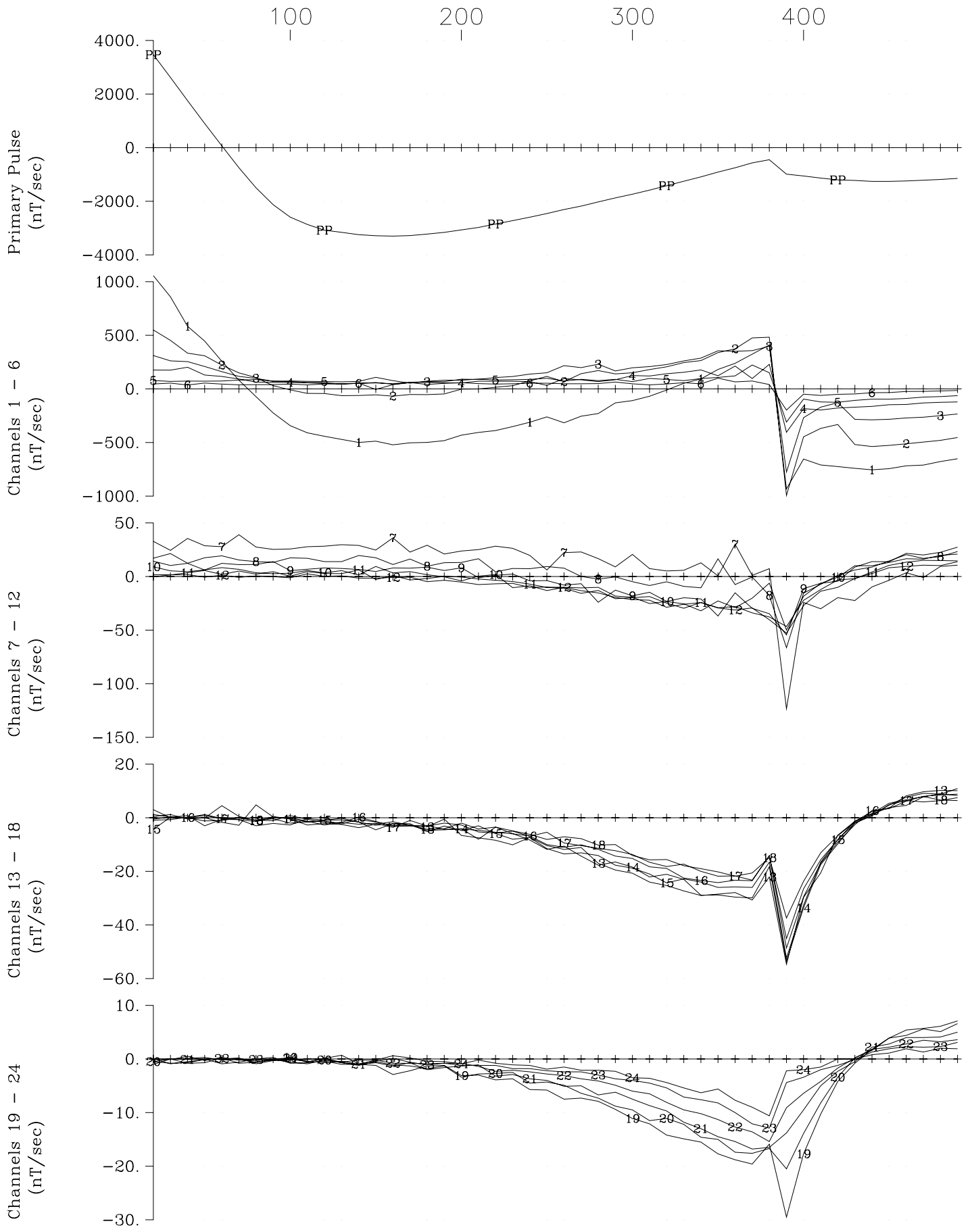
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-120 X Component
 Crone Geophysics & Exploration Ltd.



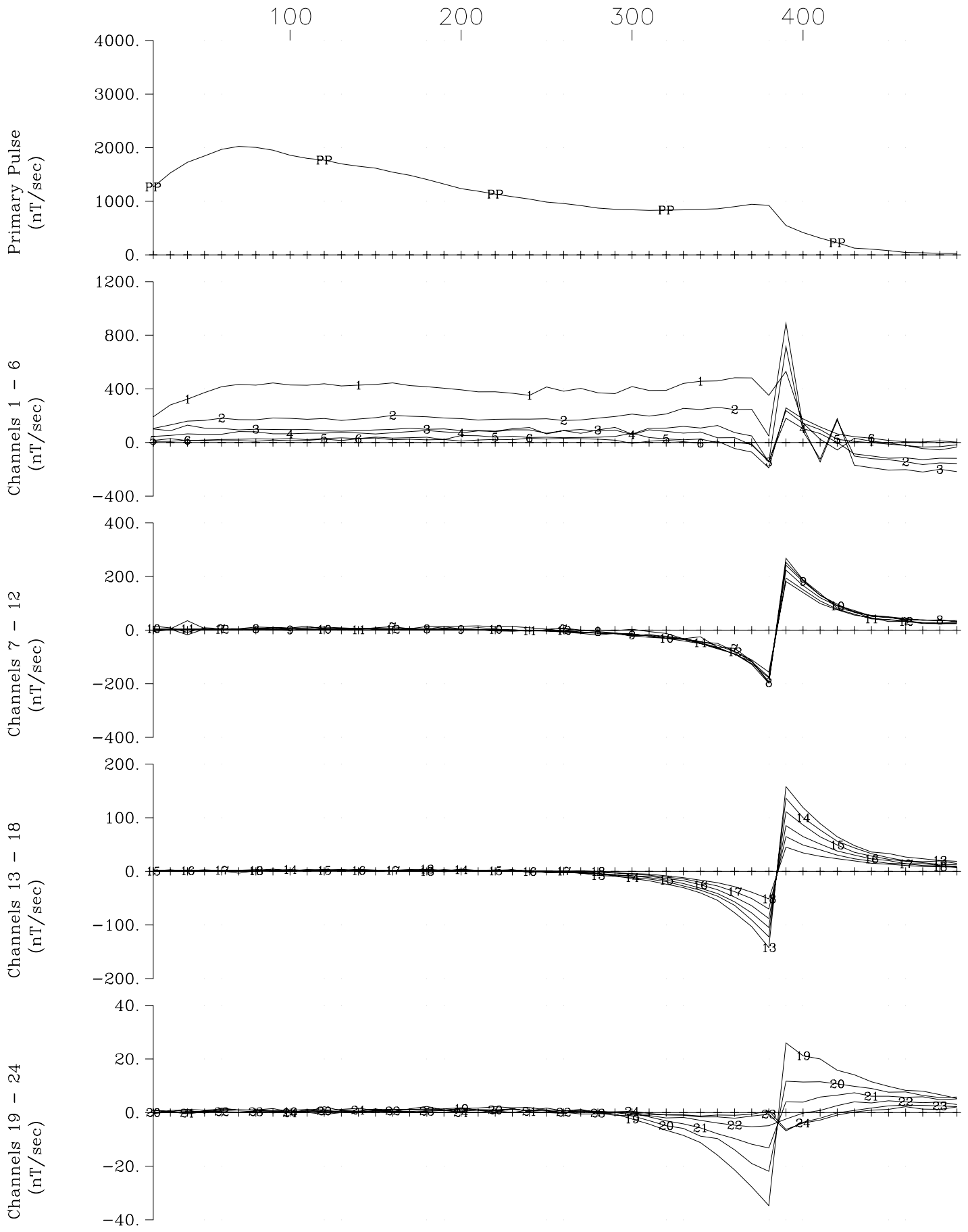
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-120 Y Component
 Crone Geophysics & Exploration Ltd.



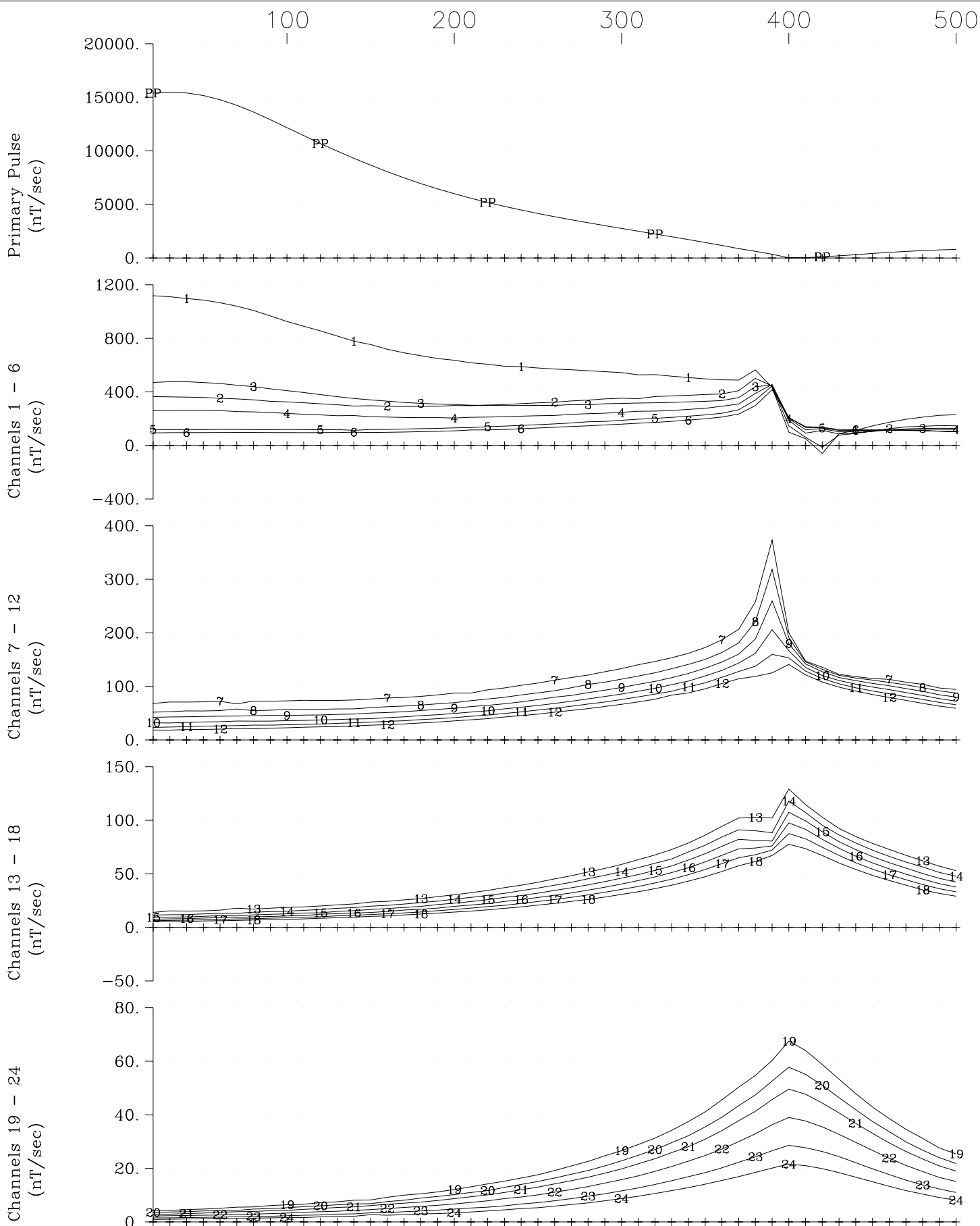
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-120 Z Component
 Crone Geophysics & Exploration Ltd.



Ursa Major Minerals Inc. Shakespeare East Property
 Loop 2, Hole U-03-121 X Component
 Crone Geophysics & Exploration Ltd.



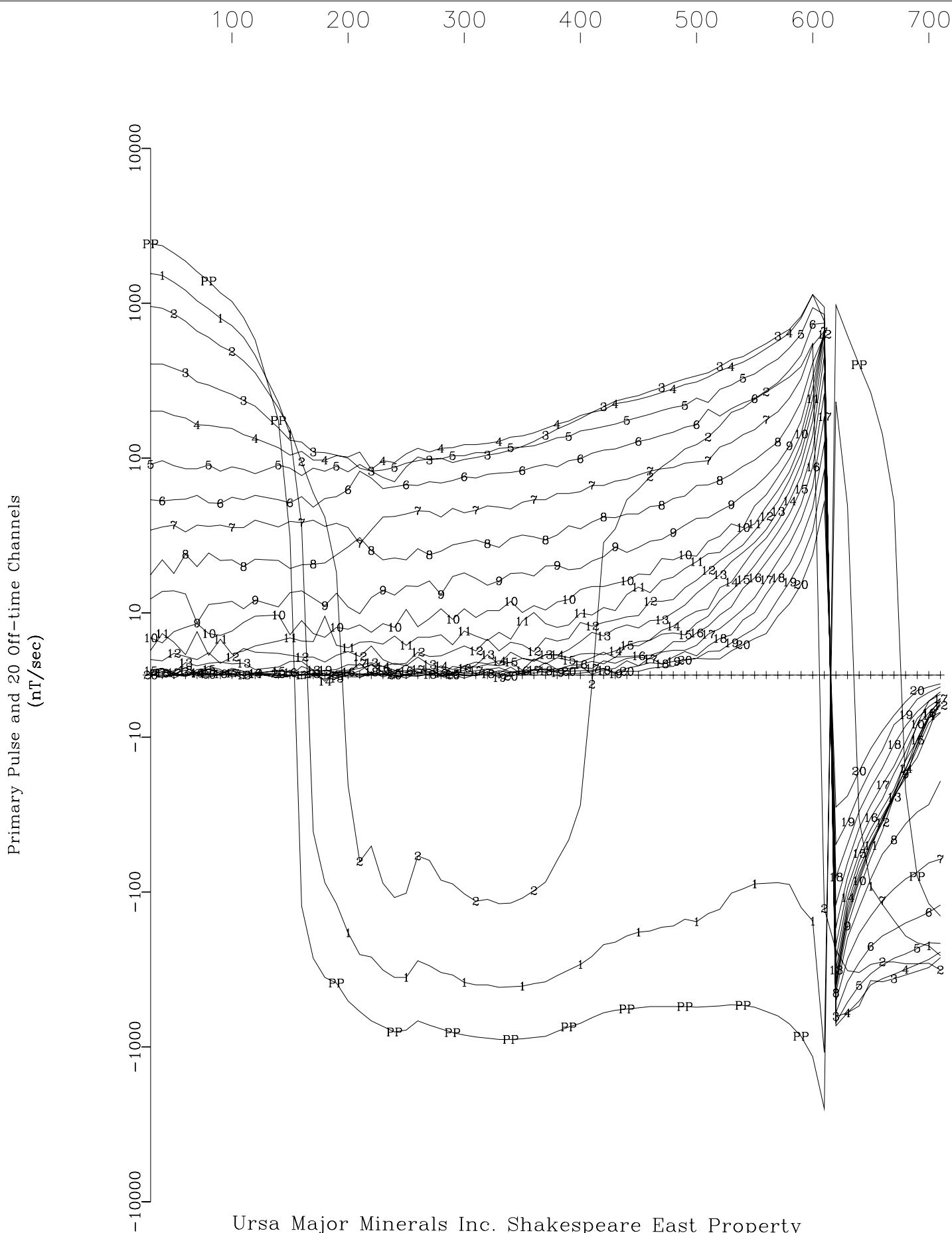
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 2, Hole U-03-121 Y Component
 Crone Geophysics & Exploration Ltd.



Ursa Major Minerals Inc. Shakespeare East Property
 Loop 2, Hole U-03-121 Z Component
 Crone Geophysics & Exploration Ltd.

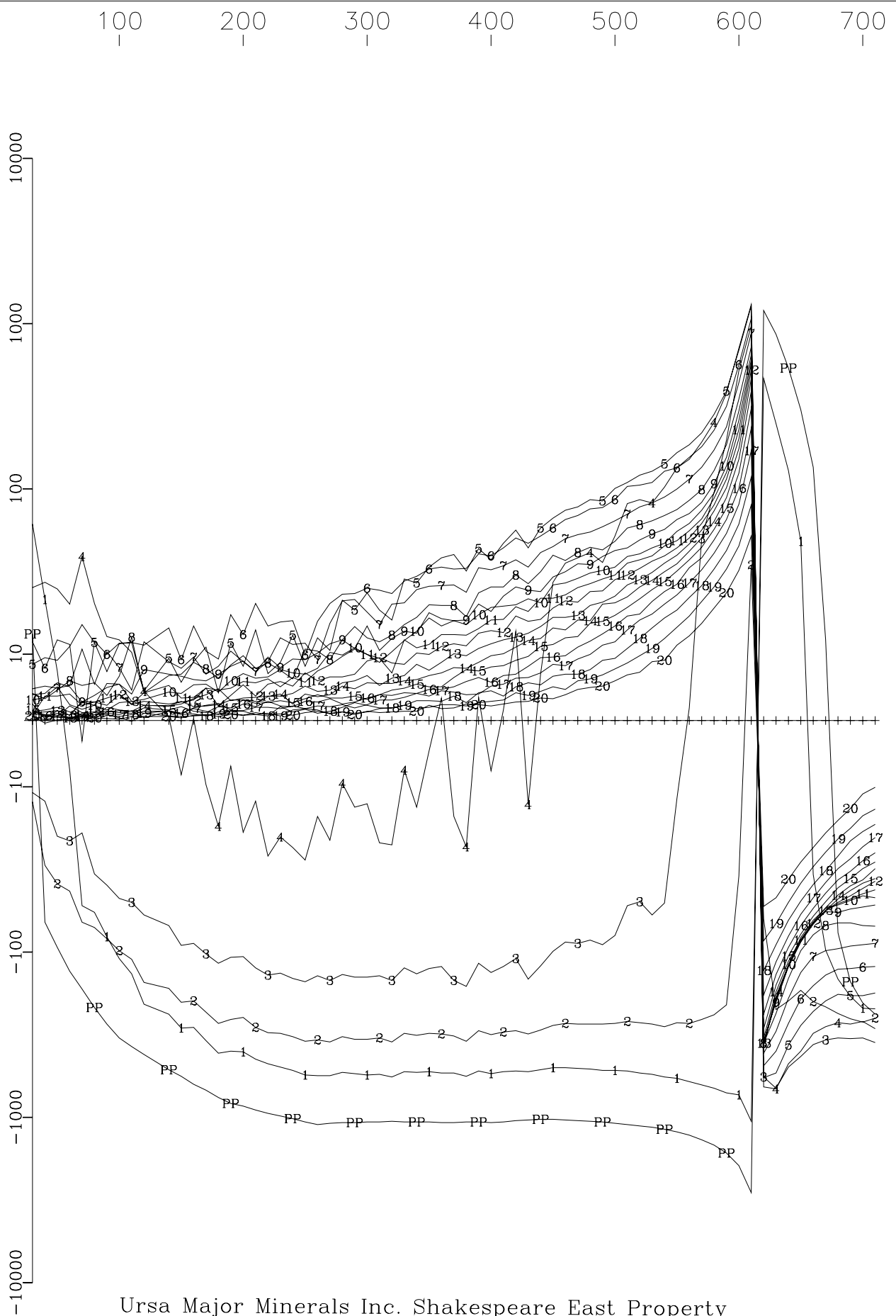
APPENDIX III

PULSE EM DATA PROFILES (LIN-LOG SCALE)



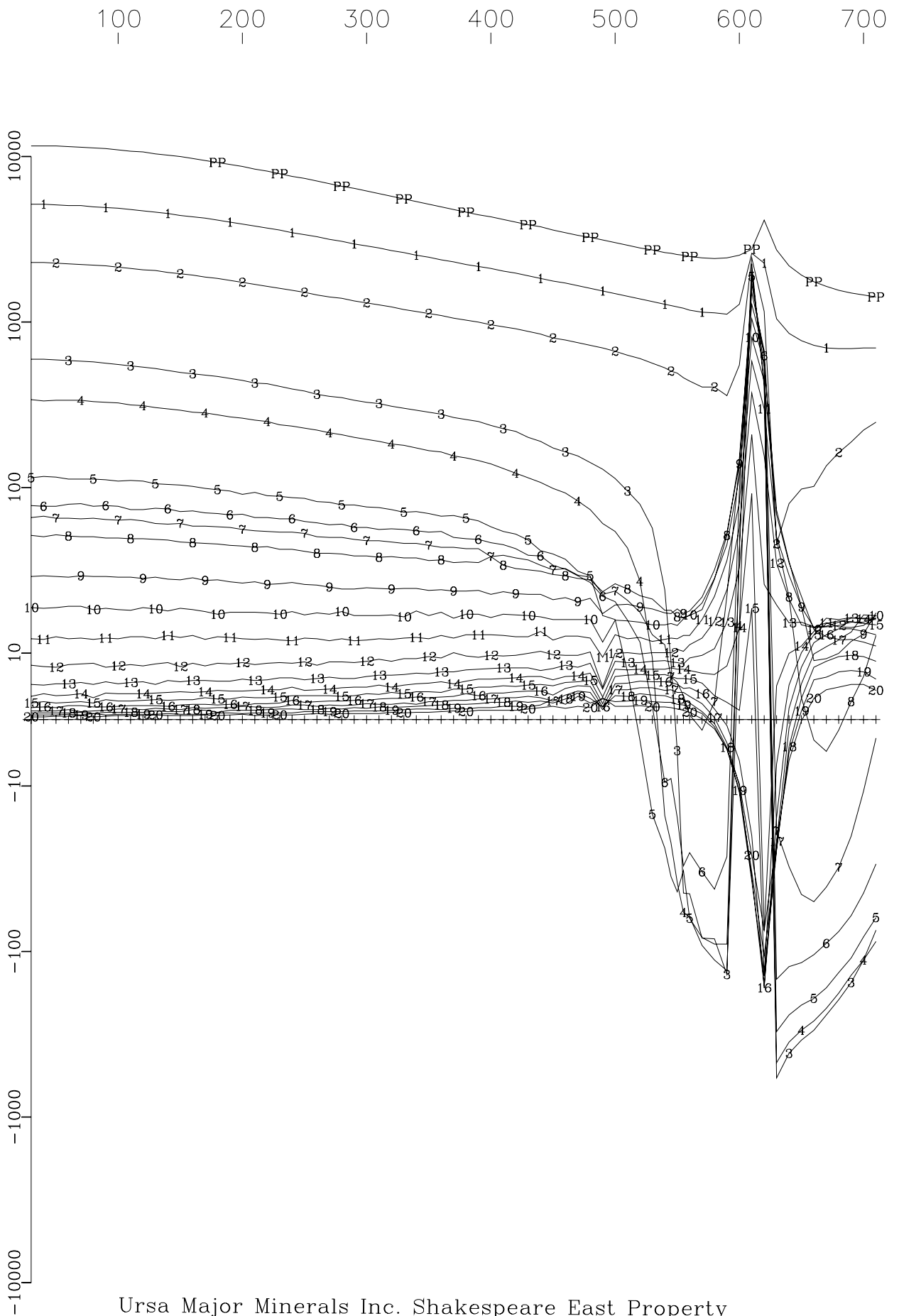
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-08-02 X Component
 Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)



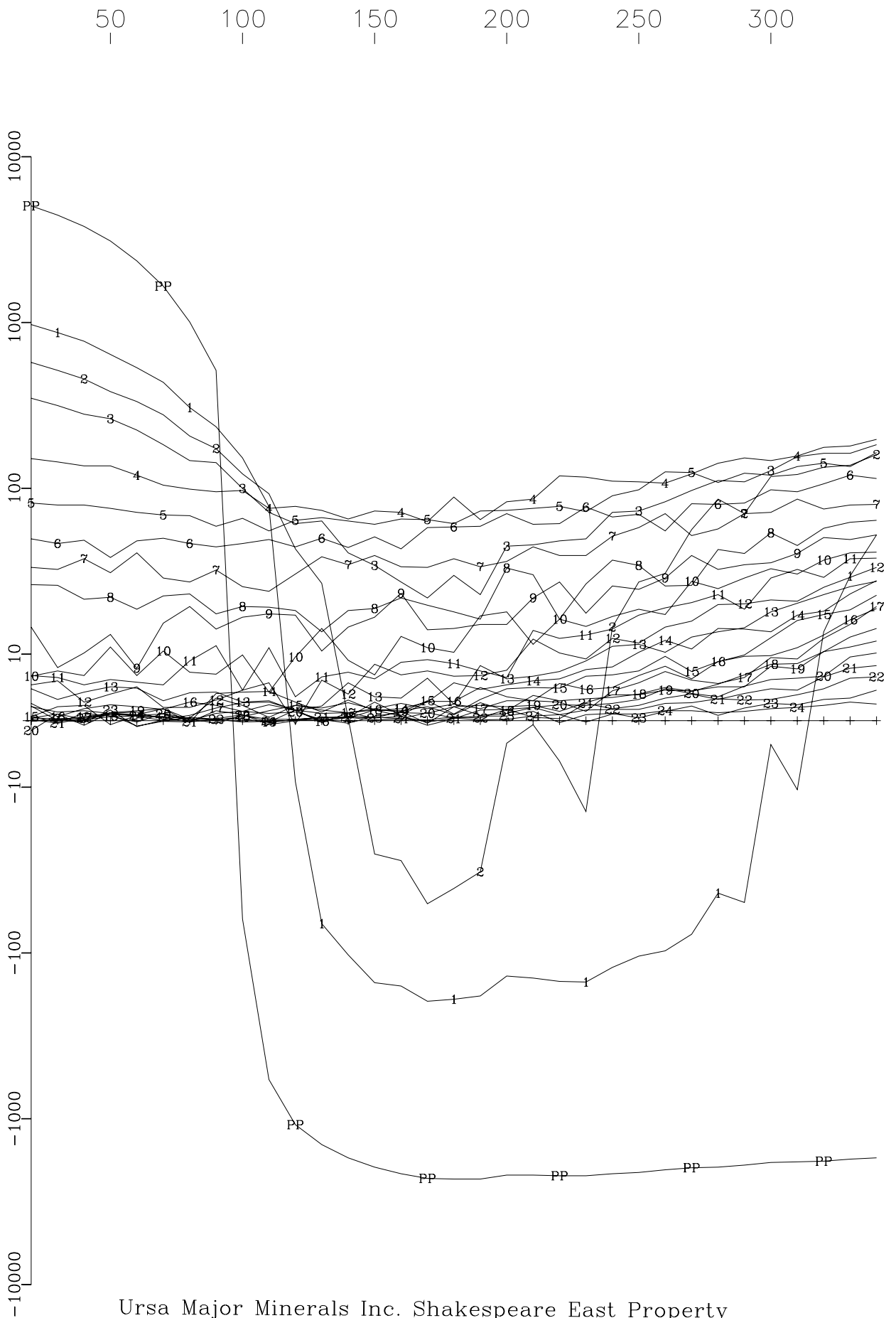
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-08-02 Y Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)



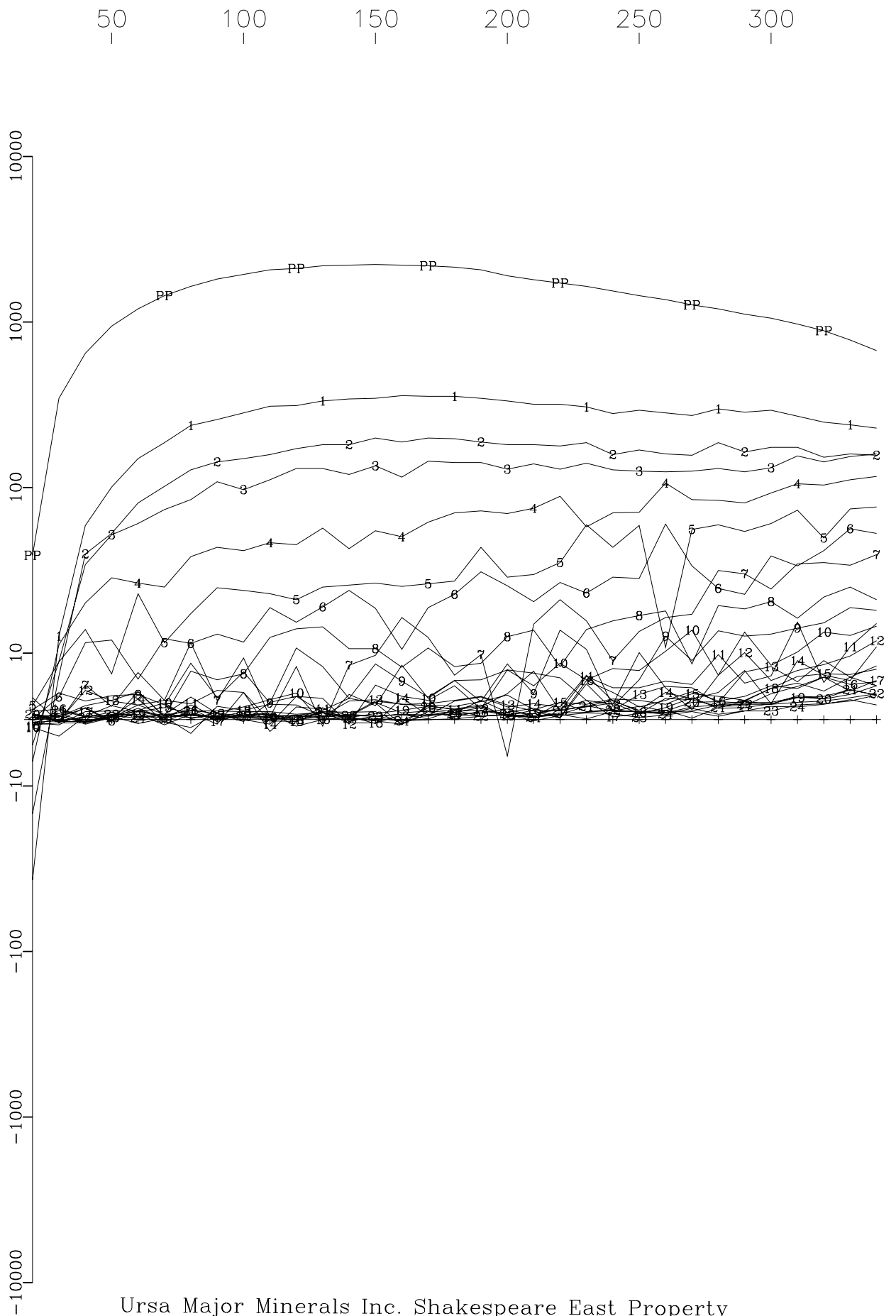
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-08-02 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



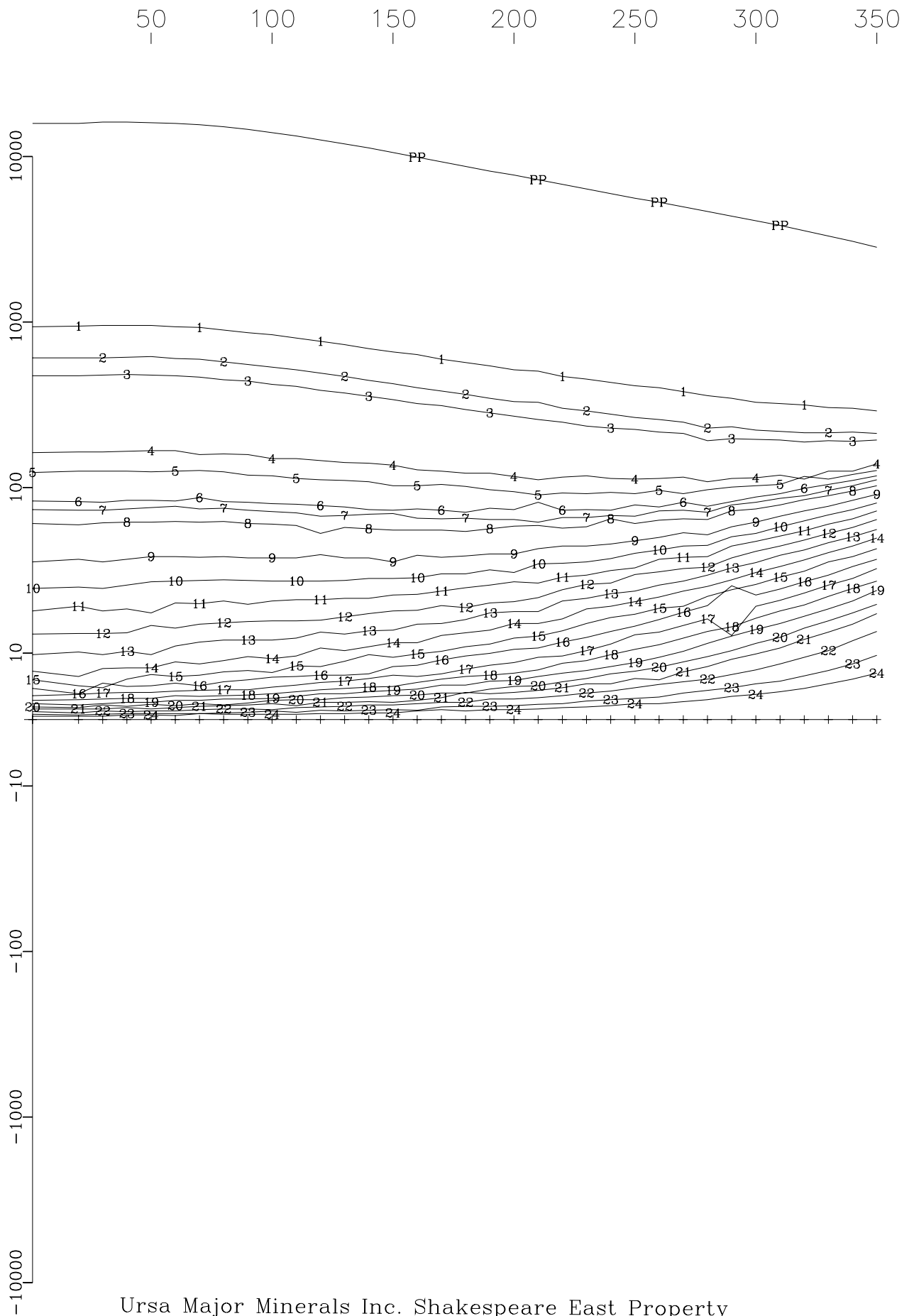
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-113 X Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



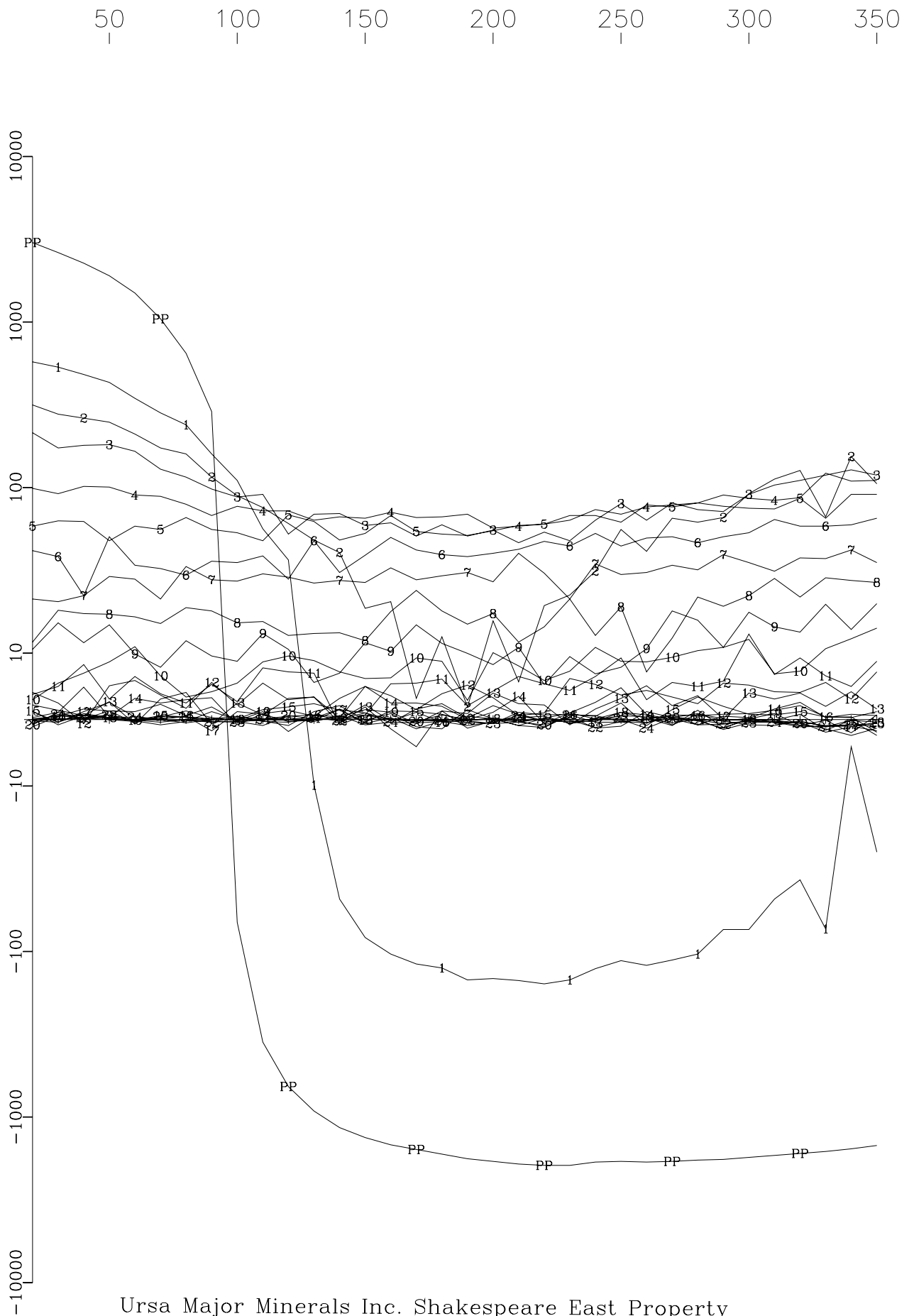
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-113 Y Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



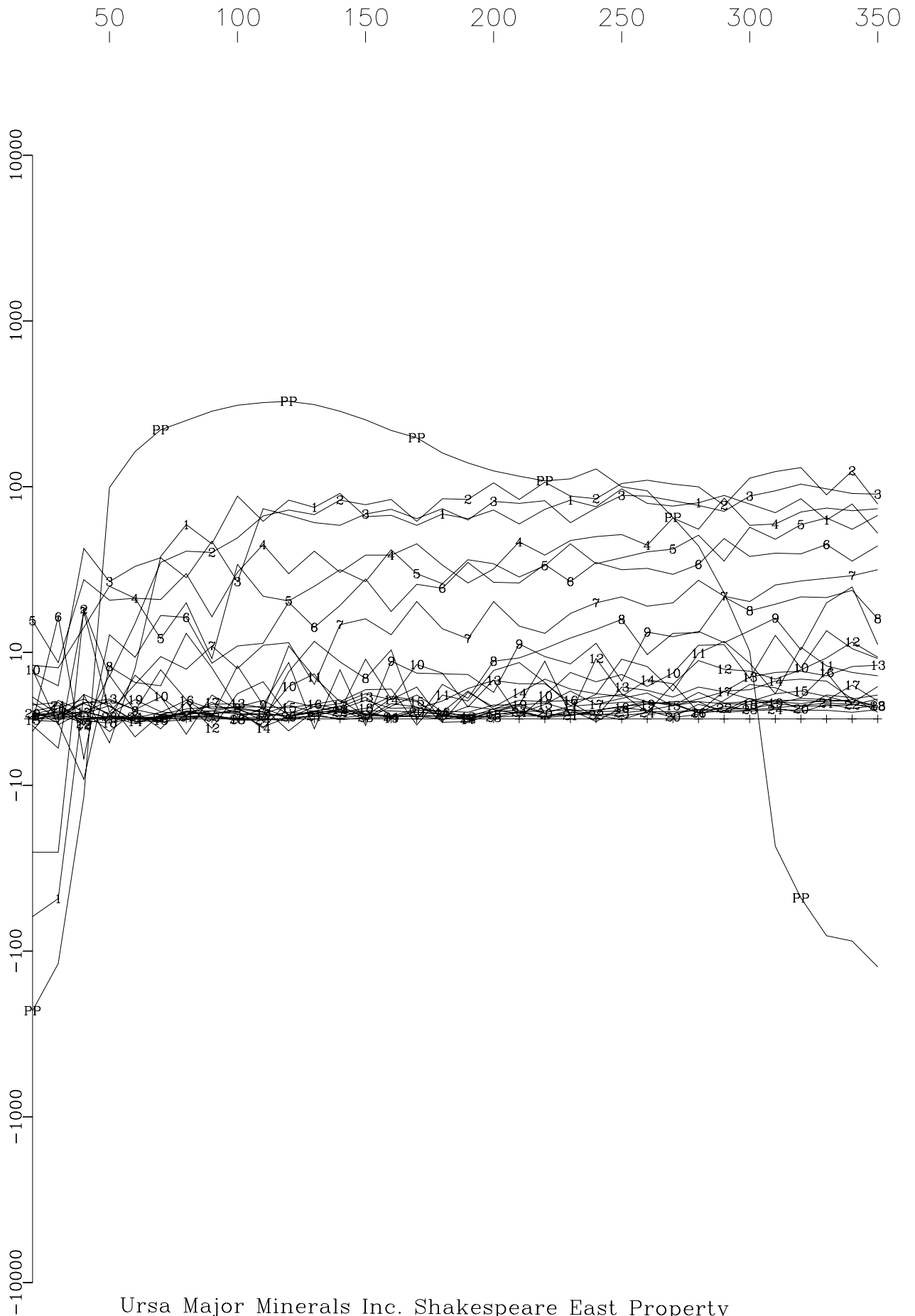
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-113 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



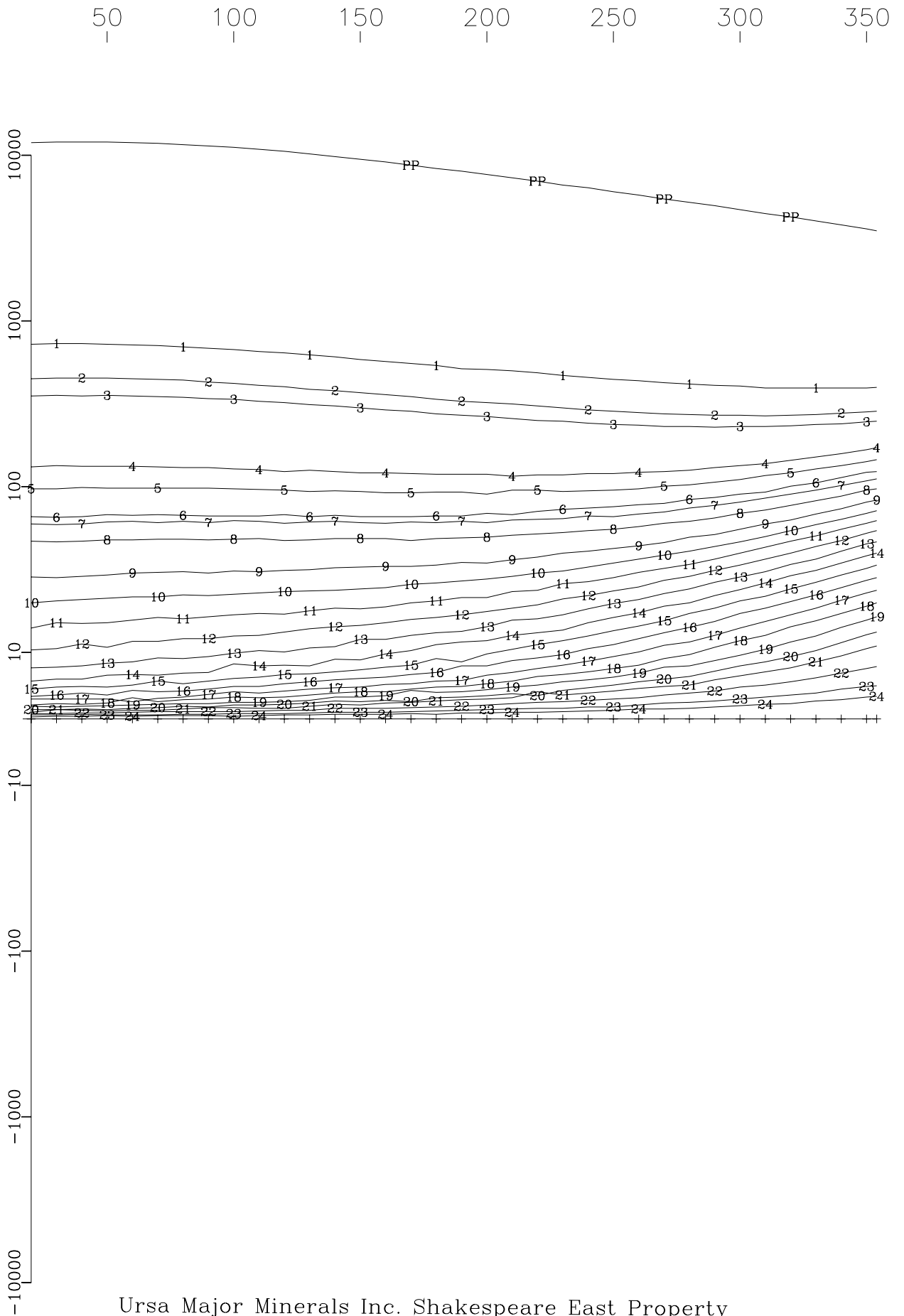
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-114 X Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



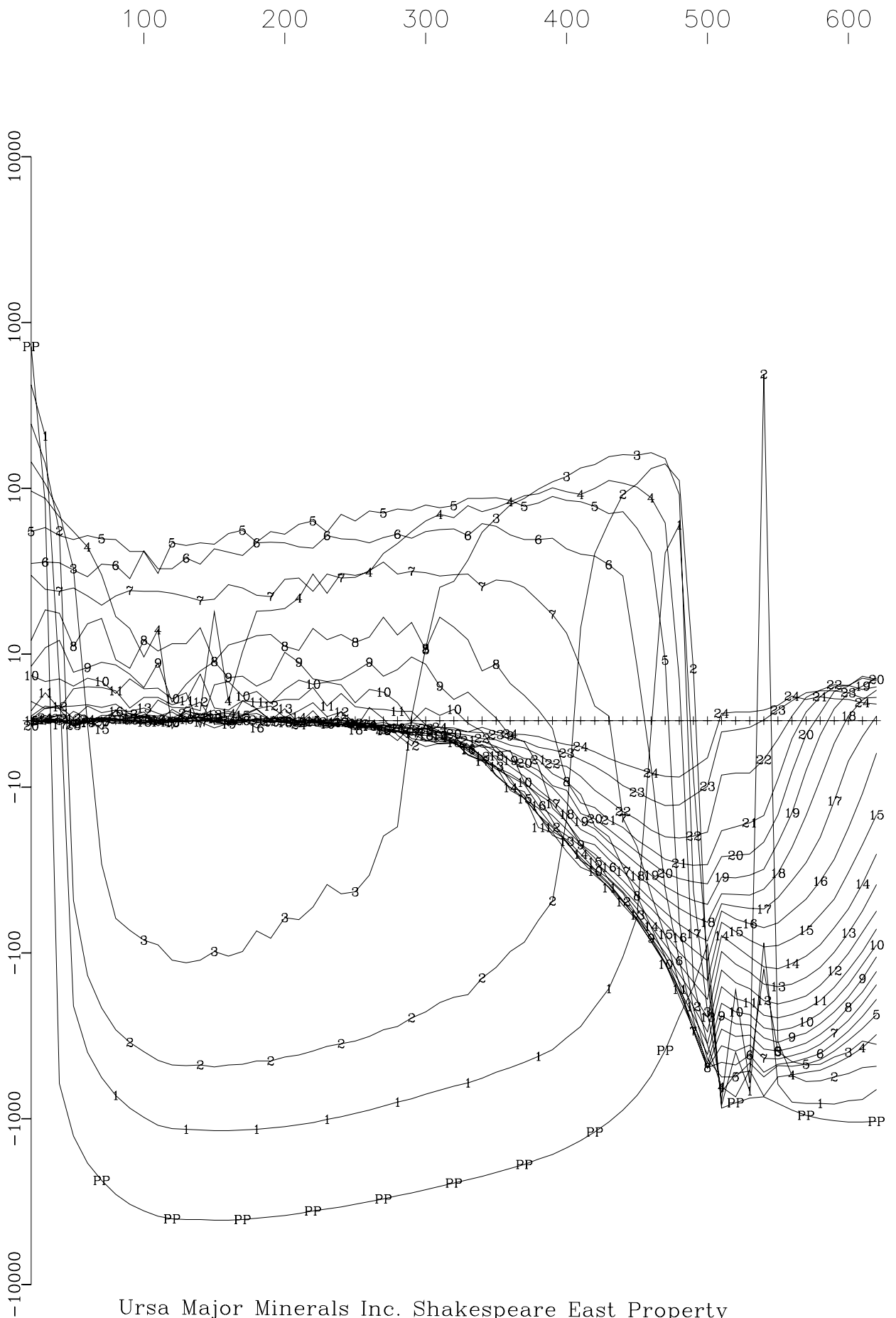
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-114 Y Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



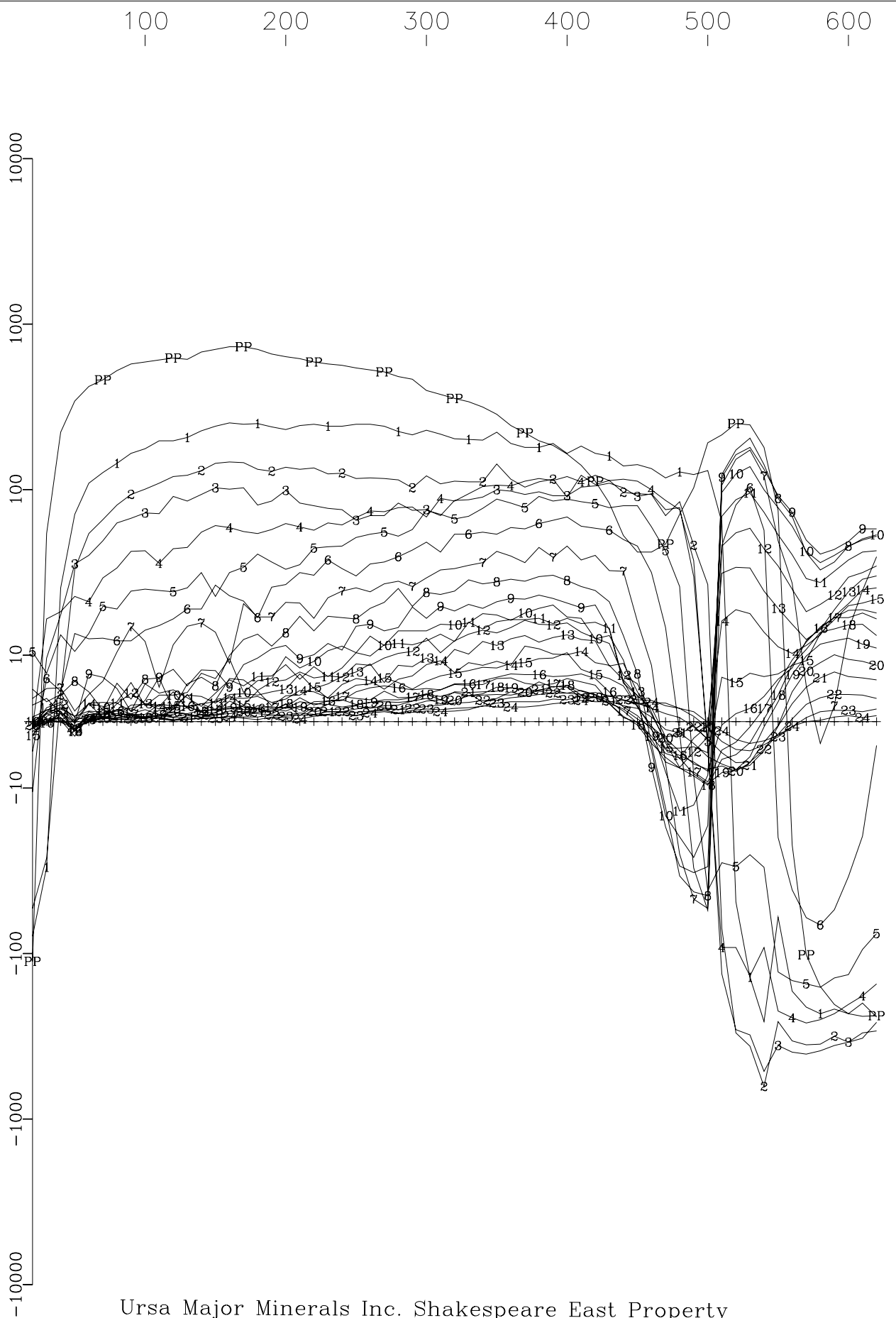
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-114 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



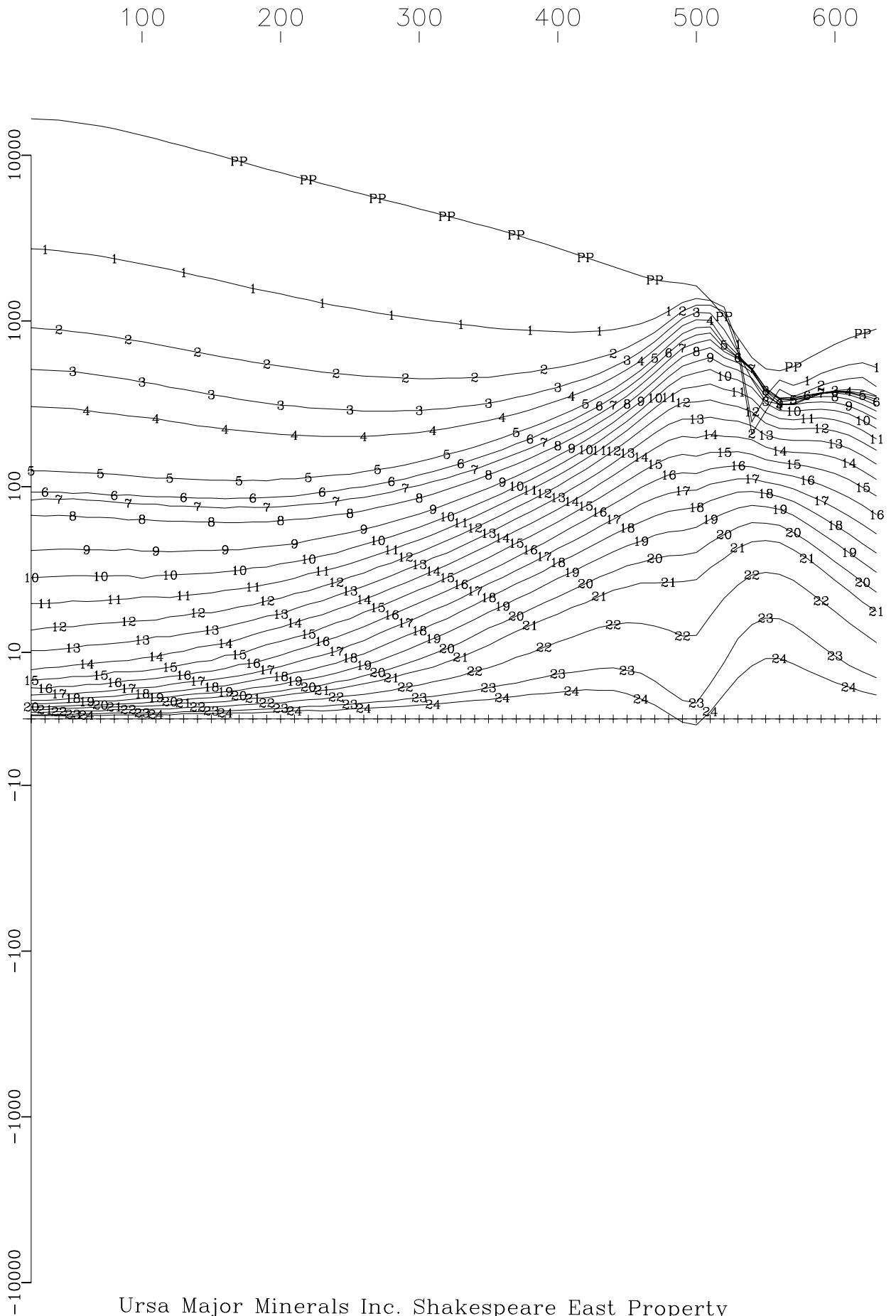
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-116 X Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



