



MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

Technical Report on the Crypto Zinc-Copper-Indium Project Juab County, Utah

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Prepared for
LITHIC RESOURCES LTD.
912 - 510 West Hastings St.
Vancouver, B.C., Canada V6B 1L8

Prepared by:
Paul G. Tietz, C.P.G.
Steven Ristorcelli, R.P.G.
C. F. Staargaard, P.Geo.

775-856-5700

210 South Rock Blvd.
Reno, Nevada 89502
FAX: 775-856-6053



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- Appendix A Crypto Project Mining Claims and Lease as of September 2, 2009
- Appendix B Peatfield QA/QC Report
- Appendix C Descriptive Statistics of Metal Domain Samples



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1.0 SUMMARY

1.1 Introduction

Mine Development Associates (“MDA”) has prepared this technical report on the Crypto zinc-copper-indium project, located in Juab County, Utah, at the request of Lithic Resources Ltd. (“Lithic”). The purpose of this report is to provide a technical summary containing the first 43-101-compliant Mineral Resource estimate of the Crypto zinc project. This report was written in compliance with disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”), Companion Policy 43-101CP, and Form 43-101F1. All information on legal, land, and environmental issues in this report are based on information provided to MDA by Lithic; MDA is not an expert in these areas and presents no opinion on this information.

The Crypto zinc-copper-indium project is located on the northwestern edge of the Fish Springs Range in west-central Utah, approximately 160km southwest of Salt Lake City. The property consists of 159 unpatented lode mining claims; all or part interest in 18 patented mining claims, which are now private land; and one state mineral lease. The property has an aggregate area of 1,597.9ha and is situated in Sections 7-9 and 16-21, Township 11 South, Range 14 West, and in Sections 12, 13, and 24, Township 11 South, Range 15 West, Salt Lake Base and Meridian. All titles are held either in the name of Lithic or its U. S. subsidiary, N.P.R. (US), Inc.

The Crypto property is subject to a 1.5% Net Smelter Return royalty interest on all production payable to Vaaldiam Resources Ltd., who is also entitled to receive a one-time cash payment of \$1,000,000 upon Lithic’s securing financing to bring the Crypto property into production.

1.2 Geology and Mineralization

The Crypto zinc property is located on the northwestern pediment of the Fish Springs Range, one of the roughly north-trending ranges of the Basin and Range physiographic province. Generally speaking, the Fish Springs Range is a north-trending horst comprised of over 3,500m of Lower Cambrian to Upper Devonian platformal sedimentary rocks that have been homoclinally tilted to the west at generally moderate dips. Scattered quartz monzonite intrusive complexes and rhyolite dikes and occasional andesitic plugs intrude the sedimentary rocks locally and are thought to be Late Eocene in age. Tertiary volcanic rocks of latitic, shoshonitic, and rhyodacitic composition are found along with younger alluvium in basins adjoining the Fish Springs Range.

775-856-5700

210 South Rock Blvd.
Reno, Nevada 89502
FAX: 775-856-6053



The Crypto property is predominately underlain by a sequence of lower Cambrian to upper Devonian dolostones with lesser, generally thin-bedded limestones and minor interbedded quartzites and shales. The most obvious structure on the property is the Juab fault, a west-northwest-trending, north-dipping normal fault that trends through the middle of the property. The fault is significant enough to have caused a conspicuous left-lateral offset of the Fish Springs Range and is thought to have on the order of 500-600m of net vertical displacement. The north-trending Overland fault along the western margin of the Fish Spring Range, together with a number of lesser subparallel faults, are normal with west-side down and represent extensional faulting typical of the Basin and Range Province.

Drilling has revealed that the sedimentary package has been intruded by a late Eocene (38.5 ± 1.0 Ma, K/Ar), felsic intrusive complex which underlies a large part of the property at depth but is not exposed at the surface. In the vicinity of the Crypto zinc deposit, it rises to the bedrock surface in a cupola which sub-crops below shallow Pleistocene gravels. Various dikes ranging in composition from porphyritic quartz trachyte to rhyolite are exposed in outcrop or have been observed in drill core and are thought to be related to the same intrusive event as the quartz monzonite.

Thin-bedded carbonate rocks near the intrusive complex, particularly those with shaly partings, have been altered to skarn, marble, and siliceous hornfels. More thickly bedded to massive dolostones tend to be converted to marble. Zinc-copper-indium mineralization of the Crypto deposit occurs in portions of the skarn, while molybdenite mineralization occurs both as disseminations in the skarn and in more classic, porphyry-style quartz-pyrite veinlets within the quartz monzonite intrusion itself. High-grade silver-lead-zinc- mineralization, including that exploited in the historic Utah and Emma mines, occurs in structurally controlled replacement zones in carbonate rocks peripheral to skarn.

The most significant mineralization discovered to date on the Crypto property consists of sphalerite with minor chalcopyrite occurring in a series of concordant to discordant skarns and replacement bodies in carbonate rocks in proximity to the quartz monzonite intrusive complex. Two main areas of zinc mineralization have been found, the Main and Deep Zones, neither of which is exposed in outcrop. The two zones are separated by the Juab fault. The Main Zone occurs in Ordovician Pogonip Group carbonate rocks and possibly in some Ely Springs Dolomite immediately south of the sub-cropping quartz monzonite cupola and north of the Juab fault. Main Zone mineralization has been traced with drilling over a length of about 525m, a width of about 150m, and to a depth of 575m and remains open to the west and to depth. The Main Zone has been oxidized to an average depth of about 200m. The Deep Zone is hosted predominantly by thinly bedded, shaly limestones, probably the Corset Spring Shale and Candland Shale members, of the Orr Formation immediately south of the Juab fault. Deep Zone mineralization also occurs as proximal skarn within the Orr Formation along the contact with the underlying quartz monzonite intrusive. At least three separate mineralized stratabound horizons have been identified through drilling over an area of about 330m by 225m at depths of between about 450 to 750m. They remain open to the west, south, and possibly the east.

1.3 Exploration and Mining History

The Crypto zinc property lies in the Fish Springs mining district, from which about 7.9 million kg of lead, 1,300kg of zinc, 2,400kg of copper, and 2.7 million ounces of silver were produced from 1890 to 1953. This mineralization came from high-grade lead-silver ores found in oxidized carbonate replacement deposits.



The Crypto project area was at one time or another held or optioned by Kennecott Copper Corporation (“Kennecott”), Pinnacle Exploration Inc. (“Pinnacle”), Utah Construction & Mining (“Utah,” later Utah International Inc.), Noble Peak Resources Ltd. (“Noble Peak,” later called Vaaldiam Resources Ltd. “Vaaldiam”), Cyprus Minerals Company (“Cyprus” (in a joint venture with Mitsui Mining & Smelting Co. Ltd.)), Sierra Gigantes Resources Inc. (“Sierra”), and EuroZinc Mining Corporation (“EuroZinc”). Lithic purchased the property from EuroZinc in 2005 through the purchase of N.P.R. (US), Inc., a wholly-owned subsidiary of Eurozinc, and subsequently staked an additional 119 claims, purchased additional interests in two of the patented claims, and purchased a partial interest in one additional patented claim. The Main Zone was discovered by Utah, and the Deep Zone was later confirmed as a separate zone and expanded by Cyprus. Historic resource estimates were made by Utah in 1976, Cyprus in 1991 and 1993, and Noble Peak in 1995, but all of these were made prior to the NI 43-101 reporting requirements.

Since acquiring the property, Lithic has completed aerial photography and photogrammetry, pole-dipole induced polarization surveying, and helicopter-borne magnetic surveying. In 2007-2008, Lithic completed a program of 10,639m of core drilling in 17 holes. In 2009, they commissioned preliminary metallurgical testwork on both sulfide and oxide mineralization.

1.4 Drilling and Sampling

Four campaigns of drilling completing 85 core and RC exploration holes totalling 38,138m have been carried out on the Crypto property (Table 1.1).

Table 1.1 Crypto Mineral Resource Drilling Database Summary

Company	Period	Hole Numbers	Core		RC		Total	
			No.	Meters	No.	Meters	No.	Meters
Pinnacle Mines	1958-1959	C1,C2	2	228.6	--	--	2	228.6
Utah International	1961-1979	CC1 to 46 RC2-4,14,26,35-37	39	16,555.8	8	609.5	47	17,165.3
Cyprus Minerals	1990-1991	CCC1 to15 RCCC-1, 6	17	9,434.6	2	670.6	19	10,105.2
Lithic Resources	2007-2008	C07-1 to 5 C08-6 to 15	17	10,638.9	--	--	17	10,638.9
Totals			75	36,857.9	10	1,280.1	85	38,138.0

Lithic’s samples were analyzed by ALS Chemex. Lithic implemented a quality-control protocol involving a variety of standards and duplicates as well as a blank for all of its sampling on the project. Every 11th sample was either a standard, a duplicate of some type (preparation, assay, or field duplicate), or a blank.

MDA has audited the historic database using the available sources and has no reason to suspect that any systematic problems exist; however, an unfortunate deficiency is the lack of original analytical certificates from previous exploration programs, even as photocopies. As a result, MDA cannot state



that it has checked the historic database using entirely original sources. MDA found no significant issues in its audit of Lithic's entries in the database.

1.5 Metallurgical Testing

Lithic initiated metallurgical testing by two firms which supersedes historical testwork completed by Cyprus. G&T Metallurgical Services Ltd. tested a series of sulfide composites constructed from samples across the deposit to develop a flotation treatment plan for sulfide mineralization. Kappes, Cassiday & Associates completed a series of leach and concentration tests on a composite of the oxide zinc mineralization constructed from samples taken from a variety of Lithic's drill intercepts.

For G&T's study of sulfide mineralization, composites were created representing three different types of mineralization: Cu-Zn, High-Grade Zn, and Low-Grade Zinc mineralization. The program developed by G&T focused on the conventional processes to generate independent copper and zinc concentrates. A Bond ball mill work index, grinding and flotation tests, open-circuit and locked-cycle tests, and preliminary testing to investigate potential to recover a magnetite concentrate were undertaken.

The initial testing on the Cu-Zn composite, along with subsequent testing on the Low-Grade Zn and High-Grade Zn composites, indicated a similar moderate hardness and the target grind was determined to be 65 microns. Energy requirements are expected to be similar for all three types of mineralization.

Open-circuit bench-scale testing to evaluate the recovery of copper and zinc determined that the use of zinc depressants, ZnSO_4 and NaCN , was essential to control the recovery of zinc to the copper concentrate thereby optimizing the performance of the zinc recovery circuit. The open-circuit testwork also indicated that rougher concentrate regrinds were essential for both the copper and zinc circuits in order to optimize the concentrate grades and recoveries.

The open-circuit testwork provided the preliminary criteria to develop flotation locked-cycle test procedures. Locked-cycle tests were completed to confirm recoveries and concentrate grades identified by the open-circuit tests. Among the results of the locked-cycle tests were:

- The zinc concentrate will contain 52.5% Zn which represents a zinc recovery between 75% and 95% depending on feed grade. The linear relationship between feed grade and recovery is based on the formula: $\text{Recovery Zn} = (1.55 \times \% \text{Zn}(\text{feed}) + 78.43)\%$, max 95%.
- The copper concentrate will contain 32.0% Cu and 6.0% Zn which represents a copper recovery of 50% and a Zn recovery of 3%;
- Indium is recovered in the zinc concentrate described in the following formula: $\text{Recovery In} = (-1.93 \times \% \text{Zn}(\text{feed}) + 76.8)\%$

The metallurgical testwork that has been completed by G&T confirms that the sulfide zone of the Crypto project will be amenable to processing using a conventional copper – zinc differential flotation process. Gold, silver, and indium will be recovered to the concentrates. Deleterious elements were not found to be present in the copper and zinc flotation concentrates at penalty levels however it was recommended by G&T that future work should monitor bismuth concentration as it approached threshold limits depending on the smelter accepting the concentrate.



Results of the G&T sulfide flotation testwork program were consistent with work completed by Cyprus in 1991 that identified the potential to recover zinc to a marketable zinc concentrate.

Kappes, Cassidy and Associates (KCA) has completed a preliminary zinc mineral evaluation program on a single composite of the oxide mineralization. Sulfuric acid leaching tests were conducted to determine the potential to recover the zinc. The test results indicated a potential to extract an average of 95% of the zinc, 78% of the copper, and 37% of the indium from the ore into solution. No work has yet been completed to determine the process method and resulting recovery of zinc, copper, or indium from the acid solution. However, there are proven technologies available that will be evaluated in future test programs.

1.6 Mineral Resource Estimation

Upon completion of the database validation process, MDA constructed cross sections looking west. One set of sections was made for each of lithology, zinc, copper, and indium. Drill-hole information, including host lithology and metal grades along with the topographic surface, were plotted on the cross sections. MDA used a combination of lithology, angles to core axes, structural data and logged sulfide percentages to construct a geologic model which formed the basis for the density model and metal domain models. MDA assigned density values to various group of rocks ranging from a low of 2.54 to a high of 3.97 g/cm³. The significant range in density values reflects the variable high-sulfide or high-magnetite alteration/mineralization.

Quantile plots of zinc and copper in percent and indium in grams per tonne were made to help define the natural populations of metal grades to be modeled on the cross sections. The plots were reviewed with all data for each metal grouped together, but also with the sulfide material evaluated separately from the oxide. The analytical population breaks indicated by the quantile plots along with the geological interpretation were used in the creation of distinct mineral domains. The interpreted cross sections were then sliced to levels on 3m intervals to coincide with the block-model block size in that direction. The defined metal mineral domains were used to code the drill samples and control the estimation. Mineral domain statistics, and spatial location of higher grades, were made to assess validity of these domains and to determine capping levels. After these analyses, MDA chose to cap 23 samples. Compositing was done to 3m down-hole lengths, honoring all material type and mineral domain boundaries. The 2m by 2m by 3m blocks inside each mineral domain were estimated using only composites from inside that domain.

The Crypto resource block model replicates the relatively complex metal distributions and skarn geometries. Because of the rather contorted geometries, two passes using Inverse Distance techniques were made in the estimate; a long pass to insure filling in all the blocks and a short pass for the Indicated classification. Indium search parameters were particularly long (up to 300m) because of the limited amount of analytical data.

MDA classified the Crypto resource in order of increasing geological and quantitative confidence into Inferred and Indicated categories to be in compliance with Canadian National Instrument 43-101 and the "CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines," issued in 2000 and modified with adoption of the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" in 2005. MDA classified the Crypto resources by a combination of distance to the nearest



sample and the number of samples, while at the same time taking into account reliability of underlying data and understanding and use of the geology. There are no Measured resources within the deposit, primarily due to complexity of the mineralization but also due to limited drill data. The maximum distance criteria for Indicated within the Main Zone is less than that used for the Deep Zone due to the greater variability in domain morphology and metal grades. While MDA is confident that the indium zones do continue as modeled, mostly because of their relationship with zinc (the probable location of indium metal), MDA cannot be sure of the grades, and hence the unfortunately small amount of Indicated material. None of these issues deter from the overall confidence in the global project resource, but they do detract from confidence in some of the accuracy which MDA believes is required for Measured and Indicated resources. Without the downgrading for indium, the Indicated zinc and copper material would likely be two times larger than presently reported.

A summary of the total combined Crypto resources are tabulated in Table 1.2.