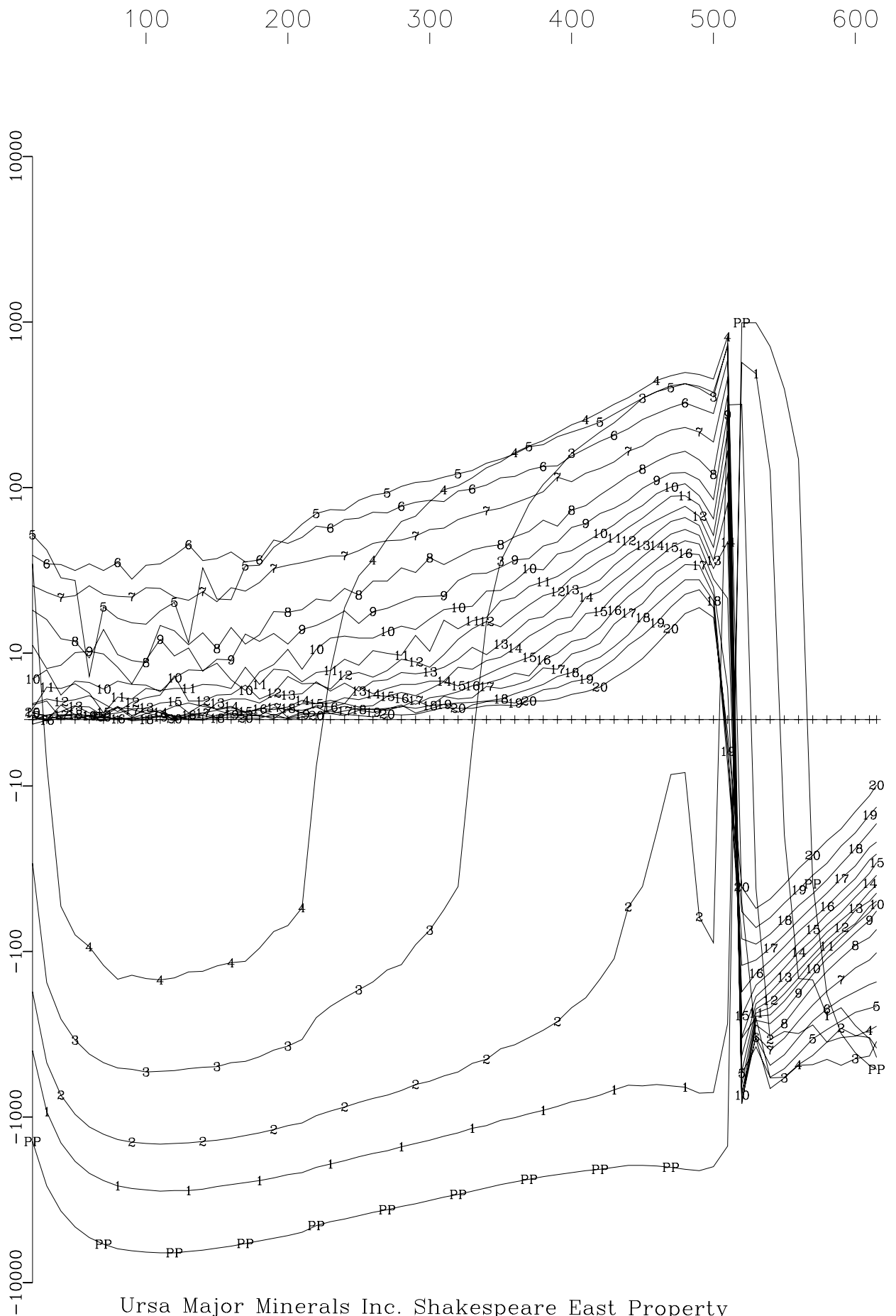
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-116 Y Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)

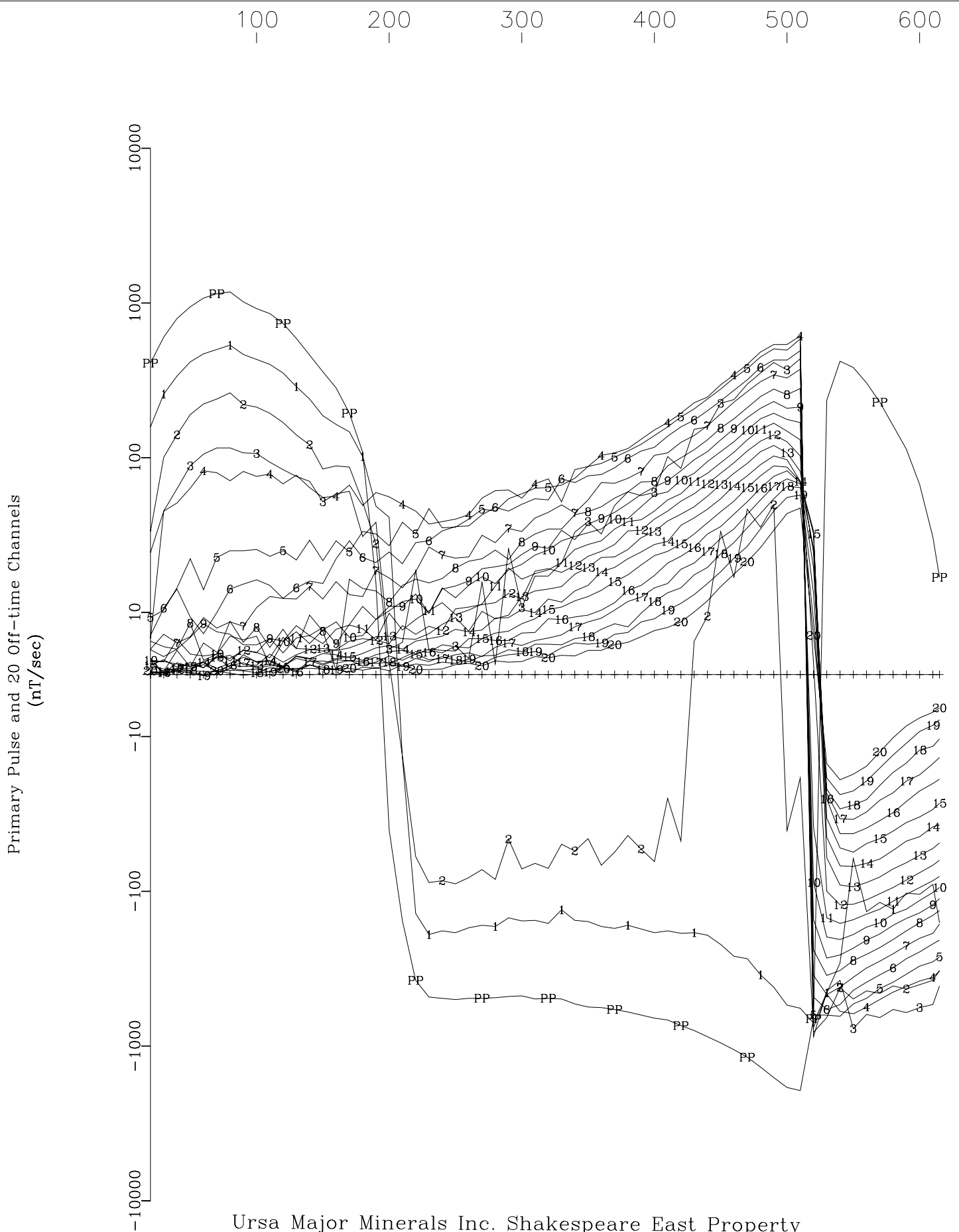


Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-116 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)

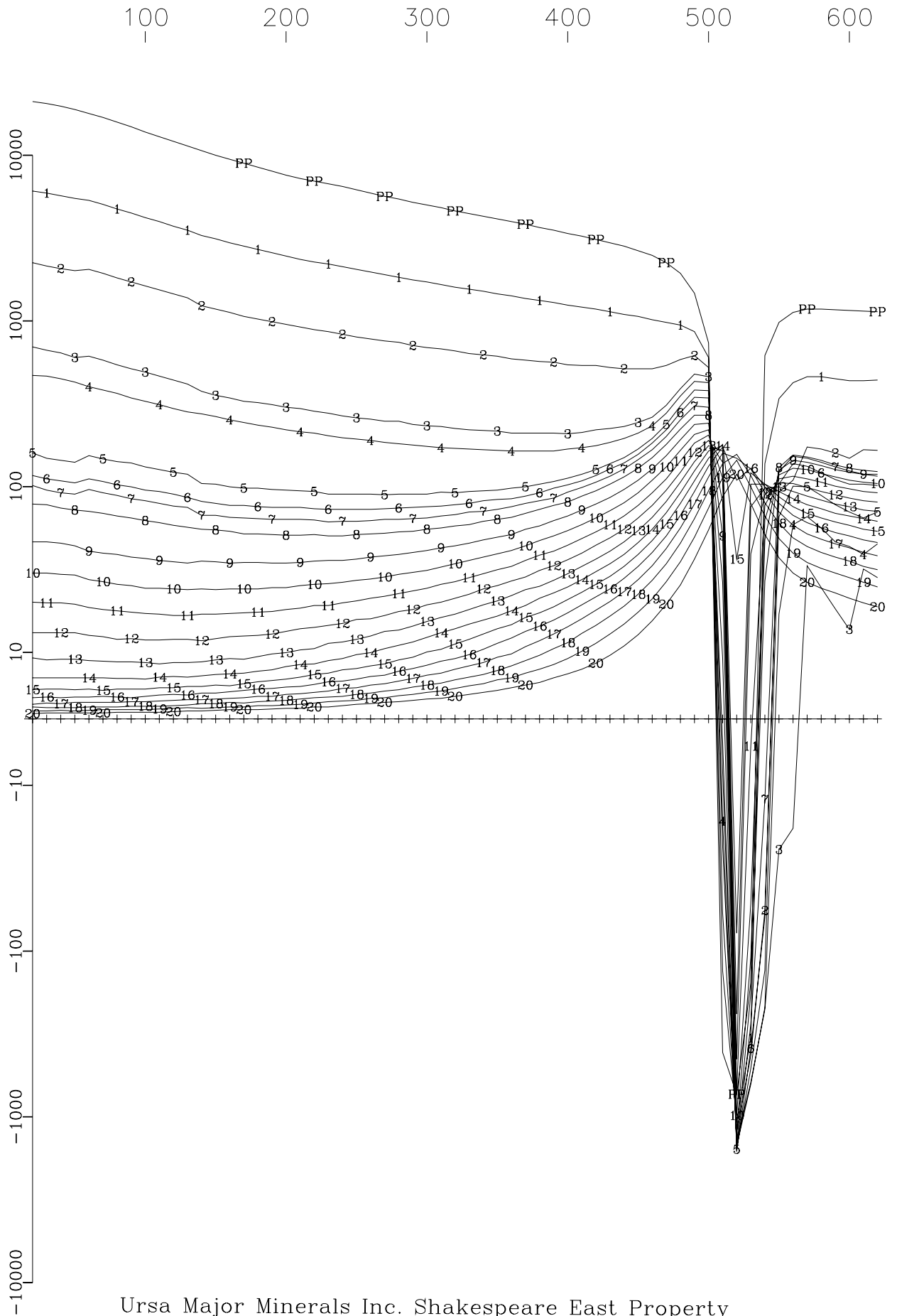


Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-118 X Component
Crone Geophysics & Exploration Ltd.



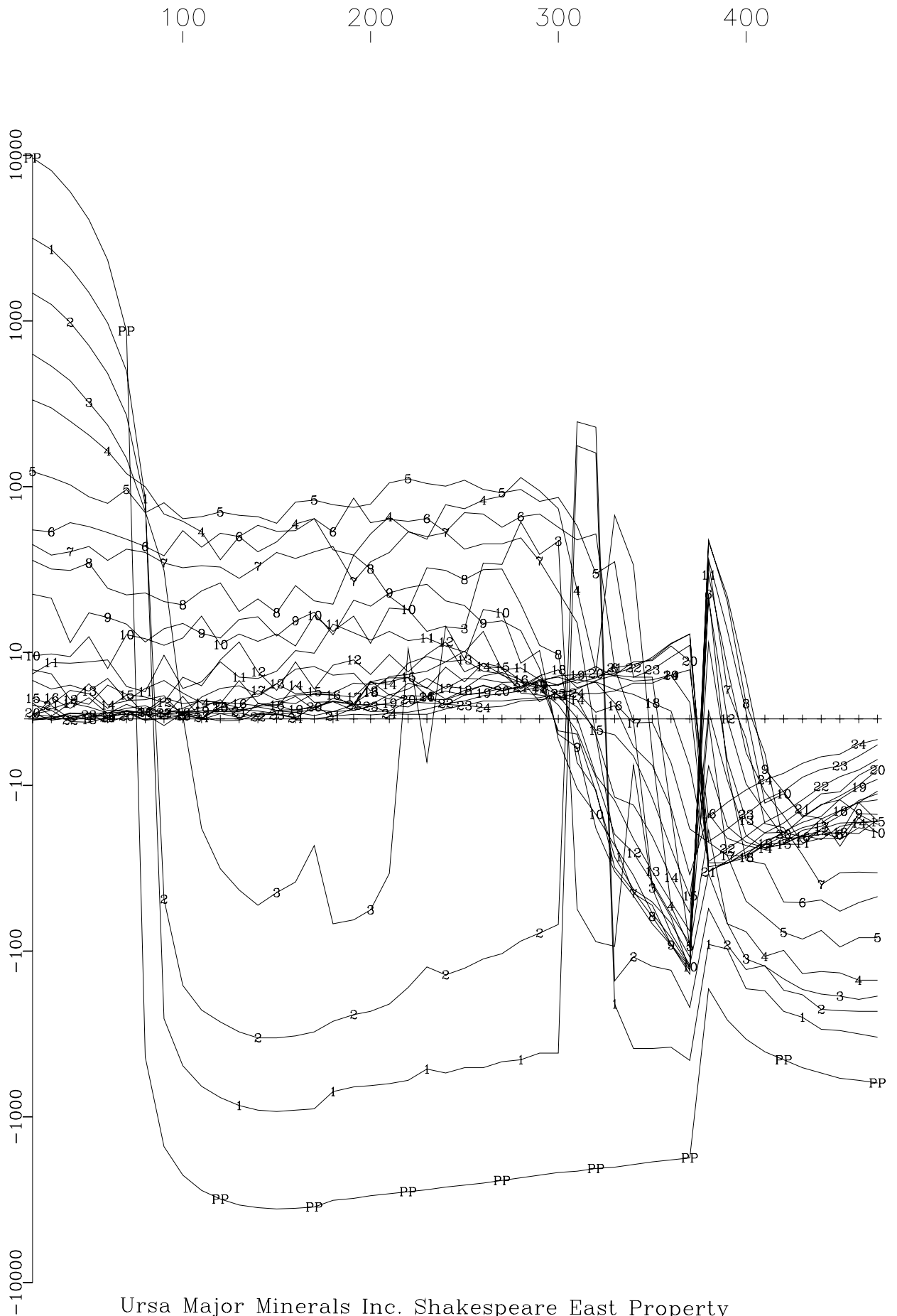
Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 Y Component
 Crone Geophysics & Exploration Ltd.

Primary Pulse and 20 Off-time Channels
(nT/sec)



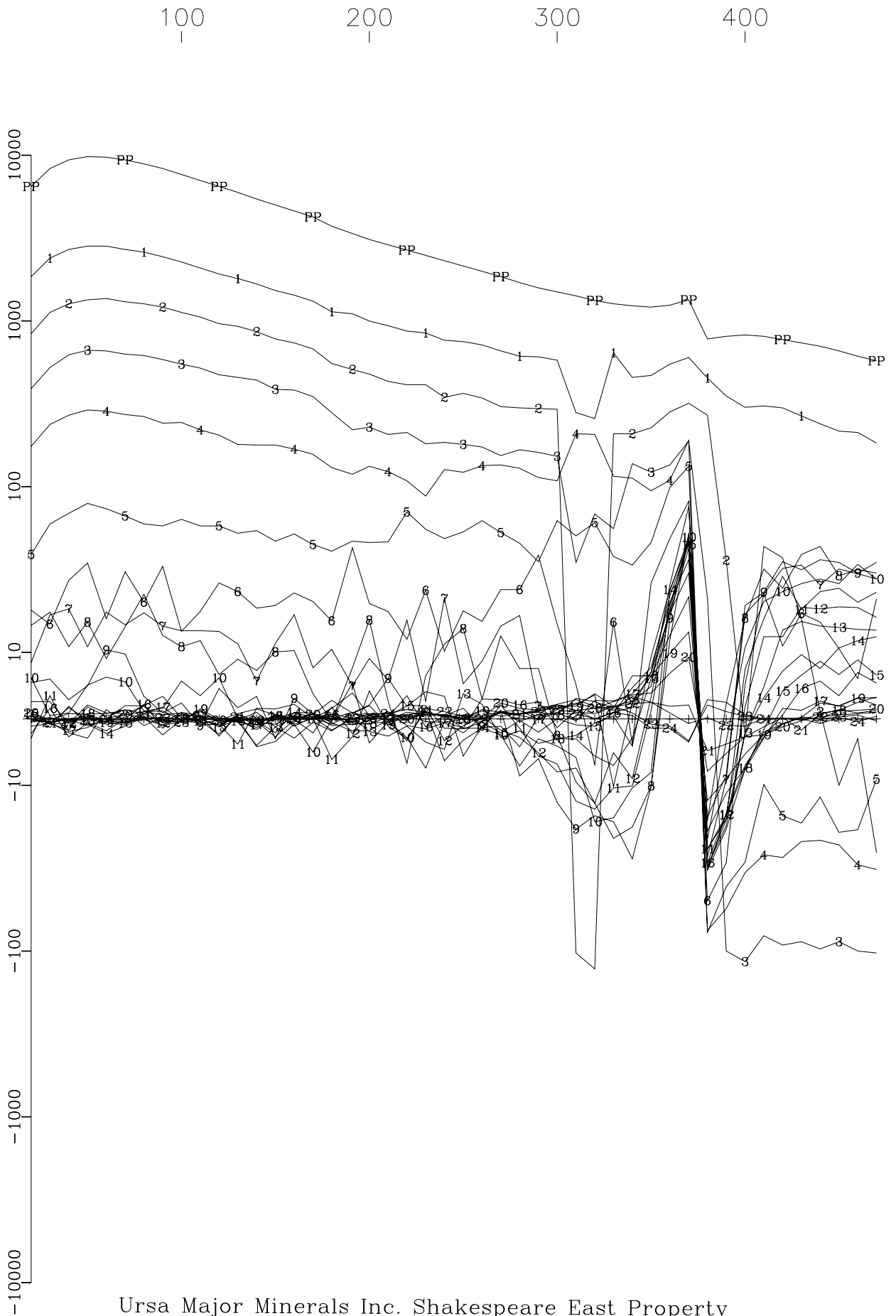
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-118 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



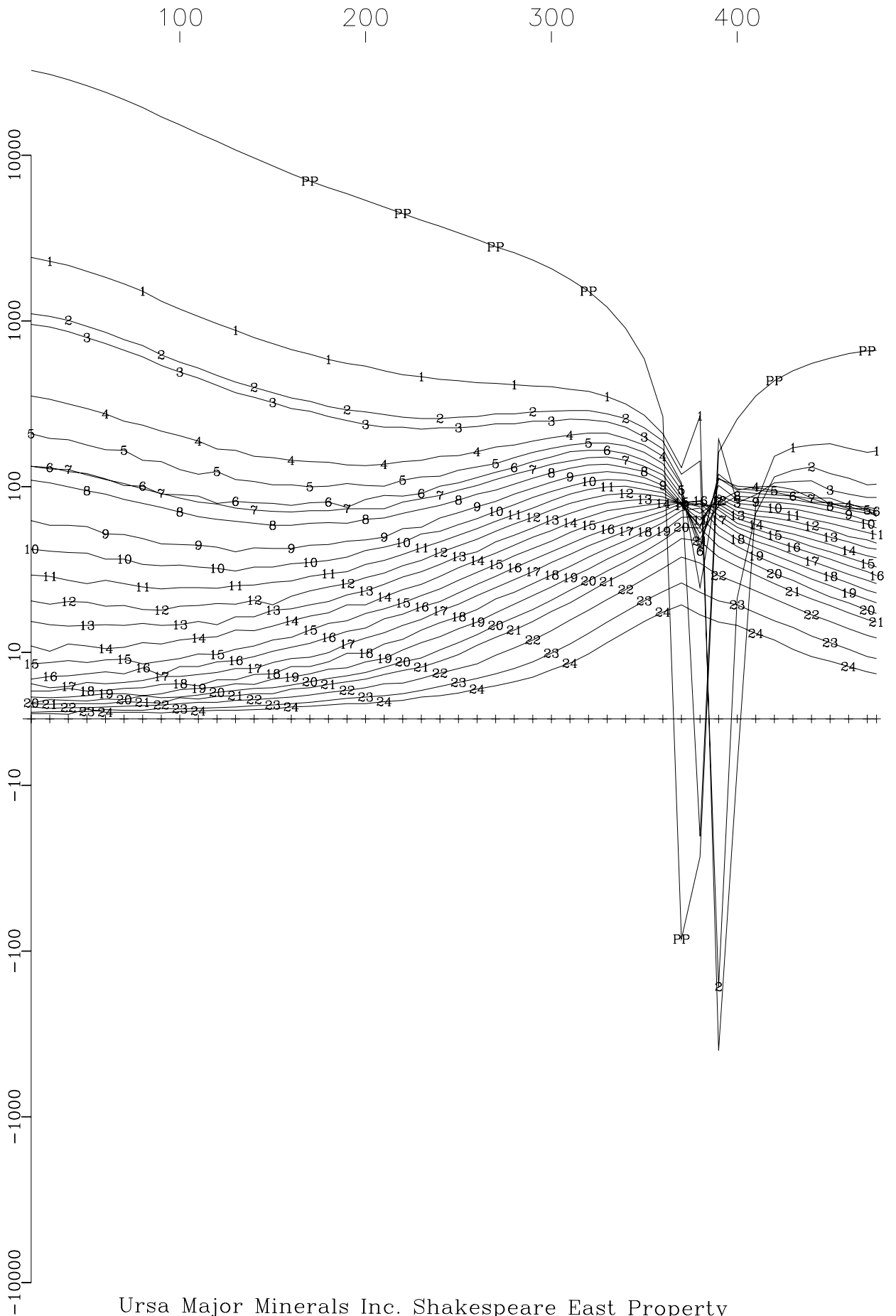
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-120 X Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



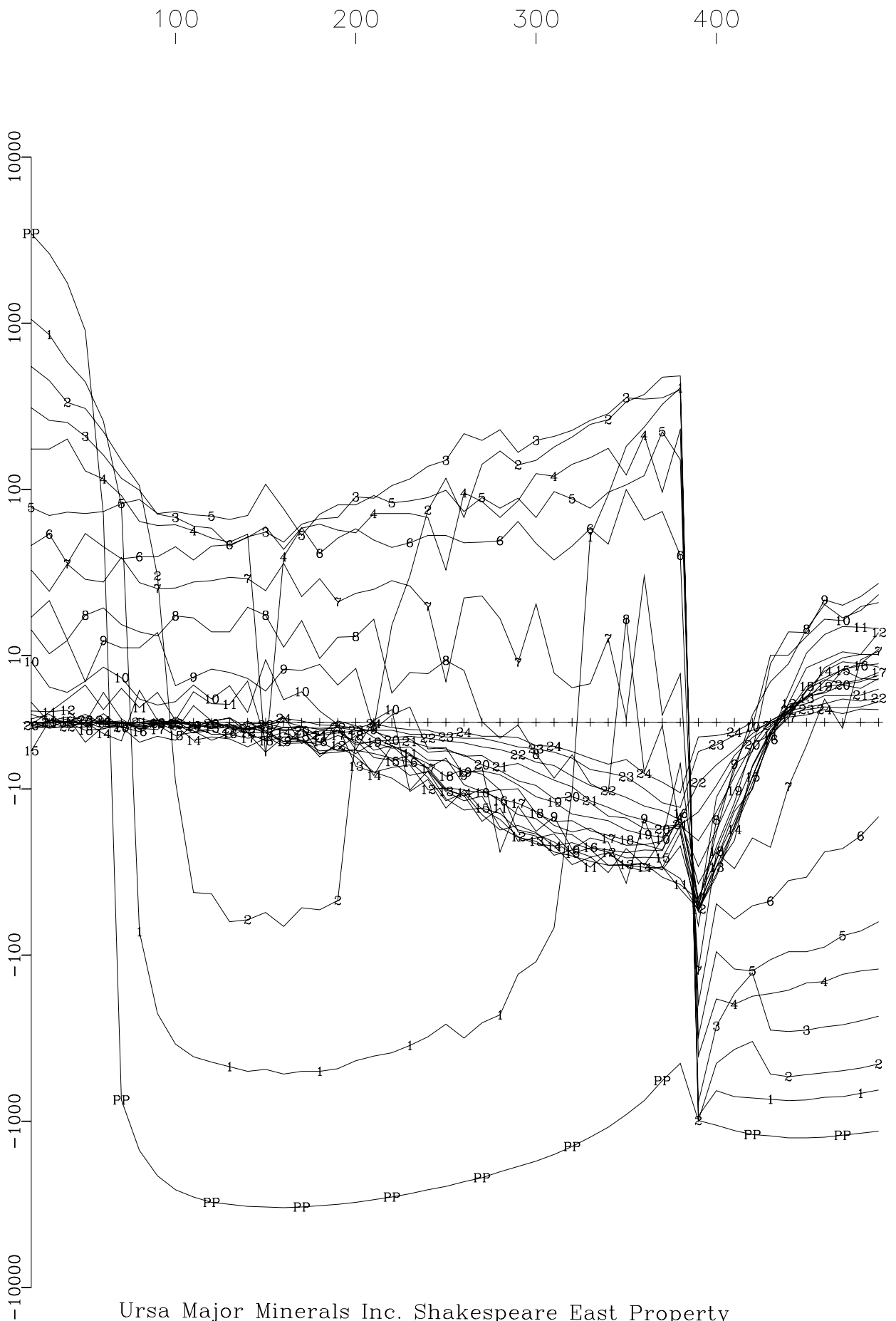
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-120 Y Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



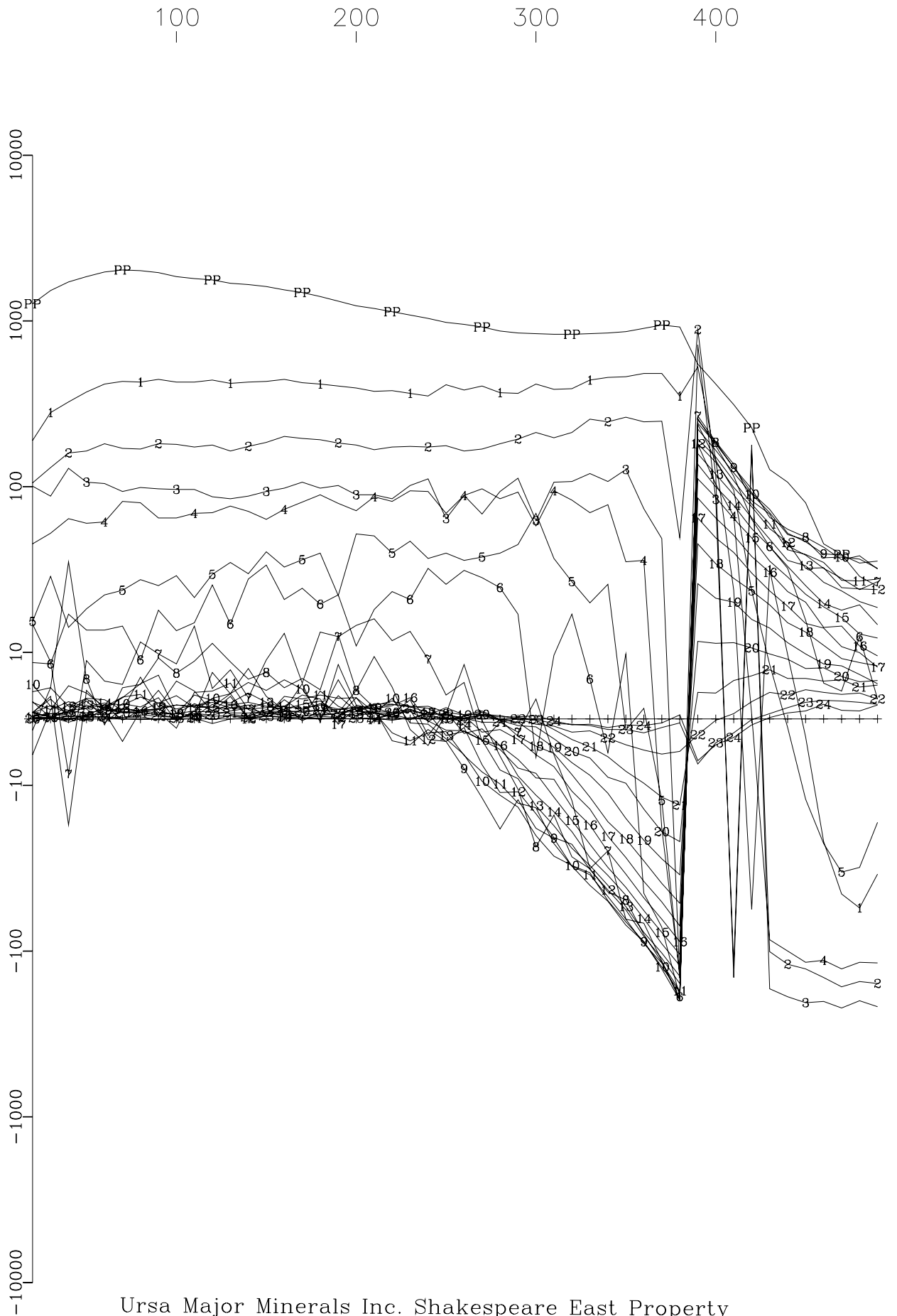
Ursa Major Minerals Inc. Shakespeare East Property
Loop 1, Hole U-03-120 Z Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



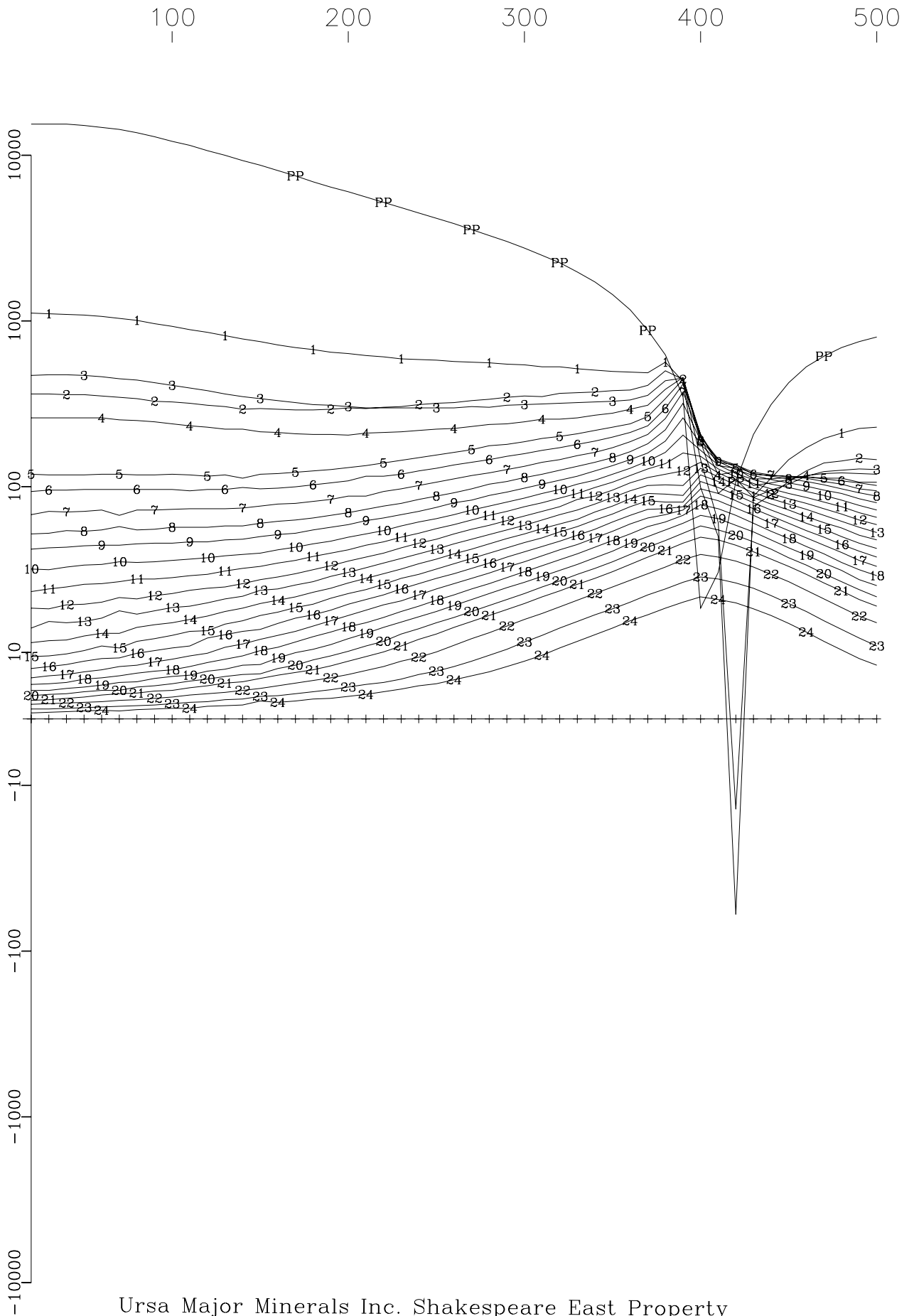
Ursa Major Minerals Inc. Shakespeare East Property
Loop 2, Hole U-03-121 X Component
Crone Geophysics & Exploration Ltd.

Primary Pulse and 24 Off-time Channels
(nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
Loop 2, Hole U-03-121 Y Component
Crone Geophysics & Exploration Ltd.

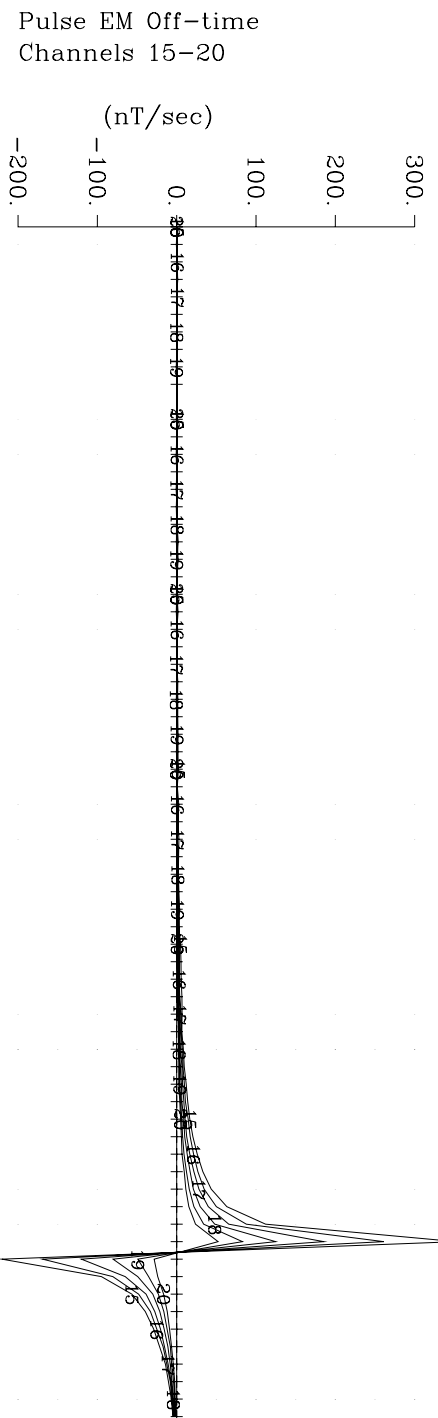
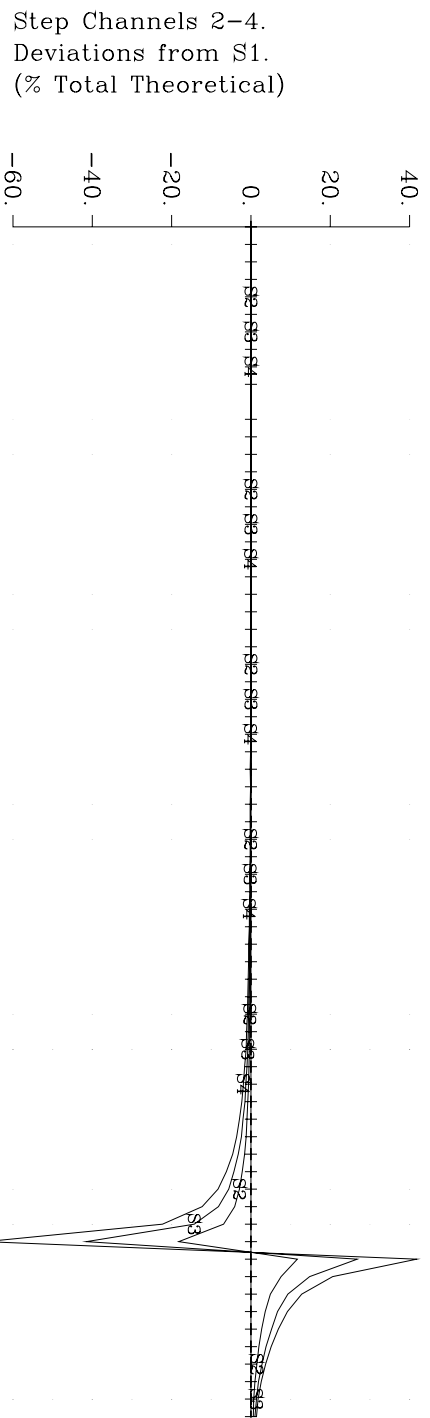
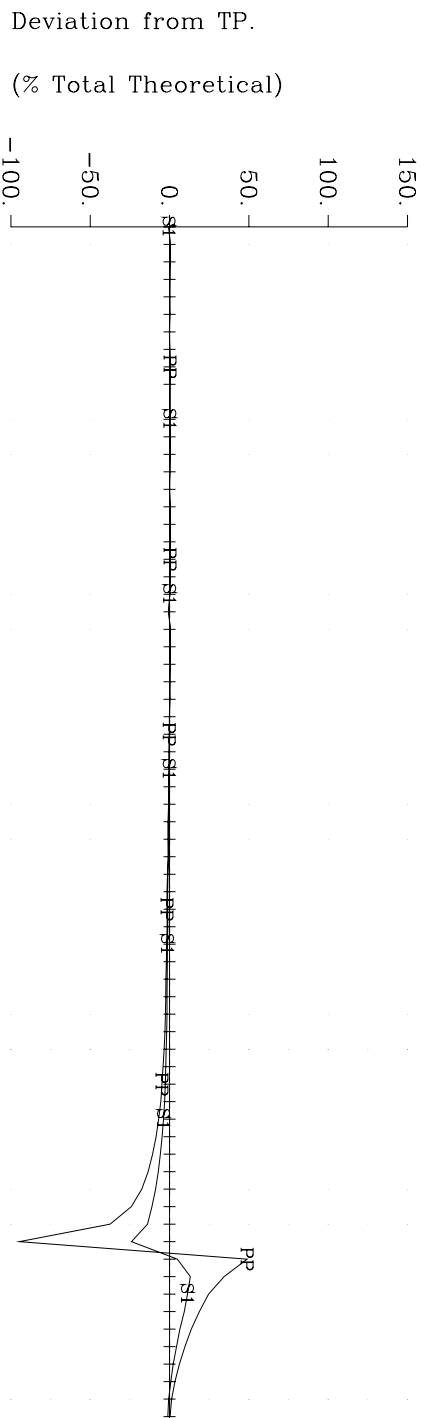
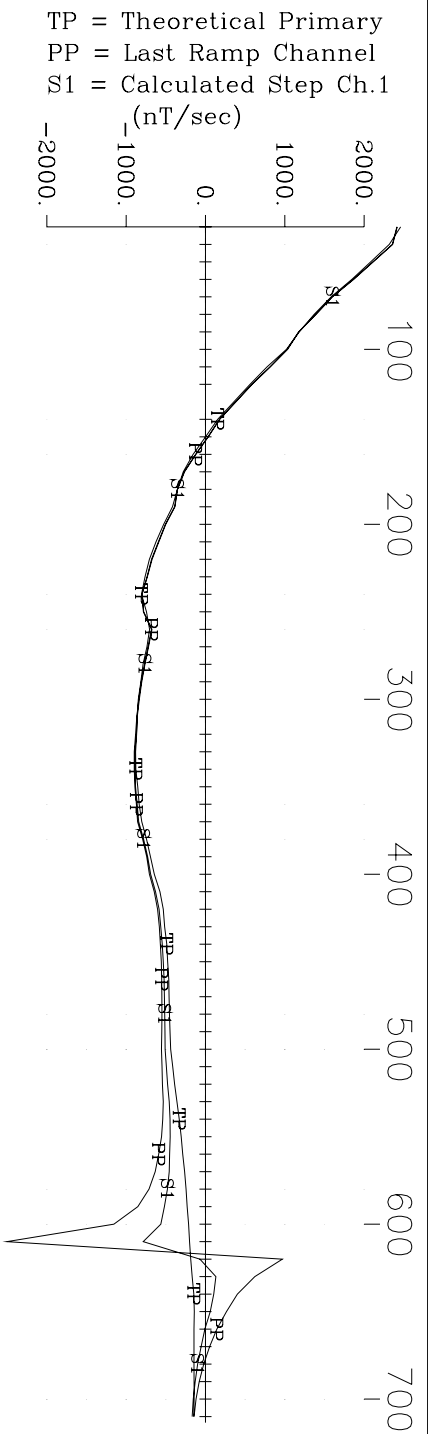
Primary Pulse and 24 Off-time Channels
(nT/sec)



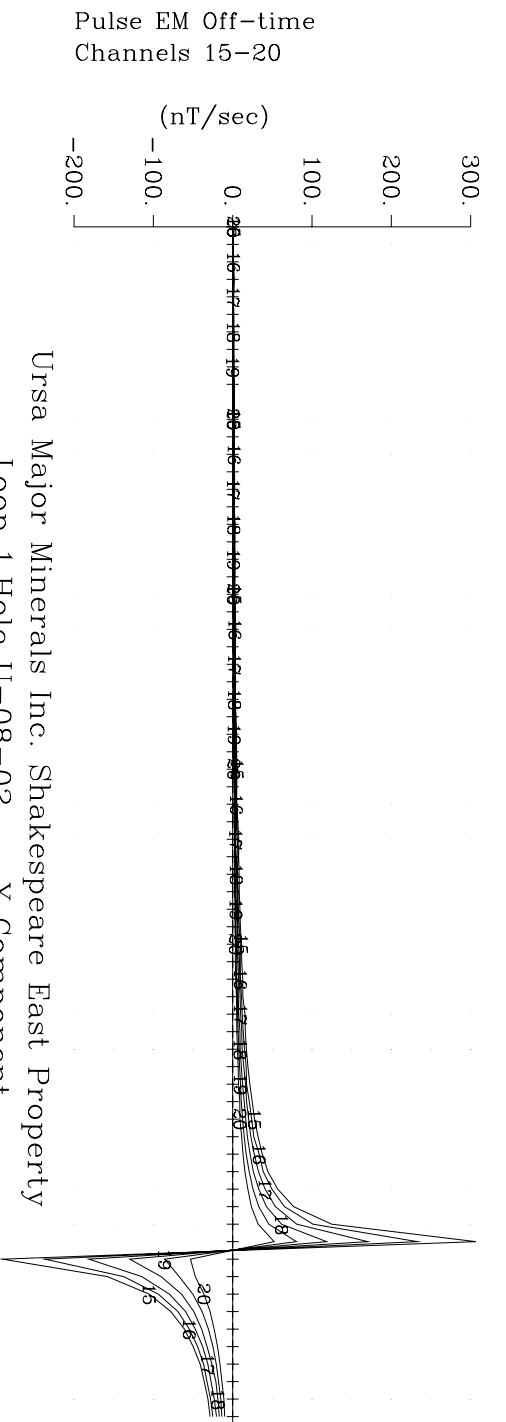
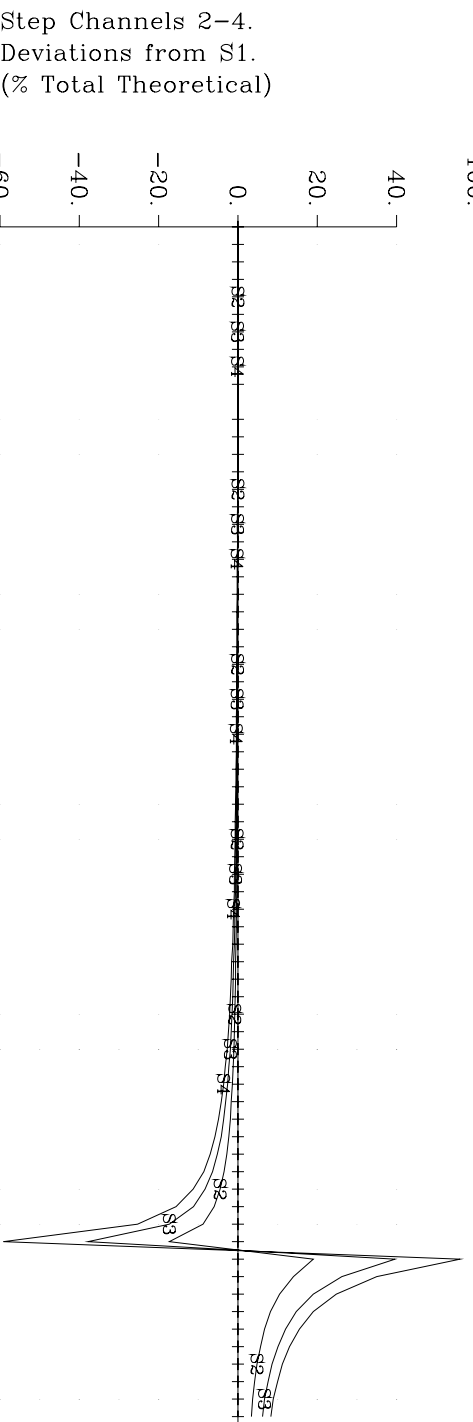
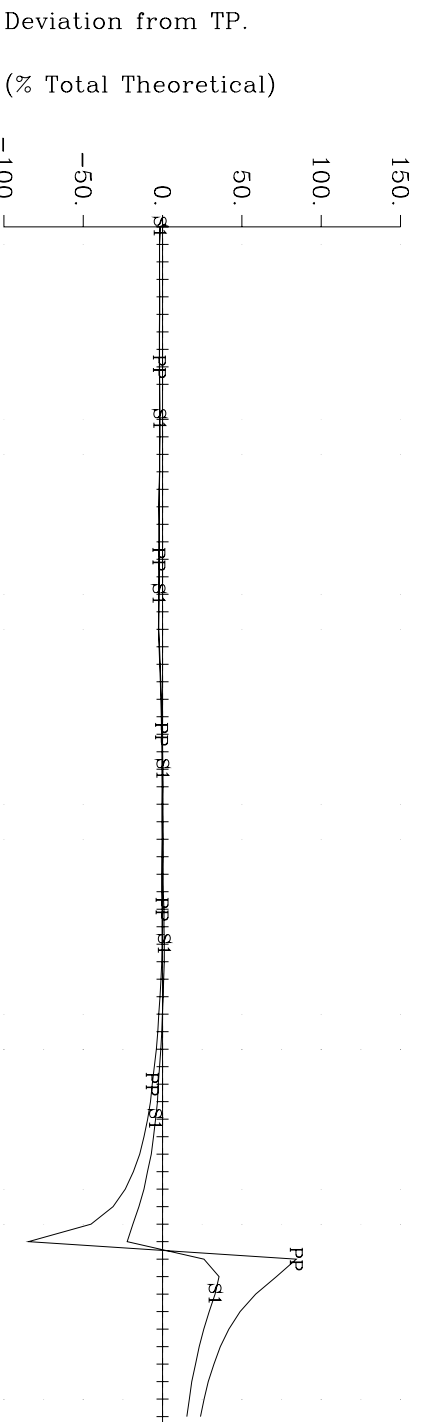
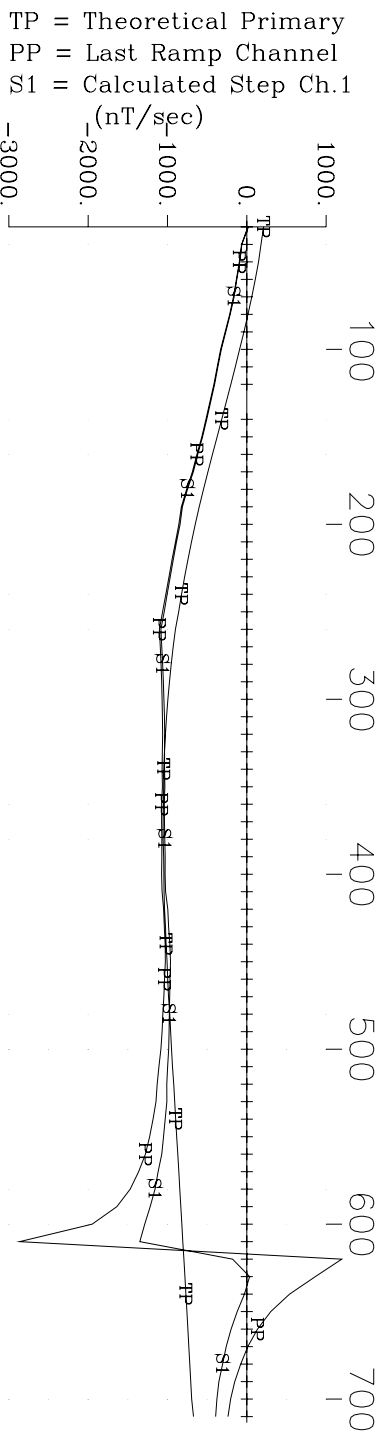
Ursa Major Minerals Inc. Shakespeare East Property
Loop 2, Hole U-03-121 Z Component
Crone Geophysics & Exploration Ltd.

APPENDIX IV
STEP RESPONSE DATA PROFILES



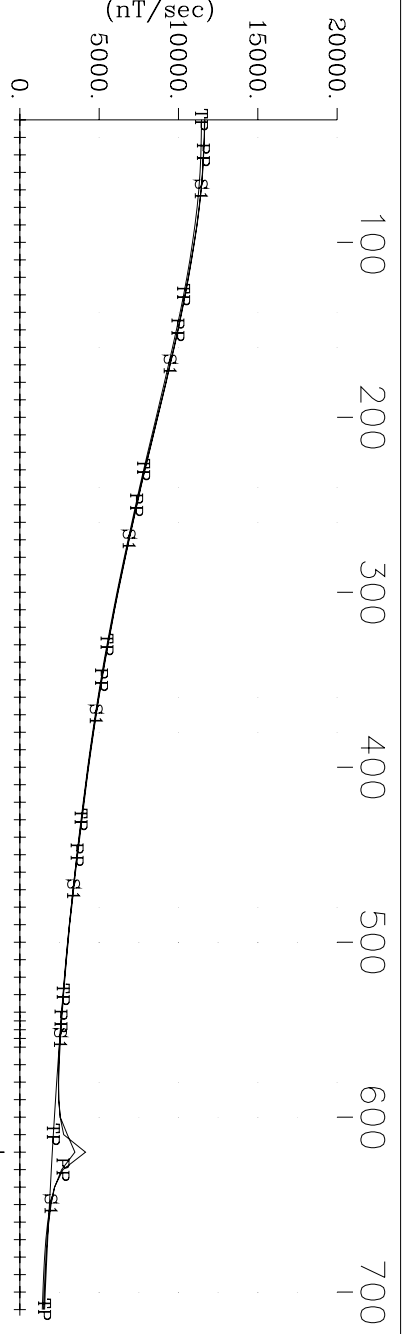


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-08-02 X Component
 Crone Geophysics & Exploration Ltd.

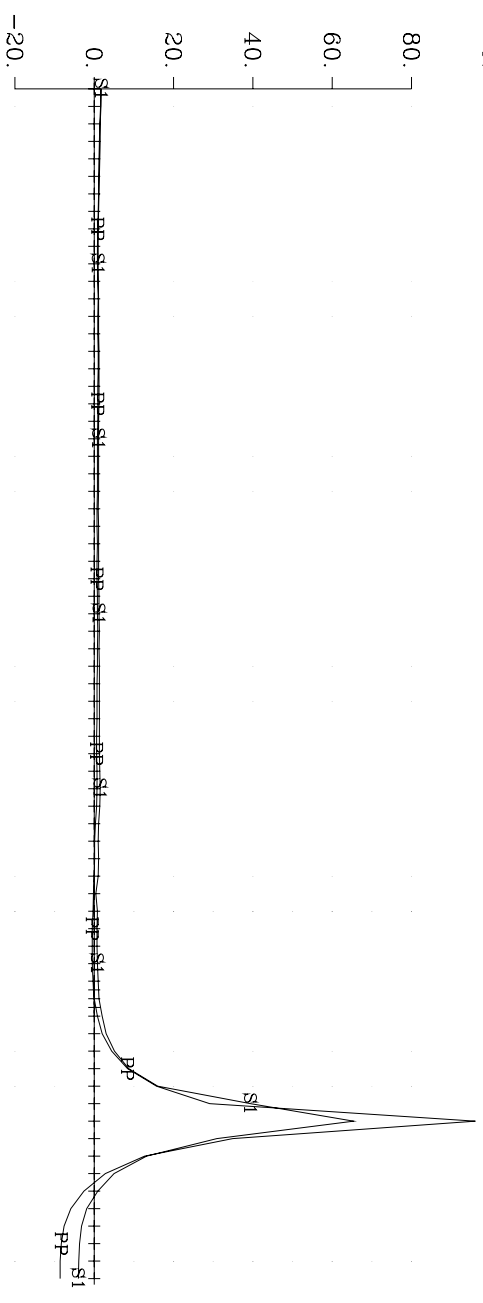


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-08-02 Y Component
 Crone Geophysics & Exploration Ltd.

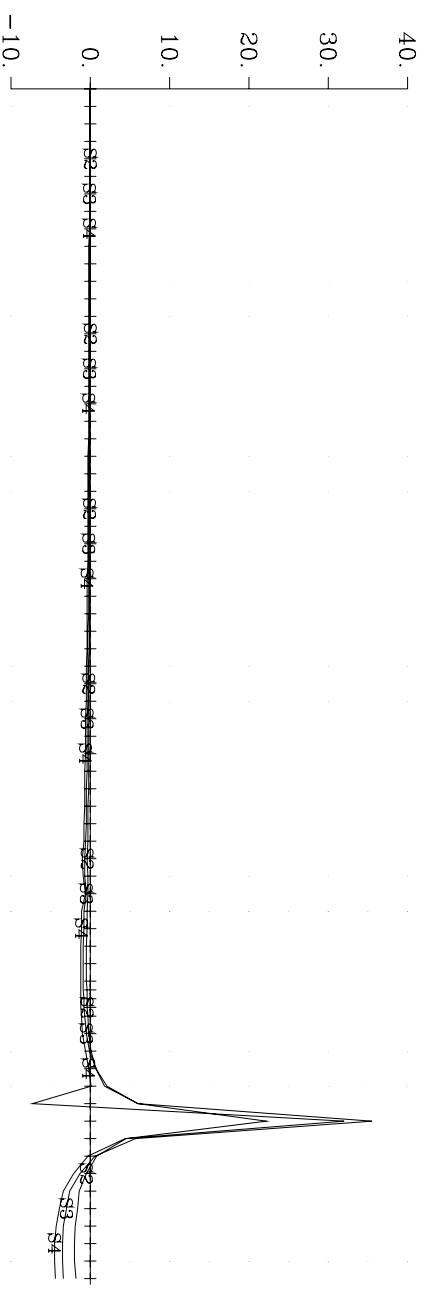
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



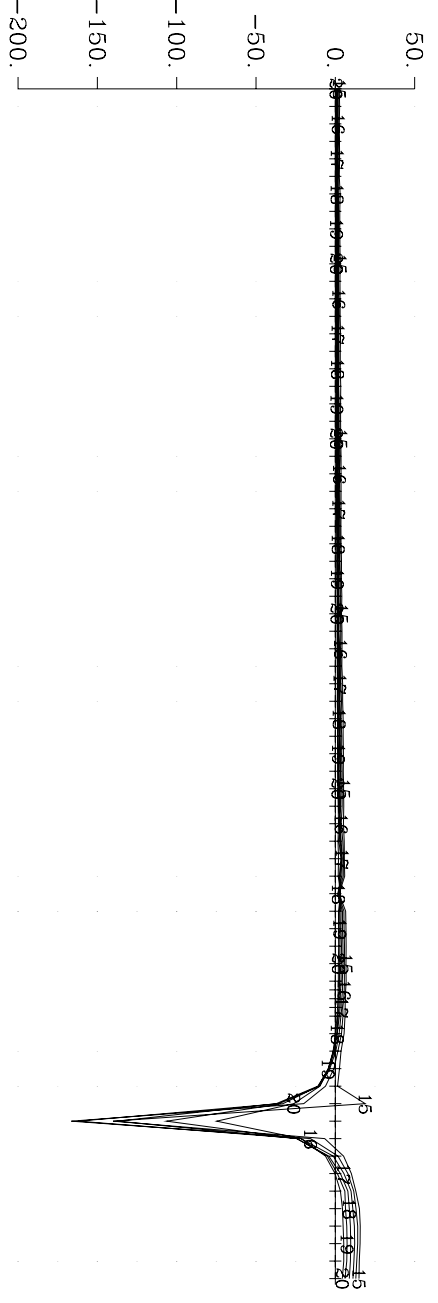
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

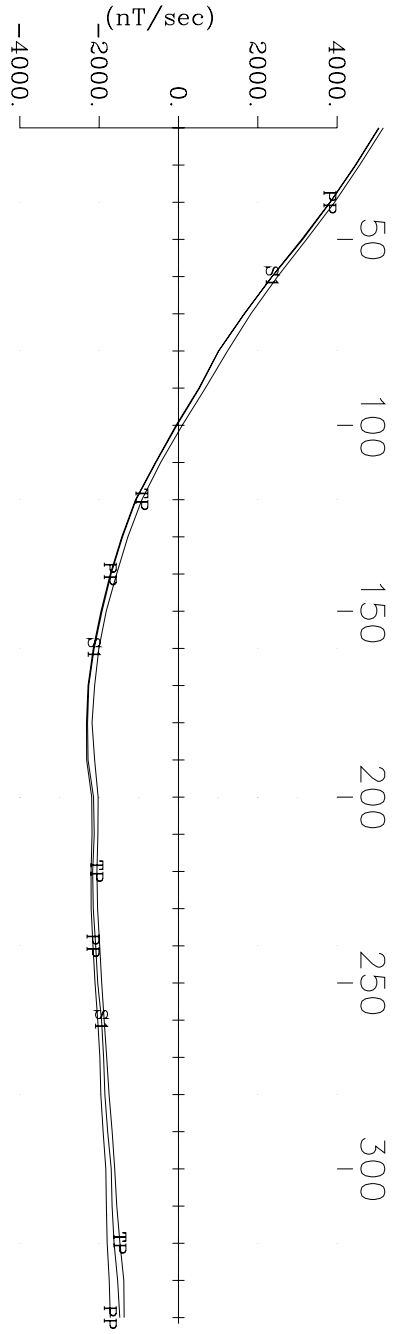


Pulse EM Off-time
 Channels 15-20
 (nT/sec)

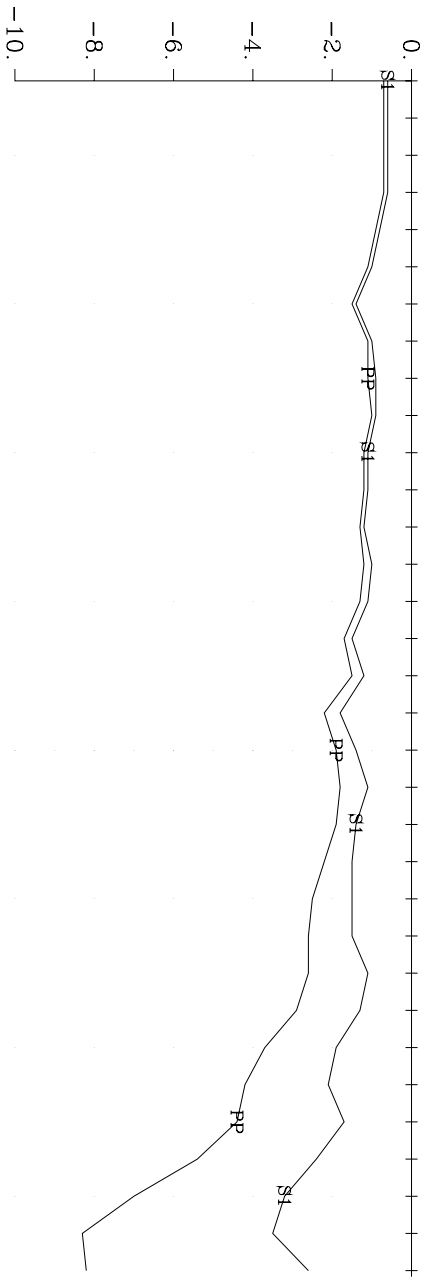


Urso Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-08-02 Z Component
 Crone Geophysics & Exploration Ltd.

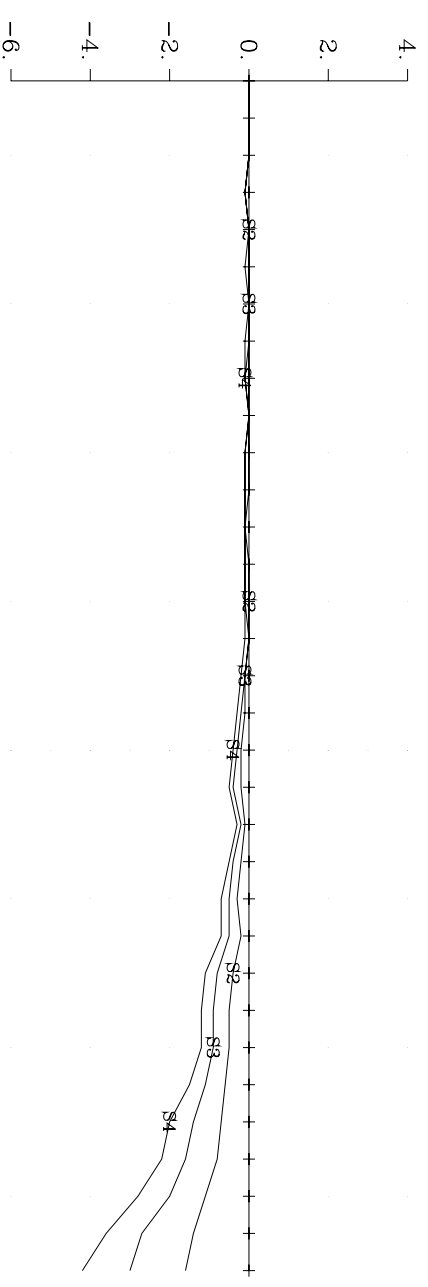
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



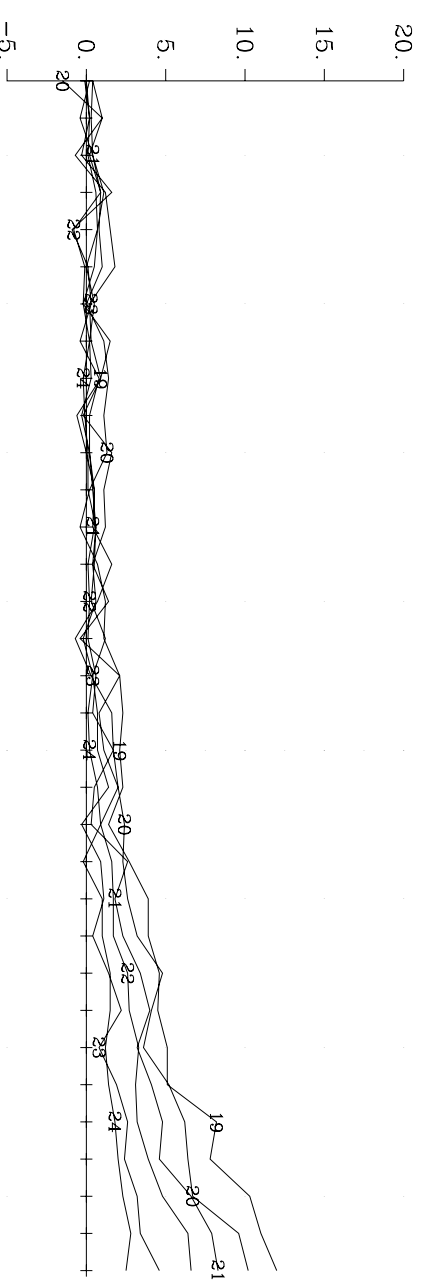
Deviation from TP.
 (% Total Theoretical)



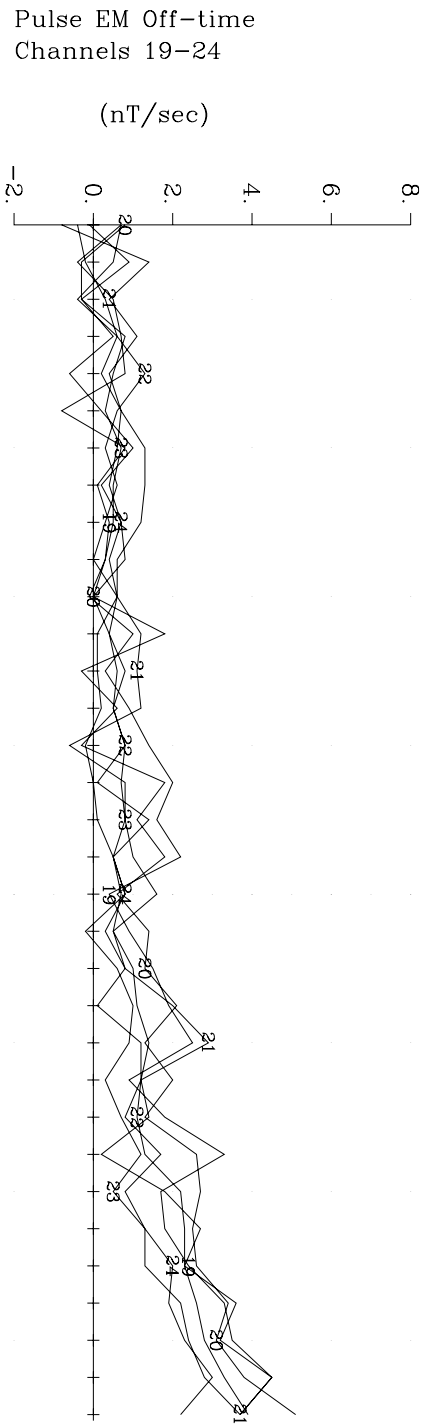
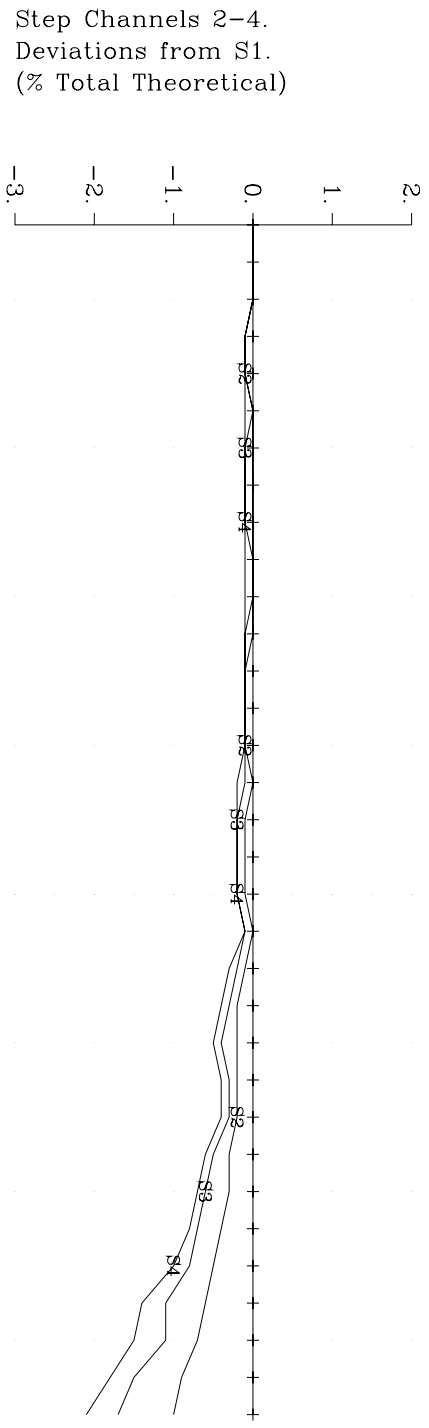
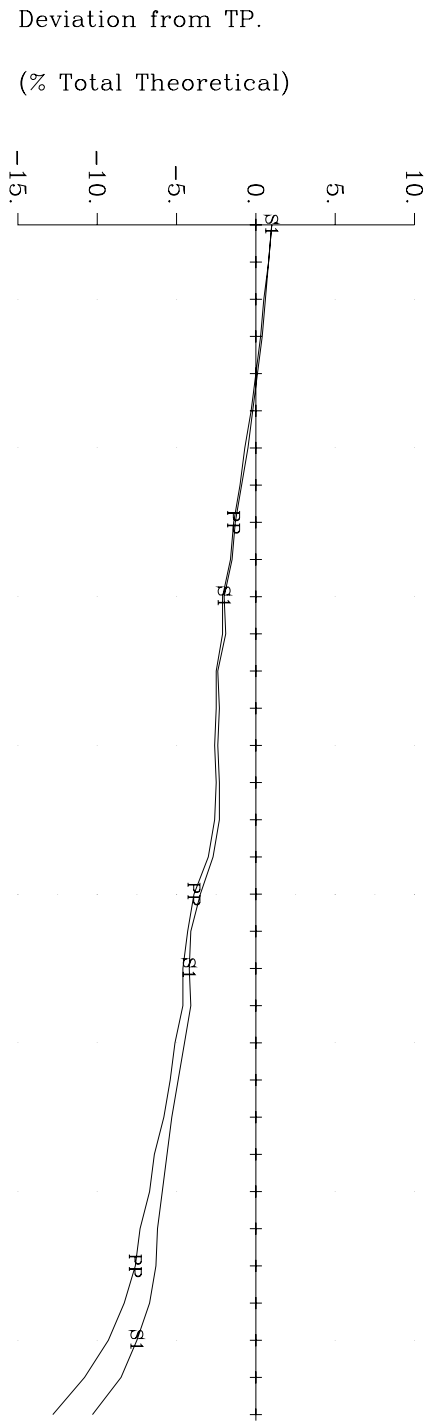
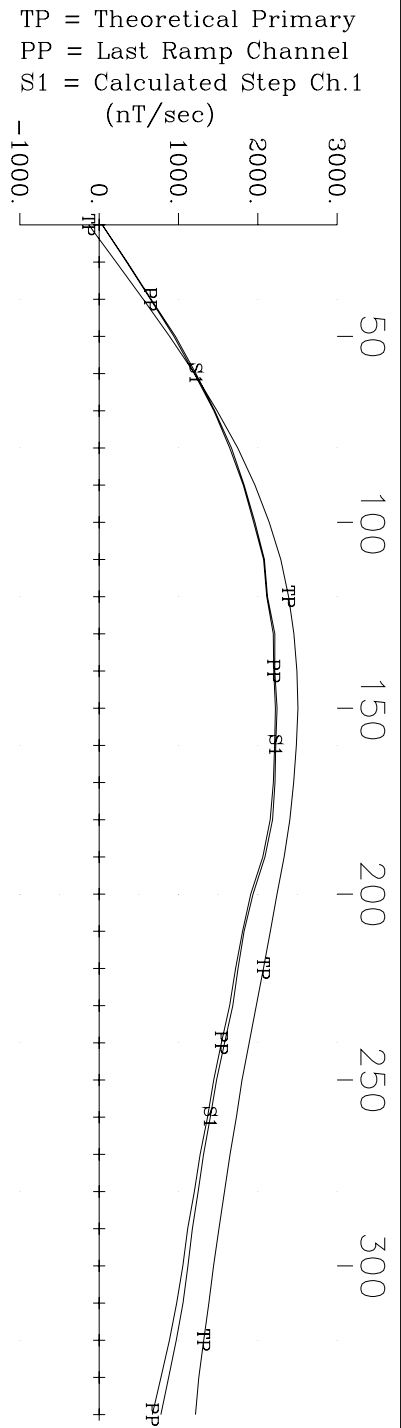
Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 19-24
 (nT/sec)

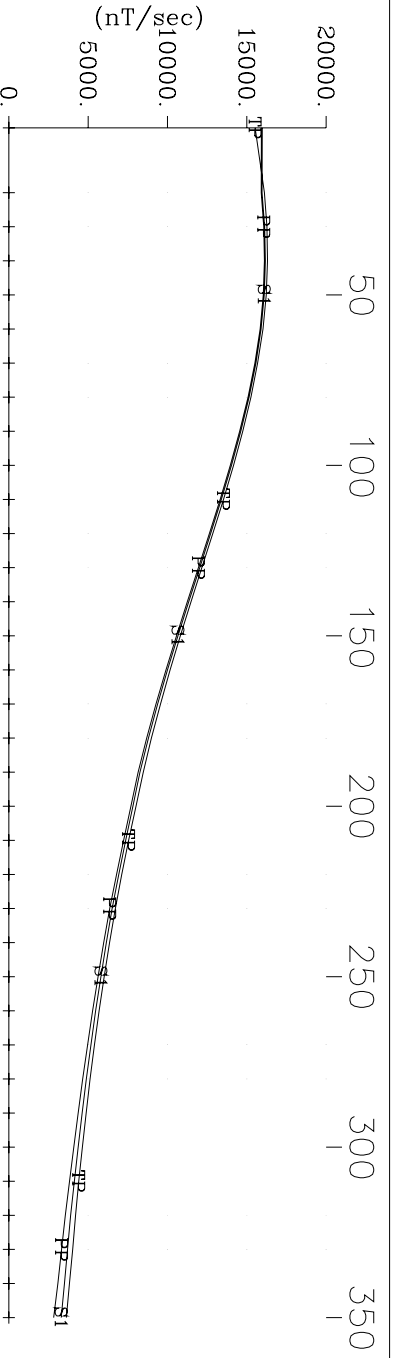


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-113 X Component
 Crone Geophysics & Exploration Ltd.

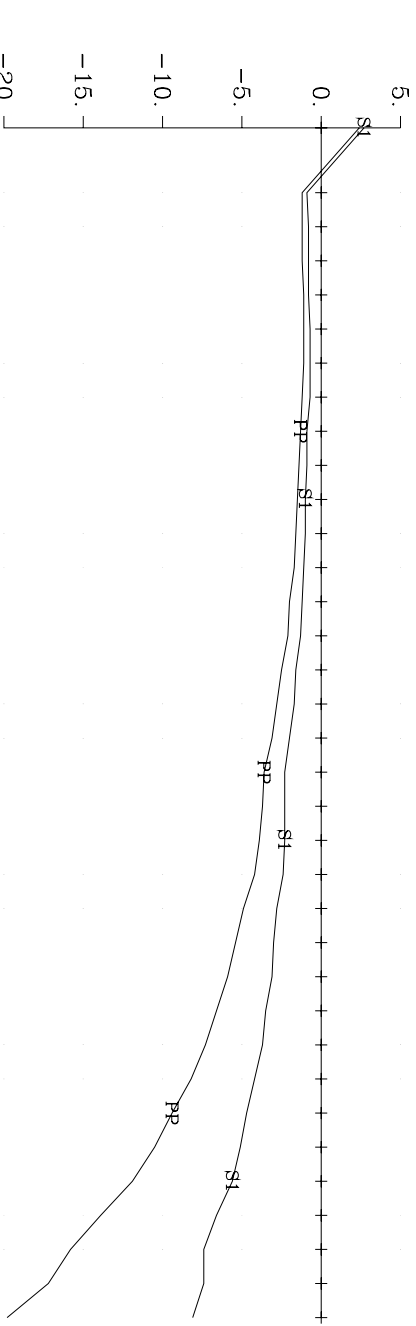


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-113 Y Component
 Crone Geophysics & Exploration Ltd.

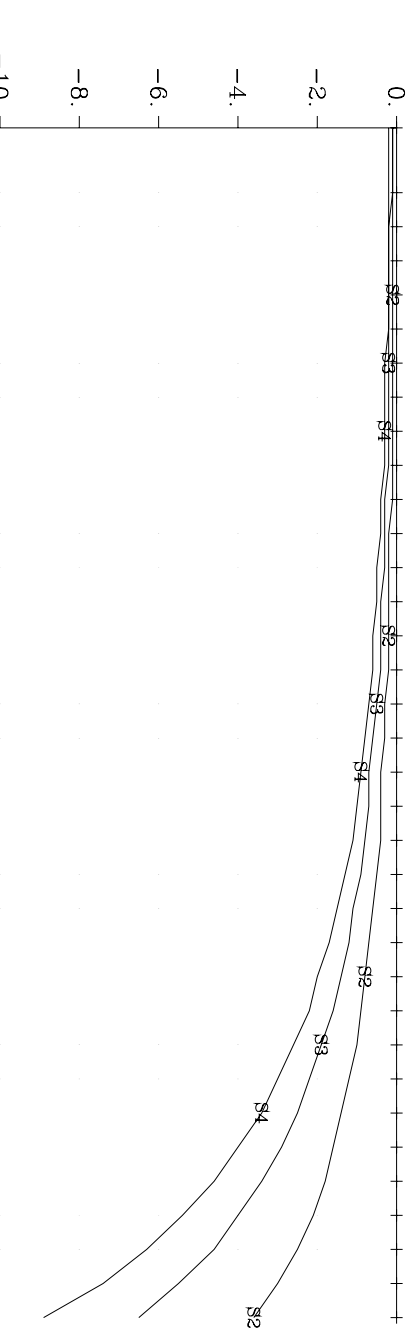
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



Deviation from TP.
 (% Total Theoretical)



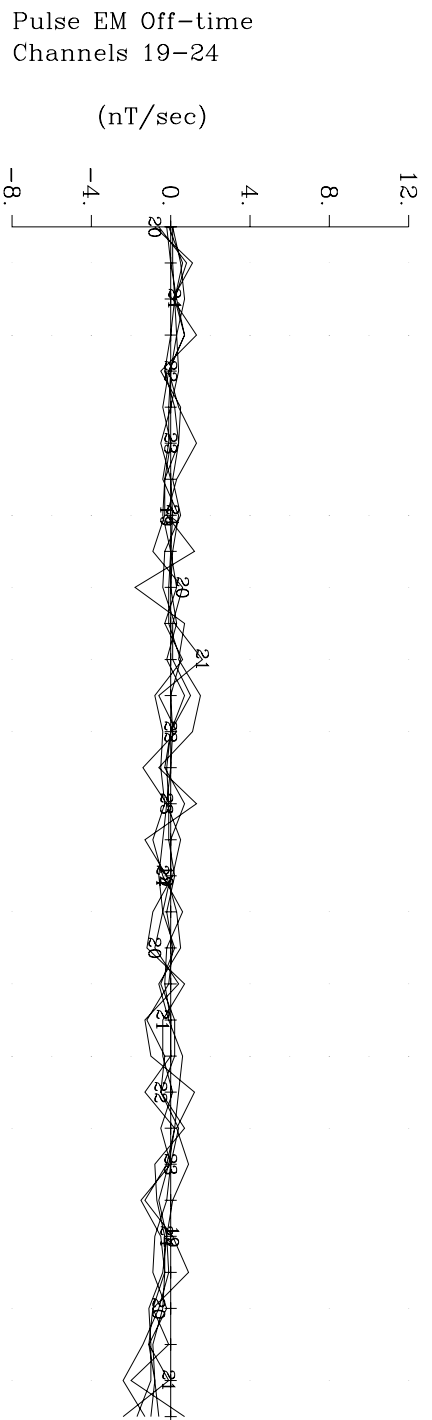
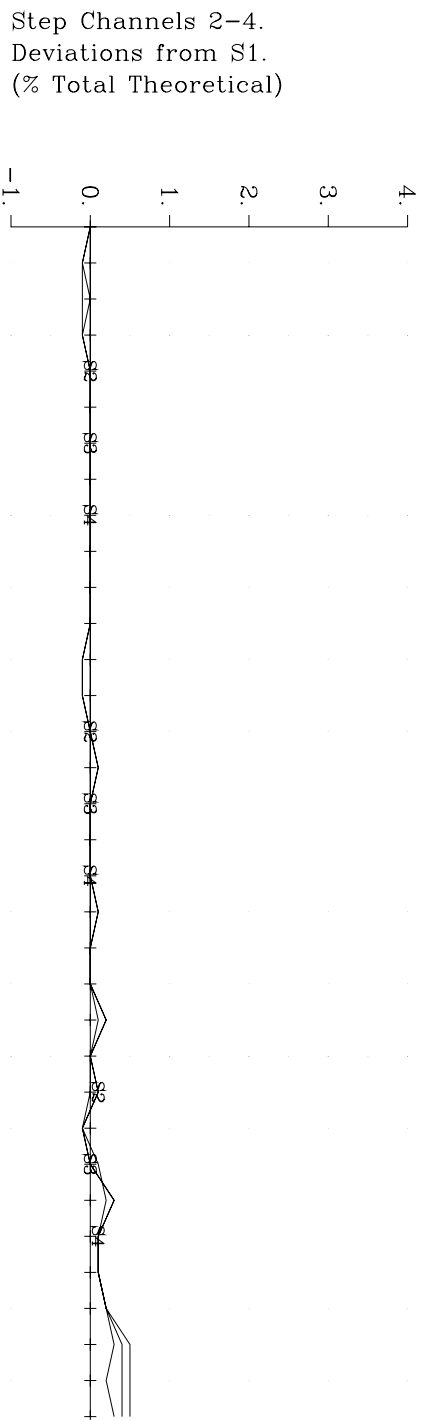
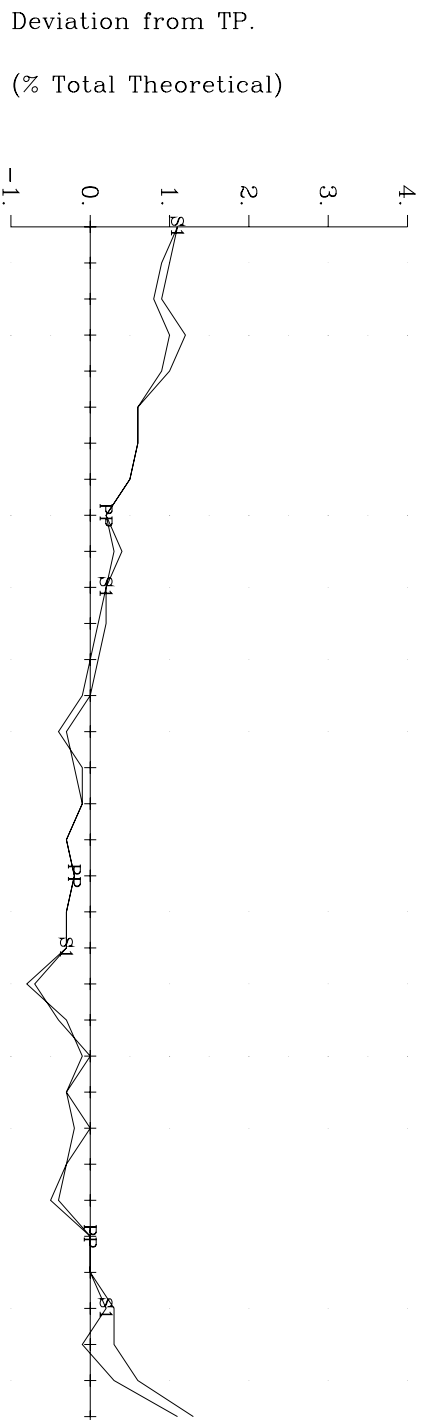
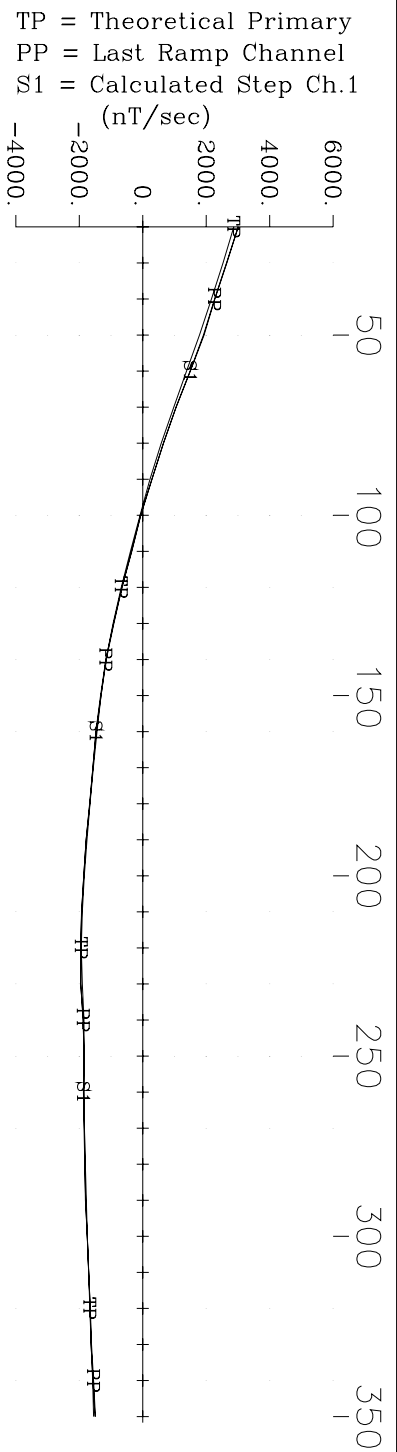
Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 19-24
 (nT/sec)

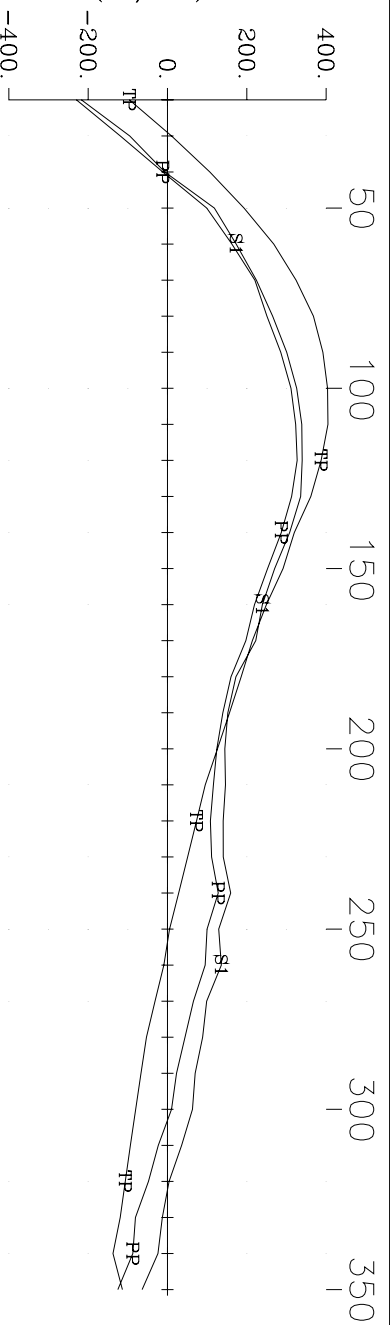


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-113 Z Component
 Crone Geophysics & Exploration Ltd.

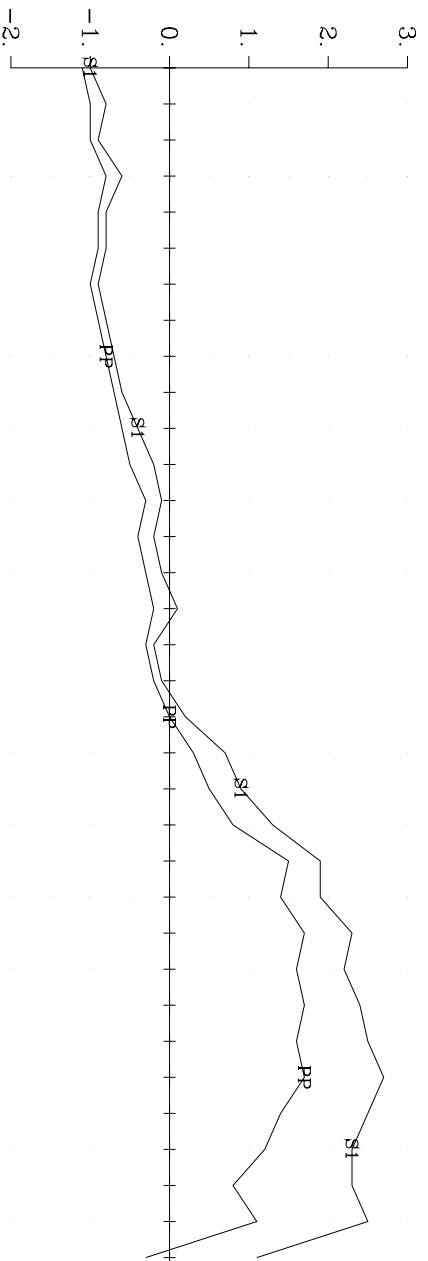


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-114 X Component
 Crone Geophysics & Exploration Ltd.

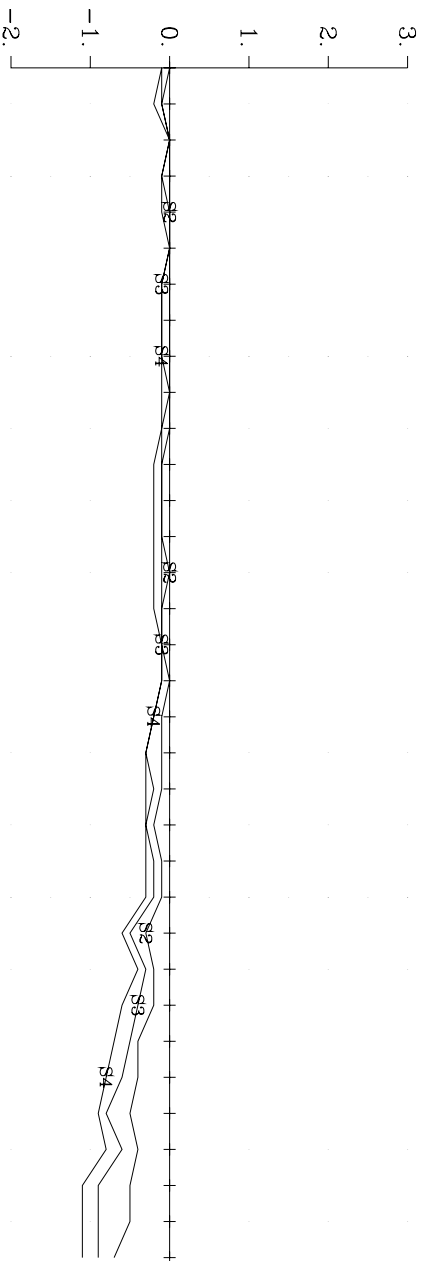
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



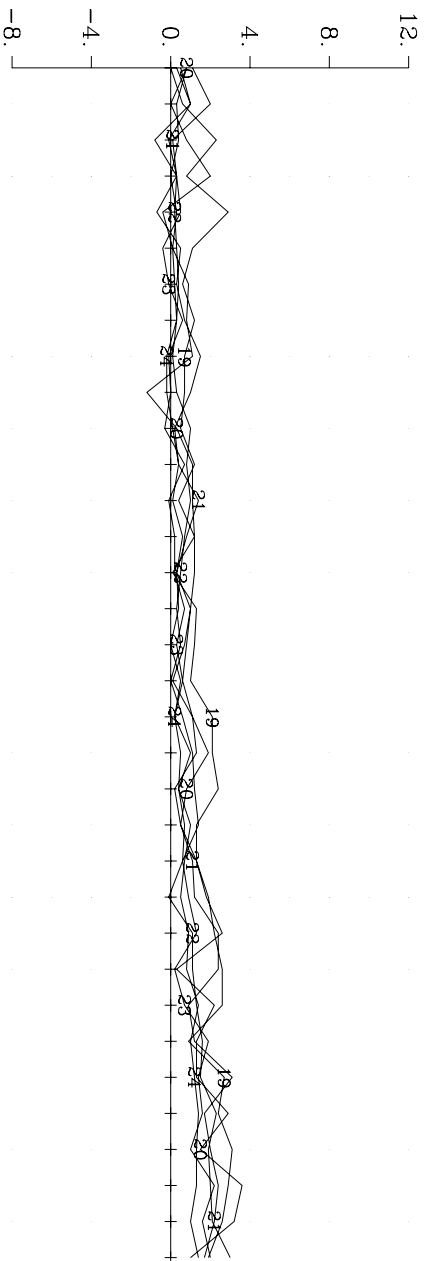
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

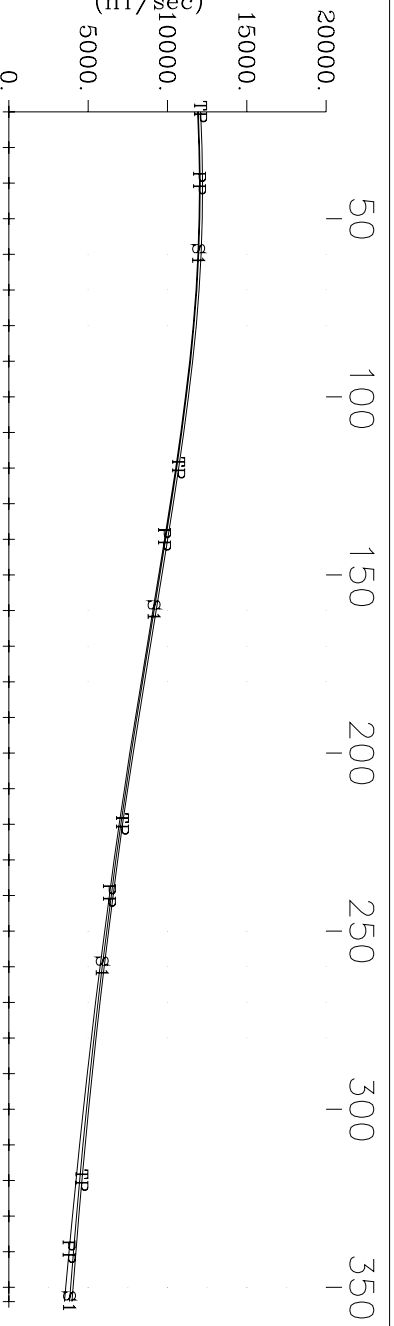


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

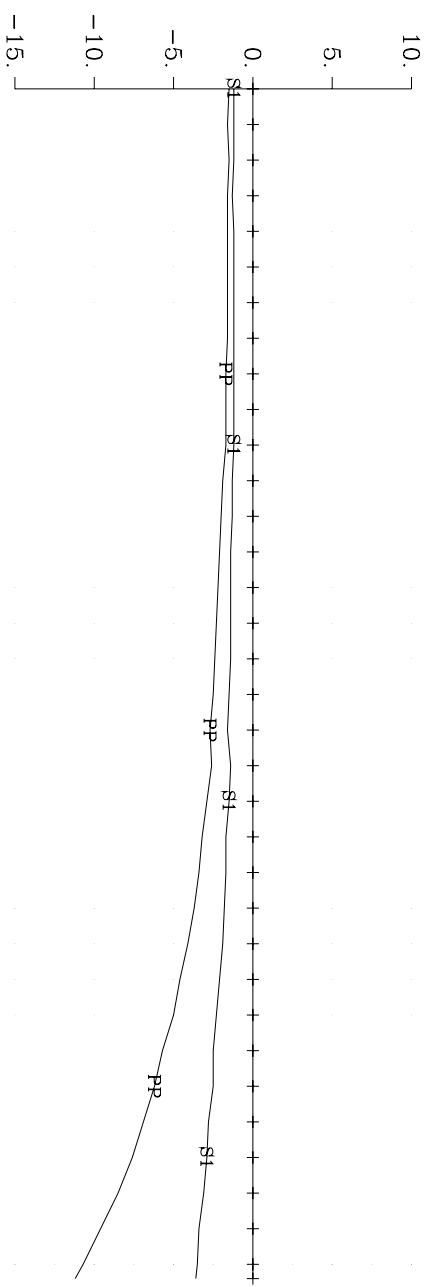


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-114 Y Component
 Crone Geophysics & Exploration Ltd.

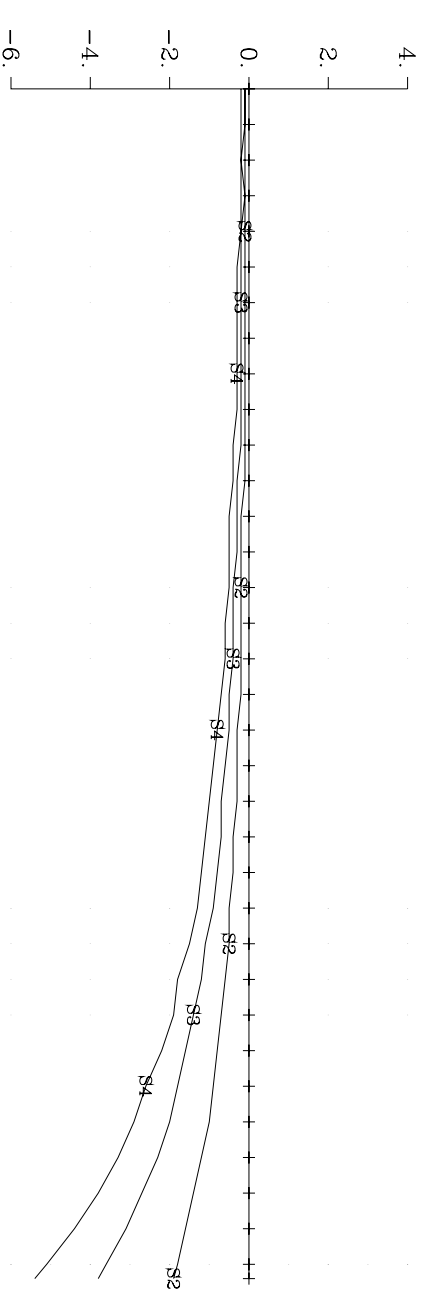
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



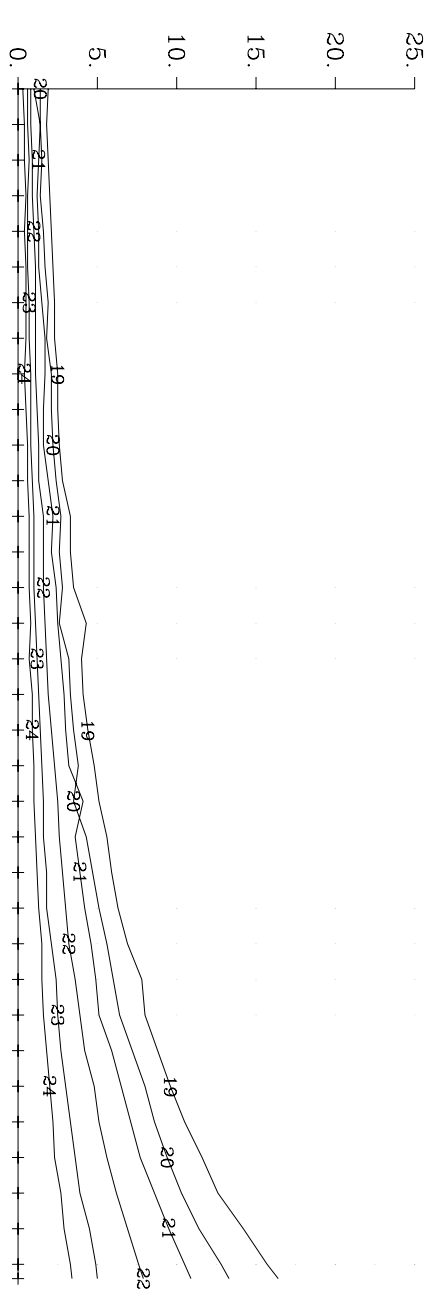
Deviation from TP.
 (% Total Theoretical)



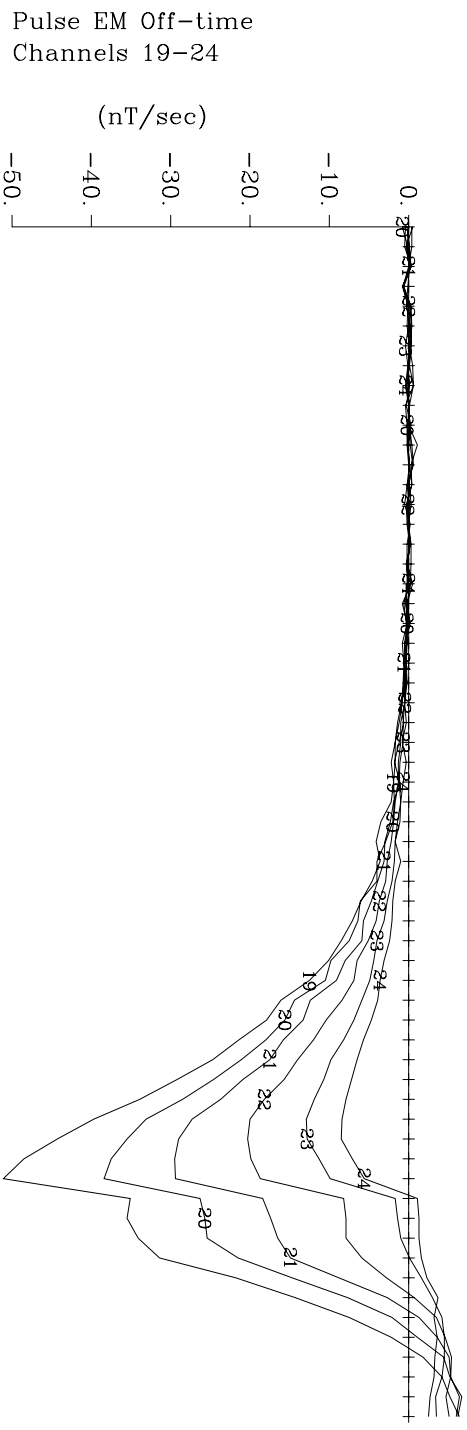
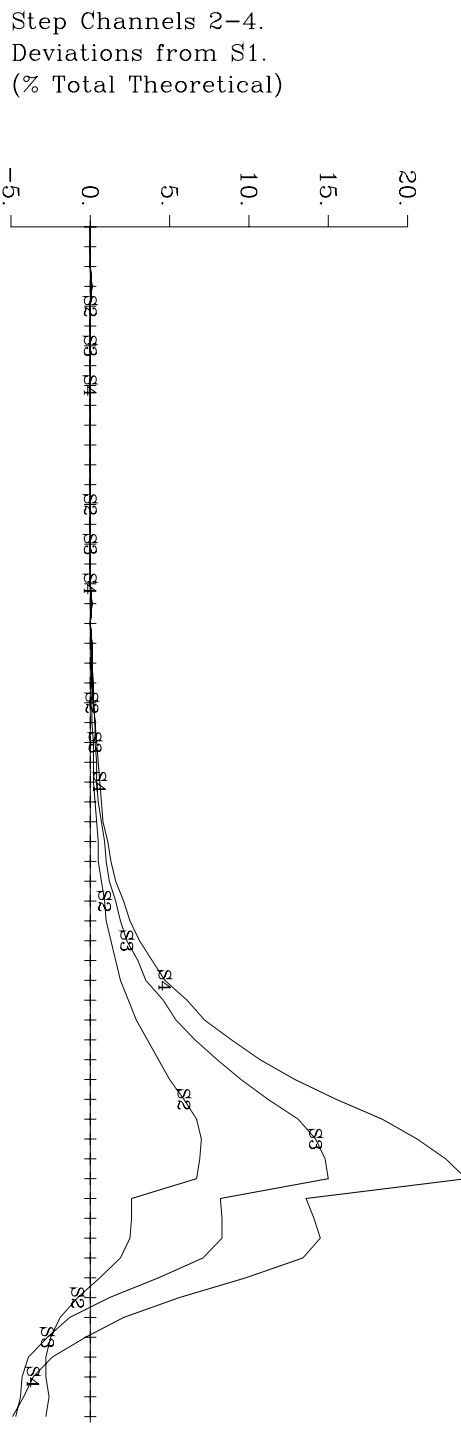
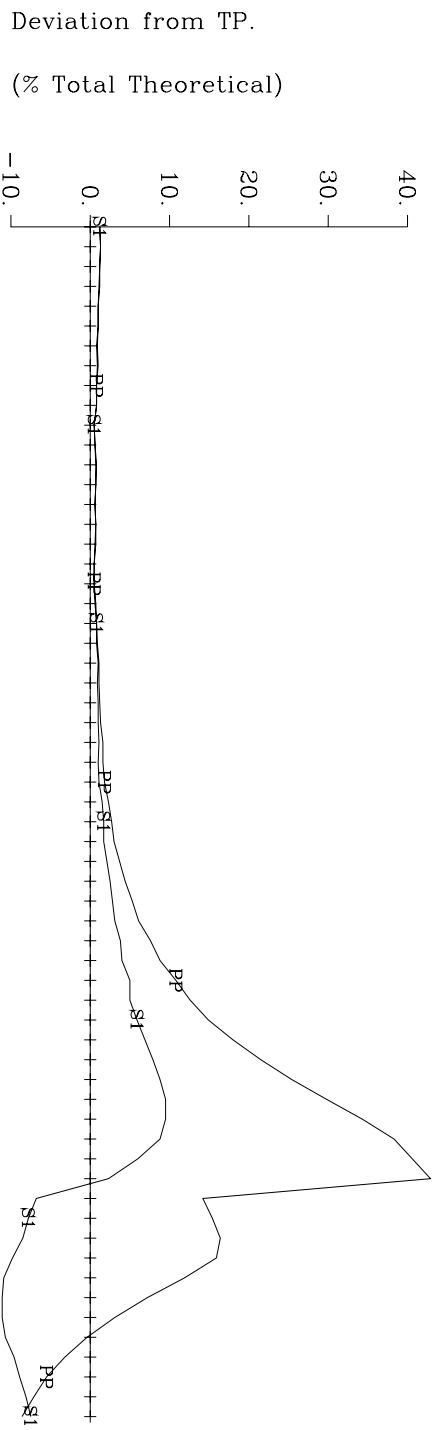
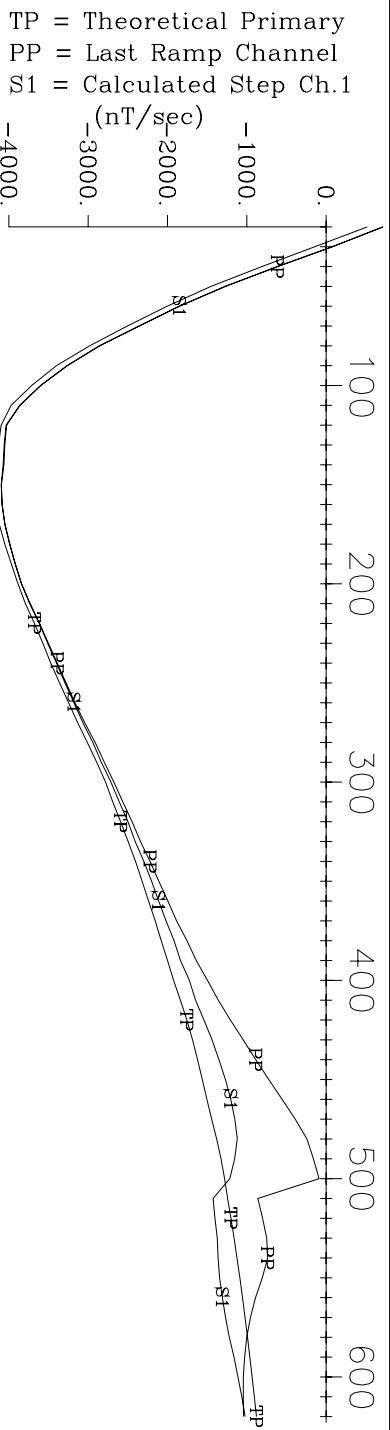
Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 19-24
 (nT/sec)

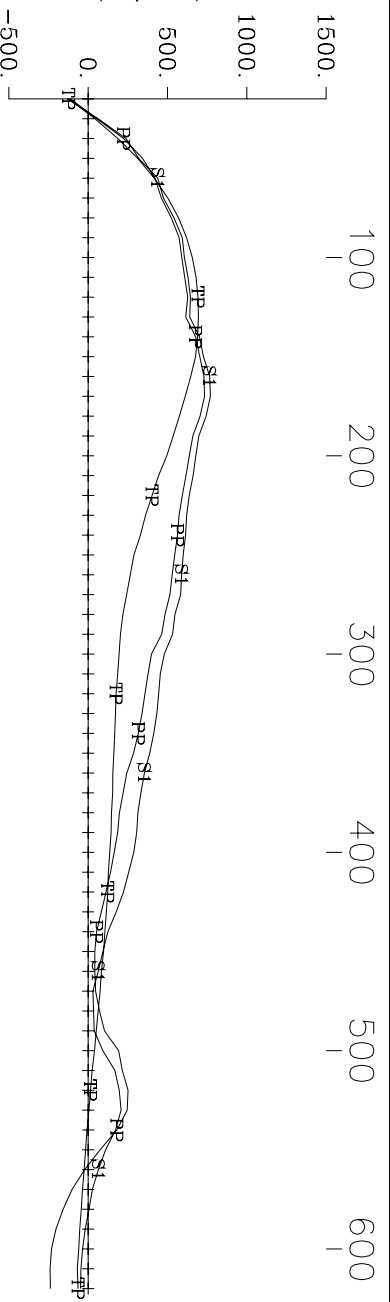


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-114 Z Component
 Crone Geophysics & Exploration Ltd.