Table 1.2 Summary Table of Crypto Resources

Cutoff ZnEq%	Tonnes	ZnEq (%)	Zn (%)	Zn (tonnes)	Zn (lbs)	Cu (%)	Cu (tonnes)	Cu (lbs)	In (g/t)	In (kg)
Project-wide Indicated Resources										
3.00	6,298,000	6.87	4.75	299,136	659,482,000	0.322	20,299	44,752,000	46.2	291,000
Project-wide Inferred Resources										
3.00	15,832,000	6.95	5.08	804,836	1,774,360,000	0.359	56,901	125,446,000	34.9	551,900

The stated resources are fully diluted to 2m by 2m by 3m (vertical) blocks and are tabulated on a zinc-equivalent (“ZnEq”) cutoff grade of 3.0% ZnEq. All material, regardless of which metal is present and which is absent, is tabulated. Because multiple metals exist, but do not on a local scale necessarily co-exist, the ZnEq grade is used for tabulation. Using the individual metal grades of each block, the ZnEq grade is calculated using the following formula:

$$\%ZnEq = \%Zn + (0.0284 * \text{ppm In}) + (2.5 * \%Cu)$$

This formula is based on prices of US\$0.80 per pound zinc, US\$2.00 per pound copper, and US\$500.00 per kilogram of indium. No metal recoveries are applied, as this is the *in situ* resource.

The decision as to the appropriate mining method for the Crypto deposit awaits further evaluation, and there is the potential that a combination of open-pit and underground methods would be optimal. The lower cut-off used for the oxide material reflects the potential for open-pit mining scenarios for this near-surface material. The 2m by 2m by 3m block size likely understates the dilution expected from standard open-pit mining methods, but this block size was used to provide the operator the option for evaluating the deposit, either in total or within specific areas, using underground mining methods.

The detailed work completed by Lithic and MDA on the geologic model, and the data defining the model, has resulted in a resource estimate of high quality. The risk is mostly related to the deposit type. Skarn deposits, such as Crypto, often have relatively complicated and rapidly changing grades and geology. This downside would mostly be alleviated through additional drilling. The upside is clearly dominated by the ability to increase the amount of higher classification material with an increase in indium sample assays. The relatively small amount of Indicated material within the current resource is



due to the many fewer samples with indium grades. An increase in indium sample assays would likely increase the overall indium grade if the tenor of the new sample assays was similar to the existing assays. There is also good potential to increase the size of the deposit by targeting extensions of mineralization primarily to the east, west and south.

1.7 Recommendations

Substantial Indicated and Inferred resources of skarn-hosted zinc, copper, and indium have been outlined making Crypto a property meriting substantial amounts of additional exploration and development work. These defined resources remain open for expansion to the east, west and south, and there is very good potential for the discovery of new, similar zones beyond these extensions. In addition, significant intercepts of high-grade, replacement-style, silver-zinc-lead mineralization and porphyry and/or skarn-style molybdenum mineralization have been encountered in both Lithic's and historic drilling on the property.

A Preliminary Economic Assessment ("PEA") should be completed in order to refine priorities for further work on the Crypto deposit and is not only warranted but recommended. Done in parallel and not contingent upon the results of the PEA, Phase One work should include exploration for resource expansion through drilling of approximately 20,000m of core drilling, possibly including some reverse circulation drilling, but budgeting considers only core. In addition, metallurgical testwork is justified to optimize reported recoveries but the magnitude of the metallurgical studies in Phase One will be dictated by the results of the PEA. A total of US\$7 million for the entire Phase One program is recommended. If successful and positive results are achieved in Phase One, Phase two follow up work could reach US\$20 million.



2.0 INTRODUCTION AND TERMS OF REFERENCE

Mine Development Associates (“MDA”) has prepared this technical report on the Crypto zinc project, located in Juab County, Utah, at the request of Lithic Resources Ltd. (“Lithic”). Lithic is a public company based in Vancouver, Canada, which trades on the TSX Venture Exchange. The Crypto property is held by Lithic and its U. S. subsidiary, N.P.R. (US), Inc. (“NPR”).

This report was written in compliance with disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”), Companion Policy 43-101CP, and Form 43-101F1.

2.1 Project Scope and Terms of Reference

The purpose of this report is to provide a technical summary containing the first 43-101-compliant Mineral Resource estimate of the Crypto zinc project. This report has been prepared by Mr. Paul Tietz, C. P. G. and Senior Geologist for MDA, and Mr. Steven Ristorcelli, R. P. G. and Principal Geologist for MDA, who are qualified persons under NI 43-101, and by Mr. Chris Staargaard, P.Geo., President of Lithic. The Mineral Resources were estimated and classified under the supervision of Mr. Tietz; no Mineral Reserves are estimated. There is no affiliation between Mr. Tietz or Mr. Ristorcelli and Lithic except that of an independent consultant/client relationship. Mr. Staargaard is not independent of the issuer. The Mineral Resources reported herein for the Crypto project are reported to fulfill the requirements stipulated in NI 43-101. Other resource estimates presented in Section 1.0 are reported for historic purposes only and do not necessarily meet the reporting requirements of NI 43-101.

The scope of this study included a review of pertinent technical reports and data provided to MDA by Lithic relative to the general setting, geology, project history, exploration activities and results, methodology, quality assurance, interpretations, drilling programs, and metallurgy. MDA has relied on the data and information provided by Lithic for the completion of this report, including the supporting data for the estimation of the Mineral Resources. In compiling the background information for this report, MDA relied on information provided by Lithic and on other references as cited in Section 22.0.

The authors’ mandate was to comment on substantive public or private documents and technical information listed in Section 22.0. The mandate also required on-site inspections and the preparation of this independent technical report containing the authors’ observations, conclusions, and recommendations. Tietz, accompanied by Peter Ronning (consultant acting on MDA’s behalf), conducted a site visit on March 26, 2008, which included a review of the drilling and sampling procedures. Ristorcelli conducted a site visit on April 6, 2009. Tietz conducted a second site visit June 9 through 13, 2008 in which the drilling results and project geology were reviewed with Lithic personnel.

MDA has made such independent investigations as deemed necessary in the professional judgment of the authors to be able to reasonably present the conclusions discussed herein.



2.2 Frequently Used Acronyms, Abbreviations, Definitions, and Units of Measure

In this report, measurements are generally reported in metric units. Where information was originally reported in Imperial units, MDA has made conversions according to the formulas shown below; discrepancies may result in slight variations from the original data in some cases.

Linear Measure

1 centimeter	= 0.3937 inch	
1 meter	= 3.2808 feet	= 1.0936 yard
1 kilometer	= 0.6214 mile	

Area Measure

1 hectare	= 2.471 acres	= 0.0039 square mile
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Capacity Measure (liquid)

1 liter	= 0.2642 US gallons
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Weight

1 tonne	= 1.1023 short tons	= 2,205 pounds
1 kilogram	= 2.205 pounds	

Currency Unless otherwise indicated, all references to dollars (\$) in this report refer to currency of the United States.

Acronyms and abbreviations that appear in report:

AA	atomic absorption spectrometer
Ag	silver
ASL	above sea level
Cd	cadmium
CIM	Canadian Institute of Mining, Metallurgical, and Petroleum
cm	centimeter
core	diamond drill drilling method
Cu	copper
°C	degrees Centigrade
ddh	diamond drill holes
FA-AA	fire assay with an atomic absorption finish
Fe	iron
GSR	gross smelter return
g	grams
g Ag/t	grams of silver per metric tonne
ha	hectares
ICP-AES	inductively coupled plasma-atomic emission spectroscopy analytical technique
ICP-MS	inductively coupled plasma mass spectroscopy analytical technique
IP	induced polarization geophysical survey
km	kilometers
m	meters



Ma	million years
mm	millimeter
NPI	net profits interest
NSR	net smelter return
oz	ounces
Pb	lead
QA/QC	quality control/quality assurance
RC	reverse-circulation drilling
t	tonnes
tpd	tonnes per day
Zn	zinc



3.0 RELIANCE ON OTHER EXPERTS

The authors are not experts in legal matters, such as the assessment of the legal validity of mining claims, private lands, mineral rights, and property agreements. The authors did not conduct any investigations of the environmental or social-economic issues associated with the Crypto project, and the authors are not experts with respect to these issues.