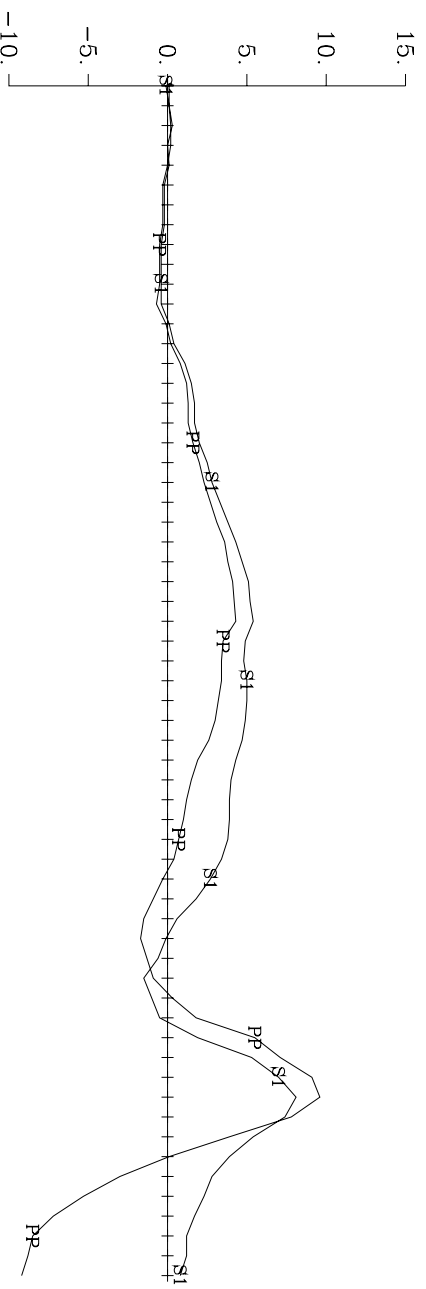


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-116 X Component
 Crone Geophysics & Exploration Ltd.

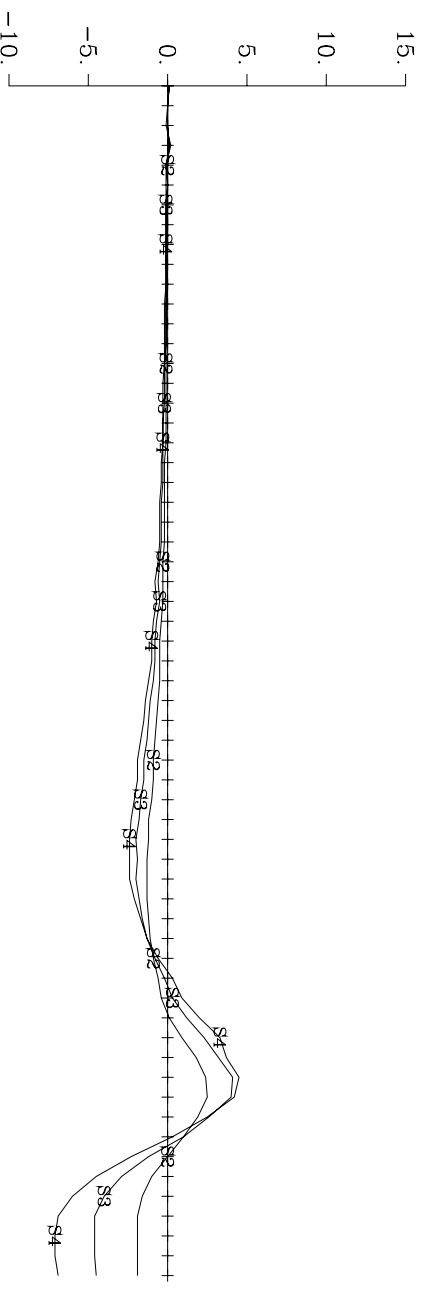
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



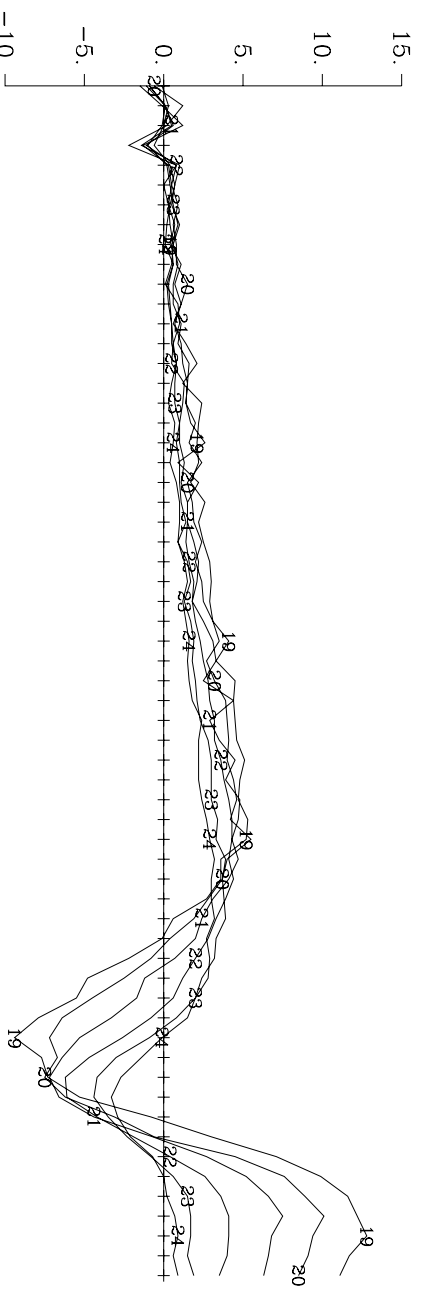
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

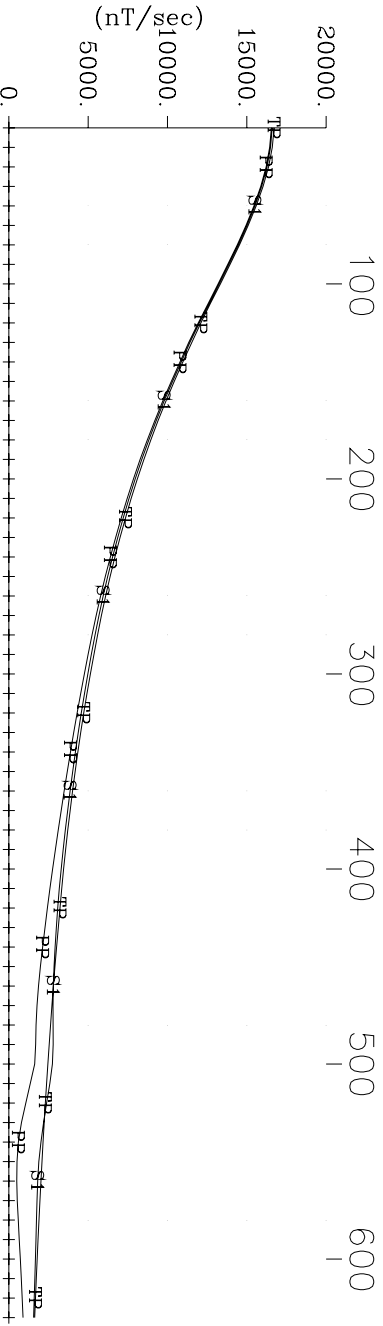


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

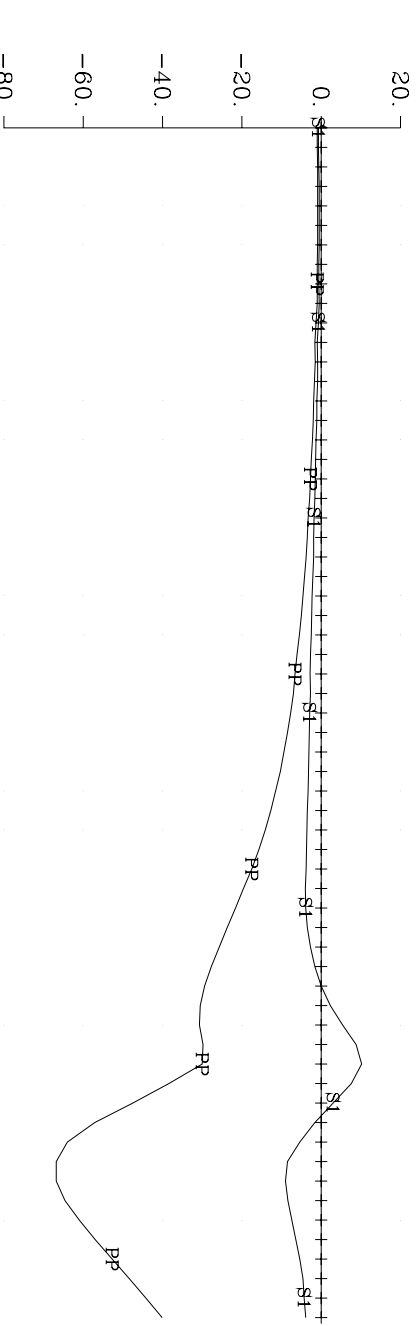


Urso Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-116 Y Component
 Crone Geophysics & Exploration Ltd.

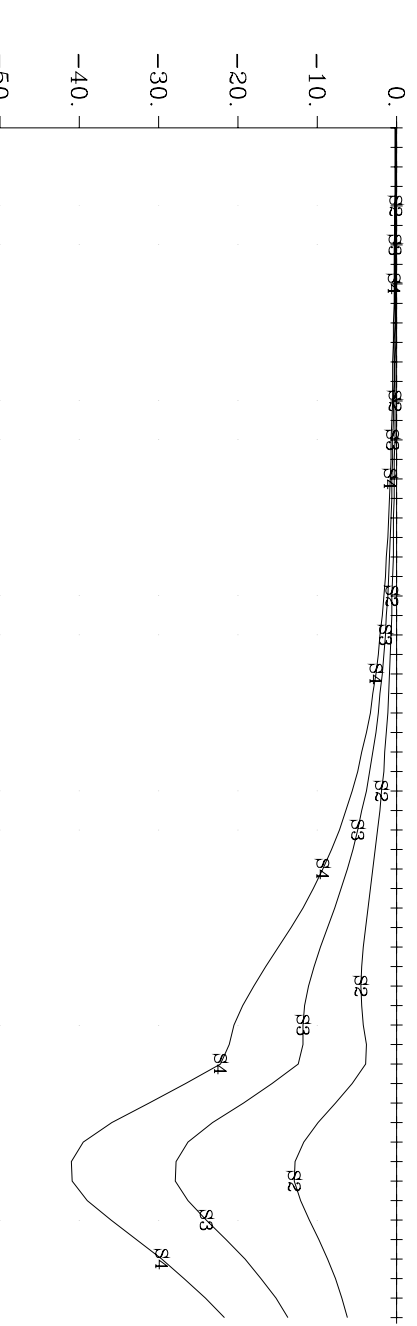
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



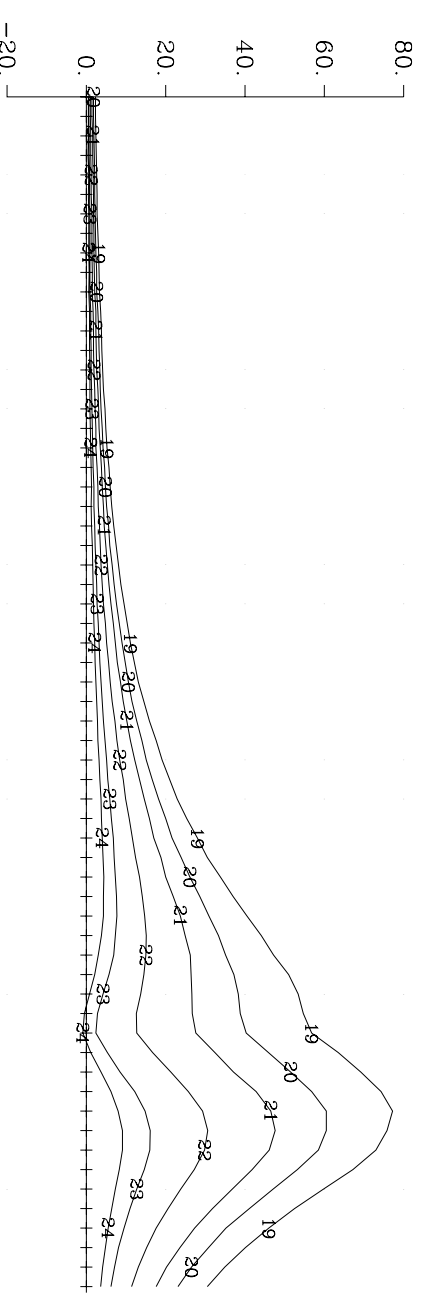
Deviation from TP.
 (% Total Theoretical)



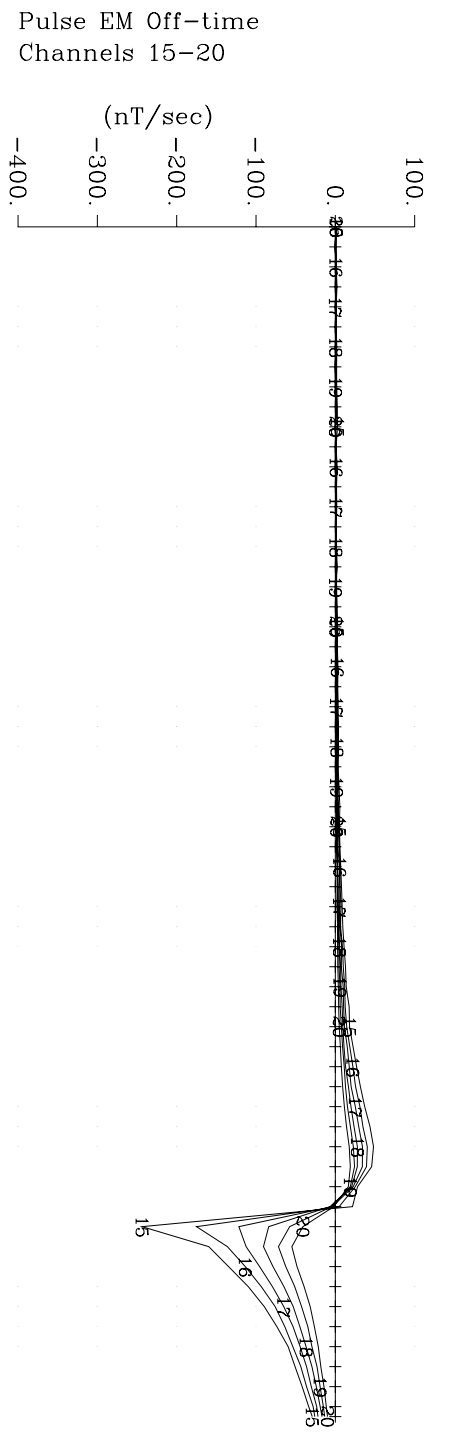
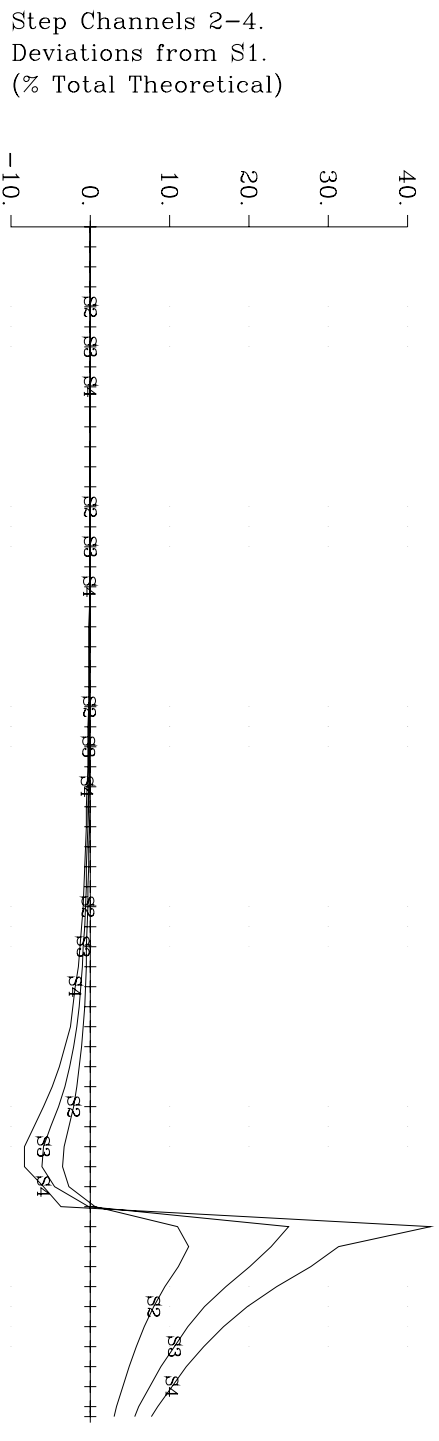
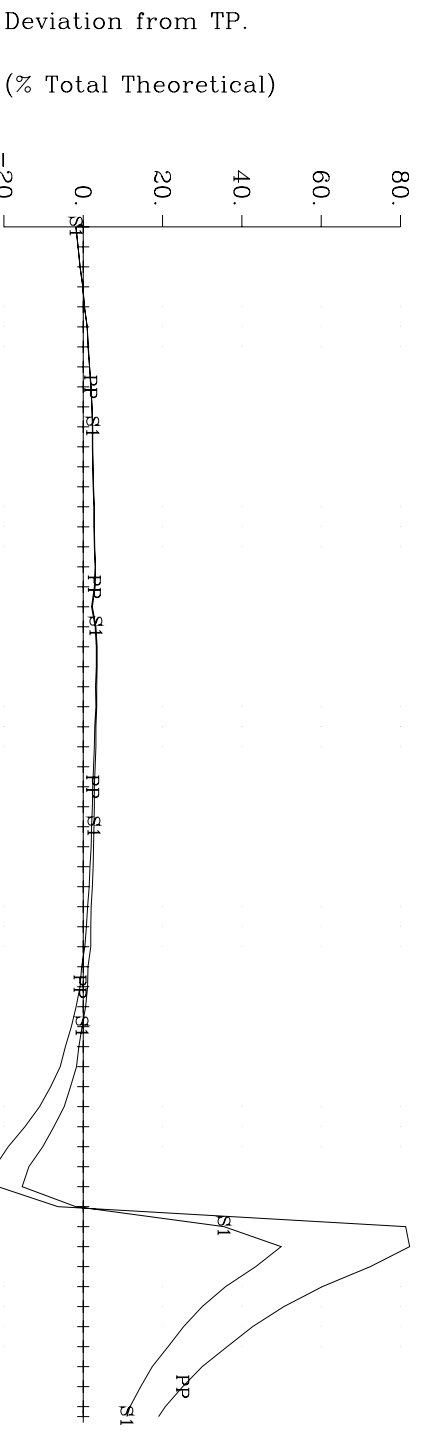
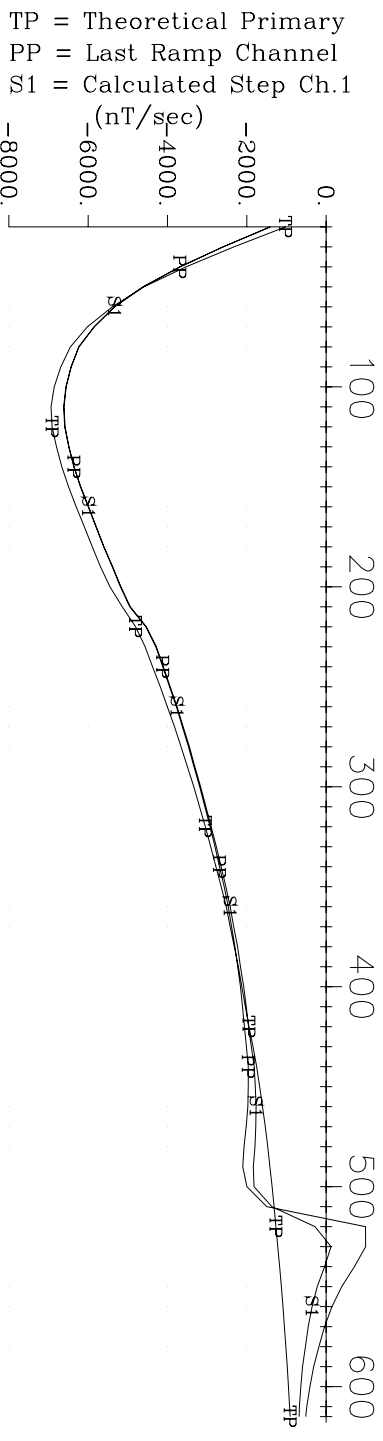
Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



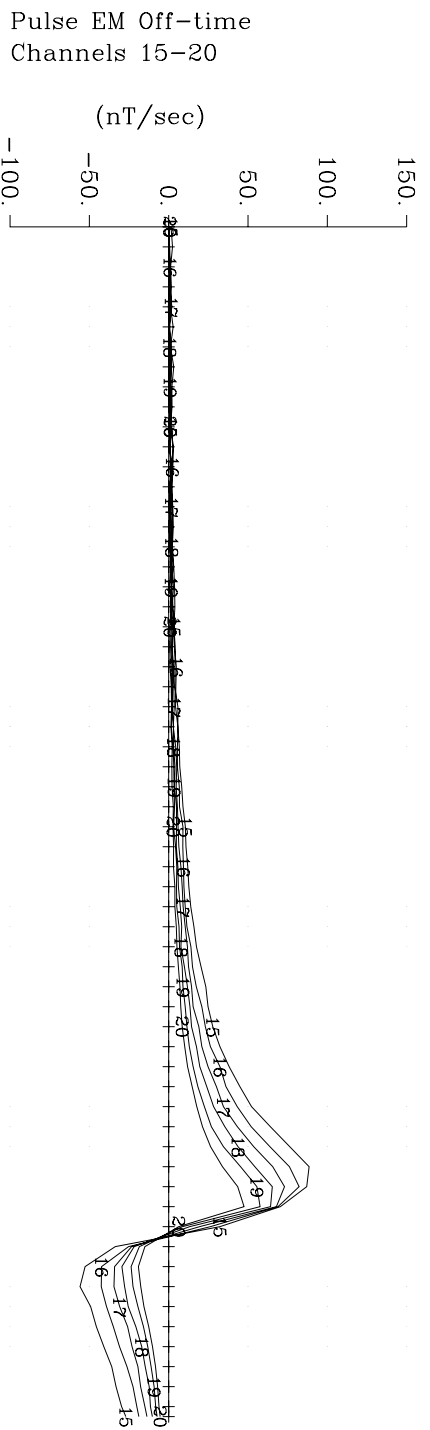
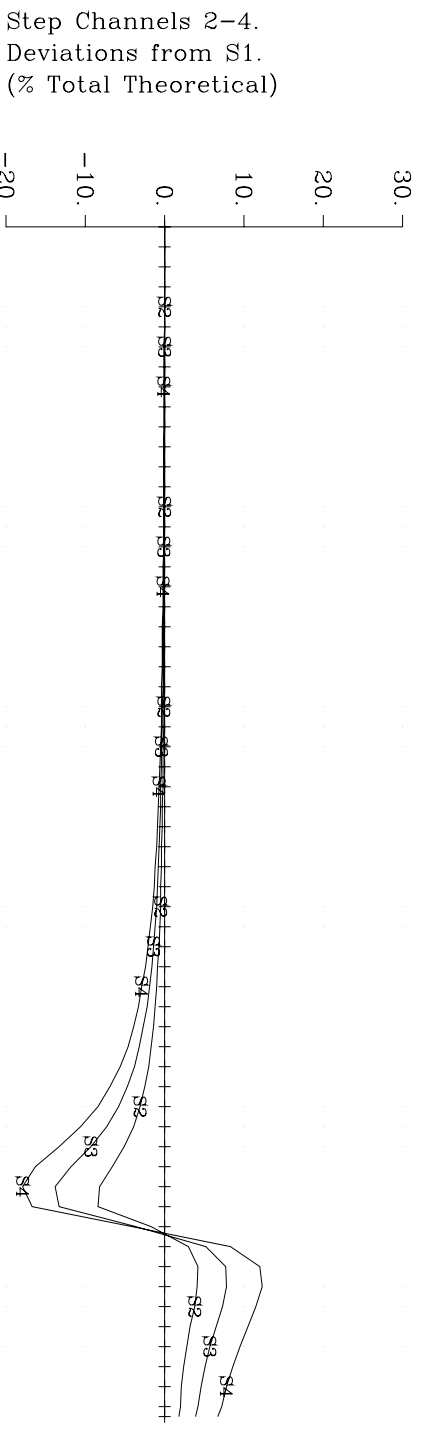
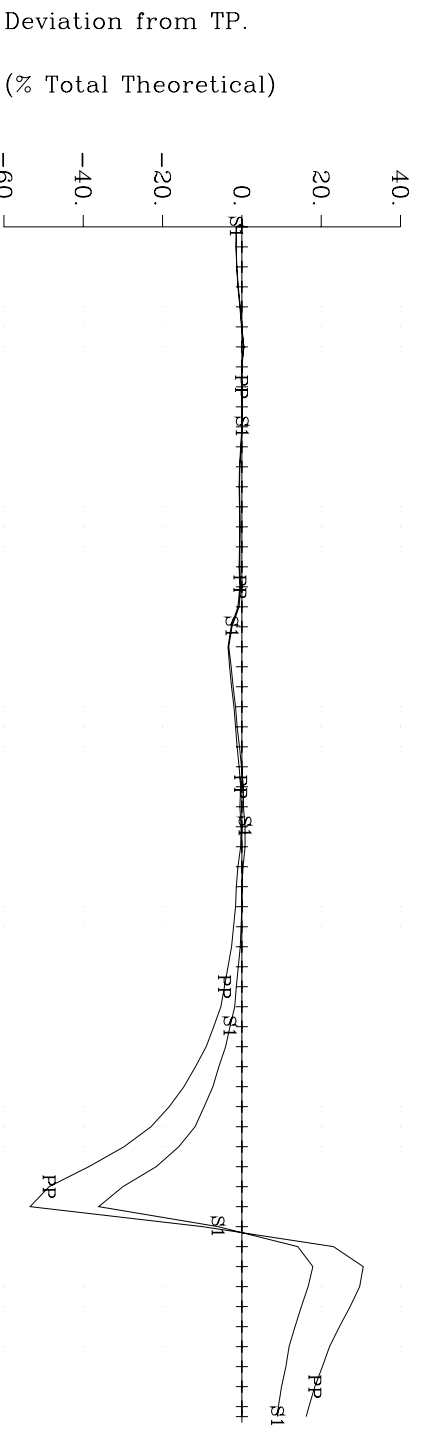
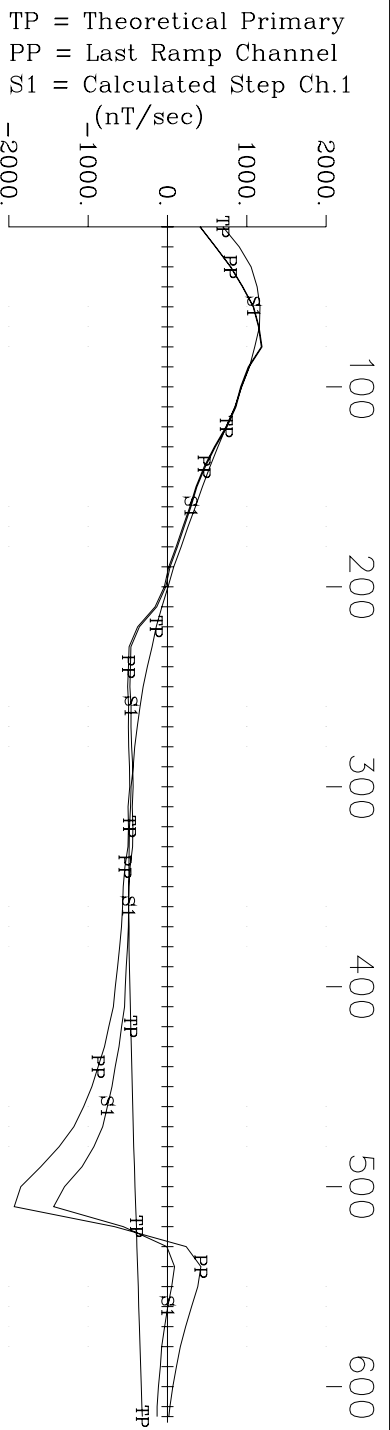
Pulse EM Off-time
 Channels 19-24
 (nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-116 Z Component
 Crone Geophysics & Exploration Ltd.

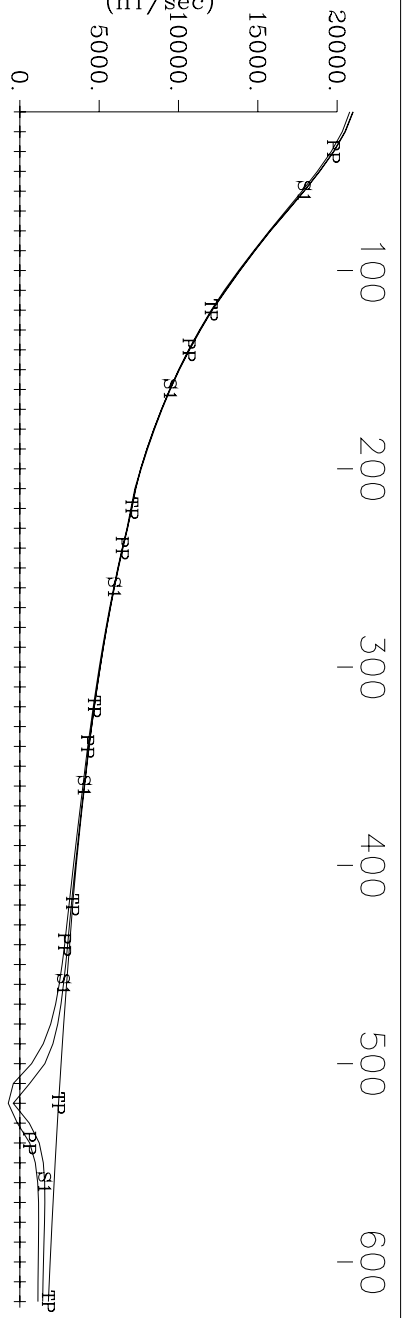


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 X Component
 Crone Geophysics & Exploration Ltd.

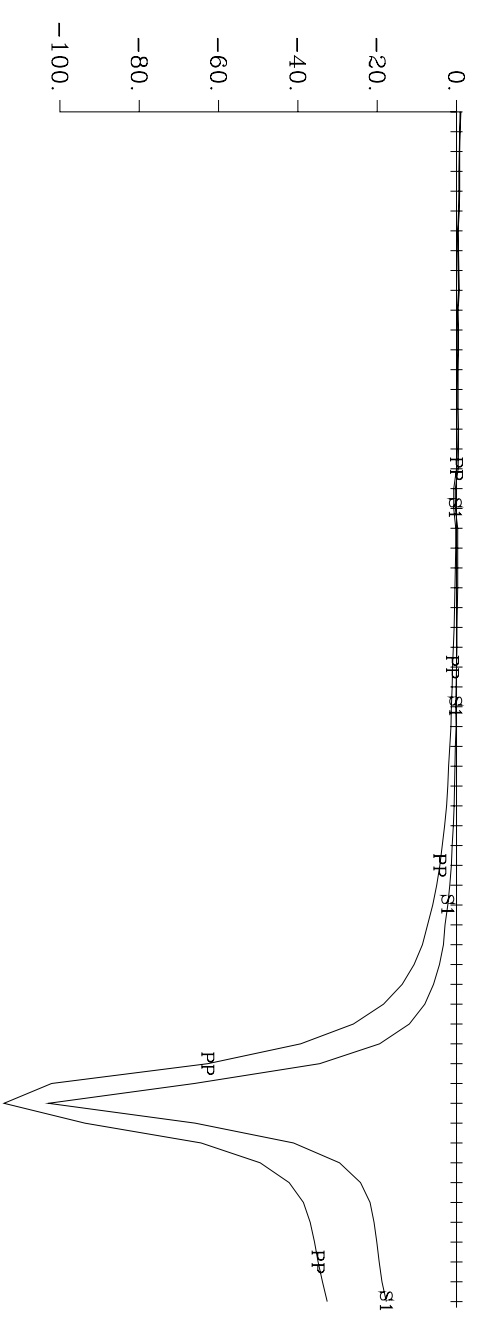


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 Y Component
 Crone Geophysics & Exploration Ltd.

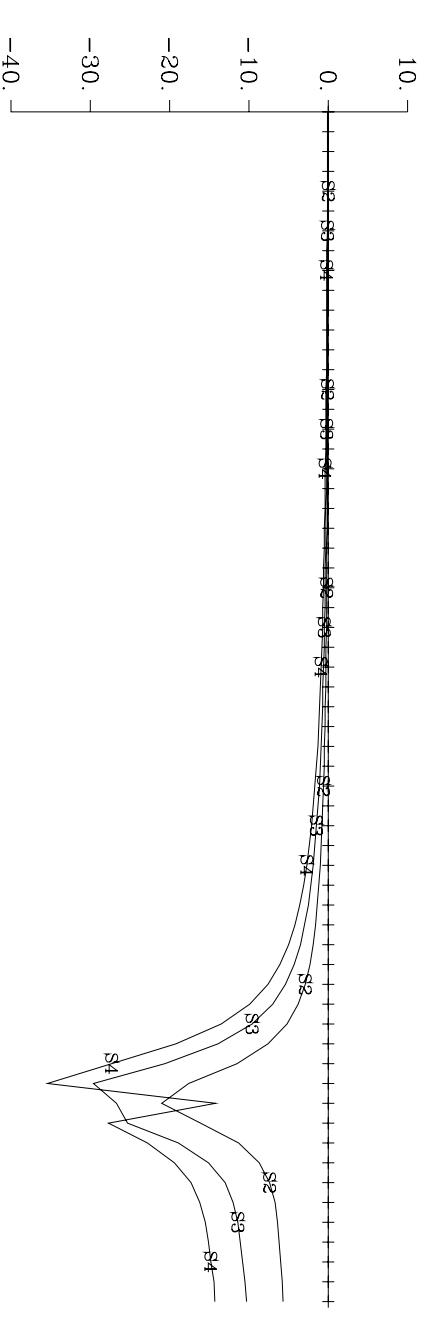
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



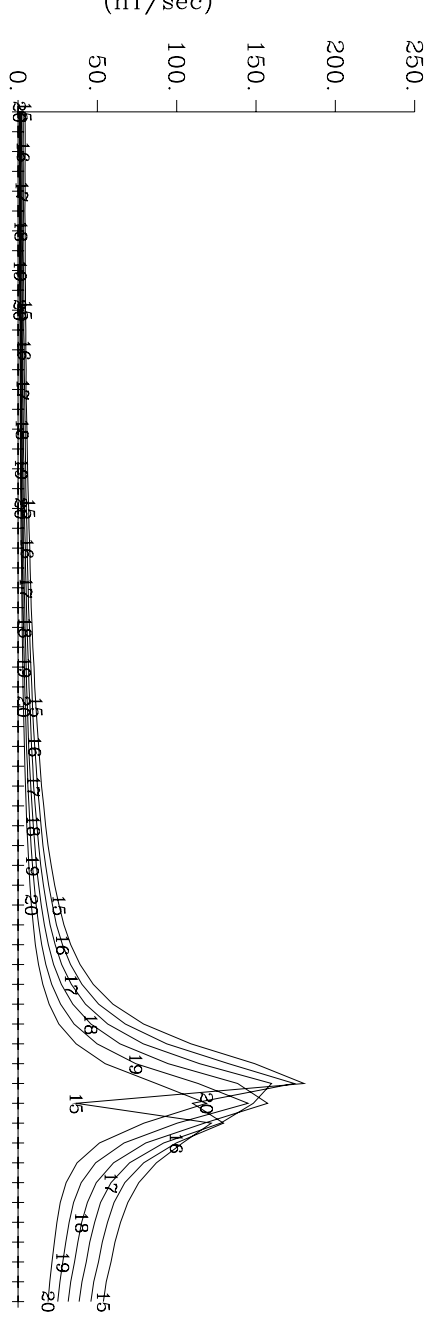
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

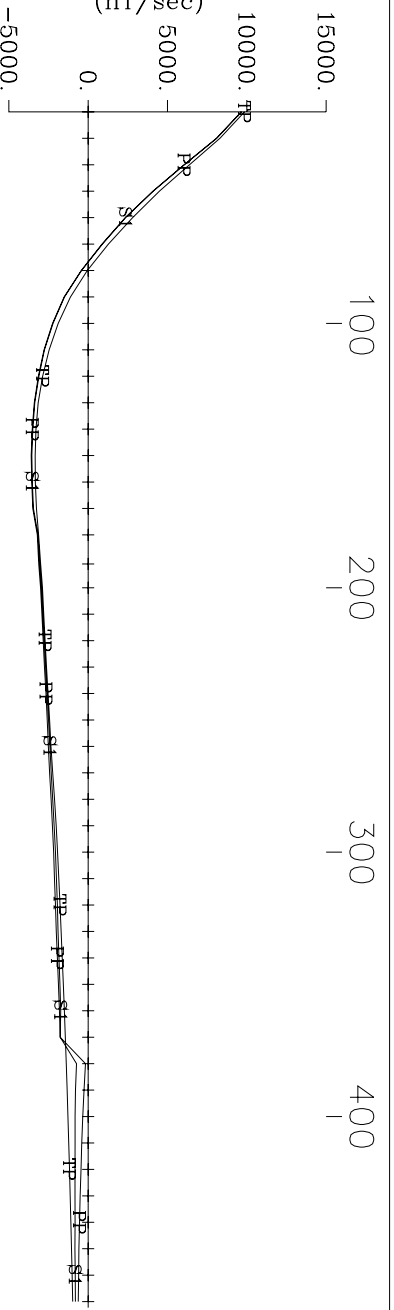


Pulse EM Off-time
 Channels 15-20
 (nT/sec)

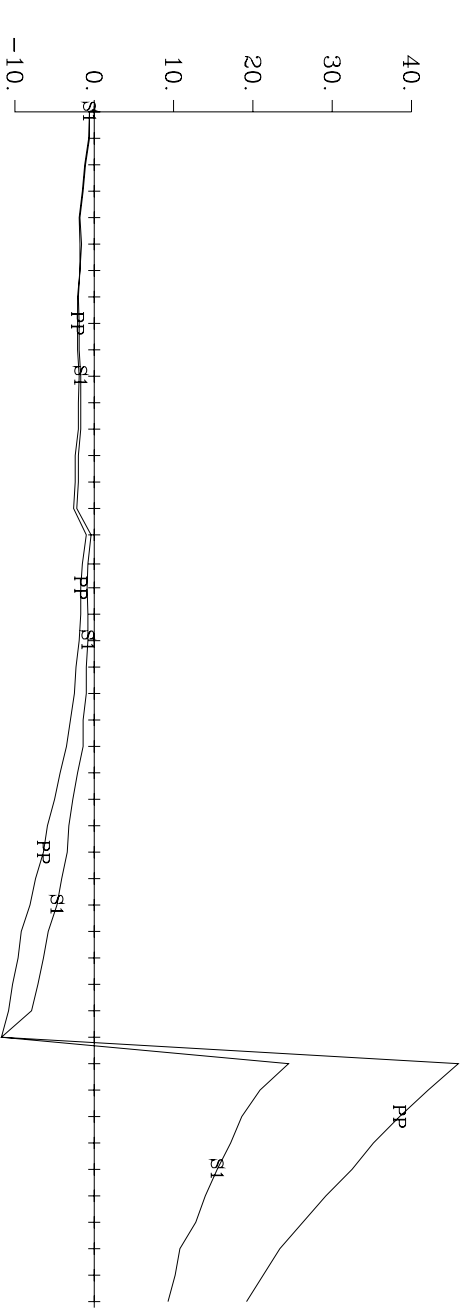


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-118 Z Component
 Crone Geophysics & Exploration Ltd.

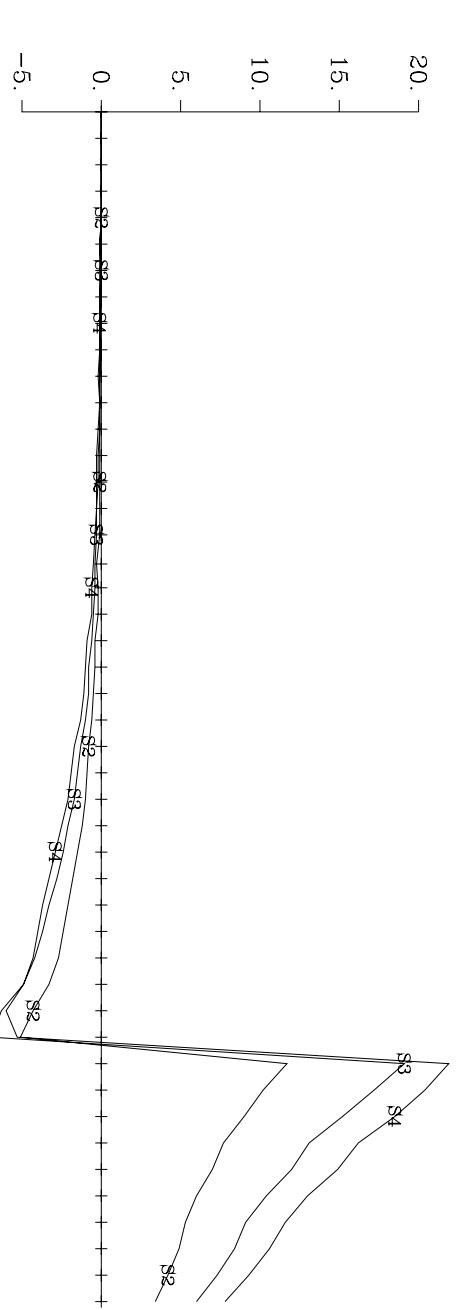
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



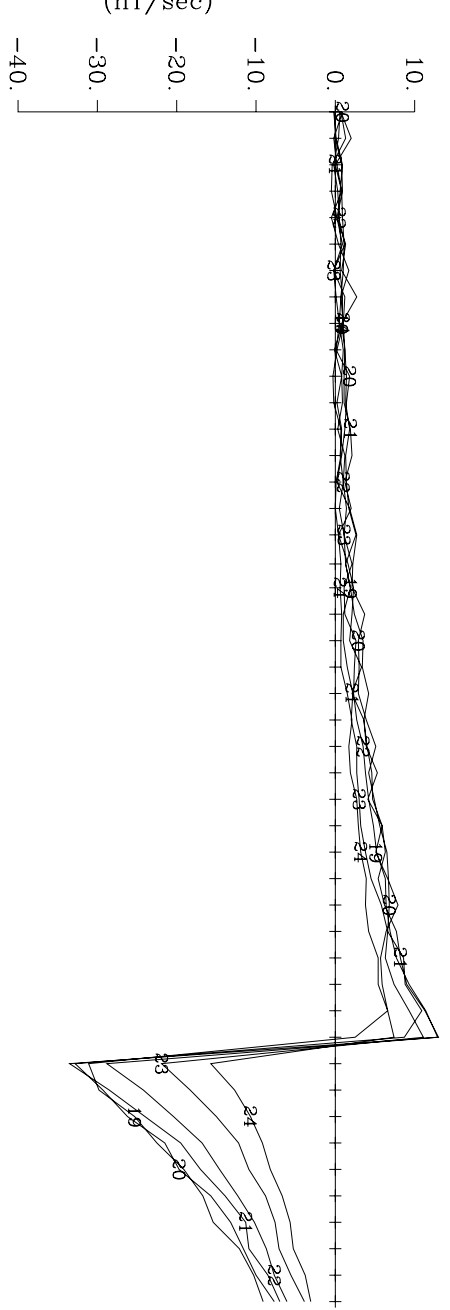
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

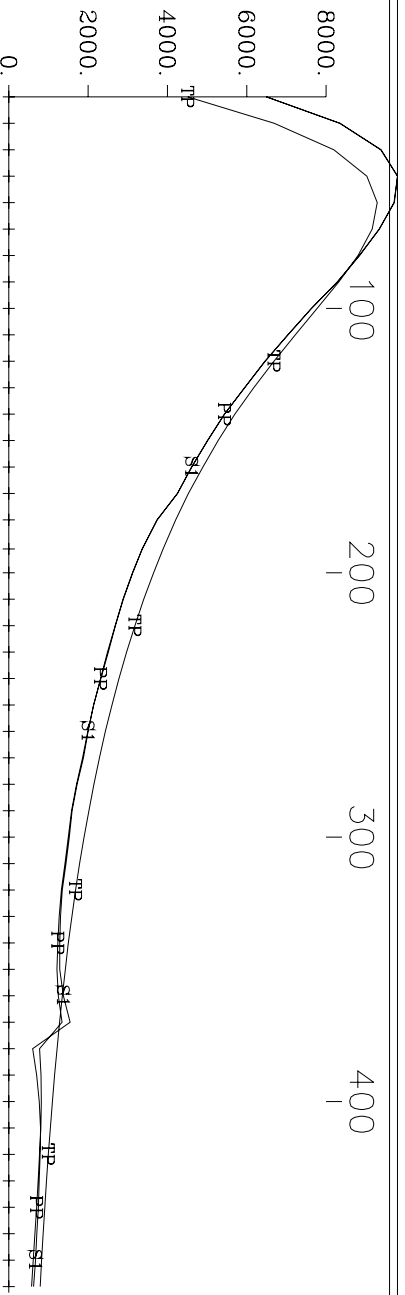


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

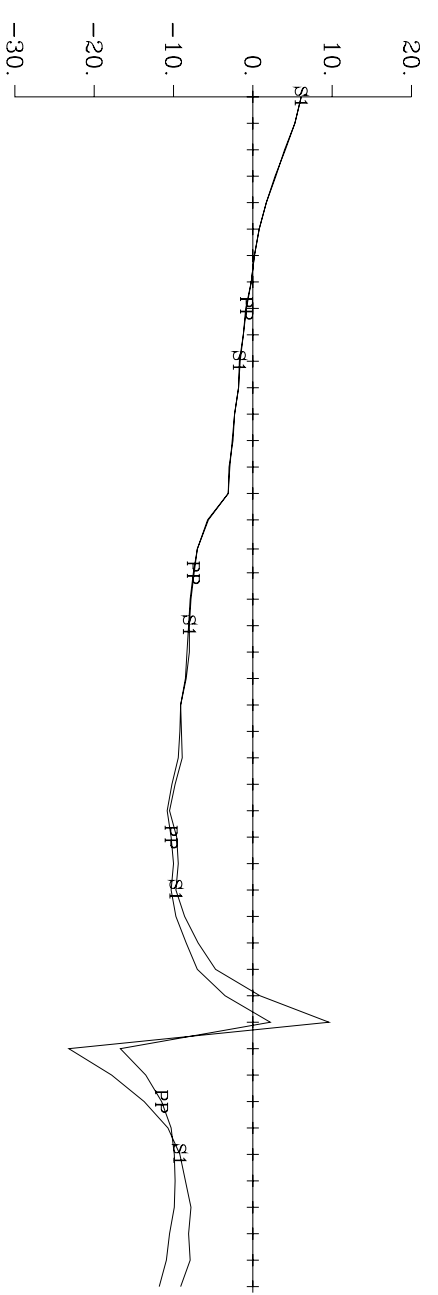


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-120 X Component
 Crone Geophysics & Exploration Ltd.

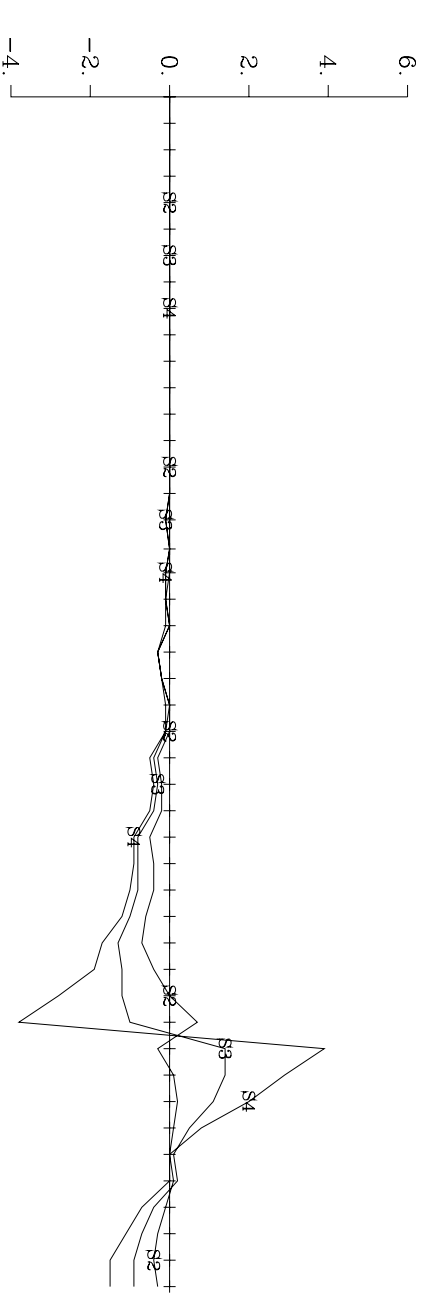
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



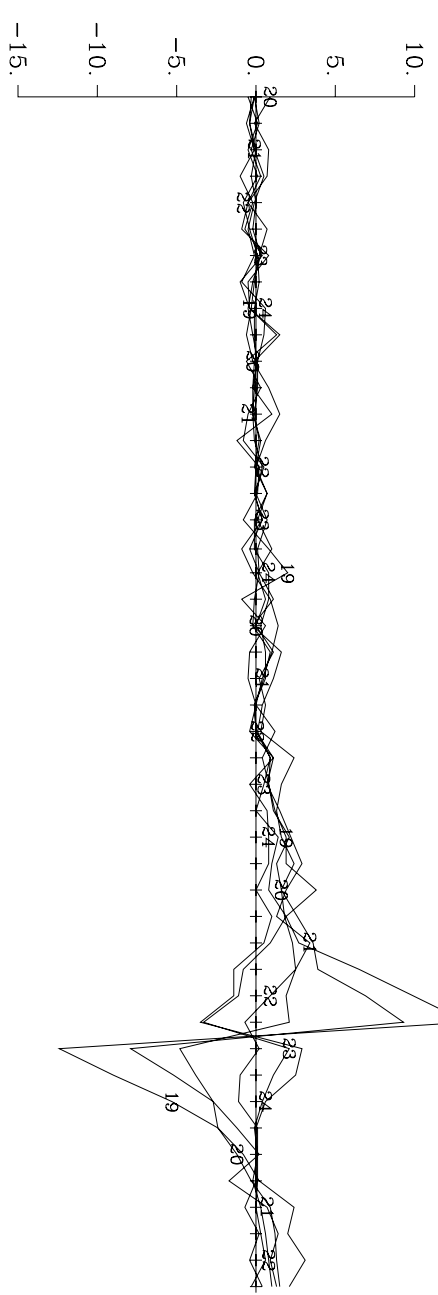
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

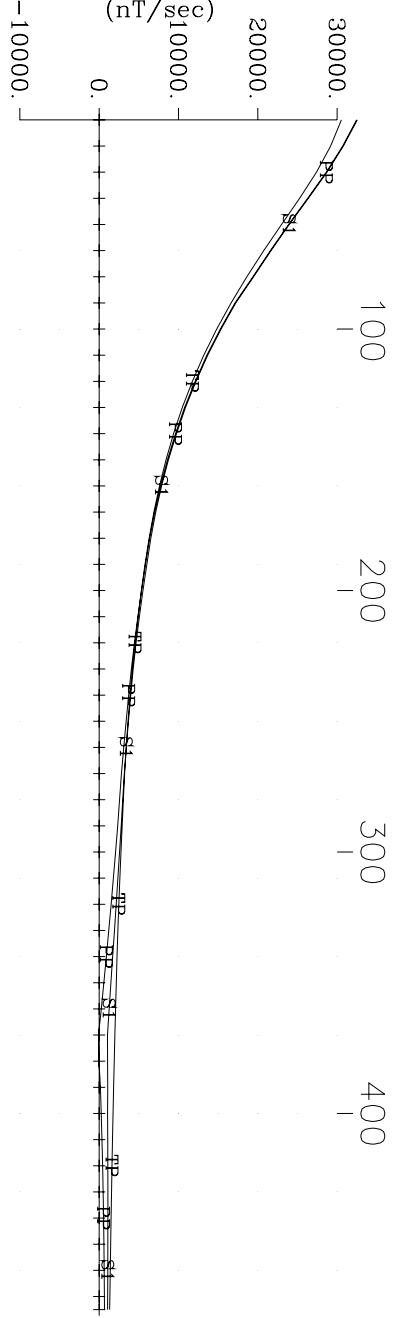


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

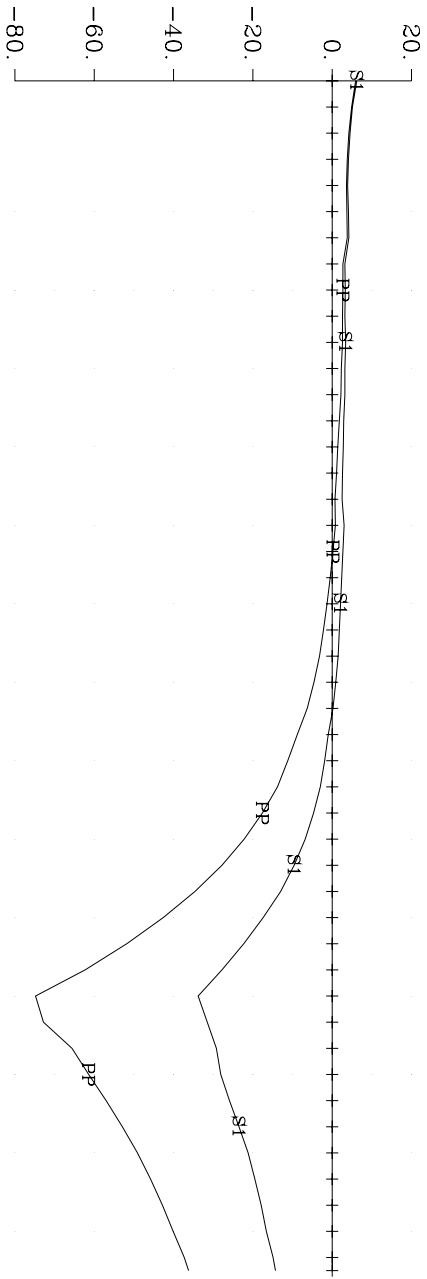


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-120 Y Component
 Crone Geophysics & Exploration Ltd.

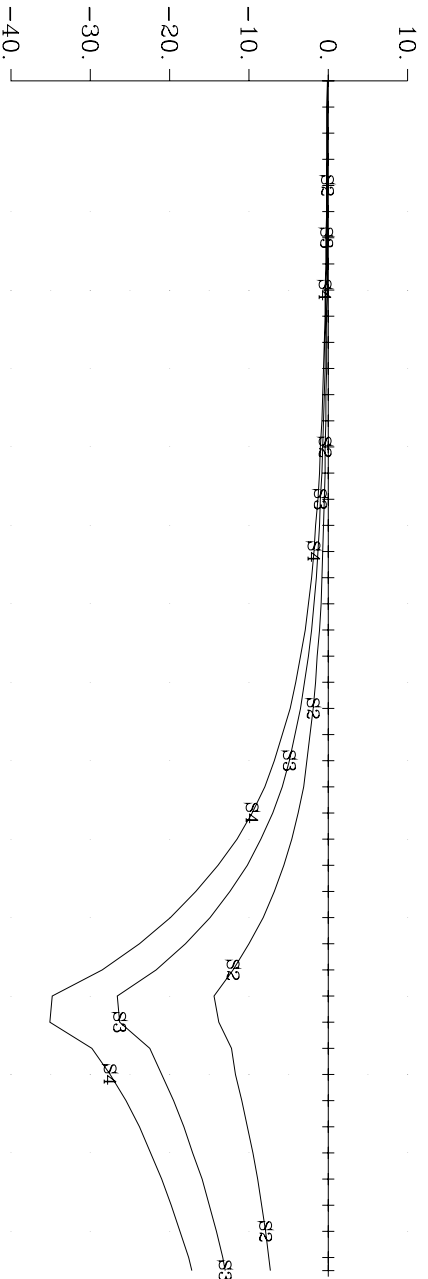
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

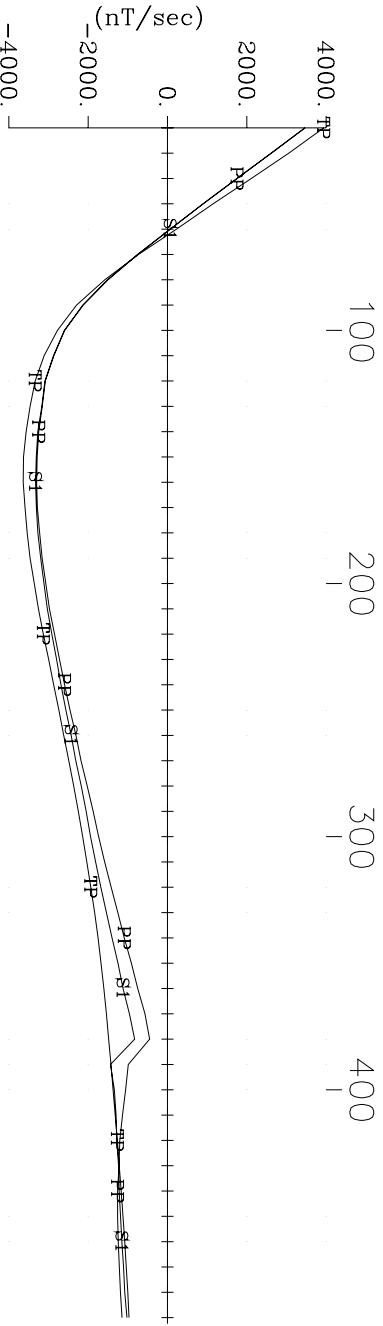


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

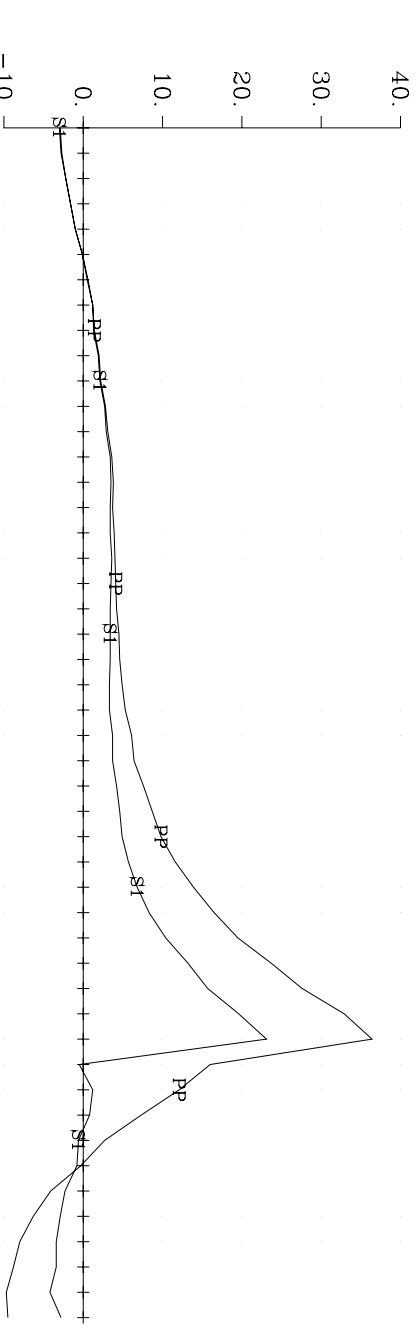


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 1, Hole U-03-120 Z Component
 Crone Geophysics & Exploration Ltd.

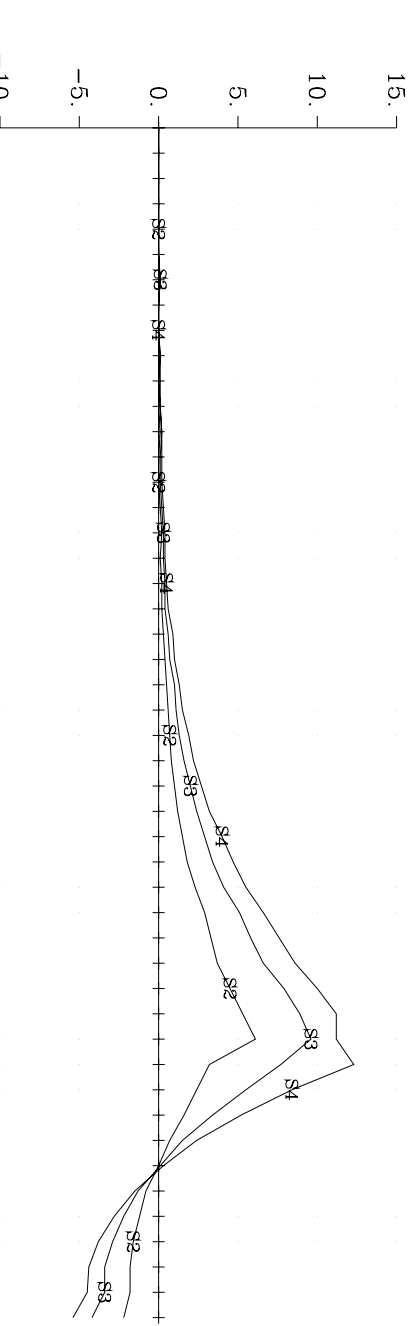
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 S1 = Calculated Step Ch.1



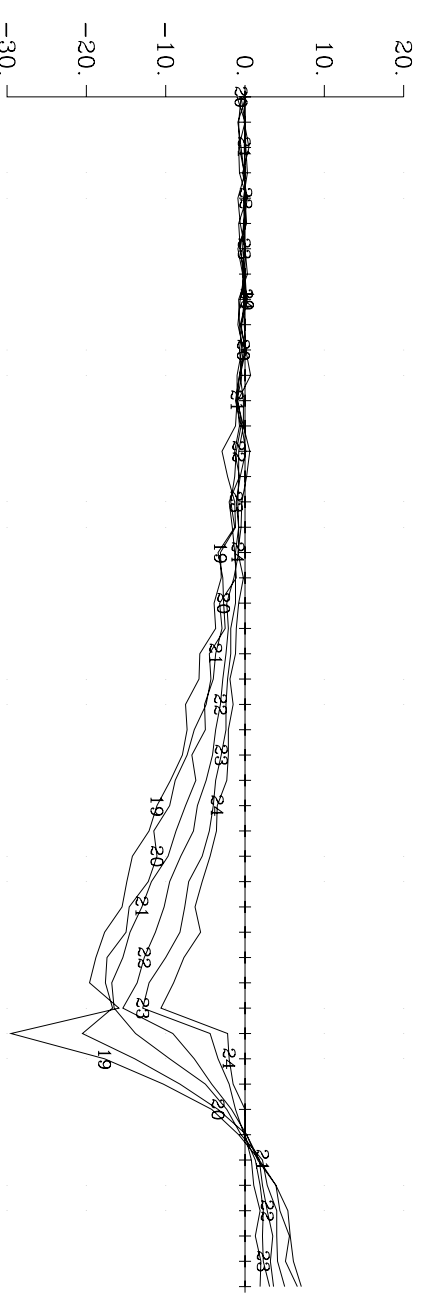
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

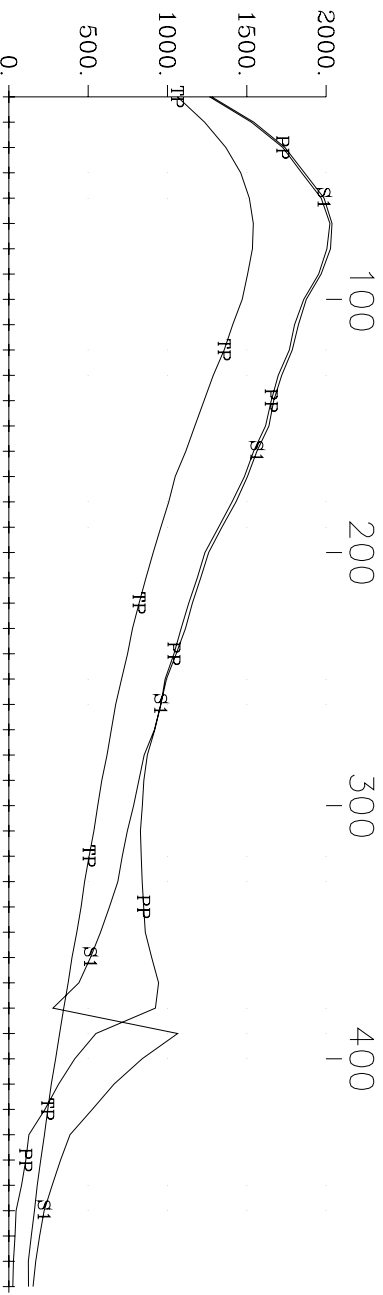


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

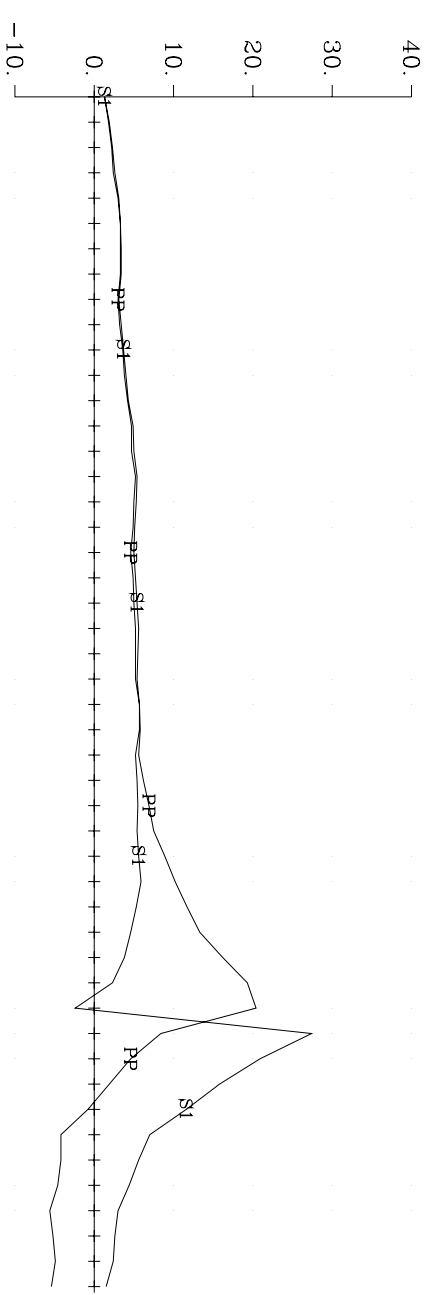


Ursa Major Minerals Inc. Shakespeare East Property
 Loop 2, Hole U-03-121 X Component
 Crone Geophysics & Exploration Ltd.

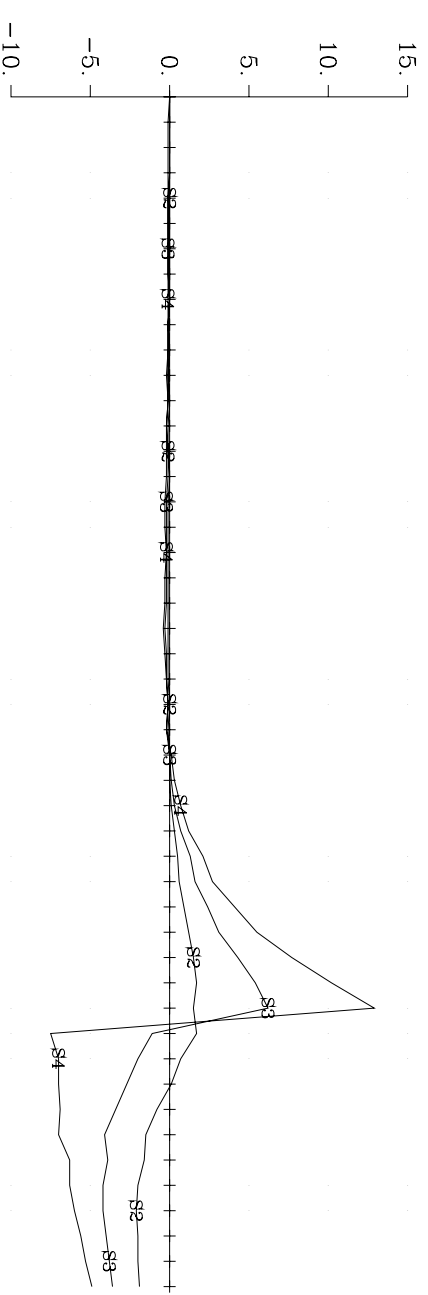
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1
 (nT/sec)



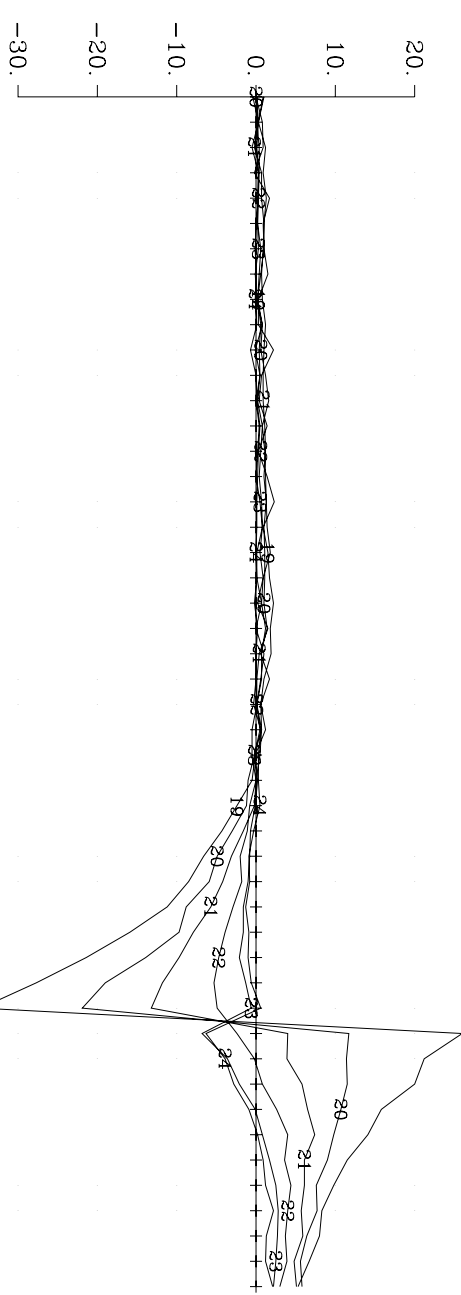
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)

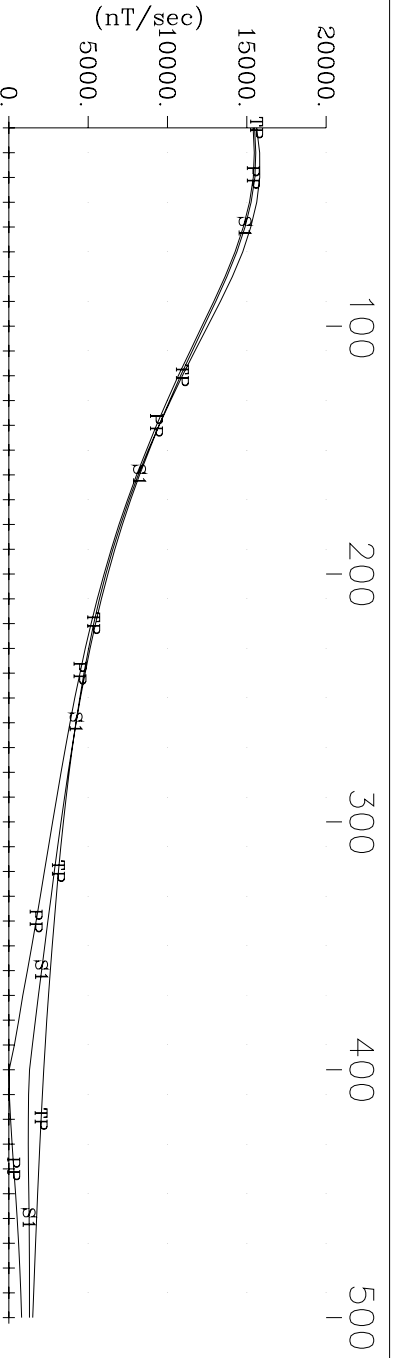


Pulse EM Off-time
 Channels 19-24
 (nT/sec)

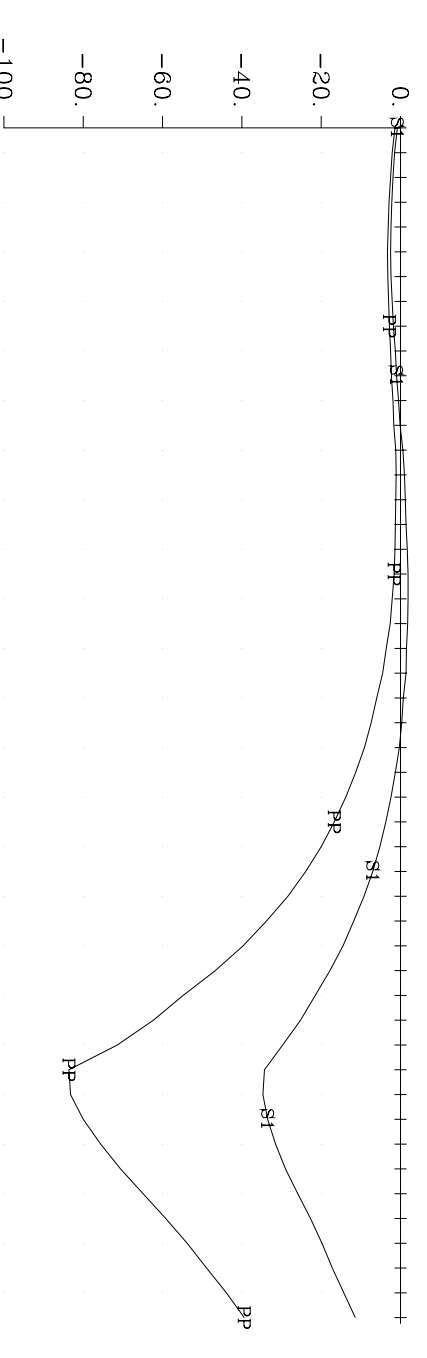


Urso Major Minerals Inc. Shakespeare East Property
 Loop 2, Hole U-03-121 Y Component
 Crone Geophysics & Exploration Ltd.

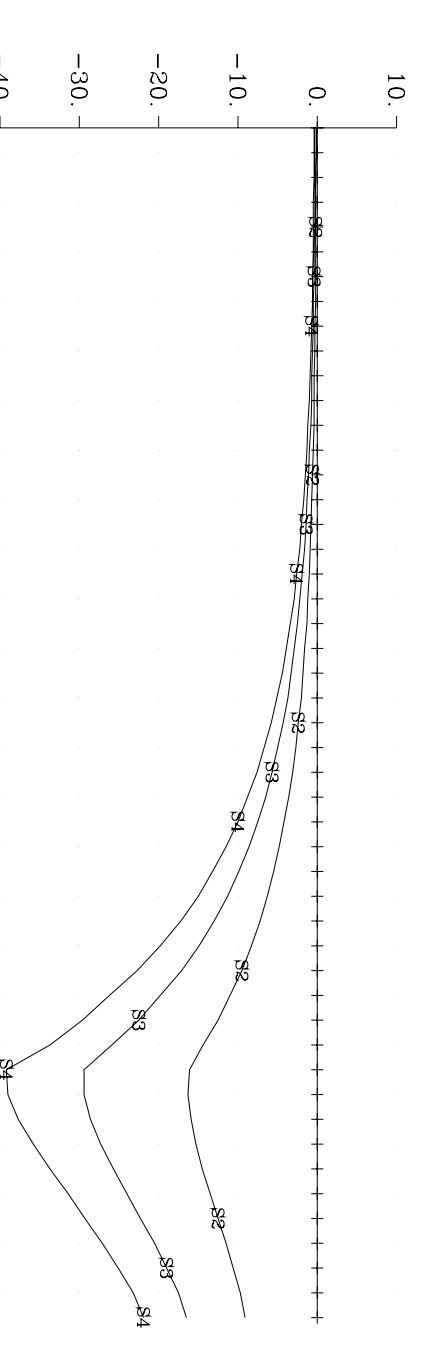
TP = Theoretical Primary
 PP = Last Ramp Channel
 S1 = Calculated Step Ch.1



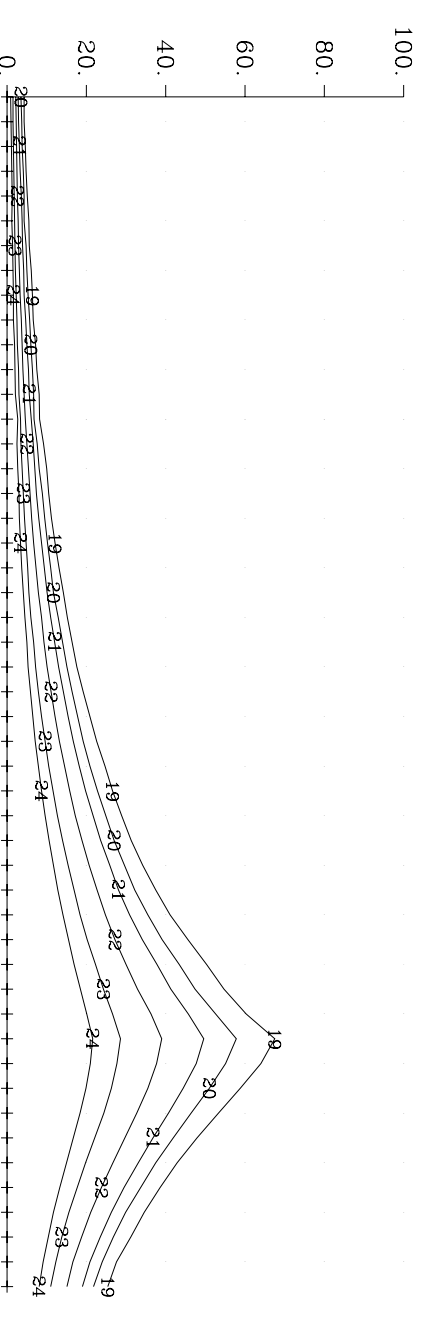
Deviation from TP.
 (% Total Theoretical)



Step Channels 2-4.
 Deviations from S1.
 (% Total Theoretical)



Pulse EM Off-time
 Channels 19-24
 (nT/sec)



Ursa Major Minerals Inc. Shakespeare East Property
 Loop 2, Hole U-03-121 Z Component
 Crone Geophysics & Exploration Ltd.

APPENDIX V
CRONE INSTRUMENT SPECIFICATIONS



Crone Pulse EM System Description

SYSTEM DESCRIPTION

The Crone Pulse EM system is a time domain electromagnetic method (TDEM) that utilizes an alternating pulsed primary current with a controlled shut-off and measures the rate of decay of the induced secondary field across a series of time windows during the off-time. The system uses a transmit loop of any size or shape. A portable power source feeds a transmitter which provides a precise current waveform through the loop. The receiver apparatus is moved along surface lines or down boreholes.

The transmitter cycle consists of slowly increasing the current over a few milliseconds, a constant current, abrupt linear termination of the current, and finally zero current for a selected length of time in milliseconds. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic 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. The receiver, which is synchronized to the off-time of the transmitter, measures this transient magnetic field where it cuts the surface coil or borehole probe. These readings are across fixed time windows or "channels".

SYSTEM TERMINOLOGY

Ramp Time

"Ramp time" refers to the controlled shut-off of the transmitter current. Three ramp times are selectable by the operator; 0.5ms, 1.0ms, and 1.5ms. By controlling the shut-off rather than having it depend on the loop size and current ensures that the same waveform is maintained for different loops so data can be properly compared.

The 1.5ms ramp is the normally used setting for good conductors. It keeps the early channel responses on scale and decreases the chance of overload. The faster ramp times of 1.0ms and 0.5ms will enhance the early time responses. This can be useful for weak conductors when data from the higher end of the frequency spectrum is desired.

Time Base

Time base is the length of time the transmitter current is off (it includes the ramp time). This also equals the on time of the current. Time bases are available for both 60Hz and 50Hz noise rejection respectively:

- 8.33ms (30Hz), 16.66ms (15Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)
- 10ms (25Hz), 20ms (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)

Since readings are taken during the off cycles, the time base will have an effect on the receiver channels. Normally, a standard time base is selected for the type of system and survey being used, but this can be changed to suit a particular situation. A longer time base is preferred for conductors of greater time constants, and in surveys such as resistive soundings where more channels are desired.

Zero Time Set

The term "zero time set" or "ZTS" refers to the starting point for the receiver channel measurements. It is manually set on the receiver by the operator thus allowing adjustments for the ramp times and fine tuning for any fluctuations in the transmitter signal.

Receiver Channels

The rate of decay of the secondary field is measured across fixed time windows which occupy most of the off-time of the transmitter. These time windows are referred to as "channels". These channels are numbered in sequence with "1" being the earliest. The analog and datalogger receivers measured eight fixed channels. The digital receiver, being under software control, offers more flexibility in the channel positioning, channel width, and number of channels.

PP Channel

The PEM system monitors the primary field by taking a measurement during the current ramp and storing this information in a "PP channel". This means that data can be presented in either normalized or normalized formats, and additional information is available during interpretation. The PP channel data can provide useful diagnostic information and helps avoid critical errors in field polarity.

Synchronization

Since the PEM system measures the secondary field in the absence of the primary field, the receiver must be in "sync" with the transmitter to read during the off-time. There are three synchronization methods available: cable connection, radio telemetry, and crystal clock. This flexibility enhances the operational capabilities of the system.

SURVEY METHODS

The wide frequency spectrum of data produced by a Pulse EM survey can be used to provide structural geological information as well as the direct detection of conductive or conductive associated ore deposits. The various types of survey methods, from surface and borehole, have greatly improved the chances of success in deep exploration programs. There are eight basic profiling methods as well as a resistivity sounding mode.

Moving Coil

A small, multi-turn transmitter loop (13.7m diameter) is moved for each reading while the receiver remains a fixed distance away. This method is ideal for quick reconnaissance in areas of high background conductivity.

Moving Loop

Same as Moving Coil method, but with a larger rectangular transmit loop (100 to 300 meters). This method provides deeper penetration in areas of high background conductivity, and works best for near-vertical conductors. This method can be used in conjunction with the Moving In-loop survey for increased sensitivity to horizontal conductors.

Moving In-Loop

A rectangular transmit loop of size 100 to 300 meters is moved for each reading while the receiver remains at the center of the loop. This method provides deep penetration in areas of very high background conductivity, and works best for near-horizontal conductors. It can be used in conjunction with the Moving Loop survey.

Large In-Loop

A very large, stationary transmit loop (800m square or more) is used, and survey lines are run inside the loop. This mode provides very deep penetration (700m or more) and couples best with shallow dip conductors (<45 deg.) under the loop.

Deep EM

A large, stationary transmit loop is used, and survey lines are run outside the loop. This mode provides very deep penetration, and couples best with steeply dipping conductors (>45 deg.) outside the loop.

Borehole (Z Component only)

Isolated Borehole: A drill hole is surveyed by lowering a probe down a hole and surveying it with a number of transmit loops laid out on surface. The data from multiple loops gives directional information on the conductors.

Multiple Boreholes: One large transmit loop is used to survey a number of closely spaced holes. The change in anomaly from hole to hole provides directional information. These methods have detected conductors to depths of 2500m from surface and up to 200m from the hole.

3-D Borehole

Drill holes are surveyed with both the Z and the XY borehole probes. The X and Y components provide accurate direction information using just one transmit loop. Since the probe rotates as it moves down the hole a correction is required for the X-Y data. This is accomplished in one of two ways. The measurement of the primary field from the "PP" channel can be used to apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation tool for the X-Y probe. This attachment uses dip meters to calculate the probe rotation. A third method uses another rotation tool with integrated 3-axis accelerometers and 3-axis magnetometers which can be used to correct rotation on steeply dipping holes including vertical.

Underground Borehole

Underground drill holes can be surveyed in any of the above mentioned borehole methods with one or more transmit loops on the surface. Near-horizontal holes can be surveyed using a push-rod system.

Resistivity Soundings

By reading a large number of channels in the centre of a transmit loop it is possible to perform a decay curve analysis giving a best-fit layer earth model using programs such as ARRTI or TEMIX.

EQUIPMENT

Transmit Loops

The PEM system can operate with practically any size of transmit loop, from a multi-turn circular loop 13.7m in diameter, to a 1 or 2 turn loop of any shape up to 1 or 2 kilometers square using standard insulated copper wire of 10 or 12 gauge. The multi-turn loop is made in two sections with screw connectors. The 10 or 12 gauge loop wire comes on spools in either 300m or 400m lengths. The spools can be mounted on pack frame wire winders for laying out or retrieving.

Power Supply

The PEM system has been produced in 2 varieties: high power (4.8 KW), and low power (2.4 KW). The low power PEM system normally operates with an input voltage from 24V to 240V with a maximum output current of 20 amps. For very low power surveys a 20amp/hr 24V battery can be used. The high power system operates on a continuously variable voltage input up to 240V with a maximum output current of 30 amps. The power supply requires a motor generator and a voltage regulator to control and filter the input voltage to the transmitter.

Specifications: PEM Motor Generator

- (2.4 KW) 4.5 hp Robin EH34 engine, 120V 3-phase alternator
- (4.8 KW) 11 hp Robin RGV6100 240V/120V generator (1-phase)
- cable output to regulator
- fuse type overload protection
- steel frame
- external gas tank

- optional packframe for low-power generator
- wooden shipping box
- unit weight: 33kg (2.4 KW); 81kg (4.8 KW)
- shipping weight: 47kg (2.4 KW); 100kg (4.8 KW)

Specifications: PEM Variable Voltage Regulator

- High Power
 - Continuously variable voltage output up to 240V
 - 30 amp maximum current
 - Integrated sealed aluminum case ruggedized for shipping
 - Shipping weight 18kg
- Low Power
 - selectable voltage between 24v and 120v
 - 20amp maximum current
 - anodized aluminum case
 - padded wooden shipping box
 - unit weight 10kg; shipping weight 18kg
- fuse and internal circuit breaker protection
- cable connections to motor generator and transmitter

Specifications: PEM Transmitter

- High Power
 - Timebases
 - ♦ 8.33ms (30Hz), 10ms (25Hz), 16.66ms (15Hz), 20ms, (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)
 - ramp times: 0.5ms, 1.0ms, 1.5ms
 - operating voltage: continuously variable input up to 240V
 - output current up to 30amp maximum
 - optional current control feedback system features constant current output with ± 0.1 amp precision
 - integrated sealed aluminum case ruggedized for shipping with shock protection
- Low Power
 - Timebases
 - ♦ 8.33ms (30Hz), 10ms (25Hz), 16.66ms (15Hz), 20ms, (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz)
 - operating voltage: 24v to 120v
 - output current: 5amp to 20amp
 - anodized aluminum case
 - optional pack frame
 - unit weight 12.5kg; shipping weight 22kg
 - padded wooden shipping box
- monitors for input voltage, output current, shut-off ramp, tx loop continuity, instrument temperature, and overload output current
- automatic shut-off for open loop, high instrument temperature, and overload
- fuse and circuit breaker overload protection
- three sync modes:
 - built-in radio and antenna
 - cable sync output for direct wire link to receiver or remote radio
 - crystal clock connection with built-in optical isolation

Receiver

The receiver measures the rate of decay of the secondary field across several time channels. The Crone Digital Receiver, in use since 1987 uses software control, offering a variety of programmable channel configurations.

Specifications: Digital PEM Receiver

- 26 bit (156dB) dynamic range
- operating temperature -40°C to 50°C
- built-in non-volatile memory
- optional pack frame
- unit weight 15kg; shipping weight 25.5kg
- padded wooden shipping box
- Menu driven operating software system offering the following functions:
 - controls channel positions, channel widths, and number of channels
 - Timebases: 8.33ms (30Hz), 10ms (25Hz), 16.66ms (15Hz), 20ms (12.5Hz), 50ms (5Hz), 100ms (2.5Hz), 150ms (1.67Hz), 300ms (0.833Hz), 500ms (0.5Hz), 750ms (0.33Hz), 1000ms (0.25Hz)
 - ramp time selectable
 - sample stacking from 1 to 65536
 - automatic gain and spike rejection
 - scrolling routines for viewing data
 - graphic display of decay curve and profile with various plotting options
 - routines for memory management
 - control of data transmission
 - provides information on instrument and operating status

Sync Equipment

There are three modes of synchronization available; radio, cable, and crystal clock. The radio sync signal can be transmitted through a booster antenna from either the PEM Transmitter internal radio or through a Remote Radio.

Specifications: Sync Cable

- 2 conductor, 24awg, Teflon coated
- approx. 900m per aluminum spool with connectors

Specifications: Remote Radio

- operating frequency 27.12mhz
- 12V rechargeable gel cell battery supply
- fuse protection
- sync wire link to transmitter
- coaxial link to booster antenna
- anodized aluminum case
- unit weight 2.7kg

Specifications: Booster Antenna

- 8m, 4 section aluminum mast
- guide rope support
- ¼ wave CB fiberglass antenna
- range up to 2km
- coaxial connection to transmitter or remote radio

Specification: Crystal Clocks

- heat stabilized crystals
- 24V rechargeable gel cell battery supply

- anodized aluminum case
- rx unit can be separate or housed in the receiver
- outlet for external supplementary battery supply

Surface PEM Receive Coil

The Surface PEM Receive Coil picks up the EM field to be measured by the receiver. The coil is mounted on a tripod that can be positioned to take readings of any component of the field.

Specifications: Surface PEM Receive Coil

- ferrite core antenna
- VLF filter
- 10khz bandwidth
- two 9v transistor battery supply
- tripod adjustable to all planes
- unit weight 4.5kg; shipping weight 13.5kg
- padded wooden shipping box

Surface SQUID sensor

CSIRO 1-, 2- or 3- axis high-sensitivity superconducting sensor measures magnetic field in the sub-pT range.

Specifications: Surface SQUID sensor

- liquid nitrogen cooled, 12 hour operation between reservoir refills
- low-noise floor $\sim 350\text{fT}/\sqrt{\text{Hz}}$
- man-portable sensor and control system
- moving loop, or large loop survey configuration
- solid teflon non-magnetic housing
- operational temperature range: -40°C to 40°C
- total system packaged shipping weight (without liquid nitrogen): 62kg

Borehole PEM Z Component Probe

The Z component probe measures the axial component of the EM field. The Z component data is not affected by probe rotation so no correction is required.

Specifications: Borehole PEM Z Component Probe

- ferrite core
- dimensions: length - 1.6m; dia - 3.02cm (3.15cm for high pressure tested probes)
- internal rechargeable NiCd battery supply
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths 1300m, 2000m, and 2800m
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total weight 17kg

Borehole PEM XY Component Probe

The XY probe measures two orthogonal components of the EM field perpendicular to the axis of the hole. Correction for probe rotation can be achieved by mathematical theoretical primary field reduction or more commonly with an attached orientation tool sensor.

Specifications: Borehole PEM XY Component Probe

- ferrite core
- dimensions: length - 2.01m; dia - 3.02cm
- internal rechargeable ni-cad battery supply

- selection of X or Y coils by means of a switch box on surface or automatic switching with Digital receiver
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths to 2800m
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 20kg

Specifications: Orientation Tool

- 2 axis tilt sensors
- accuracy ± 0.1 deg.
- operating range -88 to -10 deg.
- dimensions: length - 0.94m; dia - 28.5mm
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 14kg

Specifications: Rotation Angle Direction (RAD) Tool

- integrated 3-axis accelerometers and 3-axis magnetometers
- dip and roll accuracy: $\pm 0.5^\circ$, azimuth accuracy: $\pm 1.0^\circ$
- operating range: all
- simultaneous 3D magnetometer borehole survey by station
- optional continuous logging mode
- dual 3-axis sensors provide an alternative complete borehole Dip-Azimuth measurement
- dimensions: length - 0.75m; dia - 31.8mm
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 14kg
- NiCd battery provides all-day operation
 - ♦ Length - 0.93m; dia - 28.6mm
 - ♦ Packaged in padded cover and aluminum tube
 - ♦ Shipped in padded wooden box; total shipping weight 14kg

Borehole Equipment

To lower the probe down a drill hole requires a cable and spool, winch assembly frame and cable counter. Borehole surveys also require equipment to "dummy probe" the hole before doing the survey.

Specifications: Borehole Cable

- two conductor shielded cable
- kevlar strengthened
- lengths are available up to 2600m on three sizes of spools
- shipped in wooden box

Specifications: Slip Ring

- attaches to side of borehole cable spool providing a connection to the receiver while allowing the spool to turn.
- VLF filter
- pure silver contacts

Specifications: Borehole Winch Frame

- welded aluminum frame
- removable axle
- chain driven, 3 speed gear box
- hand or optional power winding
- hand brake and lock

- optional chain-gear safety cover
- two sizes: standard for up to 1300m cable; large for longer cables
- shipped in wooden box

Specifications: Borehole Counter

- attaches to the drill hole casing
- calibrated in meters
- shipped in wooden box; total weight 13kg

Specifications: Dummy Probe and Cable

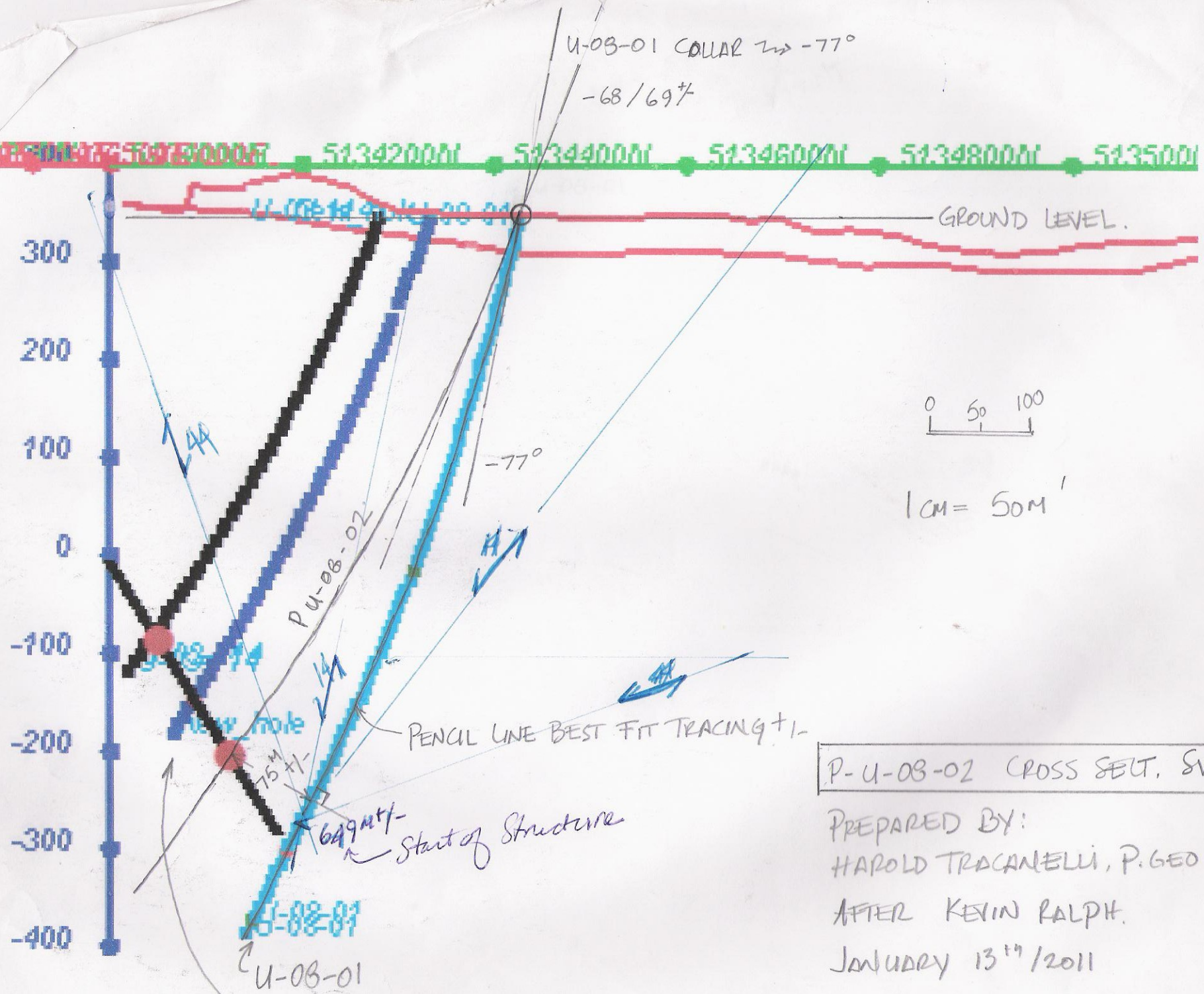
- solid steel or steel pipe
- same dimensions as borehole probe
- shear pin connection to dummy cable
- steel dummy cable on aluminum spool
- cable mounts on borehole frame
- various lengths to 2600m on 3 spool sizes.

DDH U-08-03

Ranger Bore Hole Orientation Survey

Test	Az.	Dec 9 W	Inclination	Magnetics	
0	147	147	-73	surface	Sylvain Bernache Lined Up drill along pickets set at 147 degrees Az., set head at -73 deg
15	148.7	139.7	-72.8	55890	Yanic Menard May have been some influence due to close proximaty to the adjacer
51	150.2	141.2	-72.4	55760	Yannick Benoit June 19th., 2011
102	152.2	143.2	-71.2	55740	Yanic Menard
150	151.6	142.6	-70	55770	Yanic Menard
201	152.8	143.8	-69	55860	Yannick Benoit June 20th., 2011
252	153.9	144.9	-67.8	55720	Yannick Benoit June 21st., 2011
300	156.3	147.3	-66.8	55690	Yannick Benoit June 21st., 2011
351	158.9	149.9	-65.4	55710	Yannick Benoit
402	163.4	154.4	-64.3	56160	Yanic Menard
450	165.2	156.2	-62.5	55390	Yannick Benoit June 23rd., 2011
501	167.5	158.5	-61.2	55570	Yanic Menard
549	169.3	160.3	-60	55680	Yannick Benoit June 24th., 2011
600	172.8	163.8	-58.5	55620	Yannick Benoit June 24th., 2011
651	177.4	168.4	-56.7	56330	Yanic Menard
699	175.5	166.5	-56.6	55500	Yannick Benoit June 28th., 2011
750	178	169	-56.4	55620	Yannick Benoit June 28th., 2011
End of DDH U-08-03			763	Meters	

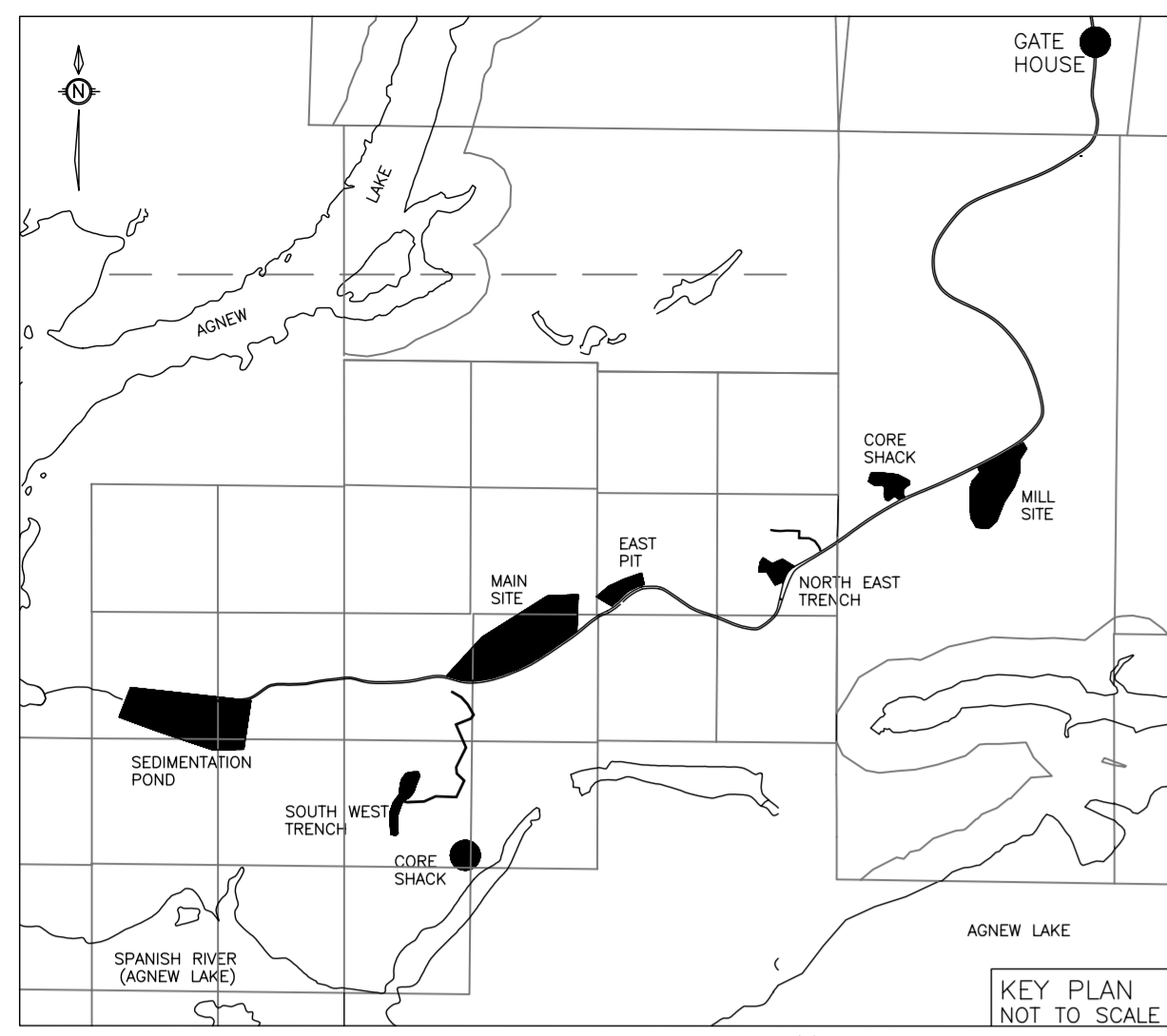
rees inclination
nt steel casings.



P-U-03-02 CROSS SECT. SW

PREPARED BY:
 HAROLD TRACANELLI, P.GEO
 AFTER KEVIN RALPH.
 JANUARY 13TH / 2011

KEVIN'S HOLE ALONG STRIKE OF U-03-01 TO SW.