The authors have relied on Lithic to provide full information concerning the legal status of Lithic Resources Ltd., as well as current legal title, material terms of all agreements, existence of applicable royalty obligations, and material environmental and permitting information that pertain to the Crypto property. Section 4.0 in its entirety is based on information provided by Lithic, and the authors offer no professional opinions with respect to the provided information.



4.0 PROPERTY DESCRIPTION AND LOCATION

The authors are not experts in land, legal, environmental, and permitting matters. The information presented in this Section 4 is based entirely on information provided to MDA by Lithic. The land-status information of Section 4.2 and the permitting information in Section 4.4 came primarily from a report on land status and mineral rights prepared by North American Exploration, Inc. (Gatten, 2009); Mr. Gatten is a licensed professional geologist in the state of Utah. MDA presents this information to fulfill reporting requirements of NI 43-101 but expresses no opinion regarding the legal or environmental status of the Crypto property or any of the agreements and encumbrances related to the property.

4.1 Location

The Crypto zinc property is located in western Juab County, west-central Utah, U.S.A, approximately 160km southwest of Salt Lake City (Figure 4.1).

The property is located within the Fish Springs SW 7½' quadrangle and the Fish Springs 30 by 60 minute topographic map. The project area lies about 4km south of the U. S. Air Force's Deseret Test Center. The Fish Springs Wilderness Study Area is adjacent to the southern boundary and southeast corner of the Crypto property (Figure 4.2). Gatten (2009) noted that the Fish Springs National Wildlife Refuge is located about 5 to 6km east of the Crypto property on the opposite side of the range in an entirely different watershed and groundwater resource area.

The Crypto zinc project lies within the Fish Springs mining district.



Figure 4.1 Location of the Crypto Zinc Property

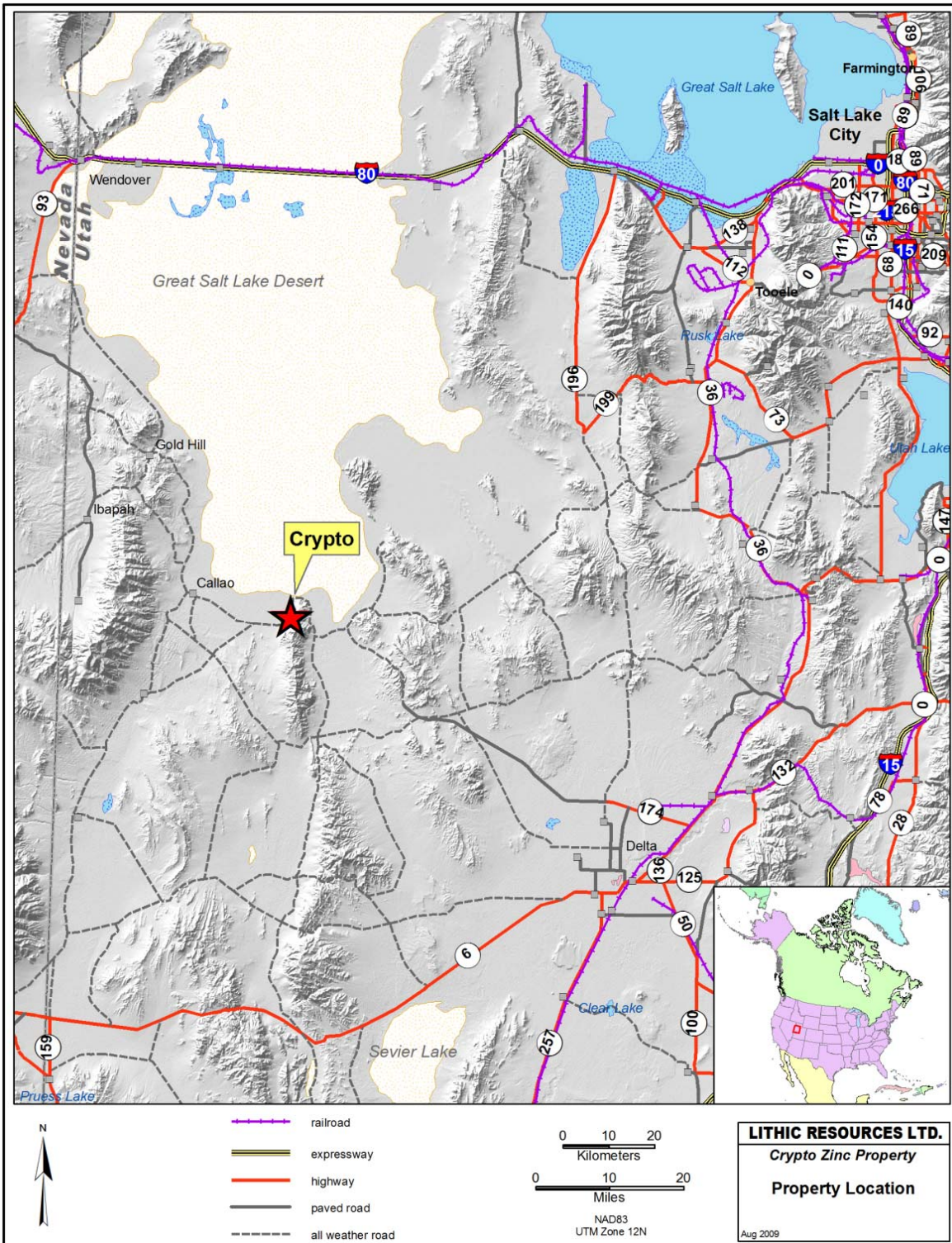
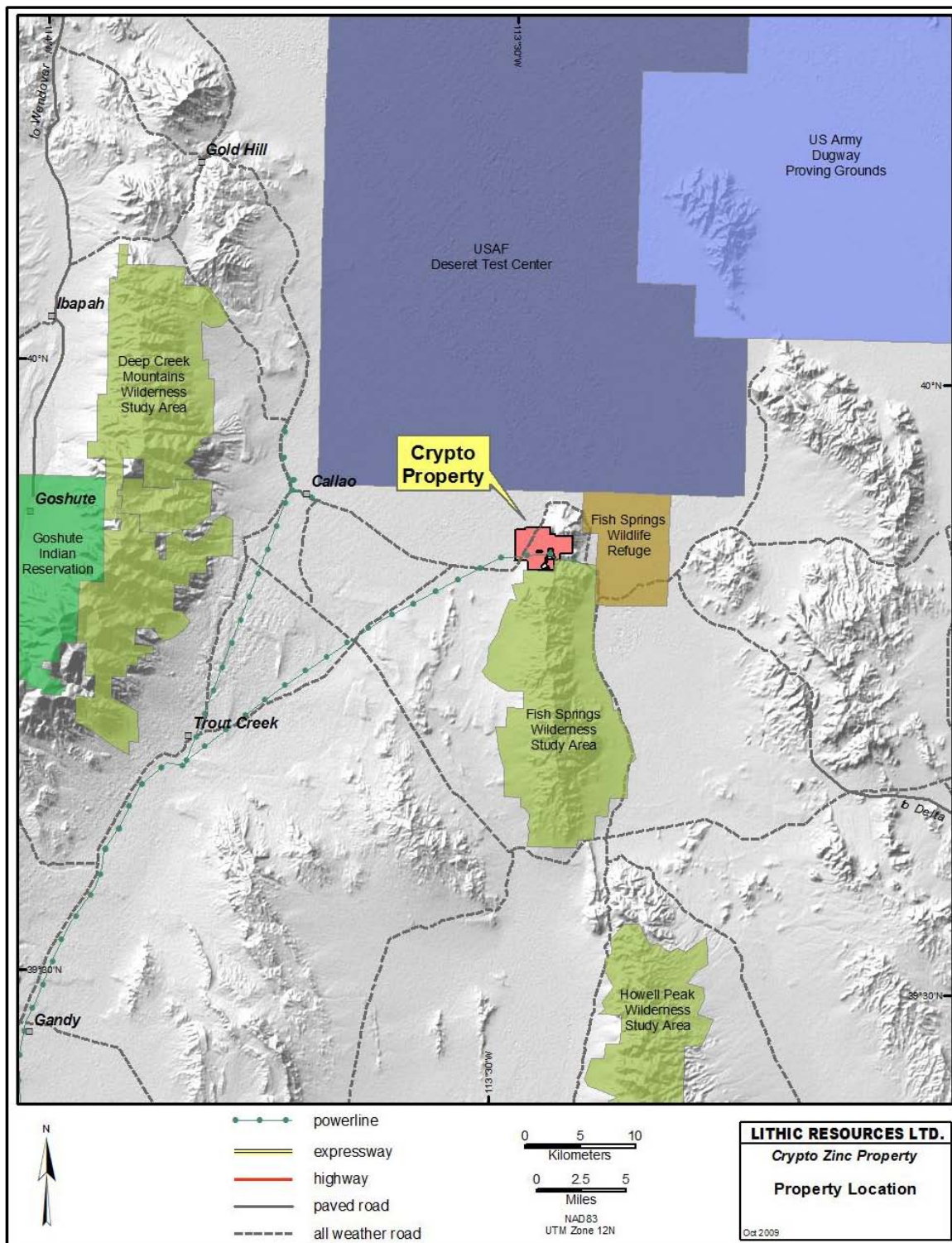