SCALE 1:1000 metres
0 10 20 30 40 50 100



**Shakespeare Project
Shakespeare
BOREHOLE LOCATION MAP
JULY 26, 2011**

PAUL H. TORRANCE SURVEYING LTD.
GEOMATICS SERVICES
3A Elizabeth Walk, Elliot Lake, Ontario P5A 1Z2 (705) 848-9175

PLAN	DATE	REFERENCE NUMBER
J.R.O.	2011-07-28	2010-010

Location: DATA\2010\2010-010\JULY 26, 2011 COMPILED SURFACE

REVISIONS	DATE
BOREHOLE/CORE SHED ELEVATION REVISION	JULY 14, 2011
FIELD SURVEY JULY 26, 2011	JULY 28, 2011

NOTES
 - SURVEYS COMPLETED AS NOTED
 - CONTOUR INTERVAL = 0.5m
 - NAD83 COORDINATES AND ELEVATIONS DERIVED FROM CONTROL POINTS 0011993U541 AND 01019810402.
 NAD83 (ZONE 17) METRIC COORDINATES
 NS123754.536 E430570.000 206.347 01019810402
 NS126426.558 E443083.470 208.209 0011993U541

#13690 U-08-01
TOP OF BH: 348.68
GROUND: 348.54
NS134402.66
E437085.32

#13691 U-08-02
TOP OF BH: 348.86
GROUND: 348.54
NS134402.40
E437084.98

#13978 U-08-03
TOP OF BH: 348.21
GROUND: 348.54
NS134404.22
E437088.80

#13683 U-03-117
TOP OF BH: 359.05
GROUND: 358.72
NS134215.77
E436955.48

#13686 U-03-118
TOP OF BH: 362.87
GROUND: 362.72
NS134214.29
E437021.91

#13976 U-03-124
TOP OF BH: 362.61
GROUND: 362.73
NS134213.17
E437021.93

#13687 U-03-116
TOP OF BH: 361.12
GROUND: 360.36
NS134182.92
E436878.98

#13685 U-03-115
TOP OF BH: 361.58
GROUND: 360.76
NS134187.20
E436950.79

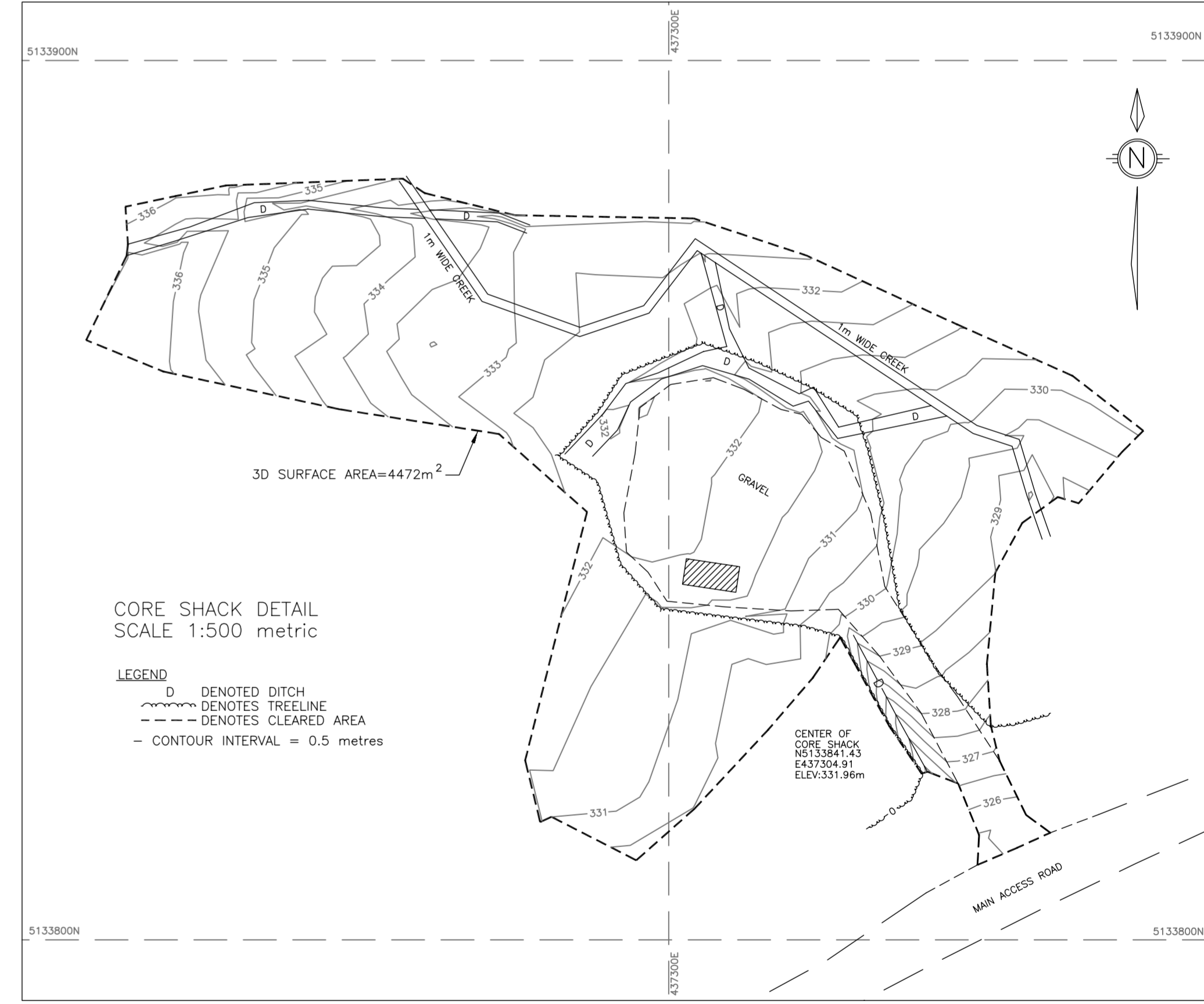
#13919 UNIDENTIFIED
TOP OF BH: 349.22
GROUND: 354.04
NS134074.96
E436681.20

#13917 U-03-120
TOP OF BH: 352.05
GROUND: 351.87
NS134046.57
E436703.05

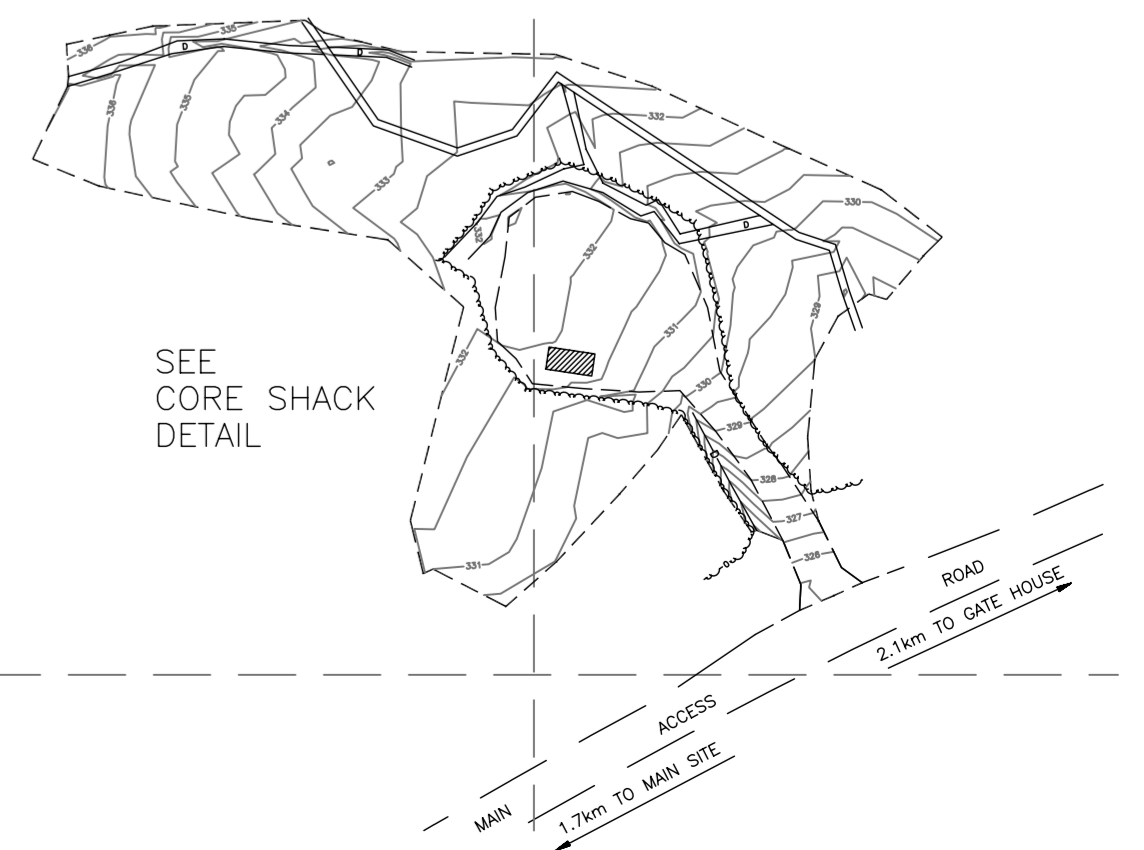
#13921 U-03-122
TOP OF BH: 351.64
GROUND: 350.98
NS134021.09
E436622.21

#13920 U-03-121
TOP OF BH: 351.29
GROUND: 350.98
NS134020.92
E436622.393

#13688 U-03-119
TOP OF BH: 354.36
GROUND: 354.04
NS133998.24
E436728.86



LEGEND
 D DENOTES DITCH
 ~~~~~ DENOTES TREELINE  
 - - - DENOTES CLEARED AREA  
 - CONTOUR INTERVAL = 0.5 metres



MINING CLAIM  
S-36046

MINING CLAIM  
S-36045

SSIB  
1529

RR  
1507



DDH U-08-01

Ranger Bore Hole Orientation Survey

| Test | Az.                                         | Dec 9 W | Inclination |
|------|---------------------------------------------|---------|-------------|
| 0    | 148                                         | 148     | -77         |
| 15   | 158                                         | 149     | -76.2       |
| 54   | 159.2                                       | 150.2   | -75.6       |
| 99   | 161.7                                       | 152.7   | -74.7       |
| 153  | 164.5                                       | 155.5   | -73.3       |
| 198  | 165.1                                       | 156.1   | -73.1       |
| 225  | 166.5                                       | 157.5   | -72.1       |
| 300  | 168.4                                       | 159.4   | -70.6       |
| 348  | 171                                         | 162     | -69.6       |
| 402  | 173.2                                       | 164.2   | -68.4       |
| 450  | 176.1                                       | 167.1   | -67.4       |
| 501  | 180.3                                       | 171.3   | -64.1       |
| 552  | 177.5                                       | 168.5   | -65         |
| 600  | Drillers did not take test at this location |         |             |
| 651  | 181.7                                       | 172.7   | -63.5       |
| 699  | 182.6                                       | 173.6   | -63.4       |
| 750  | 184.4                                       | 175.4   | -63.2       |
| 792  | 185.6                                       | 176.6   | -63.1       |

End of DDH U-08-01, 798 meters

DDH U-08-02

Fordia Bore Hole Orientation Survey

| Test | Az.                               | Dec 9 W | Inclination | Magnetics | Operator       | Date                 |
|------|-----------------------------------|---------|-------------|-----------|----------------|----------------------|
| 0    | 147                               | 147     | -69.5       | collar    | Glen Madden    | January 13th., 2011  |
| 12   | 155.6                             | 146.6   | -69.4       | 57200     | Yanic Menard   | March 02nd., 2011    |
| 50   | 156.5                             | 147.5   | -67.8       | 56280     | Yanic Menard   | March 02nd., 2011    |
| 102  | 159.9                             | 150.9   | -66.2       | 56550     | Stephan Menard | February 23rd., 2011 |
| 150  | 158.6                             | 149.6   | -65.9       | 56220     | Yanic Menard   | March 02nd., 2011    |
| 201  | 162.6                             | 153.6   | -64.4       | 59200     | Yanic Menard   | March 02nd., 2011    |
| 252  | 164.2                             | 155.2   | -63.1       | 56200     | Yanic Menard   | March 02nd., 2011    |
| 300  | 166.8                             | 157.8   | -60.2       | 55890     | Stephan Menard | February 28th., 2011 |
| 351  | 170.2                             | 161.2   | -58.8       | 55750     | Yanic Menard   | March 02nd., 2011    |
| 400  | 170.6                             | 161.6   | -56.4       | 55970     | Yanic Menard   | March 02nd., 2011    |
| 450  | 171.4                             | 162.4   | -52.9       | 56150     | Yanic Menard   | March 03rd., 2011    |
| 501  | 175                               | 166     | -52.1       | 55920     | Stephan Menard | March 03rd., 2011    |
| 552  | 177.4                             | 168.4   | -49.2       | 56280     | Stephan Menard |                      |
| 600  | 180.1                             | 171.1   | -47.2       | 56280     | Yanic Menard   |                      |
| 651  | 182.3                             | 173.3   | -44.3       | 55800     | Yanic Menard   |                      |
| 702  | 184                               | 175     | -43.8       | 55590     | Gilles Marier  |                      |
| 717  | End of Diamond Drill Hole U-08-02 |         |             |           |                |                      |

## **APPENDIX IV**

Assay Certificates for samples collected in diamond drill holes U-08-01, U-08-02 and U-08-03

Wednesday, April 6, 2011

## Certificate of Analysis

 URSA Major Minerals Inc.  
 8 King St. E., Ste. 1300  
 Toronto, ON, CAN  
 M5C1B5  
 Ph#: (416) 864-0615  
 Fax#: (416) 864-0620  
 Email: rsutcliffe@bellnet.ca

 Date Received: 03/24/2011  
 Date Completed: 04/06/2011  
 Job #: 201110097  
 Reference:  
 Sample #: 64

| Acc #    | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 11141    | 907208    | <5        | <15       | <10       |           |           |           | <1        | <1        |           |           | <1        |           |           |
| 11142    | 907209    | 9         | 21        | 12        |           |           |           | 48        | 93        |           |           | 132       |           |           |
| 11143    | 907210    | <5        | 46        | 12        |           |           |           | 52        | 140       |           |           | 187       |           |           |
| 11144    | 907211    | 10        | 24        | 14        |           |           |           | 55        | 110       |           |           | 160       |           |           |
| 11145    | 907212    | <5        | 29        | <10       |           |           |           | 7         | 36        |           |           | 16        |           |           |
| 11146    | 907213    | <5        | 24        | 15        |           |           |           | 40        | 84        |           |           | 123       |           |           |
| 11147    | 907214    | <5        | <15       | <10       |           |           |           | 28        | 90        |           |           | 102       |           |           |
| 11148    | 907215    | 8         | 36        | 11        |           |           |           | 41        | 146       |           |           | 158       |           |           |
| 11149    | 907216    | <5        | 22        | 16        |           |           |           | 49        | 91        |           |           | 143       |           |           |
| 11150    | 907217    | 6         | 33        | <10       |           |           |           | 9         | 49        |           |           | 33        |           |           |
| 11151Dup | 907217    | <5        | 40        | <10       |           |           |           | 9         | 48        |           |           | 33        |           |           |
| 11152    | 907218    | 13        | 38        | 18        |           |           |           | 57        | 120       |           |           | 175       |           |           |
| 11153    | 907219    | <5        | <15       | <10       |           |           |           | <1        | <1        |           |           | <1        |           |           |
| 11154    | 907220    | 13        | 37        | 16        |           |           |           | 63        | 148       |           |           | 199       |           |           |
| 11155    | 907221    | <5        | 33        | 12        |           |           |           | 49        | 67        |           |           | 105       |           |           |
| 11156    | 907222    | 10        | 35        | 21        |           |           |           | 53        | 125       |           |           | 140       |           |           |
| 11157    | 907223    | <5        | 40        | <10       |           |           |           | 37        | 68        |           |           | 47        |           |           |
| 11158    | 907224    | 6         | 29        | 16        |           |           |           | 38        | 83        |           |           | 48        |           |           |
| 11159    | 907225    | 81        | 329       | 204       |           |           |           | 37        | 102       |           |           | 37        |           |           |
| 11160    | 907226    | 17        | 84        | 43        |           |           |           | 307       | 2269      |           |           | 4464      |           |           |
| 11161    | 907227    | 24        | 68        | 39        |           |           |           | 68        | 429       |           |           | 423       |           |           |
| 11162Dup | 907227    | 18        | 104       | 35        |           |           |           | 71        | 435       |           |           | 454       |           |           |
| 11163    | 907228    | 106       | 229       | 195       |           |           |           | 262       | 1788      |           |           | 3232      |           |           |
| 11164    | 907229    | 94        | 218       | 171       |           |           |           | 462       | 1049      |           |           | 7076      |           |           |
| 11165    | 907230    | 55        | 130       | 98        |           |           |           | 177       | 1422      |           |           | 2115      |           |           |
| 11166    | 907231    | 79        | 164       | 171       |           |           |           | 239       | 1535      |           |           | 2919      |           |           |
| 11167    | 907232    | 39        | 103       | 73        |           |           |           | 89        | 1092      |           |           | 835       |           |           |
| 11168    | 907233    | 21        | 85        | 42        |           |           |           | 51        | 501       |           |           | 333       |           |           |
| 11169    | 907234    | 19        | 70        | 33        |           |           |           | 47        | 371       |           |           | 226       |           |           |
| 11170    | 907235    | 13        | 46        | 27        |           |           |           | 52        | 333       |           |           | 244       |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

 Certified By:   
 Derek Demianuk H.Bsc., Laboratory Manager

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Wednesday, April 6, 2011

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 8 King St. E., Ste. 1300  
 Toronto, ON, CAN  
 M5C1B5  
 Ph#: (416) 864-0615  
 Fax#: (416) 864-0620  
 Email: rsutcliffe@bellnet.ca

 Date Received: 03/24/2011  
 Date Completed: 04/06/2011  
 Job #: 201110097  
 Reference:  
 Sample #: 64

| Acc #    | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 11171    | 907236    | 18        | 41        | 31        |           |           |           | 52        | 287       |           |           | 196       |           |           |
| 11172    | 907237    | 11        | 22        | <10       |           |           |           | 38        | 119       |           |           | 66        |           |           |
| 11173Dup | 907237    | <5        | 18        | <10       |           |           |           | 40        | 119       |           |           | 67        |           |           |
| 11174    | 907238    | 12        | <15       | <10       |           |           |           | 40        | 98        |           |           | 64        |           |           |
| 11175    | 907239    | <5        | 16        | <10       |           |           |           | 39        | 74        |           |           | 55        |           |           |
| 11176    | 907240    | 9         | <15       | <10       |           |           |           | <1        | <1        |           |           | <1        |           |           |
| 11177    | 907241    | <5        | <15       | <10       |           |           |           | 36        | 84        |           |           | 54        |           |           |
| 11178    | 907242    | 10        | <15       | <10       |           |           |           | 33        | 101       |           |           | 74        |           |           |
| 11179    | 907243    | 6         | <15       | 15        |           |           |           | 41        | 182       |           |           | 132       |           |           |
| 11180    | 907244    | 18        | <15       | 12        |           |           |           | 44        | 156       |           |           | 116       |           |           |
| 11181    | 907245    | 8         | 15        | <10       |           |           |           | 43        | 185       |           |           | 112       |           |           |
| 11182    | 907246    | 19        | <15       | 23        |           |           |           | 52        | 374       |           |           | 191       |           |           |
| 11183    | 907247    | 21        | 28        | 36        |           |           |           | 57        | 552       |           |           | 276       |           |           |
| 11184Dup | 907247    | 23        | <15       | 35        |           |           |           | 57        | 566       |           |           | 272       |           |           |
| 11185    | 907248    | 46        | <15       | 26        |           |           |           | 50        | 378       |           |           | 216       |           |           |
| 11186    | 907249    | 38        | <15       | 39        |           |           |           | 53        | 605       |           |           | 298       |           |           |
| 11187    | 907250    | 39        | 21        | 45        |           |           |           | 57        | 645       |           |           | 362       |           |           |
| 11188    | 907801    | 24        | 33        | 41        |           |           |           | 55        | 568       |           |           | 286       |           |           |
| 11189    | 907802    | 45        | 24        | 35        |           |           |           | 56        | 327       |           |           | 206       |           |           |
| 11190    | 907803    | 40        | 28        | 48        |           |           |           | 58        | 463       |           |           | 272       |           |           |
| 11191    | 907804    | 46        | 45        | 69        |           |           |           | 63        | 685       |           |           | 388       |           |           |
| 11192    | 907805    | 63        | 72        | 105       |           |           |           | 74        | 1482      |           |           | 710       |           |           |
| 11193    | 907806    | 38        | 24        | 61        |           |           |           | 65        | 670       |           |           | 388       |           |           |
| 11194    | 907807    | 57        | 53        | 88        |           |           |           | 66        | 1489      |           |           | 588       |           |           |
| 11195Dup | 907807    | 64        | 71        | 93        |           |           |           | 66        | 1530      |           |           | 600       |           |           |
| 11196    | 907808    | 16        | 20        | 28        |           |           |           | 46        | 329       |           |           | 144       |           |           |
| 11197    | 907809    | 20        | <15       | 34        |           |           |           | 54        | 320       |           |           | 154       |           |           |
| 11198    | 907810    | 18        | 36        | 39        |           |           |           | 52        | 314       |           |           | 166       |           |           |
| 11199    | 907811    | 34        | 54        | 57        |           |           |           | 59        | 438       |           |           | 256       |           |           |
| 11200    | 907812    | 79        | 95        | 100       |           |           |           | 70        | 1073      |           |           | 489       |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

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 Fax#: (416) 864-0620  
 Email: rsutcliffe@bellnet.ca

 Date Received: 03/24/2011  
 Date Completed: 04/06/2011  
 Job #: 201110097  
 Reference:  
 Sample #: 64

| Acc #    | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 11201    | 907813    | 73        | 99        | 115       |           |           |           | 75        | 1027      |           |           | 676       |           |           |
| 11202    | 907814    | 97        | 155       | 172       |           |           |           | 86        | 1919      |           |           | 1001      |           |           |
| 11203    | 907815    | 104       | 138       | 182       |           |           |           | 84        | 1926      |           |           | 951       |           |           |
| 11204    | 907816    | 44        | 54        | 85        |           |           |           | 54        | 1009      |           |           | 278       |           |           |
| 11205    | 907817    | 17        | 16        | 66        |           |           |           | 50        | 369       |           |           | 139       |           |           |
| 11206Rep | 907817    | 20        | 37        | 57        |           |           |           | 49        | 382       |           |           | 139       |           |           |
| 11207    | 907818    | 9         | 21        | 58        |           |           |           | 50        | 292       |           |           | 131       |           |           |
| 11208    | 907819    | 18        | <15       | 62        |           |           |           | 53        | 345       |           |           | 145       |           |           |
| 11209    | 907820    | 34        | 40        | 104       |           |           |           | 60        | 1321      |           |           | 381       |           |           |
| 11210    | 907821    | 9         | <15       | <10       |           |           |           | <1        | <1        |           |           | <1        |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

 Certified By:   
 Derek Demianiuk H.Bsc., Laboratory Manager

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Thursday, September 8, 2011

## Certificate of Analysis

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 8 King St. E., Ste. 1300  
 Toronto, ON, CAN  
 M5C1B5  
 Ph#: (416) 864-0615  
 Fax#: (416) 864-0620  
 Email: htracaneli@xplornet.ca, rsutcliffe@bellnet.ca

 Date Received: 08/18/2011  
 Date Completed: 09/08/2011  
 Job #: 201110393  
 Reference:  
 Sample #: 8

| Acc #    | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 46464    | 1054761   | 8         | 20        | 19        |           |           |           | 69        | 194       |           |           | 213       |           |           |
| 46465    | 1054762   | 12        | 41        | 22        |           |           |           | 80        | 273       |           |           | 283       |           |           |
| 46466    | 1054763   | 9         | 39        | 18        |           |           |           | 73        | 244       |           |           | 254       |           |           |
| 46467    | 1054764   | 6         | 47        | 19        |           |           |           | 58        | 182       |           |           | 151       |           |           |
| 46468    | 1054765   | 23        | 19        | 21        |           |           |           | 71        | 628       |           |           | 245       |           |           |
| 46469    | 1054766   | 10        | 21        | 23        |           |           |           | 72        | 359       |           |           | 248       |           |           |
| 46470    | 1054767   | 24        | 99        | 72        |           |           |           | 115       | 1191      |           |           | 906       |           |           |
| 46471    | 1054768   | 56        | 113       | 83        |           |           |           | 106       | 822       |           |           | 839       |           |           |
| 46472Dup | 1054768   | 30        | 132       | 76        |           |           |           | 109       | 829       |           |           | 845       |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

 Certified By:   
 Derek Demianiuk H.Bsc., Laboratory Manager

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Tuesday, August 23, 2011

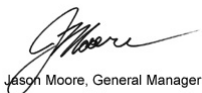
## Certificate of Analysis

 URSA Major Minerals Inc.  
 8 King St. E., Ste. 1300  
 Toronto, ON, CAN  
 M5C1B5  
 Ph#: (416) 864-0615  
 Fax#: (416) 864-0620  
 Email: htracanelli@xplornet.ca, rsutcliffe@bellnet.ca

 Date Received: 08/08/2011  
 Date Completed: 08/22/2011  
 Job #: 201110359  
 Reference:  
 Sample #: 86

| Acc #    | Client ID | Au<br>ppb          | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 38817    | 1054747   | <5                 | <15       | <10       |           |           |           | <1        | <1        |           |           | 13        |           |           |
| 38818    | 1054748   | <5                 | <15       | <10       |           |           |           | <1        | <1        |           |           | 2         |           |           |
| 38819    | 1054749   | <5                 | 26        | <10       |           |           |           | 11        | 51        |           |           | 44        |           |           |
| 38820    | 1054750   | 5                  | 21        | 12        |           |           |           | 59        | 131       |           |           | 203       |           |           |
| 38821    | 1054751   | 36                 | 34        | 15        |           |           |           | 68        | 141       |           |           | 219       |           |           |
| 38822    | 1054752   | 5                  | 36        | 14        |           |           |           | 67        | 142       |           |           | 219       |           |           |
| 38823    | 1054753   | 6                  | 32        | 14        |           |           |           | 69        | 172       |           |           | 226       |           |           |
| 38824    | 1054754   | 12                 | 62        | 17        |           |           |           | 65        | 152       |           |           | 209       |           |           |
| 38825    | 1054755   | 7                  | <15       | 12        |           |           |           | 70        | 187       |           |           | 240       |           |           |
| 38826    | 1054756   | 8                  | 42        | 12        |           |           |           | 70        | 178       |           |           | 231       |           |           |
| 38827Dup | 1054756   | 9                  | 65        | 20        |           |           |           | 69        | 180       |           |           | 232       |           |           |
| 38828    | 1054757   | 12                 | 39        | 21        |           |           |           | 75        | 201       |           |           | 261       |           |           |
| 38829    | 1054758   | 11                 | 38        | 14        |           |           |           | 66        | 172       |           |           | 219       |           |           |
| 38830    | 1054759   | 9                  | 79        | 20        |           |           |           | 77        | 223       |           |           | 281       |           |           |
| 38831    | 1054760   | 9                  | 45        | 14        |           |           |           | 66        | 185       |           |           | 198       |           |           |
| 38832    | 1054761   | 13                 | 44        | 18        |           |           |           | 69        | 195       |           |           | 211       |           |           |
| 38833    | 1054762   | 13                 | <15       | 20        |           |           |           | 81        | 249       |           |           | 271       |           |           |
| 38834    | 1054763   | 13                 | 46        | <10       |           |           |           | 67        | 192       |           |           | 215       |           |           |
| 38835    | 1054764   | No Sample Received |           |           |           |           |           |           |           |           |           |           |           |           |
| 38836    | 1054765   | No Sample Received |           |           |           |           |           |           |           |           |           |           |           |           |
| 38837    | 1054766   | 21                 | 47        | 21        |           |           |           | 74        | 250       |           |           | 243       |           |           |
| 38838Dup | 1054766   | 14                 | 37        | 23        |           |           |           | 74        | 244       |           |           | 246       |           |           |
| 38839    | 1054767   | 56                 | 105       | 105       |           |           |           | 129       | 929       |           |           | 1086      |           |           |
| 38840    | 1054768   | 88                 | 74        | 65        |           |           |           | 126       | 826       |           |           | 1136      |           |           |
| 38841    | 1054769   | 41                 | 89        | 66        |           |           |           | 103       | 670       |           |           | 791       |           |           |
| 38842    | 1054770   | 31                 | 125       | 95        |           |           |           | 123       | 957       |           |           | 1018      |           |           |
| 38843    | 1054771   | 28                 | 113       | 83        |           |           |           | 129       | 905       |           |           | 972       |           |           |
| 38844    | 1054772   | 17                 | 40        | 38        |           |           |           | 85        | 388       |           |           | 460       |           |           |
| 38845    | 1054773   | 38                 | 165       | 171       |           |           |           | 198       | 1467      |           |           | 2135      |           |           |
| 38846    | 1054774   | 74                 | 263       | 254       |           |           |           | 273       | 1679      |           |           | 3423      |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

 Certified By:   
 Jason Moore, General Manager

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Tuesday, August 23, 2011

## Certificate of Analysis

 URSA Major Minerals Inc.  
 8 King St. E., Ste. 1300  
 Toronto, ON, CAN  
 M5C1B5

Ph#: (416) 864-0615

Fax#: (416) 864-0620

Email: htracanelli@xplornet.ca, rsutcliffe@bellnet.ca

Date Received: 08/08/2011

Date Completed: 08/22/2011

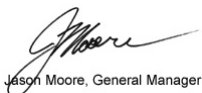
Job #: 201110359

Reference:

Sample #: 86

| Acc #    | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 38847    | 1054775   | 82        | 380       | 323       |           |           |           | 348       | 2067      |           |           | 4739      |           |           |
| 38848    | 1054776   | 25        | 47        | 39        |           |           |           | 96        | 492       |           |           | 653       |           |           |
| 38849Dup | 1054776   | 27        | 67        | 44        |           |           |           | 93        | 475       |           |           | 647       |           |           |
| 38850    | 1054777   | 24        | 49        | 40        |           |           |           | 91        | 733       |           |           | 767       |           |           |
| 38851    | 1054778   | 86        | 195       | 157       |           |           |           | 188       | 2956      |           |           | 3040      |           |           |
| 38852    | 1054779   | 162       | 285       | 284       |           |           |           | 366       | 1401      |           |           | 6352      |           |           |
| 38853    | 1054780   | 82        | 317       | 303       |           |           |           | 359       | 1504      |           |           | 4928      |           |           |
| 38854    | 1054781   | 145       | 174       | 223       |           |           |           | 100       | 1983      |           |           | 1199      |           |           |
| 38855    | 1054782   | 93        | 175       | 165       |           |           |           | 115       | 2831      |           |           | 1422      |           |           |
| 38856    | 1054783   | 22        | 56        | 30        |           |           |           | 68        | 578       |           |           | 425       |           |           |
| 38857    | 1054784   | 32        | 43        | 38        |           |           |           | 71        | 720       |           |           | 505       |           |           |
| 38858    | 1054785   | 30        | 73        | 37        |           |           |           | 67        | 950       |           |           | 488       |           |           |
| 38859    | 1054786   | 89        | 142       | 148       |           |           |           | 77        | 823       |           |           | 722       |           |           |
| 38860Dup | 1054786   | 47        | 80        | 75        |           |           |           | 79        | 863       |           |           | 732       |           |           |
| 38861    | 1054787   | 85        | 130       | 128       |           |           |           | 115       | 2509      |           |           | 1574      |           |           |
| 38862    | 1054788   | 48        | 87        | 69        |           |           |           | 103       | 961       |           |           | 1203      |           |           |
| 38863    | 1054789   | 159       | 263       | 257       |           |           |           | 128       | 2881      |           |           | 1929      |           |           |
| 38864    | 1054790   | 103       | 186       | 166       |           |           |           | 107       | 2012      |           |           | 1358      |           |           |
| 38865    | 1054791   | 41        | 58        | 61        |           |           |           | 74        | 840       |           |           | 633       |           |           |
| 38866    | 1054792   | 45        | 94        | 65        |           |           |           | 82        | 1290      |           |           | 880       |           |           |
| 38867    | 1054793   | 57        | 254       | 100       |           |           |           | 110       | 1774      |           |           | 1286      |           |           |
| 38868    | 1054794   | 46        | 98        | 67        |           |           |           | 87        | 762       |           |           | 737       |           |           |
| 38869    | 1054795   | 91        | 276       | 157       |           |           |           | 174       | 2474      |           |           | 2186      |           |           |
| 38870    | 1054796   | 53        | 106       | 100       |           |           |           | 80        | 1360      |           |           | 839       |           |           |
| 38871Dup | 1054796   | 51        | 91        | 98        |           |           |           | 83        | 1429      |           |           | 860       |           |           |
| 38872    | 1054797   | 131       | 255       | 265       |           |           |           | 129       | 2742      |           |           | 2005      |           |           |
| 38873    | 1054798   | 116       | 184       | 204       |           |           |           | 145       | 2565      |           |           | 2093      |           |           |
| 38874    | 1054799   | 193       | 361       | 339       |           |           |           | 161       | 3478      |           |           | 3001      |           |           |
| 38875    | 1054800   | <5        | <15       | <10       |           |           |           | <1        | 3         |           |           | 1         |           |           |
| 38876    | 1054801   | 78        | 105       | 171       |           |           |           | 112       | 2068      |           |           | 1486      |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

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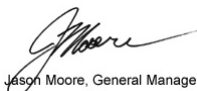
Job #: 201110359

Reference:

Sample #: 86

| Acc #    | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 38877    | 1054802   | 88        | 160       | 197       |           |           |           | 118       | 2542      |           |           | 1610      |           |           |
| 38878    | 1054803   | 41        | 89        | 89        |           |           |           | 82        | 1131      |           |           | 713       |           |           |
| 38879    | 1054804   | 53        | 87        | 95        |           |           |           | 82        | 1323      |           |           | 725       |           |           |
| 38880    | 1054805   | 85        | 104       | 117       |           |           |           | 104       | 1693      |           |           | 927       |           |           |
| 38881    | 1054806   | 189       | 180       | 306       |           |           |           | 195       | 3800      |           |           | 2946      |           |           |
| 38882Rep | 1054806   | 205       | 260       | 310       |           |           |           | 192       | 3736      |           |           | 2781      |           |           |
| 38883    | 1054807   | 162       | 260       | 290       |           |           |           | 150       | 3861      |           |           | 2306      |           |           |
| 38884    | 1054808   | 28        | 63        | 57        |           |           |           | 70        | 730       |           |           | 413       |           |           |
| 38885    | 1054809   | 53        | 96        | 111       |           |           |           | 87        | 1313      |           |           | 857       |           |           |
| 38886    | 1054810   | 76        | 174       | 164       |           |           |           | 104       | 1516      |           |           | 1273      |           |           |
| 38887    | 1054811   | 62        | 116       | 109       |           |           |           | 77        | 1423      |           |           | 819       |           |           |
| 38888    | 1054812   | 48        | 80        | 98        |           |           |           | 78        | 1289      |           |           | 770       |           |           |
| 38889    | 1054813   | 29        | 84        | 55        |           |           |           | 69        | 792       |           |           | 381       |           |           |
| 38890    | 1054814   | 34        | 112       | 64        |           |           |           | 69        | 691       |           |           | 362       |           |           |
| 38891    | 1054815   | 28        | 73        | 56        |           |           |           | 62        | 795       |           |           | 352       |           |           |
| 38892    | 1054816   | 20        | 65        | 51        |           |           |           | 57        | 710       |           |           | 248       |           |           |
| 38893Dup | 1054816   | 23        | 89        | 49        |           |           |           | 57        | 711       |           |           | 250       |           |           |
| 38894    | 1054817   | 14        | 49        | 33        |           |           |           | 52        | 462       |           |           | 155       |           |           |
| 38895    | 1054818   | 13        | 76        | 31        |           |           |           | 54        | 444       |           |           | 150       |           |           |
| 38896    | 1054819   | 14        | 74        | 30        |           |           |           | 53        | 495       |           |           | 168       |           |           |
| 38897    | 1054820   | 86        | 95        | 858       |           |           |           | 41        | 441       |           |           | 521       |           |           |
| 38898    | 1054821   | 17        | 63        | 31        |           |           |           | 58        | 504       |           |           | 177       |           |           |
| 38899    | 1054822   | 13        | 64        | 24        |           |           |           | 51        | 299       |           |           | 124       |           |           |
| 38900    | 1054823   | 12        | 77        | 28        |           |           |           | 56        | 305       |           |           | 141       |           |           |
| 38901    | 1054824   | 18        | 74        | 29        |           |           |           | 53        | 277       |           |           | 127       |           |           |
| 38902    | 1054825   | 11        | 75        | 28        |           |           |           | 53        | 318       |           |           | 140       |           |           |
| 38903    | 1054826   | 20        | 112       | 41        |           |           |           | 62        | 1050      |           |           | 266       |           |           |
| 38904Dup | 1054826   | 26        | 101       | 43        |           |           |           | 59        | 1014      |           |           | 256       |           |           |
| 38905    | 1054827   | 15        | 52        | 40        |           |           |           | 55        | 475       |           |           | 151       |           |           |
| 38906    | 1054828   | 15        | 77        | 49        |           |           |           | 51        | 424       |           |           | 133       |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1


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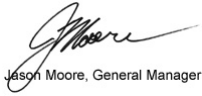
Job #: 201110359

Reference:

Sample #: 86

| Acc # | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 38907 | 1054829   | 9         | 71        | 36        |           |           |           | 50        | 269       |           |           | 113       |           |           |
| 38908 | 1054830   | 13        | 55        | 41        |           |           |           | 50        | 287       |           |           | 113       |           |           |
| 38909 | 1054831   | 10        | 46        | 41        |           |           |           | 51        | 244       |           |           | 122       |           |           |
| 38910 | 1054832   | <5        | <15       | <10       |           |           |           | 1         | <1        |           |           | 3         |           |           |

 PROCEDURE CODES: ALP1, ALPG1, ALC<sub>Co</sub>AR1, ALC<sub>Cu</sub>AR1, ALNiAR1

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Thursday, February 24, 2011

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 Toronto, ON, CAN  
 M5C1B5  
 Ph#: (416) 864-0615  
 Fax#: (416) 864-0620  
 Email: rsutcliffe@bellnet.ca

 Date Received: 02/14/2011  
 Date Completed: 02/24/2011  
 Job #: 201110051  
 Reference:  
 Sample #: 44

| Acc #   | Client ID | Au<br>ppb | Pt<br>ppb | Pd<br>ppb | Rh<br>ppb | Ag<br>ppm | As<br>ppm | Co<br>ppm | Cu<br>ppm | Fe<br>ppm | Mo<br>ppm | Ni<br>ppm | Pb<br>ppm | Zn<br>ppm |
|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 5197    | 907101    | <5        | <15       | <10       |           | 1.47      |           | 23        | 52        |           |           | 43        |           |           |
| 5198    | 907102    | 11        | <15       | <10       |           | 1.58      |           | 38        | 42        |           |           | 64        |           |           |
| 5199    | 907103    | <5        | <15       | <10       |           | 1.39      |           | 14        | 31        |           |           | 33        |           |           |
| 5200    | 907104    | 24        | <15       | <10       |           | 2.30      |           | 57        | 4163      |           |           | 69        |           |           |
| 5201    | 907105    | 15        | <15       | <10       |           | 1.86      |           | 18        | 68        |           |           | 29        |           |           |
| 5202    | 907106    | <5        | <15       | <10       |           | 1.26      |           | 12        | 31        |           |           | 26        |           |           |
| 5203    | 907107    | <5        | 18        | <10       |           | 1.41      |           | 15        | 17        |           |           | 38        |           |           |
| 5204    | 907108    | 14        | <15       | <10       |           | 1.56      |           | 60        | 162       |           |           | 76        |           |           |
| 5205    | 907109    | <5        | <15       | <10       |           | 1.22      |           | 12        | 17        |           |           | 22        |           |           |
| 5206    | 907110    | <5        | <15       | <10       |           | 1.57      |           | 36        | 80        |           |           | 85        |           |           |
| 5207Dup | 907110    | <5        | <15       | <10       |           | 1.52      |           | 38        | 81        |           |           | 85        |           |           |
| 5208    | 907111    | <5        | <15       | <10       |           | 1.57      |           | 32        | 78        |           |           | 82        |           |           |
| 5209    | 907112    | <5        | <15       | <10       |           | 1.42      |           | 25        | 73        |           |           | 68        |           |           |
| 5210    | 907113    | <5        | 17        | <10       |           | 1.44      |           | 33        | 75        |           |           | 78        |           |           |
| 5211    | 907114    | 7         | <15       | <10       |           | 1.46      |           | 24        | 68        |           |           | 68        |           |           |
| 5212    | 907115    | 24        | <15       | <10       |           | 1.55      |           | 29        | 67        |           |           | 127       |           |           |
| 5213    | 907116    | 37        | 59        | 65        |           | 2.10      |           | 113       | 291       |           |           | 766       |           |           |
| 5214    | 907117    | 12        | <15       | <10       |           | 2.07      |           | 44        | 76        |           |           | 60        |           |           |
| 5215    | 907118    | 11        | 24        | <10       |           | 2.13      |           | 43        | 109       |           |           | 109       |           |           |
| 5216    | 907119    | 10        | <15       | <10       |           | 2.40      |           | 149       | 563       |           |           | 1684      |           |           |
| 5217    | 907120    | 7         | <15       | <10       |           | 1.84      |           | 34        | 111       |           |           | 50        |           |           |
| 5218Dup | 907120    | 8         | 27        | <10       |           | 1.79      |           | 34        | 108       |           |           | 46        |           |           |
| 5219    | 907121    | 14        | 29        | <10       |           | 1.67      |           | 25        | 193       |           |           | 36        |           |           |
| 5220    | 907122    | 6         | <15       | <10       |           | 1.80      |           | 34        | 138       |           |           | 40        |           |           |
| 5221    | 907123    | 7         | <15       | <10       |           | 1.66      |           | 31        | 110       |           |           | 47        |           |           |
| 5222    | 907124    | 10        | 18        | <10       |           | 2.31      |           | 32        | 321       |           |           | 41        |           |           |
| 5223    | 907125    | 13        | <15       | <10       |           | 2.38      |           | 36        | 296       |           |           | 42        |           |           |
| 5224    | 907126    | 7         | 20        | <10       |           | 2.17      |           | 35        | 196       |           |           | 43        |           |           |
| 5225    | 907127    | 7         | <15       | <10       |           | 2.14      |           | 35        | 124       |           |           | 39        |           |           |
| 5226    | 907128    | 11        | 30        | <10       |           | 2.15      |           | 40        | 500       |           |           | 38        |           |           |

PROCEDURE CODES: ALP1, ALPG1, ALCoAR1, ALCuAR1, ALNiAR1

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 Derek Demianuk H.Bsc., Laboratory Manager

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 Reference:  
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|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 5227    | 907129    | 29        | 35        | <10       |           | 2.53      |           | 36        | 1122      |           |           | 77        |           |           |
| 5228    | 907130    | 9         | 23        | <10       |           | 2.10      |           | 38        | 438       |           |           | 46        |           |           |
| 5229Dup | 907130    | 8         | 43        | <10       |           | 2.03      |           | 35        | 403       |           |           | 44        |           |           |
| 5230    | 907131    | <5        | 22        | 12        |           | 1.87      |           | 33        | 146       |           |           | 39        |           |           |
| 5231    | 907132    | 5         | 23        | 10        |           | 1.99      |           | 31        | 138       |           |           | 35        |           |           |
| 5232    | 907133    | 7         | 39        | <10       |           | 2.07      |           | 33        | 199       |           |           | 35        |           |           |
| 5233    | 907134    | 7         | 16        | <10       |           | 2.04      |           | 38        | 247       |           |           | 35        |           |           |
| 5234    | 907135    | 7         | <15       | 24        |           | 2.01      |           | 34        | 177       |           |           | 47        |           |           |
| 5235    | 907136    | 7         | <15       | 15        |           | 2.04      |           | 40        | 74        |           |           | 54        |           |           |
| 5236    | 907137    | 6         | 30        | <10       |           | 1.04      |           | 38        | 317       |           |           | 51        |           |           |
| 5237    | 907138    | 11        | <15       | <10       |           | <1        |           | 39        | 531       |           |           | 44        |           |           |
| 5238    | 907139    | <5        | <15       | <10       |           | <1        |           | 34        | 151       |           |           | 38        |           |           |
| 5239    | 907140    | 8         | <15       | <10       |           | 1.30      |           | 47        | 541       |           |           | 52        |           |           |
| 5240Dup | 907140    | 9         | <15       | <10       |           | 1.35      |           | 50        | 546       |           |           | 55        |           |           |
| 5241    | 907141    | 14        | 15        | 13        |           | 1.59      |           | 37        | 1123      |           |           | 56        |           |           |
| 5242    | 907142    | 8         | 16        | 11        |           | <1        |           | 36        | 203       |           |           | 51        |           |           |
| 5243    | 907200    | 8         | <15       | <10       |           | 1.26      |           | 56        | 549       |           |           | 60        |           |           |
| 5244    | 907201    | <5        | <15       | <10       |           | <1        |           | <1        | <1        |           |           | <1        |           |           |

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URSA Major Minerals Incorporated

Sample Intervals for DDH U-08-02

By: Harold Tracaneli, Getn, P. Geo

Field Blank Materials Indicated in Red text

1/4 Duplicate Sample Materials Indicated in green

Lab Duplicate in blue

|  |                                                                                                                                   |
|--|-----------------------------------------------------------------------------------------------------------------------------------|
|  | Injections of the quartz diorite phase of the Shakespeare Intrusive Suite                                                         |
|  | Massive to varitextured quartz gabbro phase of the Shakespeare Intrusive Suite.                                                   |
|  | Fine to medium grained, slightly more felsic - feldspar, ilmenite bearing version - phase of the shakespeare melagabbro.          |
|  | Vari textured gabbro < shakespeare melagabbro, abundant blue quartz eyes, cpy grains and small blebs > po content, c.grn'd layer? |
|  | Shakespeare rock fragment bearing melagabbro phase of the Shakespeare Intrusive Suite.                                            |
|  | Shakespeare massive equigranular melagabbro phase of the Shakespeare Intrusive Suite.                                             |

| Date:         | Sample Number | From:  | To:    | Distance: | Box Number: | Comments:                                                                                                                              |
|---------------|---------------|--------|--------|-----------|-------------|----------------------------------------------------------------------------------------------------------------------------------------|
| March 08 / 11 | 907208        | 0.00   | 0.00   | 0.00      | N/A         | Field blank of barren orthoquartzite materials for DDH U-08-02                                                                         |
| March 20 / 11 | 907209        | 544.82 | 545.51 | 0.69      | 130         | 1% -2% of scattered small 1mm to 2mm local mild interconnected po with traces cpy in QD injection.                                     |
| March 20 / 11 | 907210        | 545.51 | 546.03 | 0.52      | 130         | 1% - 2% possible 3% scattered small 1mm to 2mm local mild interconnected po with traces of cpy in QD injection                         |
| March 20 / 11 | 907211        | 548.80 | 549.41 | 0.61      | 131         | Pervasive fe carb alt's of QD inject'ns, rare 5 mm x 10 mm blebs po rimmed with some cpy.                                              |
| March 20 / 11 | 907212        | 549.41 | 550.15 | 0.74      | 131         | Blue grey, hornfels altered quartzite materials. May contain faint visible traces of sulphide minerals.                                |
| March 20 / 11 | 907213        | 550.15 | 550.60 | 0.45      | 131 and 132 | 1% to 3% of small < 1mm grains and 2 mm x 10 mm stretched blebs of po with some cpy in 10 mm to 230 mm QD inject'ns                    |
| March 20 / 11 | 907214        | 550.60 | 551.56 | 0.96      | 132         | 1/2% to 1% of disseminated small < 1mm grains of po in a series of 10 mm to 230 mm injections of QD.                                   |
| March 20 / 11 | 907215        | 551.56 | 552.00 | 0.44      | 132         | 1% to local 2% small < 1mm grains, to rare interconnected collection of po with some minor cpy in QD injections.                       |
| March 20 / 11 | 907216        | 552.00 | 552.74 | 0.74      | 132         | 1% - 2% possibly 3% of small <1mm grains to 3mm - 3mm x 25 mm stretched - interconnected blebs po in the QD inject'ns.                 |
| March 20 / 11 | 907217        | 552.74 | 553.65 | 0.91      | 132         | Blue grey, hornfels altered quartzite materials. May contain faint visible traces of sulphide minerals.                                |
| March 20 / 11 | 907218        | 553.65 | 554.65 | 1.00      | 132         | Same as that described for 907215, sulphides distributed in a large scale 1,110 mm QD injection.                                       |
| March 20 / 11 | 907219        | 0.00   | 0.00   | 0.00      | N/A         | Field blank of barren orthoquartzite materials for DDH U-08-02                                                                         |
| March 20 / 11 | 907220        | 553.65 | 554.65 | 1.00      | 132         | 1/4 Duplicate sample from sample 907218 as described for 907215, sulphides distributed in a large scale 1,110 mm QD injection.         |
| March 20 / 11 | 907221        | 593.38 | 594.38 | 1.00      | 142         | 1/2 - 1% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, 1mm to 20 mm qtz - fe carb chl fract fill viens    |
| March 20 / 11 | 907222        | 594.38 | 595.38 | 1.00      | 142         | 1/2 - 1% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, <1 -1mm up to 2mm qtz - fe carb chl fract fill v's |
| March 20 / 11 | 907223        | 595.38 | 596.38 | 1.00      | 142         | 1 - 2% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, <1 -1mm qtz - fe carb chl fract fill v's             |
| March 20 / 11 | 907224        | 596.38 | 597.38 | 1.00      | 142         | 1 - 2% small 3mm irreg blebs f.gr'd po, with minor cpy in shakespeare qtz gabbro, po cpy bearing <1 -1mm qtz - fe carb chl fract v's   |
| March 20 / 11 | 907225        | 614.82 | 615.82 | 1.00      | 147         | Rare visible tr's sulph in f.gr'd shakespeare qtz gabbro, py bearing , <1mm to 2mm qtz- calc carb fecarb - chl fract fill v's          |
| March 20 / 11 | 907226        | 615.82 | 616.24 | 0.42      | 147         | 15% - 30% of 3mm to 10mm x 15mm blebs po with 1 - 1.5% cpy in f.gr'd - med gr'd shake qtz gab, local 1 -2mm fecarb fract v's           |
| March 20 / 11 | 907227        | 616.24 | 616.85 | 0.61      | 147         | 1 - 5% 3mm to rare lrg 30mm irreg blebs po with 1/2 -1% cpy, 3 - 5%, <1 - 1mm grains ilmenite in shake qtz gabbro                      |
| March 20 / 11 | 907228        | 616.85 | 617.80 | 0.95      | 147         | 15 - 25% irreg 3 - 10mm x 30mm, some interconnected blebs po with 1% possible 1.5 -2% cpy in med gr'd shake qtz gabbro                 |
| March 20 / 11 | 907229        | 617.80 | 618.15 | 0.35      | 147         | 7-10% local 25-30% collect'n 3mm - 10mm x10mm some interconnected bleb po, 1/2 - 1% possible 2% cpy, fabric align'mt of sulph's        |
| March 20 / 11 | 907230        | 618.15 | 618.54 | 0.39      | 147         | Somewhat stretched remnants 3-5% po with 1/2 - 1% cpy, @ contact shake qtz gab - melagab, 1 up to 20mm po-cpy, qtz-carb v's            |
| March 20 / 11 | 907231        | 616.85 | 617.80 | 0.95      | 147         | 1/4 dupl, 15 - 25% irreg 3 - 10mm x 30mm, some interconnected blebs po with 1% possible 1.5 -2% cpy in med gr'd shake qtz gab          |
| March 20 / 11 | 907232        | 618.54 | 619.56 | 1.02      | 147 and 148 | 2-3% poss up 5% f.gr'd po , 1-1.5 cpy, 1-3% grains ilmenite, some po-cpy remobed into 1-5mm q-carb frac fill v's in shake melagab      |
| March 20 / 11 | 907233        | 619.56 | 620.56 | 1.00      | 148         | 1-2% poss up 3%, 3mm - 5mm blebs po, tr-1/2% cpy, 3-5% 3mm grains ilmenite, 1-3mm qtz-calcarb fract fill v's shake melagab             |
| March 20 / 11 | 907234        | 620.56 | 621.56 | 1.00      | 148         | 1-2% , 3mm - 5mm blebs po, tr-1/2% cpy, 3-5% 3mm grains ilmenite, cpy-po bearing 1-3mm qtz-calcarb fract fill v's, shake melagab       |
| March 20 / 11 | 907235        | 621.56 | 622.56 | 1.00      | 148         | 1/2-1% 1-2mm gr'ns - 3mm round blebs po, tr-1/2% cpy, 3-5% gr'ns ilmenite, 1-2mm sharp qtz-calcarb fract fill v's, shake melagab       |
| March 20 / 11 | 907236        | 622.56 | 623.56 | 1.00      | 148 and 149 | 1/2-1% 1-2mm gr'ns - 3mm round blebs po, tr cpy, 3-5% gr'ns ilmenite, 1-2mm sharp qtz-calcarb fract fill v's, shake melagab            |
| March 20 / 11 | 907237        | 623.56 | 624.56 | 1.00      | 149         | rare tr's po - cpy, 3-5% 2-3mm gr'ns ilmenite in mass f.- med gr'd shake melagab.                                                      |
| March 20 / 11 | 907238        | 624.56 | 625.56 | 1.00      | 149         | rare tr's po - cpy, rare 1-2mm gr'ns po, 3-5% 2-3mm gr'ns ilmenite, 1mm po-cpy bearing q-carb v's in mass f.- m gr'd shake melagab.    |
| March 20 / 11 | 907239        | 625.56 | 626.06 | 0.50      | 149         | rare tr's po - cpy, rare 1-2mm gr'ns po, 3-5% 2-3mm gr'ns ilmenite, 1mm po-cpy bearing q-carb v's in mass f.- m gr'd shake melagab.    |
| March 20 / 11 | 907240        | 0.00   | 0.00   | 0.00      | N/A         | Field blank of barren orthoquartzite materials for DDH U-08-02                                                                         |
| March 20 / 11 | 907241        | 626.06 | 627.00 | 0.94      | 149         | rare 3-5mm faint irreg blebs po less cpy, med-c.grn'd shake melagab to vari text gab with 5mm x 10mm irreg to round blue qtz eyes      |
| March 20 / 11 | 907242        | 627.00 | 627.83 | 0.83      | 149 and 150 | local rare <1mm-1mm with cpy rich with less po, vari text'd gab layer(?) in shake melagab with 3-5% up to 5mm x 7mm blue q eyes        |
| March 20 / 11 | 907243        | 627.83 | 628.83 | 1.00      | 150         | tr-1/2-1%, rarely local 2% v.f.grn'd po with <r cpy 3mm-5mm irreg blebs po with some cpy in f.m.grn'd shake rx frag phase melagab      |
| March 21 / 11 | 907244        | 628.83 | 629.83 | 1.00      | 150         | tr- 1/2% up to 1 or 2% small 1-2mm grains po less cpy, rare 5mm irreg blebs po -cpy, f.m.grn'd shake rx frag phase melagab.            |
| March 21 / 11 | 907245        | 629.83 | 630.83 | 1.00      | 150         | tr-1/2 poss 1% fine diss'd po with some cpy, massive f.m.grn'd shake rx frag phase melagabbro                                          |
| March 21 / 11 | 907246        | 630.83 | 631.83 | 1.00      | 150 and 151 | 3-5% diss'd to 5-10mm high irreg blebs po - cpy, rare cpy bearing <1-1mm q-carb-ep fract fill v's shake rx frag phase melagab          |

|               |        |        |        |      |             |                                                                                                                                            |
|---------------|--------|--------|--------|------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| March 21 / 11 | 907247 | 631.83 | 632.83 | 1.00 | 151         | 1-3% poss up to 4% small ,1-3mm grains po-cpy, some local 3mm blebs po-cpy, med grn'd shake rx frag melagab                                |
| March 21 / 11 | 907248 | 632.83 | 633.83 | 1.00 | 151         | 1-3% poss up to 4% small ,1-3mm grains po-cpy, 3mm blebs po-cpy, 1mm po -cpy q-carb fract fill v's m. grn'd shake rx frag melagab          |
| March 21 / 11 | 907249 | 633.83 | 634.83 | 1.00 | 151         | 3-5% diss'd to 5-10mm high irreg blebs po - cpy, shake rx frag phase melagab                                                               |
| March 21 / 11 | 907250 | 634.83 | 635.83 | 1.00 | 151         | 2-4% diss'd to 5-10mm high irreg blebs po - cpy, cpy bearing 3 mm q-carb fract fill v's shake rx frag melagab up 10mm x 25mm rx frags      |
| March 21 / 11 | 907801 | 635.83 | 636.83 | 1.00 | 151 and 152 | 1-2% diss'd 1-3mm grn's po - cpy local 5mm x 7mm ireg blebs po with cpy, <1-5mm cpy bearing q-carb-chl frac fill v's rx frag melagab       |
| March 21 / 11 | 907802 | 636.83 | 637.83 | 1.00 | 152         | 1/2-1% diss's 1-3mm grn's po less cpy, several <1-1mm cpy-po bearing q-carb-fecarb fract fill v's, med grn'd shake rx frag melagab.        |
| March 21 / 11 | 907803 | 637.83 | 638.83 | 1.00 | 152         | 1-3% diss'd 1-3mm grn's po less cpy, scattered 5mm x 7mm irreg blebs po with cpy, cpy-po in 1-3mm carb-q fract fill v's rx frag melagab    |
| March 21 / 11 | 907804 | 638.83 | 639.83 | 1.00 | 152         | 1-3% diss'd 1-3mm grn's po less cpy, scattered 3mm irreg blebs po with cpy, cpy-po in 1-3mm carb-fecarb-q fract fill v's rx frag melagab   |
| March 21 / 11 | 907805 | 639.83 | 640.83 | 1.00 | 152 and 153 | 1-3% diss'd 1-3mm grn's po 1/2-1% cpy, scattered 3mm irreg blebs po with cpy, cpy-po in 1-3mm carb-fecarb-q fract fill v's rx frag melagab |
| March 21 / 11 | 907806 | 639.83 | 639.83 | 1.00 | 152         | 1-3% diss'd 1-3mm grn's po less cpy, scattered 3mm irreg blebs po with cpy, cpy-po in 1-3mm carb-fecarb-q fract fill v's rx frag melagab   |
| March 21 / 11 | 907807 | 640.83 | 641.83 | 1.00 | 153         | 1-3% diss'd 1-3mm grn's po 1/2-1% poss 1.5% cpy, scattered 3mm irreg blebs po with cpy, 1mm carb-q fract fill v's rx frag melagab          |
| March 21 / 11 | 907808 | 641.83 | 642.83 | 1.00 | 153         | tr-1/2% <1-1mm grn's po <cpy, multiple 1-3mm fecarb-carb-q with f:grn'd cpy and po in mass f.m.grn'd equigranular shake melagab            |
| March 21 / 11 | 907809 | 642.83 | 643.83 | 1.00 | 153         | tr-1/2% <1-1mm grn's po <cpy, multiple 1-40 mm shear fecarb-carb-q with f:grn'd cpy and po in mass f.m.grn'd equigran shake melagab        |
| March 21 / 11 | 907810 | 643.83 | 644.83 | 1.00 | 153 and 154 | tr-1 poss 2-3%small <1mm diss'd grn's po with tr'c cpy, local 10-15mm cloudy collect'n grn's po-cpy f.m.grn'd equigran shake melagab       |
| March 21 / 11 | 907811 | 644.83 | 645.83 | 1.00 | 154         | tr-1/2% - 1 or 2% f.grn'd diss'd po with tr - 1/2% f.grn'd diss'd cpy, rare <1mm carb-q with po-cpy f.m.grn'd equigran shake melagab       |
| March 21 / 11 | 907812 | 645.83 | 646.83 | 1.00 | 154         | 1-3% f.grn'd po with 1/2-1% poss 1.5% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, f.m.grn'd equi shake melagab           |
| March 21 / 11 | 907813 | 646.83 | 647.83 | 1.00 | 154         | 1-3% f.grn'd po with 1/2-1% poss 1.5% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, f.m.grn'd equi shake melagab           |
| March 21 / 11 | 907814 | 647.83 | 648.83 | 1.00 | 154         | 1-3% f.grn'd po with 1/2-1% poss 1.5-2% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, m.grn'd equi shake melagab           |
| March 21 / 11 | 907815 | 648.83 | 649.83 | 1.00 | 155         | 1-5% f.grn'd po with 1/2-1% poss 1.5-2% 1-2mm grn's cpy, some <1mm carb-q fract fill v's with cpy-po, m.grn'd equi shake melagab           |
| March 21 / 11 | 907816 | 649.83 | 650.83 | 1.00 | 155         | 1- 5% local 7-10% po,1/2-1% poss 2% 1-2mm grn's cpy, <1-8mm fecarb-carb-q fract fill v's with cpy-po, m.grn'd equi shake melagab           |
| March 21 / 11 | 907817 | 650.83 | 651.83 | 1.00 | 155         | tr-1/2% small<1mm grn's diss'd po, tr cpy,<1-2mm fecarb-carb-q fract fill v's with v.f.grn'd cpy-po, m.grn'd equigran shake melagab        |
| March 21 / 11 | 907818 | 651.83 | 652.83 | 1.00 | 155         | tr- small<1mm grn's diss'd po, tr cpy,<1-1mm fecarb-carb-q fract fill v's with v.f.grn'd cpy-po, m.grn'd equigran shake melagab            |
| March 21 / 11 | 907819 | 652.83 | 653.83 | 1.00 | 155 and 156 | tr-rare 1/2% po tr-rare 1/2%cpy, <1-2mm carb-q fract fill v's f.m.grn'd shake melagabbro                                                   |
| March 21 / 11 | 907820 | 653.83 | 654.70 | 0.87 | 156         | tr's v.f.grn'd po-cpy, several <1mm-2mm carb-fecarb-q fract fill v's with local abundant cpy-po, f.m.grn'd equigran shake melagabbro       |
| March 21 / 11 | 907821 | 0.00   | 0.00   | 0.00 | N/A         | Feild blank of barren orthoquartzite materials for DDH U-08-02                                                                             |

Samples marked out by: Harold J. Tracanelli, Getn, P.Geo  
Samples Sawn by: Ben Martel  
Samples collected and recorded by: Mike Young <my>

No jewelry or the like were worn during the marking out, preparation or the collection of the sample materials  
All plastic sample bags have been labeled, assay tags have been inserted and sealed using zip ties  
Sample lots or nominally 8 to 10 sawn core samples have been places into labeled, new rice bags.  
Each rice bag has been sealed using zip ties

64 samples contained in 7 rice bags were delivered to the Accurassay Preparation Laboratory facility in Lively, Ontario By: Harold Tracanelli, Getn, P.Geo on Thursday March 24th., 2011 @ 10:20 am.

Samples Collected From DDH U-08-02

|    |                 |                  |               | <b>Samples</b> | <b>Box</b>    |        |        |                                       |       |
|----|-----------------|------------------|---------------|----------------|---------------|--------|--------|---------------------------------------|-------|
|    | <b>Initials</b> | <b>Samples</b>   | <b>Marked</b> | <b>Sample</b>  | <b>Number</b> |        |        |                                       |       |
|    |                 | <b>Collected</b> | <b>Out</b>    | <b>Number</b>  |               |        |        |                                       |       |
| 1  | my              | Mar 22 / 11      | Mar 08 / 11   | 907208         |               | 907212 | 907813 | 907208 to 907216                      | Bag 1 |
| 2  | my              | Mar 22 / 11      | Mar 20 / 11   | 907209         | 130           |        |        | 907217 to 907225                      | Bag 2 |
| 3  | my              | Mar 22 / 11      | Mar 20 / 11   | 907210         | 130           |        |        | 907226 to 907234                      | Bag 3 |
| 4  | my              | Mar 22 / 11      | Mar 20 / 11   | 907211         | 131           |        |        | 907235 to 907243                      | Bag 4 |
| 5  | my              | Mar 22 / 11      | Mar 20 / 11   | 907212         | 131           |        |        | 907244 to 907250 and 907801 to 907802 | Bag 5 |
| 6  | my              | Mar 22 / 11      | Mar 20 / 11   | 907213         | 131 - 132     |        |        | 907803 to 907811                      | Bag 6 |
| 7  | my              | Mar 22 / 11      | Mar 20 / 11   | 907214         | 132           |        |        | 907812 to 907821                      | Bag 7 |
| 8  | my              | Mar 22 / 11      | Mar 20 / 11   | 907215         | 132           |        |        |                                       |       |
| 9  | my              | Mar 22 / 11      | Mar 20 / 11   | 907216         | 132           |        |        |                                       |       |
| 10 | my              | Mar 22 / 11      | Mar 20 / 11   | 907217         | 132           |        |        |                                       |       |
| 11 | my              | Mar 22 / 11      | Mar 20 / 11   | 907218         | 132           |        |        |                                       |       |
| 12 | my              | Mar 22 / 11      | Mar 20 / 11   | 907219         |               |        |        |                                       |       |

|    |    |             |             |        |           |
|----|----|-------------|-------------|--------|-----------|
| 13 | my | Mar 22 / 11 | Mar 20 / 11 | 907220 | 132       |
| 14 | my | Mar 22 / 11 | Mar 20 / 11 | 907221 | 142       |
| 15 | my | Mar 22 / 11 | Mar 20 / 11 | 907222 | 142       |
| 16 | my | Mar 22 / 11 | Mar 20 / 11 | 907223 | 142       |
| 17 | my | Mar 22 / 11 | Mar 20 / 11 | 907224 | 142       |
| 18 | my | Mar 22 / 11 | Mar 20 / 11 | 907225 | 147       |
| 19 | my | Mar 22 / 11 | Mar 20 / 11 | 907226 | 147       |
| 20 | my | Mar 22 / 11 | Mar 20 / 11 | 907227 | 147       |
| 21 | my | Mar 22 / 11 | Mar 20 / 11 | 907228 | 147       |
| 22 | my | Mar 22 / 11 | Mar 20 / 11 | 907229 | 147       |
| 23 | my | Mar 22 / 11 | Mar 20 / 11 | 907230 | 147       |
| 24 | my | Mar 22 / 11 | Mar 20 / 11 | 907231 | 147       |
| 25 | my | Mar 22 / 11 | Mar 20 / 11 | 907232 | 147 - 148 |
| 26 | my | Mar 22 / 11 | Mar 20 / 11 | 907233 | 148       |
| 27 | my | Mar 22 / 11 | Mar 20 / 11 | 907234 | 148       |
| 28 | my | Mar 22 / 11 | Mar 20 / 11 | 907235 | 148       |
| 29 | my | Mar 22 / 11 | Mar 20 / 11 | 907236 | 148 - 149 |
| 30 | my | Mar 22 / 11 | Mar 20 / 11 | 907237 | 149       |
| 31 | my | Mar 22 / 11 | Mar 20 / 11 | 907238 | 149       |
| 32 | my | Mar 22 / 11 | Mar 20 / 11 | 907239 | 149       |
| 33 | my | Mar 22 / 11 | Mar 20 / 11 | 907240 | 149       |
| 34 | my | Mar 22 / 11 | Mar 20 / 11 | 907241 | 149       |
| 35 | my | Mar 22 / 11 | Mar 20 / 11 | 907242 | 149 - 150 |
| 36 | my | Mar 22 / 11 | Mar 20 / 11 | 907243 | 150       |
| 37 | my | Mar 22 / 11 | Mar 21 / 11 | 907244 | 150       |
| 38 | my | Mar 22 / 11 | Mar 21 / 11 | 907245 | 150       |
| 39 | my | Mar 22 / 11 | Mar 21 / 11 | 907246 | 150 - 151 |
| 40 | my | Mar 22 / 11 | Mar 21 / 11 | 907247 | 151       |
| 41 | my | Mar 22 / 11 | Mar 21 / 11 | 907248 | 151       |
| 42 | my | Mar 22 / 11 | Mar 21 / 11 | 907249 | 151       |
| 43 | my | Mar 22 / 11 | Mar 21 / 11 | 907250 | 151       |
| 44 | my | Mar 22 / 11 | Mar 21 / 11 | 907801 | 151 - 152 |
| 45 | my | Mar 22 / 11 | Mar 21 / 11 | 907802 | 152       |
| 46 | my | Mar 22 / 11 | Mar 21 / 11 | 907803 | 152       |
| 47 | my | Mar 22 / 11 | Mar 21 / 11 | 907804 | 152       |
| 48 | my | Mar 22 / 11 | Mar 21 / 11 | 907805 | 152 - 153 |
| 49 | my | Mar 22 / 11 | Mar 21 / 11 | 907806 | 152       |
| 50 | my | Mar 22 / 11 | Mar 21 / 11 | 907807 | 153       |
| 51 | my | Mar 22 / 11 | Mar 21 / 11 | 907808 | 153       |
| 52 | my | Mar 22 / 11 | Mar 21 / 11 | 907809 | 153       |
| 53 | my | Mar 22 / 11 | Mar 21 / 11 | 907810 | 153 - 154 |
| 54 | my | Mar 22 / 11 | Mar 21 / 11 | 907811 | 154       |
| 55 | my | Mar 22 / 11 | Mar 21 / 11 | 907812 | 154       |
| 56 | my | Mar 22 / 11 | Mar 21 / 11 | 907813 | 154       |
| 57 | my | Mar 22 / 11 | Mar 21 / 11 | 907814 | 154       |
| 58 | my | Mar 22 / 11 | Mar 21 / 11 | 907815 | 155       |
| 59 | my | Mar 22 / 11 | Mar 21 / 11 | 907816 | 155       |
| 60 | my | Mar 22 / 11 | Mar 21 / 11 | 907817 | 155       |
| 61 | my | Mar 22 / 11 | Mar 21 / 11 | 907818 | 155       |
| 62 | my | Mar 22 / 11 | Mar 21 / 11 | 907819 | 155 - 156 |
| 63 | my | Mar 22 / 11 | Mar 21 / 11 | 907820 | 156       |
| 64 | my | Mar 22 / 11 | Mar 21 / 11 | 907821 |           |



Changed Values

< 1 = 0.50  
 < 5 = 2.5  
 <10 = 5  
 <15 = 7.5

| Accurassay<br>Numbers | URSA<br>Sample<br>Number | From:  | To:    | Distance: | Au ppb | Pt ppb | Pd ppb | Ni ppm | Cu ppm | Co ppm | Grade Thickness |        |        |         |         |        |
|-----------------------|--------------------------|--------|--------|-----------|--------|--------|--------|--------|--------|--------|-----------------|--------|--------|---------|---------|--------|
|                       |                          |        |        |           | 5 DL   | 15 DL  | 10 DL  | ppm    | ppm    | ppm    | Au ppb          | Pt ppb | Pd ppb | Ni ppm  | Cu ppm  | Co ppm |
| 11142                 | 907209                   | 544.82 | 545.51 | 0.69      | 9      | 21     | 12     | 132    | 93     | 48     | 6.21            | 14.49  | 8.28   | 91.08   | 64.17   | 33.12  |
| 11143                 | 907210                   | 545.51 | 546.03 | 0.52      | 2.5    | 46     | 12     | 187    | 140    | 52     | 1.3             | 23.92  | 6.24   | 97.24   | 72.8    | 27.04  |
| 11144                 | 907211                   | 548.80 | 549.41 | 0.61      | 10     | 24     | 14     | 160    | 110    | 55     | 6.1             | 14.64  | 8.54   | 97.6    | 67.1    | 33.55  |
| 11145                 | 907212                   | 549.41 | 550.15 | 0.74      | 2.5    | 29     | 5      | 16     | 36     | 7      | 1.85            | 21.46  | 3.7    | 11.84   | 26.64   | 5.18   |
| 11146                 | 907213                   | 550.15 | 550.60 | 0.45      | 2.5    | 24     | 15     | 123    | 84     | 40     | 1.125           | 10.8   | 6.75   | 55.35   | 37.8    | 18     |
| 11147                 | 907214                   | 550.60 | 551.56 | 0.96      | 2.5    | 7.5    | 5      | 102    | 90     | 28     | 2.4             | 7.2    | 4.8    | 97.92   | 86.4    | 26.88  |
| 11148                 | 907215                   | 551.56 | 552.00 | 0.44      | 8      | 36     | 11     | 158    | 146    | 41     | 3.52            | 15.84  | 4.84   | 69.52   | 64.24   | 18.04  |
| 11149                 | 907216                   | 552.00 | 552.74 | 0.74      | 2.5    | 22     | 16     | 143    | 91     | 49     | 1.85            | 16.28  | 11.84  | 105.82  | 67.34   | 36.26  |
| 11150                 | 907217                   | 552.74 | 553.65 | 0.91      | 6      | 33     | 5      | 33     | 49     | 9      | 5.46            | 30.03  | 4.55   | 30.03   | 44.59   | 8.19   |
| 11152                 | 907218                   | 553.65 | 554.65 | 1.00      | 13     | 38     | 18     | 175    | 120    | 57     | 13              | 38     | 18     | 175     | 120     | 57     |
| 11155                 | 907221                   | 593.38 | 594.38 | 1.00      | 2.5    | 33     | 12     | 105    | 67     | 49     | 2.5             | 33     | 12     | 105     | 67      | 49     |
| 11156                 | 907222                   | 594.38 | 595.38 | 1.00      | 10     | 35     | 21     | 140    | 125    | 53     | 10              | 35     | 21     | 140     | 125     | 53     |
| 11157                 | 907223                   | 595.38 | 596.38 | 1.00      | 2.5    | 40     | 5      | 47     | 68     | 37     | 2.5             | 40     | 5      | 47      | 68      | 37     |
| 11158                 | 907224                   | 596.38 | 597.38 | 1.00      | 6      | 29     | 16     | 48     | 83     | 38     | 6               | 29     | 16     | 48      | 83      | 38     |
| 11159                 | 907225                   | 614.82 | 615.82 | 1.00      | 81     | 329    | 204    | 37     | 102    | 37     | 81              | 329    | 204    | 37      | 102     | 37     |
| 11160                 | 907226                   | 615.82 | 616.24 | 0.42      | 17     | 84     | 43     | 4464   | 2269   | 307    | 7.14            | 35.28  | 18.06  | 1874.88 | 952.98  | 128.94 |
| 11161                 | 907227                   | 616.24 | 616.85 | 0.61      | 24     | 68     | 39     | 423    | 429    | 68     | 14.64           | 41.48  | 23.79  | 258.03  | 261.69  | 41.48  |
| 11163                 | 907228                   | 616.85 | 617.80 | 0.95      | 106    | 229    | 195    | 3232   | 1788   | 262    | 100.7           | 217.55 | 185.25 | 3070.4  | 1698.6  | 248.9  |
| 11164                 | 907229                   | 617.80 | 618.15 | 0.35      | 94     | 218    | 171    | 7076   | 1049   | 462    | 32.9            | 76.3   | 59.85  | 2476.6  | 367.15  | 161.7  |
| 11165                 | 907230                   | 618.15 | 618.54 | 0.39      | 55     | 130    | 98     | 2115   | 1422   | 177    | 21.45           | 50.7   | 38.22  | 824.85  | 554.58  | 69.03  |
| 11167                 | 907232                   | 618.54 | 619.56 | 1.02      | 39     | 103    | 73     | 835    | 1092   | 89     | 39.78           | 105.06 | 74.46  | 851.7   | 1113.84 | 90.78  |
| 11168                 | 907233                   | 619.56 | 620.56 | 1.00      | 21     | 85     | 42     | 333    | 501    | 51     | 21              | 85     | 42     | 333     | 501     | 51     |
| 11169                 | 907234                   | 620.56 | 621.56 | 1.00      | 19     | 70     | 33     | 226    | 371    | 47     | 19              | 70     | 33     | 226     | 371     | 47     |
| 11170                 | 907235                   | 621.56 | 622.56 | 1.00      | 13     | 46     | 27     | 244    | 333    | 52     | 13              | 46     | 27     | 244     | 333     | 52     |
| 11171                 | 907236                   | 622.56 | 623.56 | 1.00      | 18     | 41     | 31     | 196    | 287    | 52     | 18              | 41     | 31     | 196     | 287     | 52     |
| 11172                 | 907237                   | 623.56 | 624.56 | 1.00      | 11     | 22     | 5      | 66     | 119    | 38     | 11              | 22     | 5      | 66      | 119     | 38     |
| 11174                 | 907238                   | 624.56 | 625.56 | 1.00      | 12     | 7.5    | 5      | 64     | 98     | 40     | 12              | 7.5    | 5      | 64      | 98      | 40     |
| 11175                 | 907239                   | 625.56 | 626.06 | 0.50      | 2.5    | 16     | 5      | 55     | 74     | 39     | 1.25            | 8      | 2.5    | 27.5    | 37      | 19.5   |
| 11177                 | 907241                   | 626.06 | 627.00 | 0.94      | 2.5    | 7.5    | 5      | 54     | 84     | 36     | 2.35            | 7.05   | 4.7    | 50.76   | 78.96   | 33.84  |
| 11178                 | 907242                   | 627.00 | 627.83 | 0.83      | 10     | 7.5    | 5      | 74     | 101    | 33     | 8.3             | 6.225  | 4.15   | 61.42   | 83.83   | 27.39  |
| 11179                 | 907243                   | 627.83 | 628.83 | 1.00      | 6      | 7.5    | 15     | 132    | 182    | 41     | 6               | 7.5    | 15     | 132     | 182     | 41     |
| 11180                 | 907244                   | 628.83 | 629.83 | 1.00      | 18     | 7.5    | 12     | 116    | 156    | 44     | 18              | 7.5    | 12     | 116     | 156     | 44     |
| 11181                 | 907245                   | 629.83 | 630.83 | 1.00      | 8      | 15     | 5      | 112    | 185    | 43     | 8               | 15     | 5      | 112     | 185     | 43     |
| 11182                 | 907246                   | 630.83 | 631.83 | 1.00      | 19     | 7.5    | 23     | 191    | 374    | 52     | 19              | 7.5    | 23     | 191     | 374     | 52     |
| 11183                 | 907247                   | 631.83 | 632.83 | 1.00      | 21     | 28     | 36     | 276    | 552    | 57     | 21              | 28     | 36     | 276     | 552     | 57     |
| 11185                 | 907248                   | 632.83 | 633.83 | 1.00      | 46     | 7.5    | 26     | 216    | 378    | 50     | 46              | 7.5    | 26     | 216     | 378     | 50     |
| 11186                 | 907249                   | 633.83 | 634.83 | 1.00      | 38     | 7.5    | 39     | 298    | 605    | 53     | 38              | 7.5    | 39     | 298     | 605     | 53     |
| 11187                 | 907250                   | 634.83 | 635.83 | 1.00      | 39     | 21     | 45     | 362    | 645    | 57     | 39              | 21     | 45     | 362     | 645     | 57     |
| 11188                 | 907801                   | 635.83 | 636.83 | 1.00      | 24     | 33     | 41     | 286    | 568    | 55     | 24              | 33     | 41     | 286     | 568     | 55     |
| 11189                 | 907802                   | 636.83 | 637.83 | 1.00      | 45     | 24     | 35     | 206    | 327    | 56     | 45              | 24     | 35     | 206     | 327     | 56     |
| 11190                 | 907803                   | 637.83 | 638.83 | 1.00      | 40     | 28     | 48     | 272    | 463    | 58     | 40              | 28     | 48     | 272     | 463     | 58     |
| 11191                 | 907804                   | 638.83 | 639.83 | 1.00      | 46     | 45     | 69     | 388    | 685    | 63     | 46              | 45     | 69     | 388     | 685     | 63     |
| 11192                 | 907805                   | 639.83 | 640.83 | 1.00      | 63     | 72     | 105    | 710    | 1482   | 74     | 63              | 72     | 105    | 710     | 1482    | 74     |
| 11194                 | 907807                   | 640.83 | 641.83 | 1.00      | 57     | 53     | 88     | 588    | 1489   | 66     | 57              | 53     | 88     | 588     | 1489    | 66     |
| 11196                 | 907808                   | 641.83 | 642.83 | 1.00      | 16     | 20     | 28     | 144    | 329    | 46     | 16              | 20     | 28     | 144     | 329     | 46     |
| 11197                 | 907809                   | 642.83 | 643.83 | 1.00      | 20     | 7.5    | 34     | 154    | 320    | 54     | 20              | 7.5    | 34     | 154     | 320     | 54     |
| 11198                 | 907810                   | 643.83 | 644.83 | 1.00      | 18     | 36     | 39     | 166    | 314    | 52     | 18              | 36     | 39     | 166     | 314     | 52     |
| 11199                 | 907811                   | 644.83 | 645.83 | 1.00      | 34     | 54     | 57     | 256    | 438    | 59     | 34              | 54     | 57     | 256     | 438     | 59     |
| 11200                 | 907812                   | 645.83 | 646.83 | 1.00      | 79     | 95     | 100    | 489    | 1073   | 70     | 79              | 95     | 100    | 489     | 1073    | 70     |

|       |        |        |        |      |     |     |     |      |      |    |       |      |       |        |         |      |
|-------|--------|--------|--------|------|-----|-----|-----|------|------|----|-------|------|-------|--------|---------|------|
| 11201 | 907813 | 646.83 | 647.83 | 1.00 | 73  | 99  | 115 | 676  | 1027 | 75 | 73    | 99   | 115   | 676    | 1027    | 75   |
| 11202 | 907814 | 647.83 | 648.83 | 1.00 | 97  | 155 | 172 | 1001 | 1919 | 86 | 97    | 155  | 172   | 1001   | 1919    | 86   |
| 11203 | 907815 | 648.83 | 649.83 | 1.00 | 104 | 138 | 182 | 951  | 1926 | 84 | 104   | 138  | 182   | 951    | 1926    | 84   |
| 11204 | 907816 | 649.83 | 650.83 | 1.00 | 44  | 54  | 85  | 278  | 1009 | 54 | 44    | 54   | 85    | 278    | 1009    | 54   |
| 11205 | 907817 | 650.83 | 651.83 | 1.00 | 17  | 16  | 66  | 139  | 369  | 50 | 17    | 16   | 66    | 139    | 369     | 50   |
| 11207 | 907818 | 651.83 | 652.83 | 1.00 | 9   | 21  | 58  | 131  | 292  | 50 | 9     | 21   | 58    | 131    | 292     | 50   |
| 11208 | 907819 | 652.83 | 653.83 | 1.00 | 18  | 7.5 | 62  | 145  | 345  | 53 | 18    | 7.5  | 62    | 145    | 345     | 53   |
| 11209 | 907820 | 653.83 | 654.70 | 0.87 | 34  | 40  | 104 | 381  | 1321 | 60 | 29.58 | 34.8 | 90.48 | 331.47 | 1149.27 | 52.2 |

Field Blank Materials

|       |        |      |      |      | Au ppb<br>5 DL | Pt ppb<br>15 DL | Pd ppb<br>10 DL | Ni ppm<br>ppm | Cu ppm<br>ppm | Co ppm<br>ppm | Grade Thickness |        |        |        |        |        |
|-------|--------|------|------|------|----------------|-----------------|-----------------|---------------|---------------|---------------|-----------------|--------|--------|--------|--------|--------|