Figure 4.2 Land Status in the Vicinity of the Crypto Property





4.2 Land Area

The Crypto property consists of a single contiguous group of unpatented and patented lode mining claims and one Utah state mineral lease (Figure 4.3; Appendix A) situated in Sections 7-9 and 16-21, Township 11 South, Range 14 West, and in Sections 12, 13, and 24, Township 11 South, Range 15 West, Salt Lake Base and Meridian. All titles are held either in the name of Lithic or NPR. Lithic reports that there is no record in their files of the property boundary and claims having been surveyed. The property comprises 159 unpatented mining claims, all or part interest in 18 patented mining claims (private land), and one state mineral lease with an aggregate area of 1,597.9ha.

The 159 unpatented claims, which comprise 1,227ha, are located on public land administered by the U. S. Bureau of Land Management (“BLM”). They are the Crypto Zn, Crypto, and Pony claims. Unpatented claims can be held indefinitely and require an annual maintenance fee of US\$140 to be paid to the BLM each year on September 1 in order to remain in good standing. Gatten (2009) reported that the annual maintenance fees for the 159 unpatented claims have been paid for the 2009-2010 year, that the claims are valid until September 1, 2010, and that the claims are considered “active” and in good standing by the BLM. Lithic purchased 40 of the unpatented claims as part of the original land package they acquired and staked the remaining 119 claims themselves.

The 18 patented claims, which include both surface and mineral rights, are now considered private or fee land and as such are administered by the state of Utah. These 18 patented claims comprise 124ha in the core of the historic mining district. Through NPR, who is the owner of record, Lithic has 100% interest in 13 of the patented claims and a part interest in the five additional patented claims (Appendix A) (Gatten, 2009). According to Lithic, the patented claims may require varying but generally nominal annual property tax payments due in November of each year. Lithic represents that the annual property tax payments for the patented claims have been paid for the current year.

The Utah state mineral lease ML 48312, which comprises 247ha, is administered by the state of Utah School and Institutional Trust Lands Administration (“SITLA”). NPR entered into the lease June 16, 1999 (Gatten, 2009). Leases are typically for 10 years initially, during which time they require an annual payment of US\$1 per acre due on July 1 of each year to remain in good standing. Following the initial 10-year period, the leaseholder may apply to extend the lease for another 10-year period based on evidence that significant work has been done to develop the property. Extended leases are subject to minimum advance royalties of US\$3 per acre per year in addition to the annual lease payment of US\$1 per acre per year. Mineral production or processing on state leases is subject to payments of royalties as summarized in Section 4.3. The state lease that is part of the Crypto property was due to expire July 1, 2009, but Lithic applied for and was granted an extension for an additional 10 years. The new lease requires advance royalty payments of \$3 per acre per year in addition to the standard fee of \$1 per acre per year; the total annual cost to hold this lease is now \$2,448. Gatten (2009) reported that *“all payments are current and the lease is active. The terms of the lease extend to June 30, 2019, but can be extended further if a mine is in production.”*

Gatten (2009) opined that their investigation “...indicates that the property is as represented and that Lithic Resources, Ltd. and NPR (US), Inc. is the owner. The unpatented mining claims are valid and in good order...The patented mining claims are owned by NPR (US), Inc. and the State Metalliferous Minerals Lease is also held by NPR (US), Inc.”



The holding costs of the Crypto property in 2009 are estimated by Lithic at about US\$24,860.

Within the Crypto property boundary, there are 11 full and partial claims held by other parties as shown on Figure 4.3.

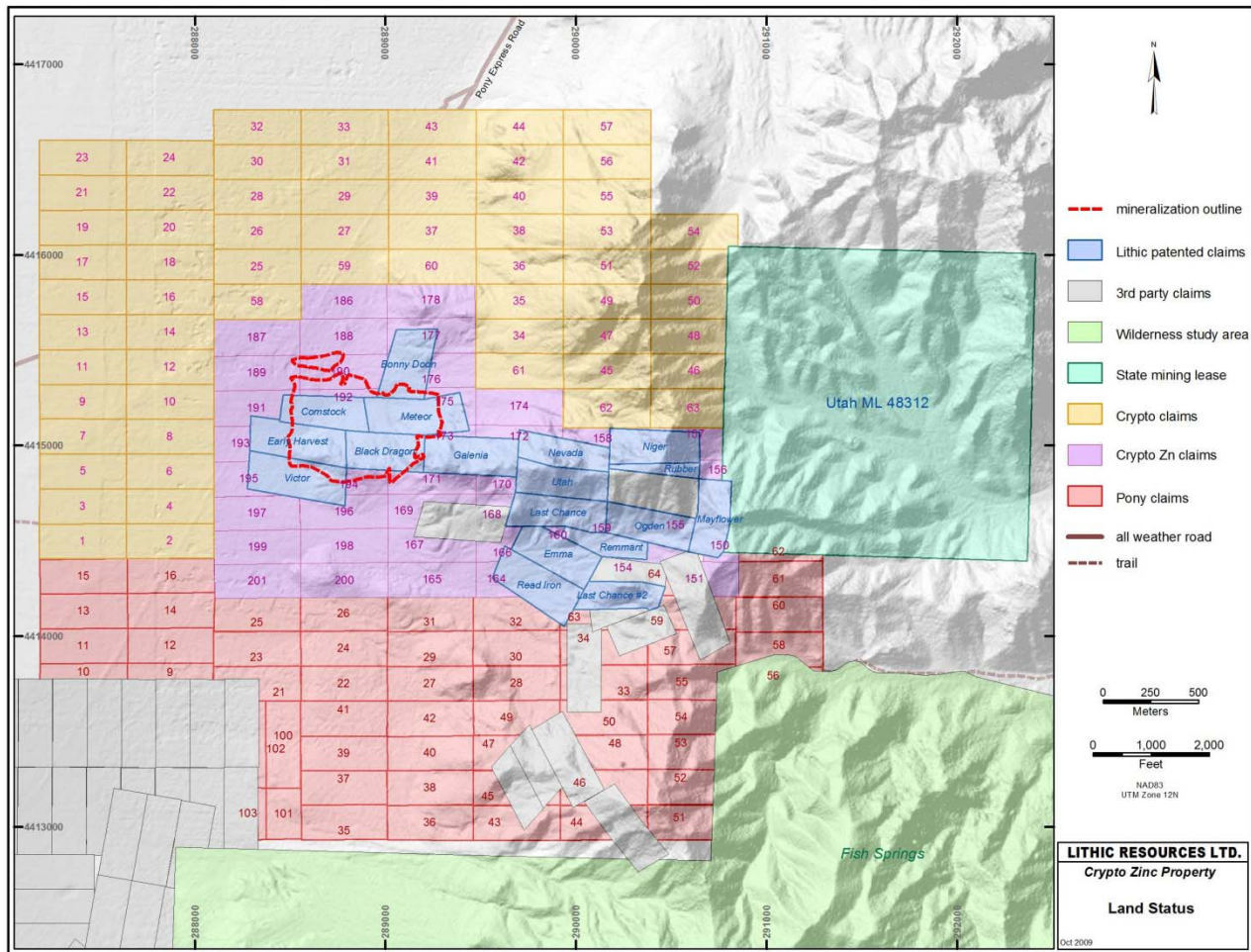
4.3 Agreements and Encumbrances

The Crypto property is subject to a 1.5% Net Smelter Return (“NSR”) royalty interest on all production payable to Vaaldiam Resources Ltd. (“Vaaldiam”), the successor company to Noble Peak Resources Ltd., a previous owner of the property. Vaaldiam is also entitled to receive a one-time cash payment of \$1,000,000 upon Lithic’s securing financing to bring the Crypto property into production. These obligations were inherited through Lithic’s purchase of the property in 2005.

The state mineral lease carries a Gross Smelter Return (“GSR”) royalty of 8% for fissionable metalliferous materials and 4% for non-fissionable metalliferous minerals, payable to SITLA and based on any ores produced from the leased lands and sold by the lessee.



Figure 4.3 Property Map for the Crypto Project



4.4 Environmental Permits and Potential Liabilities

4.4.1 Permits

The following information on the status of permits is taken directly from the land report by Gatten (2009) with minor editorial changes to conform to the style of this report and with a summary table and figure added by Lithic.

Certain permits are required by the State of Utah to explore for minerals and conduct mining operations. These are administered by the Utah Division of Oil, Gas and Mining (“DOGM”) and the BLM and include exploration, small mine (less than five acres disturbance), and large mine permits. In addition to DOGM regulation, the BLM also monitors field and reclamation activities conducted on federal lands.

NPR currently holds three permits in regards to the exploration and mine development of the Crypto property. These permits are:



Exploration Permit E/023/0105. This permit was approved by DOGM July 12, 2007 to allow for an extensive drilling program that has been conducted on the property. Terms of the permit extend until June, 2010, and the permit is in good standing. A reclamation contract is in place which includes a surety amount of \$23,350.

Small Mine Permit S/023/0103. This permit was approved by DOGM April 6, 2009 and covers 5.0 acres of land located in the NW/NW and NE/SE of Section 18. The purpose of the permit is “for surface disturbances prior to pit development.” Permit fees have been paid through June, 2010, and a reclamation contract is in place which includes a surety amount of \$41,330.

Surface Management Notice UTU 079884. This permit was issued by the BLM and allows drilling operations to be conducted on approximately 1.6 acres of land located on the border of Sections 17 and 18. The permit was issued 12/20/07 and was in good standing until 12/20/09. Lithic reports that application to renew this permit will be made.

The particulars of the permits are listed in Table 4.1 and illustrated on Figure 4.4. With regard to the BLM surface management permit area, Lithic is allowed a total of 1.6 acres of disturbance consisting of drill pads and new roads within the area shown in dark yellow on Figure 4.4.

Table 4.1 Summary of Permits in Effect on the Crypto Project

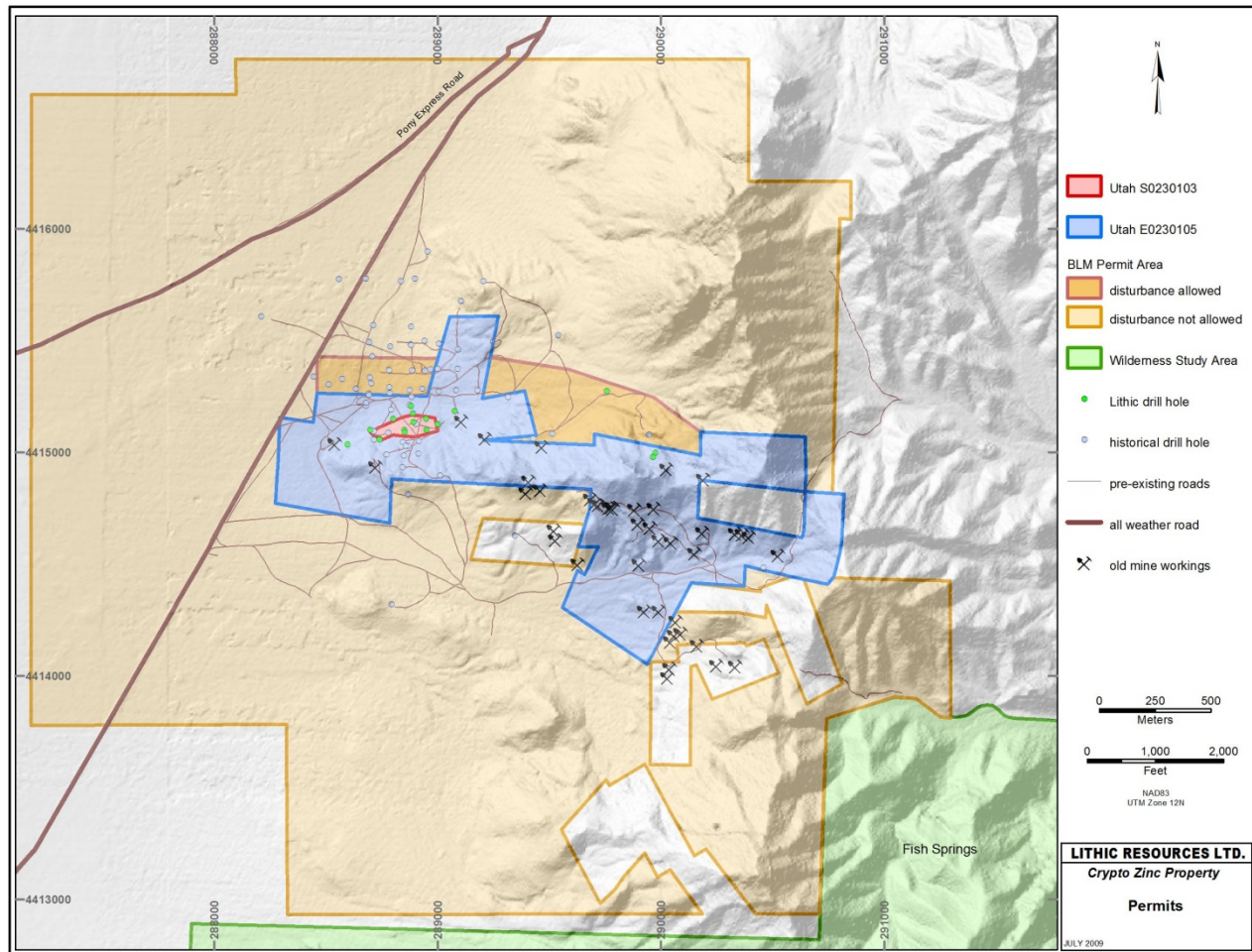
Permit	Land Status	Approval Date	Bond Amount	Authorized Disturbance	In Good Standing Until
Notice of Intention/Exploration Permit E0230105	Private Surface and Mineral rights	7/12/07; renewed 2/3/09	US\$23,350	5 acres	12/2010
Small Mine Permit S0230103	Private Surface and Mineral rights	4/6/09	US\$41,330	5 acres in Section 18	12/2010
Surface Management Notice UTU-079884	Public Surface rights, Mining Claims over Public Minerals rights	12/20/07	Joint with E0230105	1.6 acres in Sections 17-18	12/2009