|       |        |      |      |      |                |                 |                 |               |               |               | Au ppb          | Pt ppb | Pd ppb | Ni ppm | Cu ppm | Co ppm |
| 11141 | 907208 | 0.00 | 0.00 | 0.00 | 2.5            | 7.5             | 5               | 0.5           | 0.5           | 0.5           | 0               | 0      | 0      | 0      | 0      | 0      |
| 11153 | 907219 | 0.00 | 0.00 | 0.00 | 2.5            | 7.5             | 5               | 0.5           | 0.5           | 0.5           | 0               | 0      | 0      | 0      | 0      | 0      |
| 11176 | 907240 | 0.00 | 0.00 | 0.00 | 9              | 7.5             | 5               | 0.5           | 0.5           | 0.5           | 0               | 0      | 0      | 0      | 0      | 0      |
| 11210 | 907821 | 0.00 | 0.00 | 0.00 | 9              | 7.5             | 5               | 0.5           | 0.5           | 0.5           | 0               | 0      | 0      | 0      | 0      | 0      |

1/4 Duplicate Samples

|       |        |        |        |      |     |     |     |      |      |     |       |        |        |         |         |        |
|-------|--------|--------|--------|------|-----|-----|-----|------|------|-----|-------|--------|--------|---------|---------|--------|
| 11152 | 907218 | 553.65 | 554.65 | 1.00 | 13  | 38  | 18  | 175  | 120  | 57  | 13    | 38     | 18     | 175     | 120     | 57     |
| 11154 | 907220 | 553.65 | 554.65 | 1.00 | 13  | 37  | 16  | 199  | 148  | 63  | 13    | 37     | 16     | 199     | 148     | 63     |
| 11163 | 907228 | 616.85 | 617.80 | 0.95 | 106 | 229 | 195 | 3232 | 1788 | 262 | 100.7 | 217.55 | 185.25 | 3070.4  | 1698.6  | 248.9  |
| 11166 | 907231 | 616.85 | 617.80 | 0.95 | 79  | 164 | 171 | 2919 | 1535 | 239 | 75.05 | 155.8  | 162.45 | 2773.05 | 1458.25 | 227.05 |
| 11191 | 907804 | 638.83 | 639.83 | 1.00 | 46  | 45  | 69  | 388  | 685  | 63  | 46    | 45     | 69     | 388     | 685     | 63     |
| 11193 | 907806 | 638.83 | 639.83 | 1.00 | 38  | 24  | 61  | 388  | 670  | 65  | 38    | 24     | 61     | 388     | 670     | 65     |

Laboratory Duplicate:

|       |        |        |        |      |     |     |    |     |      |    |       |       |       |        |        |       |
|-------|--------|--------|--------|------|-----|-----|----|-----|------|----|-------|-------|-------|--------|--------|-------|
| 11150 | 907217 | 552.74 | 553.65 | 0.91 | 6   | 33  | 5  | 33  | 49   | 9  | 5.46  | 30.03 | 4.55  | 30.03  | 44.59  | 8.19  |
| 11151 | 907217 | 552.74 | 553.65 | 0.91 | 2.5 | 40  | 5  | 33  | 48   | 9  | 2.275 | 36.4  | 4.55  | 30.03  | 43.68  | 8.19  |
| 11161 | 907227 | 616.24 | 616.85 | 0.61 | 24  | 68  | 39 | 423 | 429  | 68 | 14.64 | 41.48 | 23.79 | 258.03 | 261.69 | 41.48 |
| 11162 | 907227 | 616.24 | 616.85 | 0.61 | 18  | 104 | 35 | 454 | 435  | 71 | 10.98 | 63.44 | 21.35 | 276.94 | 265.35 | 43.31 |
| 11183 | 907247 | 631.83 | 632.83 | 1.00 | 21  | 28  | 36 | 276 | 552  | 57 | 21    | 28    | 36    | 276    | 552    | 57    |
| 11184 | 907247 | 631.83 | 632.83 | 1.00 | 23  | 7.5 | 35 | 272 | 566  | 57 | 23    | 7.5   | 35    | 272    | 566    | 57    |
| 11194 | 907807 | 640.83 | 641.83 | 1.00 | 57  | 53  | 88 | 588 | 1489 | 66 | 57    | 53    | 88    | 588    | 1489   | 66    |
| 11195 | 907807 | 640.83 | 641.83 | 1.00 | 64  | 71  | 93 | 600 | 1530 | 66 | 64    | 71    | 93    | 600    | 1530   | 66    |
| 11205 | 907817 | 650.83 | 651.83 | 1.00 | 17  | 16  | 66 | 139 | 369  | 50 | 17    | 16    | 66    | 139    | 369    | 50    |
| 11206 | 907817 | 650.83 | 651.83 | 1.00 | 20  | 37  | 57 | 139 | 382  | 49 | 20    | 37    | 57    | 139    | 382    | 49    |

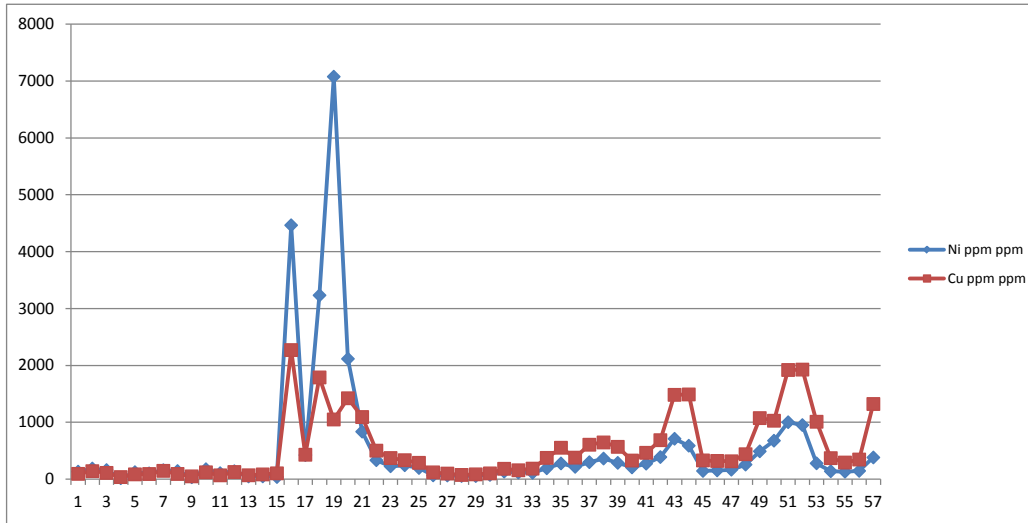
WAG

| Meters From: | Meters To: | Interval in Meters | WAG Au.  | WAG PT.   | WAG Pd.  | WAG Ni.    | WAG Cu.  | WAG Co.  | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|----------|-----------|----------|------------|----------|----------|-----------------------|-------------------|
| 548.80       | 554.65     | 5.85               | 6.035043 | 26.367521 | 10.77265 | 109.928205 | 87.88205 | 34.71795 | 43.17521              | 232.5282          |

|        |        |              |         |         |         |          |          |         |          |          |
|--------|--------|--------------|---------|---------|---------|----------|----------|---------|----------|----------|
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 593.38 | 597.38 | <b>4.00</b>  | 21.00   | 137.00  | 54.00   | 340.00   | 343.00   | 177.00  | 53       | 215      |
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 614.82 | 654.70 | <b>39.88</b> | 1432.09 | 2242.44 | 2433.46 | 19676.61 | 25560.90 | 2692.76 | 153.1594 | 1201.862 |
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 615.82 | 618.54 | <b>2.72</b>  | 176.83  | 421.31  | 325.17  | 8504.76  | 3835.00  | 650.05  | 339.4522 | 4775.665 |
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 615.82 | 618.15 | <b>2.33</b>  | 155.38  | 370.61  | 286.95  | 7679.91  | 3280.42  | 581.02  | 348.9013 | 4953.369 |
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 616.85 | 618.15 | <b>1.30</b>  | 133.60  | 293.85  | 245.10  | 5547.00  | 2065.75  | 410.60  | 517.3462 | 6171.808 |
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 615.82 | 649.83 | <b>34.01</b> | 1233.51 | 1780.14 | 1867.98 | 18615.14 | 22294.63 | 2396.56 | 143.5353 | 1273.341 |
| WAG    |        |              |         |         |         |          |          |         | Total    | Total    |
| Meters | Meters | Interval     | WAG     | WAG     | WAG     | WAG      | WAG      | WAG     | Precious | Base     |
| From:  | To:    | in Meters    | Au.     | PT.     | Pd.     | Ni.      | Cu.      | Co.     | Metals   | Metals   |
| 639.89 | 650.83 | <b>10.94</b> | 605.00  | 783.50  | 1005.00 | 5413.00  | 11326.00 | 720.00  | 218.7843 | 1595.887 |

WAG

| Meters From: | Meters To: | Interval in Meters | WAG Au.        | WAG PT.         | WAG Pd.         | WAG Ni.        | WAG Cu.           | WAG Co.        | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|----------------|-----------------|-----------------|----------------|-------------------|----------------|-----------------------|-------------------|
| 645.83       | 650.83     | 5.00               | 397.00<br>79.4 | 541.00<br>108.2 | 654.00<br>130.8 | 3395.00<br>679 | 6954.00<br>1390.8 | 369.00<br>73.8 | 318.4                 | 2143.6            |





URSA Major Minerals Incorporated

Job Number:

Sample Intervals for DDH U-08-03

Field Blank Materials Indicated in Red text  
1/4 Duplicate Sample Materials Indicated in green  
Lab Duplicate in blue

By: Harold Tracanelli, Getn, P. Geo

OGS LDI-1 Standard Reference Materials 100 grams measured out and secured.

SQG = Shakespeare Quartz Gabbro

| Date:            | Sample Number | From:  | To:    | Distance: | Box Number: | Comments:                                                                                                                                      |
|------------------|---------------|--------|--------|-----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| July 28th., 2011 | 1054747       | 0.00   | 0.00   | 0.00      | FB          | Barren quartzite field blank materials                                                                                                         |
| July 28th., 2011 | 1054748       | 0.00   | 0.00   | 0.00      | FB          | Barren quartzite field blank materials                                                                                                         |
| July 28th., 2011 | 1054749       | 635.44 | 636.44 | 1.00      | 152         | Moderate to strong hornfels altered, lower 2/3rds of a 1,580 mm sized quartzite xenolith caught up in the SQG                                  |
| July 28th., 2011 | 1054750       | 636.44 | 637.44 | 1.00      | 152         | 1/2% to possible 1% mainly small 1 mm to 2 mm grains and rare scattered 5 mm to 8 mm irreg blebs of po and cpy in the SQG                      |
| July 28th., 2011 | 1054751       | 637.44 | 638.44 | 1.00      | 152         | 1/2% to possible 1% mainly small 1 mm to 2 mm grains and rare scattered 5 mm to 8 mm irreg blebs of po and cpy in the SQG                      |
| July 28th., 2011 | 1054752       | 638.44 | 639.40 | 0.96      | 152 - 153   | 1/2% to possible 1% mainly small 1 mm to 2 mm grains and rare scattered 5 mm to 8 mm irreg blebs of po and cpy in the SQG                      |
| July 28th., 2011 | 1054753       | 639.40 | 640.40 | 1.00      | 153         | 1% to 2% locally 3% to 5% diss'd po and cpy in a finer grained version - phase of the SQG                                                      |
| July 28th., 2011 | 1054754       | 640.40 | 641.40 | 1.00      | 153         | 1% to 2% diss'd po and cpy in a finer grained version - phase of the SQG                                                                       |
| July 28th., 2011 | 1054755       | 641.40 | 642.40 | 1.00      | 153         | 1% to 2% diss'd po and cpy in a finer grained version - phase of the SQG local mild fabric imposed on rocks at:642.25 m's., 27 degrees tca     |
| July 28th., 2011 | 1054756       | 642.40 | 643.40 | 1.00      | 153 - 154   | 1% possibly 2% diss'd po and cpy in a finer grained version - phase of the SQG with a few narrow 3 m to 10 mm qtz - carb - chl fract fill v's. |
| July 28th., 2011 | 1054757       | 643.40 | 644.40 | 1.00      | 154         | 1% to 2% diss'd po and cpy in a finer grained version - phase of the SQG                                                                       |
| July 28th., 2011 | 1054758       | 644.40 | 645.40 | 1.00      | 154         | 1/2% to possible 1% of fine diss'd po and cpy in a visibly coarser grained SQG                                                                 |
| July 28th., 2011 | 1054759       | 645.40 | 646.40 | 1.00      | 154         | 1% to possible 2% of fine diss'd po and cpy and rare scattered 3 mm up to 10 mm x 12 mm blebs po and cpy in a visibly coarser grained SQG      |
| August 1, 2011   | 1054760       | 646.40 | 647.40 | 1.00      | 154-155     |                                                                                                                                                |
| August 1, 2011   | 1054761       | 647.40 | 648.40 | 1.00      | 155         |                                                                                                                                                |
| August 1, 2011   | 1054762       | 648.40 | 649.40 | 1.00      | 155         |                                                                                                                                                |
| August 1, 2011   | 1054763       | 649.40 | 650.40 | 1.00      | 155         |                                                                                                                                                |
| August 1, 2011   | 1054764       | 650.40 | 651.40 | 1.00      | 155-156     |                                                                                                                                                |
| August 1, 2011   | 1054765       | 651.40 | 651.94 | 0.54      | 156         |                                                                                                                                                |
| August 1, 2011   | 1054766       | 651.94 | 652.52 | 0.58      | 156         |                                                                                                                                                |
| August 1, 2011   | 1054767       | 652.52 | 653.30 | 0.78      | 156         |                                                                                                                                                |
| August 1, 2011   | 1054768       | 653.30 | 653.72 | 0.42      | 156         |                                                                                                                                                |
| August 1, 2011   | 1054769       | 653.72 | 654.72 | 1.00      | 156         |                                                                                                                                                |
| August 1, 2011   | 1054770       | 654.72 | 655.72 | 1.00      | 156-157     |                                                                                                                                                |
| August 1, 2011   | 1054771       | 655.72 | 656.72 | 1.00      | 157         |                                                                                                                                                |
| August 1, 2011   | 1054772       | 656.72 | 657.99 | 1.27      | 157         |                                                                                                                                                |
| August 1, 2011   | 1054773       | 657.99 | 658.60 | 0.61      | 157         |                                                                                                                                                |
| August 1, 2011   | 1054774       | 658.60 | 659.17 | 0.57      | 157         |                                                                                                                                                |
| August 1, 2011   | 1054775       | 659.17 | 659.46 | 0.29      | 157         |                                                                                                                                                |
| August 1, 2011   | 1054776       | 659.46 | 660.11 | 0.65      | 157-158     |                                                                                                                                                |
| August 1, 2011   | 1054777       | 660.11 | 661.16 | 1.05      | 158         |                                                                                                                                                |
| August 1, 2011   | 1054778       | 661.16 | 662.06 | 0.90      | 158         |                                                                                                                                                |
| August 1, 2011   | 1054779       | 662.06 | 662.49 | 0.43      | 158         |                                                                                                                                                |
| August 1, 2011   | 1054780       | 659.17 | 659.46 | 0.29      | 157         | ¼ Duplicate of 1054775                                                                                                                         |
| August 1, 2011   | 1054781       | 662.49 | 663.49 | 1.00      | 158         |                                                                                                                                                |
| August 1, 2011   | 1054782       | 663.49 | 664.49 | 1.00      | 158-159     |                                                                                                                                                |
| August 1, 2011   | 1054783       | 664.49 | 665.09 | 0.60      | 159         |                                                                                                                                                |
| August 1, 2011   | 1054784       | 665.09 | 665.66 | 0.57      | 159         |                                                                                                                                                |
| August 1, 2011   | 1054785       | 665.66 | 666.46 | 0.80      | 159         |                                                                                                                                                |
| August 1, 2011   | 1054786       | 666.46 | 667.56 | 1.10      | 159         |                                                                                                                                                |
| August 1, 2011   | 1054787       | 667.56 | 668.21 | 0.65      | 159         |                                                                                                                                                |
| August 1, 2011   | 1054788       | 668.21 | 669.04 | 0.83      | 159-160     |                                                                                                                                                |
| August 1, 2011   | 1054789       | 669.04 | 669.48 | 0.44      | 160         |                                                                                                                                                |
| August 1, 2011   | 1054790       | 669.48 | 670.48 | 1.00      | 160         |                                                                                                                                                |
| August 1, 2011   | 1054791       | 670.48 | 671.08 | 0.60      | 160         |                                                                                                                                                |
| August 1, 2011   | 1054792       | 671.08 | 671.64 | 0.56      | 160         |                                                                                                                                                |

|                |         |           |           |           |         |                       |
|----------------|---------|-----------|-----------|-----------|---------|-----------------------|
| August 1, 2011 | 1054793 | 671.64    | 672.18    | 0.54      | 160     |                       |
| August 1, 2011 | 1054794 | 672.18    | 672.94    | 0.76      | 160-161 |                       |
| August 1, 2011 | 1054795 | 672.94    | 673.60    | 0.66      | 161     |                       |
| August 1, 2011 | 1054796 | 673.60    | 674.47    | 0.87      | 161     |                       |
| August 1, 2011 | 1054797 | 674.47    | 675.30    | 0.83      | 161     |                       |
| August 1, 2011 | 1054798 | 675.30    | 675.93    | 0.63      | 161     |                       |
| August 1, 2011 | 1054799 | 675.93    | 676.66    | 0.73      | 161     |                       |
| August 1, 2011 | 1054800 | BLANK     | BLANK     | BLANK     | None    | FIELD BLANK QUARTZITE |
| August 1, 2011 | 1054801 | 676.66    | 677.66    | 1.00      | 161-162 |                       |
| August 1, 2011 | 1054802 | 677.66    | 678.75    | 1.09      | 162     |                       |
| August 1, 2011 | 1054803 | 678.75    | 679.35    | 0.60      | 162     |                       |
| August 1, 2011 | 1054804 | 679.35    | 680.20    | 0.85      | 162     |                       |
| August 1, 2011 | 1054805 | 680.20    | 680.62    | 0.42      | 162     |                       |
| August 1, 2011 | 1054806 | 680.62    | 681.09    | 0.47      | 162-163 |                       |
| August 1, 2011 | 1054807 | 681.09    | 682.01    | 0.92      | 163     |                       |
| August 1, 2011 | 1054808 | 682.01    | 683.01    | 1.00      | 163     |                       |
| August 1, 2011 | 1054809 | 683.01    | 684.01    | 1.00      | 163     |                       |
| August 1, 2011 | 1054810 | 684.01    | 685.01    | 1.00      | 163     |                       |
| August 1, 2011 | 1054811 | 685.01    | 685.48    | 0.47      | 163-164 |                       |
| August 1, 2011 | 1054812 | 685.48    | 686.20    | 0.72      | 164     |                       |
| August 1, 2011 | 1054813 | 686.20    | 687.21    | 1.01      | 164     |                       |
| August 1, 2011 | 1054814 | 687.21    | 688.20    | 0.99      | 164     |                       |
| August 1, 2011 | 1054815 | 688.20    | 689.02    | 0.82      | 164     |                       |
| August 1, 2011 | 1054816 | 689.02    | 690.02    | 1.00      | 164-165 |                       |
| August 1, 2011 | 1054817 | 690.02    | 691.02    | 1.00      | 165     |                       |
| August 1, 2011 | 1054818 | 691.02    | 692.02    | 1.00      | 165     |                       |
| August 1, 2011 | 1054819 | 692.02    | 693.02    | 1.00      | 165     |                       |
| August 1, 2011 | 1054820 | STD LDI-1 | STD LDI-1 | STD LDI-1 | None    | Standard LDI-1        |
| August 1, 2011 | 1054821 | 693.02    | 694.02    | 1.00      | 165-166 |                       |
| August 1, 2011 | 1054822 | 694.02    | 695.02    | 1.00      | 166     |                       |
| August 1, 2011 | 1054823 | 695.02    | 696.02    | 1.00      | 166     |                       |
| August 1, 2011 | 1054824 | 696.02    | 697.02    | 1.00      | 166     |                       |
| August 1, 2011 | 1054825 | 697.02    | 698.02    | 1.00      | 166     |                       |
| August 1, 2011 | 1054826 | 698.02    | 699.02    | 1.00      | 166-167 |                       |
| August 1, 2011 | 1054827 | 699.02    | 700.02    | 1.00      | 167     |                       |
| August 1, 2011 | 1054828 | 700.02    | 701.02    | 1.00      | 167     |                       |
| August 1, 2011 | 1054829 | 701.02    | 702.02    | 1.00      | 167     |                       |
| August 1, 2011 | 1054830 | 702.02    | 702.51    | 0.49      | 167-168 |                       |
| August 1, 2011 | 1054831 | 702.51    | 703.51    | 1.00      | 168     |                       |
| August 1, 2011 | 1054832 | BLANK     | BLANK     | BLANK     | FB      | FIELD BLANK QUARTZITE |

Samples marked out and recorded by: Harold Tracanelli, Getn, P.Geo and Ian Dasti

Samples Collected by: Ian Dasti and Harold Tracanelli, Getn, P.Geo

Samples sawn by: Alex Korpijaakko

Samples secured into rice bags by: Alex Korpijaakko

Samples Delivered to Accurassay sample preparation facility on Monday August 08th., 2011 by: Harold Tracanelli, Getn, P.Geo

Samples Collected

Date

By:

|           |         |                    |              |        |                                        |
|-----------|---------|--------------------|--------------|--------|----------------------------------------|
| Ian Dasti | 1054747 | August 05th., 2011 | FB           | Bag 1a | Start of Sample Stream for DDH U-08-03 |
| Ian Dasti | 1054748 | August 05th., 2011 | FB           | Bag 1a |                                        |
| Ian Dasti | 1054749 | August 05th., 2011 | Bx 152       | Bag 1a |                                        |
| Ian Dasti | 1054750 | August 05th., 2011 | Bx 152       | Bag 1a |                                        |
| Ian Dasti | 1054751 | August 05th., 2011 | Bx 152       | Bag 1a |                                        |
| Ian Dasti | 1054752 | August 05th., 2011 | Bx 152 & 153 | Bag 1a |                                        |

|           |         |                    |                           |        |
|-----------|---------|--------------------|---------------------------|--------|
| Ian Dasti | 1054753 | August 05th., 2011 | Bx 153                    | Bag 1a |
| Ian Dasti | 1054754 | August 05th., 2011 | Bx 153                    | Bag 1a |
| Ian Dasti | 1054755 | August 05th., 2011 | Bx 153                    | Bag 1a |
| Ian Dasti | 1054756 | August 05th., 2011 | Bx 153 & 154              | Bag 2a |
| Ian Dasti | 1054757 | August 05th., 2011 | Bx 154                    | Bag 2a |
| Ian Dasti | 1054758 | August 05th., 2011 | Bx 154                    | Bag 2a |
| Ian Dasti | 1054759 | August 05th., 2011 | Bx 154                    | Bag 2a |
| Ian Dasti | 1054760 | August 05th., 2011 | Bx 154 & 155              | Bag 2a |
| Ian Dasti | 1054761 | August 05th., 2011 | Bx 155                    | Bag 2a |
| Ian Dasti | 1054762 | August 05th., 2011 | Bx 155                    | Bag 2a |
| Ian Dasti | 1054763 | August 05th., 2011 | Bx 155                    | Bag 2a |
| Ian Dasti | 1054764 | August 05th., 2011 | Bx 155 & 156              | Bag 2a |
| Ian Dasti | 1054765 | August 05th., 2011 | Bx 156                    | Bag 3a |
| Ian Dasti | 1054766 | August 05th., 2011 | Bx 156                    | Bag 3a |
| Ian Dasti | 1054767 | August 05th., 2011 | Bx 156                    | Bag 3a |
| Ian Dasti | 1054768 | August 05th., 2011 | Bx 156                    | Bag 3a |
| Ian Dasti | 1054769 | August 05th., 2011 | Bx 156                    | Bag 3a |
| Ian Dasti | 1054770 | August 05th., 2011 | Bx 156 & 157              | Bag 3a |
| Ian Dasti | 1054771 | August 05th., 2011 | Bx 157                    | Bag 3a |
| Ian Dasti | 1054772 | August 05th., 2011 | Bx 157                    | Bag 3a |
| Ian Dasti | 1054773 | August 05th., 2011 | Bx 157                    | Bag 3a |
| Ian Dasti | 1054774 | August 05th., 2011 | Bx 157                    | Bag 4a |
| Ian Dasti | 1054775 | August 05th., 2011 | Bx 157                    | Bag 4a |
| Ian Dasti | 1054776 | August 05th., 2011 | Bx 157 & 158              | Bag 4a |
| Ian Dasti | 1054777 | August 05th., 2011 | Bx 158                    | Bag 4a |
| Ian Dasti | 1054778 | August 05th., 2011 | box 158                   | Bag 4a |
| Ian Dasti | 1054779 | August 05th., 2011 | bx 158                    | Bag 4a |
| Ian Dasti | 1054780 | August 05th., 2011 | box 157 duplicate of 1054 | Bag 4a |
| Ian Dasti | 1054781 | August 05th., 2011 | Box 158                   | Bag 4a |
| Ian Dasti | 1054782 | August 05th., 2011 | Box 158-159               | Bag 4a |
| Ian Dasti | 1054783 | August 05th., 2011 | Box 159                   | Bag 5a |
| Ian Dasti | 1054784 | August 05th., 2011 | Box 159                   | Bag 5a |
| Ian Dasti | 1054785 | August 05th., 2011 | Box 159                   | Bag 5a |
| Ian Dasti | 1054786 | August 05th., 2011 | Box 159                   | Bag 5a |
| Ian Dasti | 1054787 | August 05th., 2011 | Box 159                   | Bag 5a |
| Ian Dasti | 1054788 | August 05th., 2011 | Box 159-160               | Bag 5a |
| Ian Dasti | 1054789 | August 05th., 2011 | Box 160                   | Bag 5a |
| Ian Dasti | 1054790 | August 05th., 2011 | Box 160                   | Bag 5a |
| Ian Dasti | 1054791 | August 05th., 2011 | Box 160                   | Bag 5a |
| Ian Dasti | 1054792 | August 05th., 2011 | Box 160                   | Bag 6a |
| Ian Dasti | 1054793 | August 05th., 2011 | Box 160                   | Bag 6a |
| Ian Dasti | 1054794 | August 05th., 2011 | Box 160-161               | Bag 6a |
| Ian Dasti | 1054795 | August 05th., 2011 | Box 161                   | Bag 6a |
| Ian Dasti | 1054796 | August 05th., 2011 | Box 161                   | Bag 6a |
| Ian Dasti | 1054797 | August 05th., 2011 | bx 161                    | Bag 6a |



|                   |         |                    |                |         |
|-------------------|---------|--------------------|----------------|---------|
| Ian Dasti         | 1054798 | August 05th., 2011 | bx 161         | Bag 6a  |
| Ian Dasti         | 1054799 | August 05th., 2011 | Box 161        | Bag 6a  |
| Ian Dasti         | 1054800 | August 05th., 2011 | FB             | Bag 6a  |
| Ian Dasti         | 1054801 | August 05th., 2011 | Box 161-162    | Bag 7a  |
| Harold Tracanelli | 1054802 | August 05th., 2011 | bx 162         | Bag 7a  |
| Harold Tracanelli | 1054803 | August 05th., 2011 | bx 162         | Bag 7a  |
| Harold Tracanelli | 1054804 | August 05th., 2011 | bx 162         | Bag 7a  |
| Harold Tracanelli | 1054805 | August 05th., 2011 | bx 162         | Bag 7a  |
| Harold Tracanelli | 1054806 | August 05th., 2011 | bx 162 - 163   | Bag 7a  |
| Harold Tracanelli | 1054807 | August 05th., 2011 | bx 163         | Bag 7a  |
| Harold Tracanelli | 1054808 | August 05th., 2011 | bx 163         | Bag 7a  |
| Harold Tracanelli | 1054809 | August 05th., 2011 | bx 163         | Bag 7a  |
| Harold Tracanelli | 1054810 | August 05th., 2011 | bx 163         | Bag 8a  |
| Harold Tracanelli | 1054811 | August 05th., 2011 | bx 163 - 164   | Bag 8a  |
| Harold Tracanelli | 1054812 | August 05th., 2011 | bx 164         | Bag 8a  |
| Harold Tracanelli | 1054813 | August 05th., 2011 | bx 164         | Bag 8a  |
| Harold Tracanelli | 1054814 | August 05th., 2011 | bx 164         | Bag 8a  |
| Harold Tracanelli | 1054815 | August 05th., 2011 | bx 164         | Bag 8a  |
| Harold Tracanelli | 1054816 | August 05th., 2011 | bx 164 - 165   | Bag 8a  |
| Harold Tracanelli | 1054817 | August 05th., 2011 | bx 165         | Bag 8a  |
| Harold Tracanelli | 1054818 | August 05th., 2011 | bx 165         | Bag 8a  |
| Harold Tracanelli | 1054819 | August 05th., 2011 | bx 165         | Bag 9a  |
| Ian Dasti         | 1054820 | August 05th., 2011 | OGS LDI-1 STND | Bag 9a  |
| Harold Tracanelli | 1054821 | August 05th., 2011 | bx 165 - 166   | Bag 9a  |
| Harold Tracanelli | 1054822 | August 05th., 2011 | bx 166         | Bag 9a  |
| Harold Tracanelli | 1058423 | August 05th., 2011 | bx 166         | Bag 9a  |
| Harold Tracanelli | 1058424 | August 05th., 2011 | bx 166         | Bag 9a  |
| Harold Tracanelli | 1058425 | August 05th., 2011 | bx 166         | Bag 9a  |
| Harold Tracanelli | 1054826 | August 05th., 2011 | Bx 166 -167    | Bag 9a  |
| Harold Tracanelli | 1054827 | August 05th., 2011 | bx 167         | Bag 9a  |
| Harold Tracanelli | 1054828 | Augst 05th., 2011  | bx 167         | Bag 10a |
| Harold Tracanelli | 1054829 | Augst 05th., 2011  | bx 167         | Bag 10a |
| Harold Tracanelli | 1054830 | Augst 05th., 2011  | bx 167 - 168   | Bag 10a |
| Harold Tracanelli | 1054831 | Augst 05th., 2011  | bx 168         | Bag 10a |
| Ian Dasti         | 1054832 | Augst 05th., 2011  | FB             | Bag 10a |

End of Sample Stream for DDH U-08-03

Wednesday August 17th., 2011

Sample Re Cutting - bagging - securing - re issued to Accurassay

Re sampling precibed by: Harold Tracanelli, Getn, P.Geo

Sample Sawing by: Alex Korpjaakko

Sample bagging by: Alex Korpjaakko

Sample collection direct onsite monitouring by: Harold Tracanelli, Getn, P.Geo

Samples varified and secured into rice bag placed into back of pick up truck by: Alex Korpjaakko

Assay requisition paper work completed by: Harold Tracanelli, Getn, P.Geo

Reception Date: 08/18/2011  
 Due Date: 09/01/2011  
 Accurassay Job #: 201110393

Alex Korpijaakko 1054761 August 17th., 2011 bx 155 Bag 1a  
 Alex Korpijaakko 1054762 August 17th., 2011 bx 155 Bag 1a  
 Alex Korpijaakko 1054763 August 17th., 2011 bx 155 Bag 1a  
 Alex Korpijaakko 1054764 August 17th., 2011 bx 155 - 156 Bag 1a  
 Alex Korpijaakko 1054765 August 17th., 2011 bx 156 Bag 1a  
 Alex Korpijaakko 1054766 August 17th., 2011 bx 156 Bag 1a  
 Alex Korpijaakko 1054767 August 17th., 2011 bx 156 Bag 1a  
 Alex Korpijaakko 1054768 August 17th., 2011 bx 156 Bag 1a

Field Blank Materials Indicated in Red text

1/4 Dupliocate Sample Materials Indicated in green

Lab Duplicate in blue

OGS LDI-1 Standard Reference Materials, measured out 100 grams of materials and secured.

< 1 = 0.50

< 5 = 2.5

<10 = 5

<15 = 7.5

| Accurassay<br>Sample Number | URSA<br>Sample<br>Number | From:  | To:    | Distance: | Au ppb |     | Pt ppb | Pd ppb | Grade Thickness |        |        |        |        |         |        |        |
|-----------------------------|--------------------------|--------|--------|-----------|--------|-----|--------|--------|-----------------|--------|--------|--------|--------|---------|--------|--------|
|                             |                          |        |        |           | 5 DL   | 2.5 | 15 DL  | 10 DL  | Ni ppm          | Cu ppm | Co ppm | Au ppb | Pt ppb | Pd ppb  | Ni ppm | Cu ppm |
| 38819                       | 1054749                  | 635.44 | 636.44 | 1.00      | 2.5    | 26  | 5      | 44     | 51              | 11     | 2.5    | 26     | 5      | 44      | 51     | 11     |
| 38820                       | 1054750                  | 636.44 | 637.44 | 1.00      | 5      | 21  | 12     | 203    | 131             | 59     | 5      | 21     | 12     | 203     | 131    | 59     |
| 38821                       | 1054751                  | 637.44 | 638.44 | 1.00      | 36     | 34  | 15     | 219    | 141             | 68     | 36     | 34     | 15     | 219     | 141    | 68     |
| 38822                       | 1054752                  | 638.44 | 639.40 | 0.96      | 5      | 36  | 14     | 219    | 142             | 67     | 4.8    | 34.56  | 13.44  | 210.24  | 136.32 | 64.32  |
| 38823                       | 1054753                  | 639.40 | 640.40 | 1.00      | 6      | 32  | 14     | 226    | 172             | 69     | 6      | 32     | 14     | 226     | 172    | 69     |
| 38824                       | 1054754                  | 640.40 | 641.40 | 1.00      | 12     | 62  | 17     | 209    | 152             | 65     | 12     | 62     | 17     | 209     | 152    | 65     |
| 38825                       | 1054755                  | 641.40 | 642.40 | 1.00      | 7      | 7.5 | 12     | 240    | 187             | 70     | 7      | 7.5    | 12     | 240     | 187    | 70     |
| 38826                       | 1054756                  | 642.40 | 643.40 | 1.00      | 8      | 42  | 12     | 231    | 178             | 70     | 8      | 42     | 12     | 231     | 178    | 70     |
| 38828                       | 1054757                  | 643.40 | 644.40 | 1.00      | 12     | 39  | 21     | 261    | 201             | 75     | 12     | 39     | 21     | 261     | 201    | 75     |
| 38829                       | 1054758                  | 644.40 | 645.40 | 1.00      | 11     | 38  | 14     | 219    | 172             | 66     | 11     | 38     | 14     | 219     | 172    | 66     |
| 38830                       | 1054759                  | 645.40 | 646.40 | 1.00      | 9      | 79  | 20     | 281    | 223             | 77     | 9      | 79     | 20     | 281     | 223    | 77     |
| 38831                       | 1054760                  | 646.40 | 647.40 | 1.00      | 9      | 45  | 14     | 198    | 185             | 66     | 9      | 45     | 14     | 198     | 185    | 66     |
| 46464                       | 1054761                  | 647.40 | 648.40 | 1.00      | 8      | 20  | 19     | 213    | 194             | 69     | 8      | 20     | 19     | 213     | 194    | 69     |
| 46465                       | 1054762                  | 648.40 | 649.40 | 1.00      | 12     | 41  | 22     | 283    | 273             | 80     | 12     | 41     | 22     | 283     | 273    | 80     |
| 46466                       | 1054763                  | 649.40 | 650.40 | 1.00      | 9      | 39  | 18     | 254    | 244             | 73     | 9      | 39     | 18     | 254     | 244    | 73     |
| 46467                       | 1054764                  | 650.40 | 651.40 | 1.00      | 6      | 47  | 19     | 151    | 182             | 58     | 6      | 47     | 19     | 151     | 182    | 58     |
| 46468                       | 1054765                  | 651.40 | 651.94 | 0.54      | 23     | 19  | 21     | 245    | 628             | 71     | 12.42  | 10.26  | 11.34  | 132.3   | 339.12 | 38.34  |
| 46469                       | 1054766                  | 651.94 | 652.52 | 0.58      | 10     | 21  | 23     | 248    | 359             | 72     | 5.8    | 12.18  | 13.34  | 143.84  | 208.22 | 41.76  |
| 46470                       | 1054767                  | 652.52 | 653.30 | 0.78      | 24     | 99  | 72     | 906    | 1191            | 115    | 18.72  | 77.22  | 56.16  | 706.68  | 928.98 | 89.7   |
| 46471                       | 1054768                  | 653.30 | 653.72 | 0.42      | 56     | 113 | 83     | 839    | 822             | 106    | 23.52  | 47.46  | 34.86  | 352.38  | 345.24 | 44.52  |
| 38841                       | 1054769                  | 653.72 | 654.72 | 1.00      | 41     | 89  | 66     | 791    | 670             | 103    | 41     | 89     | 66     | 791     | 670    | 103    |
| 38842                       | 1054770                  | 654.72 | 655.72 | 1.00      | 31     | 125 | 95     | 1018   | 957             | 123    | 31     | 125    | 95     | 1018    | 957    | 123    |
| 38843                       | 1054771                  | 655.72 | 656.72 | 1.00      | 28     | 113 | 83     | 972    | 905             | 129    | 28     | 113    | 83     | 972     | 905    | 129    |
| 38844                       | 1054772                  | 656.72 | 657.99 | 1.27      | 17     | 40  | 38     | 460    | 388             | 85     | 21.59  | 50.8   | 48.26  | 584.2   | 492.76 | 107.95 |
| 38845                       | 1054773                  | 657.99 | 658.60 | 0.61      | 38     | 165 | 171    | 2135   | 1467            | 198    | 23.18  | 100.65 | 104.31 | 1302.35 | 894.87 | 120.78 |
| 38846                       | 1054774                  | 658.60 | 659.17 | 0.57      | 74     | 263 | 254    | 3423   | 1679            | 273    | 42.18  | 149.91 | 144.78 | 1951.11 | 957.03 | 155.61 |

|       |         |        |        |      |     |     |     |      |      |     |        |        |        |         |         |        |
|-------|---------|--------|--------|------|-----|-----|-----|------|------|-----|--------|--------|--------|---------|---------|--------|
| 38847 | 1054775 | 659.17 | 659.46 | 0.29 | 82  | 380 | 323 | 4739 | 2067 | 348 | 23.78  | 110.2  | 93.67  | 1374.31 | 599.43  | 100.92 |
| 38848 | 1054776 | 659.46 | 660.11 | 0.65 | 25  | 47  | 39  | 653  | 492  | 96  | 16.25  | 30.55  | 25.35  | 424.45  | 319.8   | 62.4   |
| 38850 | 1054777 | 660.11 | 661.16 | 1.05 | 24  | 49  | 40  | 767  | 733  | 91  | 25.2   | 51.45  | 42     | 805.35  | 769.65  | 95.55  |
| 38851 | 1054778 | 661.16 | 662.06 | 0.90 | 86  | 195 | 157 | 3040 | 2956 | 188 | 77.4   | 175.5  | 141.3  | 2736    | 2660.4  | 169.2  |
| 38852 | 1054779 | 662.06 | 662.49 | 0.43 | 162 | 285 | 284 | 6352 | 1401 | 366 | 69.66  | 122.55 | 122.12 | 2731.36 | 602.43  | 157.38 |
| 38854 | 1054781 | 662.49 | 663.49 | 1.00 | 145 | 174 | 223 | 1199 | 1983 | 100 | 145    | 174    | 223    | 1199    | 1983    | 100    |
| 38855 | 1054782 | 663.49 | 664.49 | 1.00 | 93  | 175 | 165 | 1422 | 2831 | 115 | 93     | 175    | 165    | 1422    | 2831    | 115    |
| 38856 | 1054783 | 664.49 | 665.09 | 0.60 | 22  | 56  | 30  | 425  | 578  | 68  | 13.2   | 33.6   | 18     | 255     | 346.8   | 40.8   |
| 38857 | 1054784 | 665.09 | 665.66 | 0.57 | 32  | 43  | 38  | 505  | 720  | 71  | 18.24  | 24.51  | 21.66  | 287.85  | 410.4   | 40.47  |
| 38858 | 1054785 | 665.66 | 666.46 | 0.80 | 30  | 73  | 37  | 488  | 950  | 67  | 24     | 58.4   | 29.6   | 390.4   | 760     | 53.6   |
| 38859 | 1054786 | 666.46 | 667.56 | 1.10 | 89  | 142 | 148 | 722  | 823  | 77  | 97.9   | 156.2  | 162.8  | 794.2   | 905.3   | 84.7   |
| 38861 | 1054787 | 667.56 | 668.21 | 0.65 | 85  | 130 | 128 | 1574 | 2509 | 115 | 55.25  | 84.5   | 83.2   | 1023.1  | 1630.85 | 74.75  |
| 38862 | 1054788 | 668.21 | 669.04 | 0.83 | 48  | 87  | 69  | 1203 | 961  | 103 | 39.84  | 72.21  | 57.27  | 998.49  | 797.63  | 85.49  |
| 38863 | 1054789 | 669.04 | 669.48 | 0.44 | 159 | 263 | 257 | 1929 | 2881 | 128 | 69.96  | 115.72 | 113.08 | 848.76  | 1267.64 | 56.32  |
| 38864 | 1054790 | 669.48 | 670.48 | 1.00 | 103 | 186 | 166 | 1358 | 2012 | 107 | 103    | 186    | 166    | 1358    | 2012    | 107    |
| 38865 | 1054791 | 670.48 | 671.08 | 0.60 | 41  | 58  | 61  | 633  | 840  | 74  | 24.6   | 34.8   | 36.6   | 379.8   | 504     | 44.4   |
| 38866 | 1054792 | 671.08 | 671.64 | 0.56 | 45  | 94  | 65  | 880  | 1290 | 82  | 25.2   | 52.64  | 36.4   | 492.8   | 722.4   | 45.92  |
| 38867 | 1054793 | 671.64 | 672.18 | 0.54 | 57  | 254 | 100 | 1286 | 1774 | 110 | 30.78  | 137.16 | 54     | 694.44  | 957.96  | 59.4   |
| 38868 | 1054794 | 672.18 | 672.94 | 0.76 | 46  | 98  | 67  | 737  | 762  | 87  | 34.96  | 74.48  | 50.92  | 560.12  | 579.12  | 66.12  |
| 38869 | 1054795 | 672.94 | 673.60 | 0.66 | 91  | 276 | 157 | 2186 | 2474 | 174 | 60.06  | 182.16 | 103.62 | 1442.76 | 1632.84 | 114.84 |
| 38870 | 1054796 | 673.60 | 674.47 | 0.87 | 53  | 106 | 100 | 839  | 1360 | 80  | 46.11  | 92.22  | 87     | 729.93  | 1183.2  | 69.6   |
| 38872 | 1054797 | 674.47 | 675.30 | 0.83 | 131 | 255 | 265 | 2005 | 2742 | 129 | 108.73 | 211.65 | 219.95 | 1664.15 | 2275.86 | 107.07 |
| 38873 | 1054798 | 675.30 | 675.93 | 0.63 | 116 | 184 | 204 | 2093 | 2565 | 145 | 73.08  | 115.92 | 128.52 | 1318.59 | 1615.95 | 91.35  |
| 38874 | 1054799 | 675.93 | 676.66 | 0.73 | 193 | 361 | 339 | 3001 | 3478 | 161 | 140.89 | 263.53 | 247.47 | 2190.73 | 2538.94 | 117.53 |
| 38876 | 1054801 | 676.66 | 677.66 | 1.00 | 78  | 105 | 171 | 1486 | 2068 | 112 | 78     | 105    | 171    | 1486    | 2068    | 112    |
| 38877 | 1054802 | 677.66 | 678.75 | 1.09 | 88  | 160 | 197 | 1610 | 2542 | 118 | 95.92  | 174.4  | 214.73 | 1754.9  | 2770.78 | 128.62 |
| 38878 | 1054803 | 678.75 | 679.35 | 0.60 | 41  | 89  | 89  | 713  | 1131 | 82  | 24.6   | 53.4   | 53.4   | 427.8   | 678.6   | 49.2   |
| 38879 | 1054804 | 679.35 | 680.20 | 0.85 | 53  | 87  | 95  | 725  | 1323 | 82  | 45.05  | 73.95  | 80.75  | 616.25  | 1124.55 | 69.7   |
| 38880 | 1054805 | 680.20 | 680.62 | 0.42 | 85  | 104 | 117 | 927  | 1693 | 104 | 35.7   | 43.68  | 49.14  | 389.34  | 711.06  | 43.68  |
| 38881 | 1054806 | 680.62 | 681.09 | 0.47 | 189 | 180 | 306 | 2946 | 3800 | 195 | 88.83  | 84.6   | 143.82 | 1384.62 | 1786    | 91.65  |
| 38883 | 1054807 | 681.09 | 682.01 | 0.92 | 162 | 260 | 290 | 2306 | 3861 | 150 | 149.04 | 239.2  | 266.8  | 2121.52 | 3552.12 | 138    |
| 38884 | 1054808 | 682.01 | 683.01 | 1.00 | 28  | 63  | 57  | 413  | 730  | 70  | 28     | 63     | 57     | 413     | 730     | 70     |
| 38885 | 1054809 | 683.01 | 684.01 | 1.00 | 53  | 96  | 111 | 857  | 1313 | 87  | 53     | 96     | 111    | 857     | 1313    | 87     |
| 38886 | 1054810 | 684.01 | 685.01 | 1.00 | 76  | 174 | 164 | 1273 | 1516 | 104 | 76     | 174    | 164    | 1273    | 1516    | 104    |
| 38887 | 1054811 | 685.01 | 685.48 | 0.47 | 62  | 116 | 109 | 819  | 1423 | 77  | 29.14  | 54.52  | 51.23  | 384.93  | 668.81  | 36.19  |
| 38888 | 1054812 | 685.48 | 686.20 | 0.72 | 48  | 80  | 98  | 770  | 1289 | 78  | 34.56  | 57.6   | 70.56  | 554.4   | 928.08  | 56.16  |
| 38889 | 1054813 | 686.20 | 687.21 | 1.01 | 29  | 84  | 55  | 381  | 792  | 69  | 29.29  | 84.84  | 55.55  | 384.81  | 799.92  | 69.69  |
| 38890 | 1054814 | 687.21 | 688.20 | 0.99 | 34  | 112 | 64  | 362  | 691  | 69  | 33.66  | 110.88 | 63.36  | 358.38  | 684.09  | 68.31  |
| 38891 | 1054815 | 688.20 | 689.02 | 0.82 | 28  | 73  | 56  | 352  | 795  | 62  | 22.96  | 59.86  | 45.92  | 288.64  | 651.9   | 50.84  |
| 38892 | 1054816 | 689.02 | 690.02 | 1.00 | 20  | 65  | 51  | 248  | 710  | 57  | 20     | 65     | 51     | 248     | 710     | 57     |
| 38894 | 1054817 | 690.02 | 691.02 | 1.00 | 14  | 49  | 33  | 155  | 462  | 52  | 14     | 49     | 33     | 155     | 462     | 52     |
| 38895 | 1054818 | 691.02 | 692.02 | 1.00 | 13  | 76  | 31  | 150  | 444  | 54  | 13     | 76     | 31     | 150     | 444     | 54     |
| 38896 | 1054819 | 692.02 | 693.02 | 1.00 | 14  | 74  | 30  | 168  | 495  | 53  | 14     | 74     | 30     | 168     | 495     | 53     |
| 38898 | 1054821 | 693.02 | 694.02 | 1.00 | 17  | 63  | 31  | 177  | 504  | 58  | 17     | 63     | 31     | 177     | 504     | 58     |
| 38899 | 1054822 | 694.02 | 695.02 | 1.00 | 13  | 64  | 24  | 124  | 299  | 51  | 13     | 64     | 24     | 124     | 299     | 51     |
| 38900 | 1054823 | 695.02 | 696.02 | 1.00 | 12  | 77  | 28  | 141  | 305  | 56  | 12     | 77     | 28     | 141     | 305     | 56     |
| 38901 | 1054824 | 696.02 | 697.02 | 1.00 | 18  | 74  | 29  | 127  | 277  | 53  | 18     | 74     | 29     | 127     | 277     | 53     |
| 38902 | 1054825 | 697.02 | 698.02 | 1.00 | 11  | 75  | 28  | 140  | 318  | 53  | 11     | 75     | 28     | 140     | 318     | 53     |
| 38903 | 1054826 | 698.02 | 699.02 | 1.00 | 20  | 112 | 41  | 266  | 1050 | 62  | 20     | 112    | 41     | 266     | 1050    | 62     |
| 38905 | 1054827 | 699.02 | 700.02 | 1.00 | 15  | 52  | 40  | 151  | 475  | 55  | 15     | 52     | 40     | 151     | 475     | 55     |
| 38906 | 1054828 | 700.02 | 701.02 | 1.00 | 15  | 77  | 49  | 133  | 424  | 51  | 15     | 77     | 49     | 133     | 424     | 51     |
| 38907 | 1054829 | 701.02 | 702.02 | 1.00 | 9   | 71  | 36  | 113  | 269  | 50  | 9      | 71     | 36     | 113     | 269     | 50     |
| 38908 | 1054830 | 702.02 | 702.51 | 0.49 | 13  | 55  | 41  | 113  | 287  | 50  | 6.37   | 26.95  | 20.09  | 55.37   | 140.63  | 24.5   |
| 38909 | 1054831 | 702.51 | 703.51 | 1.00 | 10  | 46  | 41  | 122  | 244  | 51  | 10     | 46     | 41     | 122     | 244     | 51     |

Averages: 46.56875 105.49375 89.1 909.9 1057.575 95.8125

Field Blank Materials Indicated in Red text

|       |         |       |       |      |     |     |   |    |     |     |   |   |   |   |   |   |
|-------|---------|-------|-------|------|-----|-----|---|----|-----|-----|---|---|---|---|---|---|
| 38817 | 1054747 | 0.00  | 0.00  | 0.00 | 2.5 | 7.5 | 5 | 13 | 0.5 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38818 | 1054748 | 0.00  | 0.00  | 0.00 | 2.5 | 7.5 | 5 | 2  | 0.5 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38875 | 1054800 | BLANK | BLANK | 0.00 | 2.5 | 7.5 | 5 | 1  | 3   | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38910 | 1054832 | BLANK | BLANK | 0.00 | 2.5 | 7.5 | 5 | 3  | 0.5 | 1   | 0 | 0 | 0 | 0 | 0 | 0 |

1/4 Dupliocate Sample Materials Indicated in green

|       |         |        |        |      |    |     |     |      |      |     |       |       |       |         |        |        |
|-------|---------|--------|--------|------|----|-----|-----|------|------|-----|-------|-------|-------|---------|--------|--------|
| 38847 | 1054775 | 659.17 | 659.46 | 0.29 | 82 | 380 | 323 | 4739 | 2067 | 348 | 23.78 | 110.2 | 93.67 | 1374.31 | 599.43 | 100.92 |
| 38853 | 1054780 | 659.17 | 659.46 | 0.29 | 82 | 317 | 303 | 4928 | 1504 | 359 | 23.78 | 91.93 | 87.87 | 1429.12 | 436.16 | 104.11 |

Lab Duplicate in blue

|       |         |        |        |      |     |     |     |      |      |     |        |        |        |         |         |        |
|-------|---------|--------|--------|------|-----|-----|-----|------|------|-----|--------|--------|--------|---------|---------|--------|
| 38826 | 1054756 | 642.40 | 643.40 | 1.00 | 8   | 42  | 12  | 231  | 178  | 70  | 8      | 42     | 12     | 231     | 178     | 70     |
| 38827 | 1054756 | 642.40 | 643.40 | 1.00 | 9   | 65  | 20  | 232  | 180  | 69  | 9      | 65     | 20     | 232     | 180     | 69     |
| 46471 | 1054768 | 653.30 | 653.72 | 0.42 | 56  | 113 | 83  | 839  | 822  | 106 | 23.52  | 47.46  | 34.86  | 352.38  | 345.24  | 44.52  |
| 46472 | 1054768 | 653.30 | 653.72 | 0.42 | 30  | 132 | 76  | 845  | 829  | 109 | 12.6   | 55.44  | 31.92  | 354.9   | 348.18  | 45.78  |
| 38848 | 1054776 | 659.46 | 660.11 | 0.65 | 25  | 47  | 39  | 653  | 492  | 96  | 16.25  | 30.55  | 25.35  | 424.45  | 319.8   | 62.4   |
| 38849 | 1054776 | 659.46 | 660.11 | 0.65 | 27  | 67  | 44  | 647  | 475  | 93  | 17.658 | 43.818 | 28.776 | 423.138 | 310.65  | 60.822 |
| 38859 | 1054786 | 666.46 | 667.56 | 1.10 | 89  | 142 | 148 | 722  | 823  | 77  | 97.9   | 156.2  | 162.8  | 794.2   | 905.3   | 84.7   |
| 38860 | 1054786 | 666.46 | 667.56 | 1.10 | 47  | 80  | 75  | 732  | 863  | 79  | 51.7   | 88     | 82.5   | 805.2   | 949.3   | 86.9   |
| 38870 | 1054796 | 673.60 | 674.47 | 0.87 | 53  | 106 | 100 | 839  | 1360 | 80  | 46.11  | 92.22  | 87     | 729.93  | 1183.2  | 69.6   |
| 38871 | 1054796 | 673.60 | 674.47 | 0.87 | 51  | 91  | 98  | 860  | 1429 | 83  | 44.37  | 79.17  | 85.26  | 748.2   | 1243.23 | 72.21  |
| 38881 | 1054806 | 680.62 | 681.09 | 0.47 | 189 | 180 | 306 | 2946 | 3800 | 195 | 88.83  | 84.6   | 143.82 | 1384.62 | 1786    | 91.65  |
| 38882 | 1054806 | 680.62 | 681.09 | 0.47 | 205 | 260 | 310 | 2781 | 3736 | 192 | 96.35  | 122.2  | 145.7  | 1307.07 | 1755.92 | 90.24  |
| 38892 | 1054816 | 689.02 | 690.02 | 1.00 | 20  | 65  | 51  | 248  | 710  | 57  | 20     | 65     | 51     | 248     | 710     | 57     |
| 38893 | 1054816 | 689.02 | 690.02 | 1.00 | 23  | 89  | 49  | 250  | 711  | 57  | 23     | 89     | 49     | 250     | 711     | 57     |
| 38903 | 1054826 | 698.02 | 699.02 | 1.00 | 20  | 112 | 41  | 266  | 1050 | 62  | 20     | 112    | 41     | 266     | 1050    | 62     |
| 38904 | 1054826 | 698.02 | 699.02 | 1.00 | 26  | 101 | 43  | 256  | 1014 | 59  | 26     | 101    | 43     | 256     | 1014    | 59     |

OGS LDI-1 Standard Reference Materials, measured out 100 grams of materials and secured.

|       |         |           |           |      |    |    |     |     |     |    |   |   |   |   |   |   |
|-------|---------|-----------|-----------|------|----|----|-----|-----|-----|----|---|---|---|---|---|---|
| 38897 | 1054820 | STD LDI-1 | STD LDI-1 | 0.00 | 86 | 95 | 858 | 521 | 441 | 41 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------|---------|-----------|-----------|------|----|----|-----|-----|-----|----|---|---|---|---|---|---|

WAG 1

| Meters From: | Meters To: | Interval in Meters | WAG Au.             | WAG PT.            | WAG Pd.               | WAG Ni.                 | WAG Cu.              | WAG Co.             | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|---------------------|--------------------|-----------------------|-------------------------|----------------------|---------------------|-----------------------|-------------------|
| 635.44       | 703.51     | <b>68.07</b>       | 2851.92<br>41.89687 | 6594.37<br>96.8763 | 5443.37<br>79.9672396 | 52482.65<br>771.0099897 | 65826.68<br>967.0439 | 6009.33<br>88.28162 | 218.74                | 1826.336          |

WAG 2

Total Total

| Meters From: | Meters To: | Interval in Meters | WAG Au.             | WAG PT.             | WAG Pd.               | WAG Ni.                 | WAG Cu.              | WAG Co.             | Precious Metals       | Base Metals       |
|--------------|------------|--------------------|---------------------|---------------------|-----------------------|-------------------------|----------------------|---------------------|-----------------------|-------------------|
| 652.52       | 699.02     | <b>46.50</b>       | 2621.03<br>56.36624 | 5691.92<br>122.4069 | 4985.16<br>107.207742 | 48189.90<br>1036.341935 | 60904.39<br>1309.772 | 4657.41<br>100.1594 | 285.98                | 2446.273          |
| WAG 3        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| 657.99       | 686.20     | <b>28.21</b>       | 2219.29<br>78.67033 | 4204.86<br>149.0557 | 4111.05<br>145.730238 | 41037.81<br>1454.725629 | 49605.50<br>1758.437 | 3322.40<br>117.7738 | 373.46                | 3330.936          |
| WAG 4        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| 658.60       | 682.01     | <b>23.41</b>       | 1975.41<br>84.38317 | 3659.09<br>156.3046 | 3552.95<br>151.770611 | 36253.13<br>1548.617258 | 43554.74<br>1860.519 | 2848.27<br>121.6689 | 392.46                | 3530.805          |
| WAG 5        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| 658.60       | 662.49     | <b>3.89</b>        | 254.47<br>65.41645  | 640.16<br>164.5656  | 569.22<br>146.329049  | 10022.58<br>2576.498715 | 5908.74<br>1518.956  | 741.06<br>190.5039  | 376.31                | 4285.959          |
| WAG 6        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| 658.60       | 664.49     | <b>5.89</b>        | 492.47<br>83.61121  | 989.16<br>167.9389  | 957.22<br>162.516129  | 12643.58<br>2146.617997 | 10722.74<br>1820.499 | 956.06<br>162.3192  | 414.07                | 4129.436          |
| WAG 7        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| 657.99       | 664.49     | <b>6.50</b>        | 515.65<br>79.33077  | 1089.81<br>167.6631 | 1061.53<br>163.312308 | 13945.93<br>2145.527692 | 11617.61<br>1787.325 | 1076.84<br>165.6677 | 410.31                | 4098.52           |
| WAG 8        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| 659.17       | 662.49     | <b>3.32</b>        | 212.29<br>63.94277  | 490.25<br>147.6657  | 424.44<br>127.843373  | 8071.47<br>2431.165663  | 4951.71<br>1491.479  | 585.45<br>176.3404  | 339.45                | 4098.985          |
| WAG 9        |            |                    |                     |                     |                       |                         |                      |                     |                       |                   |
| Meters From: | Meters To: | Interval in Meters | WAG Au.             | WAG PT.             | WAG Pd.               | WAG Ni.                 | WAG Cu.              | WAG Co.             | Total Precious Metals | Total Base Metals |

| From:  | To:    | in Meters | Au.      | PT.      | Pd.       | Ni.         | Cu.      | Co.      |        |          |
|--------|--------|-----------|----------|----------|-----------|-------------|----------|----------|--------|----------|
| 661.16 | 662.49 | 1.33      | 110.5714 | 224.0977 | 198.06015 | 4110.796992 | 2453.256 | 245.5489 | 532.73 | 6809.602 |

WAG 10

| Meters From: | Meters To: | Interval in Meters | WAG Au.  | WAG PT.  | WAG Pd.    | WAG Ni.     | WAG Cu.  | WAG Co.  | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|----------|----------|------------|-------------|----------|----------|-----------------------|-------------------|
| 661.16       | 663.49     | 2.33               | 125.3476 | 202.5966 | 208.763948 | 2861.098712 | 2251.429 | 183.0815 | 536.71                | 5295.609          |

WAG 11

| Meters From: | Meters To: | Interval in Meters | WAG Au. | WAG PT.  | WAG Pd.   | WAG Ni.     | WAG Cu.  | WAG Co.  | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|---------|----------|-----------|-------------|----------|----------|-----------------------|-------------------|
| 672.94       | 682.01     | 9.07               | 104.301 | 30.03638 | 27.954796 | 316.4663727 | 407.5105 | 23.87652 | 162.29                | 747.8534          |

WAG 12

| Meters From: | Meters To: | Interval in Meters | WAG Au.  | WAG PT.  | WAG Pd.    | WAG Ni.     | WAG Cu.  | WAG Co.  | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|----------|----------|------------|-------------|----------|----------|-----------------------|-------------------|
| 674.47       | 682.01     | 7.54               | 111.3846 | 181.0782 | 208.962865 | 1771.074271 | 2536.056 | 125.8355 | 501.43                | 4432.966          |

WAG 13

| Meters From: | Meters To: | Interval in Meters | WAG Au.  | WAG PT.  | WAG Pd.    | WAG Ni.     | WAG Cu.  | WAG Co.  | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|----------|----------|------------|-------------|----------|----------|-----------------------|-------------------|
| 674.47       | 676.66     | 2.19               | 147.3516 | 269.9087 | 272.118721 | 2362.315068 | 2936.416 | 144.2694 | 689.38                | 5443              |

WAG 14

| Meters From: | Meters To: | Interval in Meters | WAG Au.  | WAG PT.  | WAG Pd.   | WAG Ni.     | WAG Cu.  | WAG Co.  | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|----------|----------|-----------|-------------|----------|----------|-----------------------|-------------------|
| 674.47       | 678.75     | 4.28               | 116.0327 | 203.3879 | 229.36215 | 1965.974299 | 2633.068 | 130.0397 | 548.78                | 4729.082          |

URSA Major Minerals Incorporated

Job Number: 201110051

Sample Intervals for DDH U-08-01

By: Harold Tracaneli, Getn, P. Geo

Field Blank Materials Indicated in Red text

1/4 Duplicate Sample Materials Indicated in green

Lab Duplicate in blue

| Date:       | Sample Number | From:  | To:    | Distance: | Box Number: | Comments:                                                                                                       |
|-------------|---------------|--------|--------|-----------|-------------|-----------------------------------------------------------------------------------------------------------------|
| Feb 02 /11  | 907101        | 622.00 | 622.67 | 0.67      |             | 147 Massive quartz diorite <4d> as a field blank at start of a sample run.                                      |
| Feb 02 /11  | 907102        | 622.67 | 623.67 | 1.00      |             | 147 Micro fractured - brecciated sediments, healed with chlorite - mica with fine sulphides                     |
| Feb 02 /11  | 907103        | 623.67 | 624.26 | 0.59      |             | 147 Micro fractured - brecciated sediments, healed with chlorite - mica with fine sulphides                     |
| Feb 02 /11  | 907104        | 624.26 | 624.51 | 0.25      |             | 147 Narrow po and cpy bearing carbonate - mica and chlorite vein in the sediments.                              |
| Feb 02 /11  | 907105        | 624.51 | 625.51 | 1.00      |             | 148 Micro fractured - brecciated sediments, healed with chlorite - mica with fine sulphides                     |
| Feb 02 /11  | 907106        | 625.51 | 626.70 | 1.19      |             | 148 Micro fractured - brecciated sediments, healed with chlorite - mica with fine sulphides                     |
| Feb 02 /11  | 907107        | 626.70 | 627.93 | 1.23      |             | 148 Dirty quartzites to locally well laminated siltstones.                                                      |
| Feb 02 /11  | 907108        | 627.93 | 628.24 | 0.31      |             | 148 Carbonate - chlorite vein with locally abundant fine to coarse grained po.                                  |
| Feb 02 /11  | 907109        | 628.24 | 629.24 | 1.00      | 148 -149    | Laminated, dirty quartzite's with rare narrow q.v.                                                              |
| Feb 02 /11  | 907110        | 679.00 | 680.00 | 1.00      |             | 160 Highly deformed Shakespeare quartz gabbro with traces of disseminated po,py,cpy                             |
| Feb 02 /11  | 907111        | 680.00 | 681.00 | 1.00      |             | 160 Highly deformed Shakespeare quartz gabbro with traces of disseminated po,py,cpy                             |
| Feb 02 /11  | 907112        | 681.00 | 682.00 | 1.00      |             | 160 Highly deformed Shakespeare quartz gabbro with traces of disseminated po,py,cpy                             |
| Feb 02 /11  | 907113        | 679.00 | 680.00 | 1.00      |             | 160 1/4 duplicate sample collected from sample 907110, DDH U-08-01, Bx 160                                      |
| Feb 02 /11  | 907114        | 682.00 | 682.97 | 0.97      |             | 160 Deformed quartz gabbro, diss'd po, py, cpy, cut by narrow po, cpy bearing q.v's                             |
| Feb 02 /11  | 907115        | 682.97 | 683.62 | 0.65      |             | 161 Deformed quartz gabbro, with increased visible diss'd po, py, cpy remnants.                                 |
| Feb 02 /11  | 907116        | 683.62 | 683.97 | 0.35      |             | 161 Deformed remnants of part of a possible interconnected - net textured po.                                   |
| Feb 02 /11  | 907117        | 683.97 | 684.47 | 0.50      |             | 161 Mica altered Nipissing type gabbro - quartz gabbro.                                                         |
| Feb 04 / 11 | 907118        | 684.47 | 685.51 | 1.04      |             | 161 Mica altered Nipissing type gabbro - quartz gabbro with local carb fracture fill vein with po.              |
| Feb 04 / 11 | 907119        | 685.51 | 686.11 | 0.60      |             | 161 Quartz - carbonate veins with abundant po and cpy developed in the gabbro.                                  |
| Feb 04 / 11 | 907120        | 686.11 | 687.11 | 1.00      | 161 - 162   | Massive coarse grained gabbro - quartz gabbro                                                                   |
| Feb 04 / 11 | 907121        | 687.11 | 687.51 | 0.40      |             | 162 Blue grey quartz carb vein in the gabbro                                                                    |
| Feb 07 /11  | 907122        | 687.51 | 688.51 | 1.00      |             | 162 Varitextured gabbro with micro thin fe carb fracture fill veins                                             |
| Feb 07 /11  | 907123        | 688.51 | 689.51 | 1.00      |             | 162 Varitextured gabbro with micro thin fe carb fracture fill veins                                             |
| Feb 07 /11  | 907124        | 691.31 | 691.93 | 0.62      |             | 163 Highly irregular blue grey q.v materials with local shearing and alteration.                                |
| Feb 07 /11  | 907125        | 691.93 | 692.93 | 1.00      |             | 163 Somewhat altered varitextured gabbro with visible traces of diss'd po and cpy.                              |
| Feb 07 /11  | 907126        | 692.93 | 693.93 | 1.00      |             | 163 Somewhat altered varitextured gabbro with cpy - po bearing fe carb veins.                                   |
| Feb 07 /11  | 907127        | 693.93 | 694.64 | 0.71      |             | 163 Somewhat altered varitextured gabbro with increased abundance cpy - po fe carb v's                          |
| Feb 07 /11  | 907128        | 694.64 | 695.23 | 0.59      | 163 -164    | Coarser grained vari tex gabbro, thinj fe carb v's 1/2 - 1% diss'd cpy < po.                                    |
| Feb 07 /11  | 907129        | 695.23 | 695.95 | 0.72      |             | 164 Abundant 1mm to 230 mm blue grey q - fe carb v's with local <1mm to 5mm cpy-po in v's                       |
| Feb 07 /11  | 907130        | 695.95 | 696.95 | 1.00      |             | 164 Visibly altered med grn'd gabbro with thin cpy - po bearing fe carb v's, trace diss'd cpy-po                |
| Feb 07 /11  | 907131        | 696.95 | 697.95 | 1.00      |             | 164 Visibly altered med grn'd gabbro with thin cpy - po bearing fe carb v's, up to 1/2% diss'd cpy-po           |
| Feb 07 /11  | 907132        | 697.95 | 698.95 | 1.00      |             | 164 Altered c.gr'd vari tex gabbro with 1/2% to 1% of diss's cpy and po.                                        |
| Feb 07 /11  | 907133        | 698.95 | 699.95 | 1.00      | 164 -165    | Altered var tex gabbro with 1/2% diss'd cpy - po, thin fe carb veins with cpy and po.                           |
| Feb 07 /11  | 907134        | 705.52 | 706.32 | 0.80      |             | 166 Altered c.gr'd vari tex gabbro with local q - fe carb v's, with cpy and po, traces diss'd cpy-po            |
| Feb 07 /11  | 907135        | 712.73 | 713.73 | 1.00      |             | 168 Alt'd, med gr'g gabbro with 2mm to 7mm cpy - po bearing fe carb - ca carb - q.v's                           |
| Feb 07 /11  | 907136        | 713.73 | 714.73 | 1.00      |             | 168 Moderate alt'd, med gr'd gabbro with abundant blue grey qtz, < fe carb, traces cpy - po                     |
| Feb 07 /11  | 907137        | 714.73 | 715.73 | 1.00      |             | 168 Mod - strong alt'd med gr'd gabbro with abundant blue grey qtz, fe carb with local cpy - po.                |
| Feb 07 /11  | 907138        | 715.73 | 716.73 | 1.00      | 168-169     | Mod - strong alt'd med gr'd gabbro with abundant blue grey qtz, fe carb with local cpy - po.                    |
| Feb 07 /11  | 907139        | 716.73 | 717.73 | 1.00      |             | 169 Mod altr'd vari tex gabbro trace diss'd cpy - po, local 5mm fe carb - qtz v's.                              |
| Feb 07 /11  | 907140        | 717.73 | 718.73 | 1.00      |             | 169 Strong altr'd med gr'd gabbro with 1% - 2% diss'd cpy - po, up to 5mm q-fe carb v's with cpy-po.            |
| Feb 07 /11  | 907141        | 708.95 | 709.41 | 0.46      |             | 169 Strong altr'd med gr'd gabbro with 1% - 2% diss'd cpy - po, up to 5mm q-fe carb v's with cpy-po.            |
| Feb 07 /11  | 907142        | 712.73 | 713.73 | 1.00      |             | 167 Somewhat altr'd med gr'd gabbro, local 1mm up to 12mm blue grey q - fe carb veins with cpy - po.            |
| Feb 07 /11  | 907143        | 712.73 | 713.73 | 1.00      |             | 168 1/4 Duplicate from 907135 Alt'd, med gr'g gabbro with 2mm to 7mm cpy - po bearing fe carb - ca carb - q.v's |
| Feb 11 / 11 | 907200        | 718.73 | 719.73 | 1.00      |             | 169 Strong altr'd med gr'd gabbro with 1% - 2% diss'd cpy - po, up to 5mm q-fe carb v's with cpy-po.            |
| Feb 11 / 11 | 907201        | 0.00   | 0.00   | 0.00      |             | Ortho quartzite field blank for DDH U-08-01                                                                     |

(This sample some how did not ge

< 1 = 0.50  
 < 5 = 2.5  
 <10 = 5  
 <15 = 7.5

Metal Values:

Gade Thickness:

| Sample Number | From:  | To:    | Distance: | Au ppb | Pt ppb | Pd ppb | Ag ppm | Ni ppm | Cu ppm | Co ppm | Au ppb | Pt ppb | Pd ppb | Ag ppm | Ni ppm | Cu ppm | Co ppm  |       |
|---------------|--------|--------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------|
|               |        |        |           | 5 DL   | 15 DL  | 10 DL  |        |        |        |        |        |        |        |        |        |        |         |       |
| 5198          | 907102 | 622.67 | 623.67    | 1.00   | 11     | 7.5    | 5      | 1.58   | 64     | 42     | 38     | 11     | 7.5    | 5      | 1.58   | 64     | 42      | 38    |
| 5199          | 907103 | 623.67 | 624.26    | 0.59   | 2.5    | 7.5    | 5      | 1.39   | 33     | 31     | 14     | 1.475  | 4.425  | 2.95   | 0.8201 | 19.47  | 18.29   | 8.26  |
| 5200          | 907104 | 624.26 | 624.51    | 0.25   | 24     | 7.5    | 5      | 2.3    | 69     | 4163   | 57     | 6      | 1.875  | 1.25   | 0.575  | 17.25  | 1040.75 | 14.25 |
| 5201          | 907105 | 624.51 | 625.51    | 1.00   | 15     | 7.5    | 5      | 1.86   | 29     | 68     | 18     | 15     | 7.5    | 5      | 1.86   | 29     | 68      | 18    |
| 5202          | 907106 | 625.51 | 626.70    | 1.19   | 2.5    | 7.5    | 5      | 1.26   | 26     | 31     | 12     | 2.975  | 8.925  | 5.95   | 1.4994 | 30.94  | 36.89   | 14.28 |
| 5203          | 907107 | 626.70 | 627.93    | 1.23   | 2.5    | 18     | 5      | 1.41   | 38     | 17     | 15     | 3.075  | 22.14  | 6.15   | 1.7343 | 46.74  | 20.91   | 18.45 |
| 5204          | 907108 | 627.93 | 628.24    | 0.31   | 14     | 7.5    | 5      | 1.56   | 76     | 162    | 60     | 4.34   | 2.325  | 1.55   | 0.4836 | 23.56  | 50.22   | 18.6  |
| 5205          | 907109 | 628.24 | 629.24    | 1.00   | 2.5    | 7.5    | 5      | 1.22   | 22     | 17     | 12     | 2.5    | 7.5    | 5      | 1.22   | 22     | 17      | 12    |
| 5206          | 907110 | 679.00 | 680.00    | 1.00   | 2.5    | 7.5    | 5      | 1.57   | 85     | 80     | 36     | 2.5    | 7.5    | 5      | 1.57   | 85     | 80      | 36    |
| 5208          | 907111 | 680.00 | 681.00    | 1.00   | 2.5    | 7.5    | 5      | 1.57   | 82     | 78     | 32     | 2.5    | 7.5    | 5      | 1.57   | 82     | 78      | 32    |
| 5209          | 907112 | 681.00 | 682.00    | 1.00   | 2.5    | 7.5    | 5      | 1.42   | 68     | 73     | 25     | 2.5    | 7.5    | 5      | 1.42   | 68     | 73      | 25    |
| 5211          | 907114 | 682.00 | 682.97    | 0.97   | 7      | 7.5    | 5      | 1.46   | 68     | 68     | 24     | 6.79   | 7.275  | 4.85   | 1.4162 | 65.96  | 65.96   | 23.28 |
| 5212          | 907115 | 682.97 | 683.62    | 0.65   | 24     | 7.5    | 5      | 1.55   | 127    | 67     | 29     | 15.6   | 4.875  | 3.25   | 1.0075 | 82.55  | 43.55   | 18.85 |
| 5213          | 907116 | 683.62 | 683.97    | 0.35   | 37     | 59     | 65     | 2.1    | 766    | 291    | 113    | 12.95  | 20.65  | 22.75  | 0.735  | 268.1  | 101.85  | 39.55 |
| 5214          | 907117 | 683.97 | 684.47    | 0.50   | 12     | 7.5    | 5      | 2.07   | 60     | 76     | 44     | 6      | 3.75   | 2.5    | 1.035  | 30     | 38      | 22    |
| 5215          | 907118 | 684.47 | 685.51    | 1.04   | 11     | 24     | 5      | 2.13   | 109    | 109    | 43     | 11.44  | 24.96  | 5.2    | 2.2152 | 113.36 | 113.36  | 44.72 |
| 5216          | 907119 | 685.51 | 686.11    | 0.60   | 10     | 7.5    | 5      | 2.4    | 1684   | 563    | 149    | 6      | 4.5    | 3      | 1.44   | 1010.4 | 337.8   | 89.4  |
| 5217          | 907120 | 686.11 | 687.11    | 1.00   | 7      | 7.5    | 5      | 1.84   | 50     | 111    | 34     | 7      | 7.5    | 5      | 1.84   | 50     | 111     | 34    |
| 5219          | 907121 | 687.11 | 687.51    | 0.40   | 14     | 29     | 5      | 1.67   | 36     | 193    | 25     | 5.6    | 11.6   | 2      | 0.668  | 14.4   | 77.2    | 10    |
| 5220          | 907122 | 687.51 | 688.51    | 1.00   | 6      | 7.5    | 5      | 1.8    | 40     | 138    | 34     | 6      | 7.5    | 5      | 1.8    | 40     | 138     | 34    |
| 5221          | 907123 | 688.51 | 689.51    | 1.00   | 7      | 7.5    | 5      | 1.66   | 47     | 110    | 31     | 7      | 7.5    | 5      | 1.66   | 47     | 110     | 31    |
| 5222          | 907124 | 691.31 | 691.93    | 0.62   | 10     | 18     | 5      | 2.31   | 41     | 321    | 32     | 6.2    | 11.16  | 3.1    | 1.4322 | 25.42  | 199.02  | 19.84 |
| 5223          | 907125 | 691.93 | 692.93    | 1.00   | 13     | 7.5    | 5      | 2.38   | 42     | 296    | 36     | 13     | 7.5    | 5      | 2.38   | 42     | 296     | 36    |
| 5224          | 907126 | 692.93 | 693.93    | 1.00   | 7      | 20     | 5      | 2.17   | 43     | 196    | 35     | 7      | 20     | 5      | 2.17   | 43     | 196     | 35    |
| 5225          | 907127 | 693.93 | 694.64    | 0.71   | 7      | 7.5    | 5      | 2.14   | 39     | 124    | 35     | 4.97   | 5.325  | 3.55   | 1.5194 | 27.69  | 88.04   | 24.85 |
| 5226          | 907128 | 694.64 | 695.23    | 0.59   | 11     | 30     | 5      | 2.15   | 38     | 500    | 40     | 6.49   | 17.7   | 2.95   | 1.2685 | 22.42  | 295     | 23.6  |
| 5227          | 907129 | 695.23 | 695.95    | 0.72   | 29     | 35     | 5      | 2.53   | 77     | 1122   | 36     | 20.88  | 25.2   | 3.6    | 1.8216 | 55.44  | 807.84  | 25.92 |
| 5228          | 907130 | 695.95 | 696.95    | 1.00   | 9      | 23     | 5      | 2.1    | 46     | 438    | 38     | 9      | 23     | 5      | 2.1    | 46     | 438     | 38    |
| 5230          | 907131 | 696.95 | 697.95    | 1.00   | 2.5    | 22     | 12     | 1.87   | 39     | 146    | 33     | 2.5    | 22     | 12     | 1.87   | 39     | 146     | 33    |
| 5231          | 907132 | 697.95 | 698.95    | 1.00   | 5      | 23     | 10     | 1.99   | 35     | 138    | 31     | 5      | 23     | 10     | 1.99   | 35     | 138     | 31    |
| 5232          | 907133 | 698.95 | 699.95    | 1.00   | 7      | 39     | 5      | 2.07   | 35     | 199    | 33     | 7      | 39     | 5      | 2.07   | 35     | 199     | 33    |
| 5233          | 907134 | 705.52 | 706.32    | 0.80   | 7      | 16     | 5      | 2.04   | 35     | 247    | 38     | 5.6    | 12.8   | 4      | 1.632  | 28     | 197.6   | 30.4  |
| 5234          | 907135 | 712.73 | 713.73    | 1.00   | 7      | 7.5    | 24     | 2.01   | 47     | 177    | 34     | 7      | 7.5    | 24     | 2.01   | 47     | 177     | 34    |
| 5235          | 907136 | 713.73 | 714.73    | 1.00   | 7      | 7.5    | 15     | 2.04   | 54     | 74     | 40     | 7      | 7.5    | 15     | 2.04   | 54     | 74      | 40    |
| 5236          | 907137 | 714.73 | 715.73    | 1.00   | 6      | 30     | 5      | 1.04   | 51     | 317    | 38     | 6      | 30     | 5      | 1.04   | 51     | 317     | 38    |
| 5237          | 907138 | 715.73 | 716.73    | 1.00   | 11     | 7.5    | 5      | 0.5    | 44     | 531    | 39     | 11     | 7.5    | 5      | 0.5    | 44     | 531     | 39    |
| 5238          | 907139 | 716.73 | 717.73    | 1.00   | 2.5    | 7.5    | 5      | 0.5    | 38     | 151    | 34     | 2.5    | 7.5    | 5      | 0.5    | 38     | 151     | 34    |
| 5239          | 907140 | 717.73 | 718.73    | 1.00   | 8      | 7.5    | 5      | 1.3    | 52     | 541    | 47     | 8      | 7.5    | 5      | 1.3    | 52     | 541     | 47    |
| 5241          | 907141 | 708.95 | 709.41    | 0.46   | 14     | 15     | 13     | 1.59   | 56     | 1123   | 37     | 6.44   | 6.9    | 5.98   | 0.7314 | 25.76  | 516.58  | 17.02 |
| 5242          | 907142 | 712.73 | 713.73    | 1.00   | 8      | 16     | 11     | 0.5    | 51     | 203    | 36     | 8      | 16     | 11     | 0.5    | 51     | 203     | 36    |
| 5243          | 907200 | 718.73 | 719.73    | 1.00   | 8      | 7.5    | 5      | 1.26   | 60     | 549    | 56     | 8      | 7.5    | 5      | 1.26   | 60     | 549     | 56    |

Field Blank Materials



|      |        |        |        |      |     |     |   |      |     |     |     |       |       |      |        |       |       |       |
|------|--------|--------|--------|------|-----|-----|---|------|-----|-----|-----|-------|-------|------|--------|-------|-------|-------|
| 5197 | 907101 | 622.00 | 622.67 | 0.67 | 2.5 | 7.5 | 5 | 1.47 | 43  | 52  | 23  | 1.675 | 5.025 | 3.35 | 0.9849 | 28.81 | 34.84 | 15.41 |
| 5244 | 907201 | 0.00   | 0.00   | 0.00 | 2.5 | 7.5 | 5 | 0.5  | 0.5 | 0.5 | 0.5 | 0     | 0     | 0    | 0      | 0     | 0     | 0     |

1/4 Duplicate Samples

|      |        |        |        |      |     |     |   |      |    |    |    |     |     |   |      |    |    |    |
|------|--------|--------|--------|------|-----|-----|---|------|----|----|----|-----|-----|---|------|----|----|----|
| 5210 | 907113 | 679.00 | 680.00 | 1.00 | 2.5 | 17  | 5 | 1.44 | 78 | 75 | 33 | 2.5 | 17  | 5 | 1.44 | 78 | 75 | 33 |
| 5206 | 907110 | 679.00 | 680.00 | 1.00 | 2.5 | 7.5 | 5 | 1.57 | 85 | 80 | 36 | 2.5 | 7.5 | 5 | 1.57 | 85 | 80 | 36 |
| 5207 | 907110 | 679.00 | 680.00 | 1.00 | 2.5 | 7.5 | 5 | 1.52 | 85 | 81 | 38 | 2.5 | 7.5 | 5 | 1.52 | 85 | 81 | 38 |

Laboratory Duplicate:

|      |        |        |        |      |     |     |   |      |    |     |    |     |     |   |      |    |     |    |
|------|--------|--------|--------|------|-----|-----|---|------|----|-----|----|-----|-----|---|------|----|-----|----|
| 5206 | 907110 | 679.00 | 680.00 | 1.00 | 2.5 | 7.5 | 5 | 1.57 | 85 | 80  | 36 | 2.5 | 7.5 | 5 | 1.57 | 85 | 80  | 36 |
| 5207 | 907110 | 679.00 | 680.00 | 1.00 | 2.5 | 7.5 | 5 | 1.52 | 85 | 81  | 38 | 2.5 | 7.5 | 5 | 1.52 | 85 | 81  | 38 |
| 5217 | 907120 | 686.11 | 687.11 | 1.00 | 7   | 7.5 | 5 | 1.84 | 50 | 111 | 34 | 7   | 7.5 | 5 | 1.84 | 50 | 111 | 34 |
| 5218 | 907120 | 686.11 | 687.11 | 1.00 | 8   | 27  | 5 | 1.79 | 46 | 108 | 34 | 8   | 27  | 5 | 1.79 | 46 | 108 | 34 |
| 5228 | 907130 | 695.95 | 696.95 | 1.00 | 9   | 23  | 5 | 2.1  | 46 | 438 | 38 | 9   | 23  | 5 | 2.1  | 46 | 438 | 38 |
| 5229 | 907130 | 695.95 | 696.95 | 1.00 | 8   | 43  | 5 | 2.03 | 44 | 403 | 35 | 8   | 43  | 5 | 2.03 | 44 | 403 | 35 |
| 5239 | 907140 | 717.73 | 718.73 | 1.00 | 8   | 7.5 | 5 | 1.3  | 52 | 541 | 47 | 8   | 7.5 | 5 | 1.3  | 52 | 541 | 47 |
| 5240 | 907140 | 717.73 | 718.73 | 1.00 | 9   | 7.5 | 5 | 1.35 | 55 | 546 | 50 | 9   | 7.5 | 5 | 1.35 | 55 | 546 | 50 |

WAG

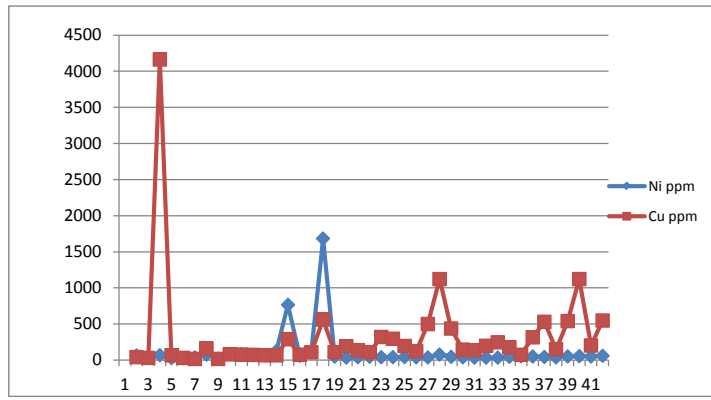
| Meters From: | Meters To: | Interval in Meters | WAG Au. | WAG PT. | WAG Pd. | WAG Ag | WAG Ni. | WAG Cu. | WAG Co. | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|---------|---------|---------|--------|---------|---------|---------|-----------------------|-------------------|
| 679.00       | 689.51     | 10.51              | 91.88   | 122.61  | 73.55   | 18.38  | 1956.77 | 1367.72 | 439.80  | 29.50838              | 358.1627          |

WAG

| Meters From: | Meters To: | Interval in Meters | WAG Au. | WAG PT. | WAG Pd. | WAG Ag | WAG Ni. | WAG Cu. | WAG Co. | Total Precious Metals | Total Base Metals |
|--------------|------------|--------------------|---------|---------|---------|--------|---------|---------|---------|-----------------------|-------------------|
| 683.62       | 686.11     | 2.49               | 36.39   | 53.86   | 33.45   | 5.43   | 1421.86 | 591.01  | 195.67  | 50.04994              | 886.9639          |

Overall the spread of nickel values are relatively lower than the copper values.





t collected)

## **APPENDIX V**

URSA Xstrata Joint Venture Project Expenditure Compilation

Thursday January 12th., 2012

URSA Major Minerals Incorporated

Compiled By: Harold Tracanelli, Getn, P.Geo

URSA / Xstrata Shakespeare East Down Plunge - Joint Venture Diamond Drilling Program Expenditure Accounting Talley Sheet.

| <u>Item</u>                                                  | <u>Date</u>  |              |                                |                            | <u>Amount</u> |
|--------------------------------------------------------------|--------------|--------------|--------------------------------|----------------------------|---------------|
|                                                              | <u>From:</u> | <u>To:</u>   | Diamond Drilling Costs         |                            |               |
| 1                                                            | Nov 29 / 10  | Dec 12 / 10  | DDH U-08-01                    |                            | 135,522.18    |
| 2                                                            | Jan 13 / 11  | Mar 11 / 11  | DDH U-08-02                    |                            | 99,781.83     |
| 3                                                            | June 17 / 11 | June 28 / 11 | DDH U-08-03                    |                            | 95,775.98     |
| Analytical - Assay Costs                                     |              |              |                                |                            |               |
| 4                                                            | Feb 24 / 11  |              | DDH U-08-01                    | Job # 201110051 44 samples | 1757.60       |
| 5                                                            | Apr 06 / 11  |              | DDH U-08-02                    | Job # 201110097 64 Samples | 2,556.51      |
| 6                                                            | Aug 15 / 11  |              | DDH U-08-03                    | Job # 201110359 82 samples | 3,275.53      |
| Paul Torrance O.L.S. Land Survey - Drill Hole Location Costs |              |              |                                |                            |               |
| 7                                                            |              |              | DDH U-08-01                    |                            | 321.70        |
| 8                                                            |              |              | DDH U-08-02                    |                            | 321.70        |
| 9                                                            |              |              | DDH U-08-03                    |                            | 321.70        |
| Crone Geophysics Borehole Geophysical Surveying              |              |              |                                |                            |               |
| 10                                                           |              |              | DDH U-08-01                    |                            | 12,194.00     |
| 11                                                           |              |              | DDH U-08-02                    |                            | 15,315.00     |
| Geology - Exploration                                        |              |              |                                |                            |               |
| 12                                                           | Nov 26 / 10  | June 28 / 11 | Harold Tracanelli, Getn, P.Geo |                            | 20,844.26     |
| 13                                                           | Aug 01 / 11  | Aug 02 / 11  | Ian Dasti                      |                            | 600.00        |
| Geological Assistance                                        |              |              |                                |                            |               |
| 14                                                           | Jan 18 / 11  | Mar 11 / 11  | Benjamin Martel                |                            | 3,233.14      |
| 15                                                           | Feb 01 / 11  | Feb 11 / 11  | Allen MacDiarmid               |                            | 809.38        |
| 16                                                           | Mar 04 / 11  | Mar 11 / 11  | Michael Young                  |                            | 809.37        |
| 17                                                           | Aug 08 / 11  | Aug 09 / 11  | Alex Korpijaakko               |                            | 350.00        |
| Computerized Drafting - Plotting Services                    |              |              |                                |                            |               |

|        |              |              |                                                  |             |
|--------|--------------|--------------|--------------------------------------------------|-------------|
| 18     | Aug 15 / 11  |              | Bruce W. Mackie                                  | 1,017.00    |
|        |              |              | Transportation - Rented Pickup Trucks Enterprise |             |
| 19     | Nov 29 / 10  | Dec 12 / 10  | Harold Tracanelli                                | 1,056.86    |
| 20     | Jan 13 / 11  | Mar 11 / 11  | Harold Tracanelli                                | 3,364.43    |
| 21     | June 17 / 11 | June 28 / 11 | Harold Tracanelli                                | 888.66      |
| 22     | June 17 / 11 | June 28 / 11 | Ian Dasti                                        | 888.66      |
| 23     | Aug 01 / 11  | Aug 02 / 11  | Ian Dasti                                        | 111.08      |
|        |              |              | Project Related Field Expenditures               |             |
| 25     |              |              | Harold Tracanelli                                | 2,148.79    |
| 26     | Aug 01 / 11  | Aug 02 / 11  | Ian Dasti                                        | 316.16      |
|        |              |              |                                                  | <u>0.00</u> |
| Total: |              |              |                                                  | 403,581.52  |

Explanation Notes on Accounting Items

Item

- 4,5,6 Analytical - Assay Costs all inclusive, sample preparation and analytical procedures
- 7,8,9 All inclusive average surveying and map generation costs calculated per diamond drill hole.
- 10, 11 The figure includes the cost of the bore hole surveying by: Crone Geophysics and Exploration Company plus the calculated costs associated with the required geological and geophysical support provided by URSA Major Minerals Incorporated. The expenditures were filed for assesment work with the Ministry of Northern Development Mines and Forestry on February 09th., 2011 and January 10th., 2012
- 10, 11 Includes: mobe - GPS - demobe loop, survey bore hole. This particular survey has not yet been filed for assesment work
- 18 Computer modeling - drafting and plotting costs