4.4.2 Potential Liabilities

According to Lithic, environmental liabilities on the Crypto property are limited to the reclamation of areas disturbed by Lithic’s exploration activities. A long history of mining and exploration on and around the property is evidenced by the presence of numerous mine workings including shafts, adits, and pits as well as waste dumps and debris from historic mining activities and settlements associated with those activities. Lithic reports that an archeological study of the Crypto property conducted by the BLM in 2007 prior to granting an exploration permit did not identify any concerns related to any prehistoric or historic artifact sites within the project area. Lithic’s exploration activities have avoided and will continue to avoid or mitigate any impacts in accordance with applicable permits and regulations.



Figure 4.4 Location of Permits in Effect on the Crypto Project





5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Access

The Crypto property is located approximately 160km southwest of Salt Lake City and can be accessed from that direction via state route 36, from which the Pony Express Road and other county-maintained gravel roads lead to the property. The property is also located 125km northwest of Delta, Utah, and can be accessed from that direction via the Brush Wellman Road and other county-maintained gravel roads. Numerous old drill and mining roads provide excellent access to most of the property.

5.2 Climate

Climatic conditions on the property are those of the arid desert, typical of the Great Basin area in Nevada and Utah. Average daytime temperatures range from 33°C in July to 1°C in January, with pronounced temperature variations between night and day. In general, precipitation does not exceed 15cm per year and occurs mainly as afternoon cloudbursts during the summer and as snowfall between October and May. Surface exploration can be carried out year-round on the property, although winter storms can occasionally deposit enough snow to impede access for a few days at a time. Mining could be carried out year-round.

5.3 Local Resources and Infrastructure

The nearest significant supply point is Delta, located approximately 125 road-km southeast of the property, which has a population of about 3,200. The state capitol and major metropolitan area of Salt Lake City is about 160km northeast of the property. Lithic established a small trailer camp on the property during its exploration program, as did previous property owners. Various ranchers in the area have heavy equipment such as bulldozers and excavators available for contract work, and unskilled labor is available in local settlements.

The nearest rail line runs through Delta; another runs parallel to Interstate Highway 80 north of the property and can be accessed at the town of Wendover, Utah, approximately 120km north-northwest of the property. The closest landing strip with the capacity to land small-engine fixed-wing aircraft is at the small ranching community of Granite Ranch, approximately 25km southwest of the property.

A single-phase 14kV electrical transmission line owned by the Mt. Wheeler Power cooperative in Ely, Nevada, crosses the Crypto property from the west, and three-phase electrical power is available at the ranching community of Callao about 20km to the west. A 1.5 gW coal-fired generating station owned by Intermountain Power is located immediately northwest of Delta and supplies Mt. Wheeler Power through a 230kV line passing south of the property at a distance of about 70km.

There is no surface water on the property. An old water well established in the 1960s was used for exploration drill water at the time. Subsequent exploration campaigns either supplemented this source with or relied on water purchased from landowners in the Callao and Granite Ranch settlements across the Snake Valley and trucked to the site.



5.4 Physiography

The Crypto property lies on the southern margin of the Great Salt Lake Desert and on the northwestern pediment slope of the Fish Springs Range, one of the generally north-trending mountain ranges of the Basin and Range physiographic province which covers western Utah and most of the state of Nevada. The Fish Springs Range is about 5km wide by 30km long and is 1,830m in elevation at its crest. The Crypto property includes flat valley floor at an elevation of about 1,200m on the west side of the property, which slopes up to fairly rugged cliffs and ridges with a maximum elevation of about 1,800m on the eastern side of the property. To date, work has concentrated on and around a minor east-west-trending spur extending west from the main range, at elevations of between 1,300 and 1,500m above sea level ("ASL").

Vegetation is typified by scattered low brush and grassy patches with intervening areas of bare ground. Mainly desert species are dominated by various grasses, sagebrush, greasewood, rabbit brush, shadscale, blackbrush, mormon tea, leadbush, and prickly pear cactus. The principal bird and animal species observed in the property area include various songbirds, rodents, jackrabbits, lizards, and snakes, while coyotes, deer, owls, and raptors are reported to have been seen elsewhere in the Fish Springs Range. Local ranchers occasionally run cattle in the area seasonally, but a lack of water precludes maintaining any livestock on a continuing basis.

Figure 5.1 shows the northern end of the Fish Springs Range. The Crypto resource is located at the foot of the mountains within the center of the image.

Figure 5.1 View Looking East toward the Crypto Property





6.0 HISTORY

6.1 Exploration History

The following information has been taken from a summary of the project's history apparently compiled by staff of Utah International in late 1973, from information provided by Lithic, and from additional sources as cited.

Silver-lead mineralization was discovered in the area of the present day Crypto zinc property in 1890 by C. C. Van Alstine, and the Fish Springs mining district was organized the following year (U.S.G.S. Mineral Resource Data System). Between 1890 and 1953, high-grade lead-silver ores were mined from oxidized, carbonate replacement deposits in small underground operations, mainly the Utah and Galena mines and to a much lesser extent, the Emma, Vulcan, Last Chance, and Meteor mines. The total production from the Fish Springs district between 1890 and 1953 is recorded at 7,850,929kg of lead, 1,271kg of zinc, 2,436kg of copper, 508 ounces of gold, and 2,658,220 ounces of silver from 18,415 tonnes of ore (Perry and McCarthy, 1976).

In 1953, Professor M. L. Jensen of Yale University, working for Kennecott Copper Corporation ("Kennecott," which for this report also includes Bear Creek Mining Company, Kennecott's U.S. exploration subsidiary), conducted a ground-magnetometer survey over the district, which revealed a strong magnetic high over the present property area. The survey was conducted with a portable Schmidt-type vertical-intensity magnetometer as part of a program of vehicle magnetics along county roads in Utah. Kennecott conducted grid magnetics and geologic mapping in the summer of 1954. In March 1955, Jensen recommended that Kennecott acquire the property; in March 1957, Frank Howd staked 35 claims in his name but on behalf of Kennecott. Between 1953 and 1957, Kennecott completed ground gravimetric, induced polarization ("IP"), and magnetic surveys as well as geochemical sampling and geologic mapping on the property. Kennecott dropped the claims in 1958. Kennecott's holdings did not include the Utah mine, which was owned by the LDS church through the Utah Mine Company, who had leased it to a John Fritch in 1953 in a 20-year lease-purchase option.

Upon learning that Kennecott was going to drop their claims and with Kennecott's permission, Jensen and M. P. Erickson re-staked the ground as the Crypto claims in the summer of 1958 on behalf of Pinnacle Exploration Inc. ("Pinnacle"), a subsidiary of Callahan Mining Corp. Robert Keeny, on behalf of former Kennecott employee Spenster M. Hansen, also located Golden Boy claims on the same ground at about the same time. At some point in 1958 or 1959, Pinnacle also completed a lease-purchase agreement with Fritch, the leaseholder of the Utah mine property. Pinnacle added new claims to the property in 1958 and 1959. Kennecott quitclaimed all rights to all Crypto claims to Jensen and Pinnacle in August 1958, apparently to circumvent the problem with the potentially conflicting claims of Spenster Hansen, according to the Utah International summary.

In July and August of 1958, Pinnacle conducted heavy-metal geochemical sampling, geological mapping, and a VLF-EM geophysical survey on the Crypto property. The heavy-metal geochemical sampling was not considered helpful, but the geophysical survey did identify several clustered EM conductors. According to the Utah International summary, Hansen probably drilled two holes, perhaps rotary holes, also in the summer of 1958, but there is no record of where they were located or the results of the drilling. In the summer of 1959, Pinnacle drilled two core holes totaling 228.6m (C-1, C-2).



According to the Utah International summary, Pinnacle's holes eliminated an EM anomaly; although no magnetite was encountered, some iron oxide zones assayed weak Pb, Cu, and Ag.

In August 1961, Utah Construction & Mining ("Utah"), a predecessor company to Utah International Inc. (also referenced further as "Utah"), leased the Crypto claims and the Utah mine lease from Pinnacle, after carrying out a ground-magnetic survey with an Askania magnetometer to test the property's potential to host an economic magnetite deposit. There was no prior connection between Utah International and the Utah mine located on the property. In 1965, after Pinnacle defaulted on its agreement with John Fritch, Utah made a new and separate lease-purchase option agreement with Fritch for the Utah mine property. In 1967, Pinnacle's interest in the Crypto claims and the Utah mine lease was quitclaimed to Utah. In 1973 following considerable legal argument, the Utah Mine Co. conveyed ownership of the Utah mine to Fritch, who then immediately transferred it to Utah. Between 1961 and 1985, Utah completed various geological, geochemical, and geophysical surveys, including detailed ground magnetics and IP-resistivity. In addition, Utah drilled 39 core holes totaling 16,555.8m and eight reverse circulation ("RC") holes totaling 609.5m. The Main Zone sulfide zinc and oxide deposits were discovered during this time. In addition to their surface work, Utah also carried out underground mapping and sampling on two levels of the historic Utah mine (Shaw and O'Toole, 1975; Shaw, 1979; Hehn, 1979-1983).

Noble Peak Resources Ltd. ("Noble Peak") purchased the property from Utah in 1985 and compiled the existing drill-hole data, carried out a small soil and rock geochemical survey, and sampled the old drill core and mine dumps for their potential to support a silver-leaching operation.

In 1990, a joint venture between Cyprus Minerals Company ("Cyprus") and Mitsui Mining & Smelting Co. Ltd. ("Mitsui") obtained an option to earn a 50% interest in the property from Noble Peak. In the second half of 1990, Cyprus completed 15.3 line-km of gradient-array IP-resistivity and 3.2 line-km of dipole-dipole IP surveying along with surface geological mapping. The gradient-array IP-resistivity survey was conducted by Great Basin Geophysical with a line spacing of 122m and a dipole spacing of 61m. It located the main Crypto anomaly, its continuation to the east toward and under the Galena and Utah mines, and a new doughnut-shaped anomaly in the northeastern quadrant of the survey area (Cyprus/Mitsui Joint Venture Geologists, 1990). The dipole-dipole IP survey confirmed the presence of most of the major IP anomalies from the gradient survey. Cyprus re-logged 7,620m of Utah's diamond drill core and constructed detailed geological cross-sections. By the end of 1991, Cyprus had completed 17 diamond drill holes totaling 9,434.6m and two RC holes totaling 670.6m (Cyprus/Mitsui Joint Venture Geologists, 1990; Bernardi and Ohlin, 1991a, 1991b). Two of the diamond core holes (CCC-6B and CCC-10A) were wedges off existing holes that were discontinued due to significant down hole deviation. Among other things, this drilling confirmed the presence of and expanded the Deep Zone. Mitsui left the joint venture in 1991. Also in 1991, after completing 14 of the diamond drill holes (CCC-1 to CCC-12, including the two wedge holes) and the two RC holes (RCCC-1 and RCCC-2), Cyprus completed a "pre-feasibility study" based on a preliminary resource estimate and some bench-scale metallurgical test work on both the oxide and sulfide mineralization; their metallurgical testing is described in Section 16.0. They subsequently drilled an additional three core holes (CCC-13 to CCC-15) into the Deep Zone and extended known mineralization. Cyprus dropped their option on the property from Noble Peak in 1993.



In 1994, Noble Peak carried out a small prospecting and surface-rock-geochemical program to investigate the possibility of zone(s) of gold enrichment. According to Lithic, at some point between 1993 and 1996 the original unpatented Crypto claims were allowed to lapse; in March 1996, North American Exploration staked 54 Crypto Zn claims on behalf of Noble Peak, 40 of which have remained active and are part of the current property. In 1998, Noble Peak changed its name to Vaaldiam Resources Ltd. (“Vaaldiam”), began to concentrate on diamond exploration, and optioned the property to Sierra Gigantes Resources Inc. (“Sierra”). Sierra carried out an “enzyme leach” soil-sampling survey prior to dropping their option due to financing difficulties.

EuroZinc Mining Corporation (“EuroZinc”) purchased the Crypto property from Vaaldiam in 2001 by purchasing a 100% equity interest in N.P.R. (US), Inc., a Nevada corporation and wholly owned subsidiary of Vaaldiam whose sole asset was the mineral title to the Crypto property. Other than compiling some of the historic results in a computer database, EuroZinc did not conduct any work during their tenure.

Lithic purchased N.P.R. (US), Inc. from EuroZinc in 2005, thereby acquiring the Crypto property. At the time of Lithic’s purchase, the property included 40 unpatented mining claims (the Crypto Zn claims in Appendix A), partial or complete interest in 17 patented claims, and the state mineral lease, all of which were held in the name of NPR. Since then, Lithic has staked an additional 119 claims (the Crypto and Pony claims), purchased additional interests in two of the patented claims, and purchased a partial interest in one additional patented claim. Lithic’s exploration is described in Section 10.0, and the list of claims and the lease that comprise the property is in Appendix A.

6.2 Historic Mineral Resource Estimates

A number of historic resource estimates for the Crypto project have been made by various parties over the years and are summarized below. Where tonnages were originally reported in Imperial units, they have been converted to metric based on conversion factors listed in Section 2.2. The following information on these historic estimates is presented for historic information only and in the interest of full disclosure. The reader is cautioned that these historic resource estimates were made prior to the implementation of NI 43-101 reporting requirements, do not conform to those requirements, and should not be relied on as being indicative of a resource or a reserve with demonstrated economic viability. Where terms later defined in NI 43-101 were used in the historic record, such terms have been enclosed in quotation marks.

6.2.1 1976 Estimate by Utah International Inc.

In 1976, Utah used a sectional approach to estimate what they termed a “proved resource” (Gorman and Jones, 1981). All of the mineralization included would be located in what is now termed the Main Zone between depths of 15 and 500m below surface. Fifteen separate zones involving four types of mineralization were outlined based on a 3.05m mining width and a minimum recovered metal value (Zn, Ag, Cu) of US\$35/ton. Metal prices were current as of 1975, and estimated mill-recovery factors were 95% for sphalerite, 70% for sulfide-oxide material, and 50% for other minerals. Mill-recovery cutoff was 1% for Zn. Zinc mineralization was considered “oxide ore” if the ZnO/Zn ratio was greater than 0.1. “Protore” was defined as material comprising the “transition between barren and sulfide/oxide ore.” Zones were geologically constrained by dikes and faults. Table 6.1 summarizes their estimate.



Table 6.1 Summary of 1976 Historic Resource Estimate by Utah International Inc.
(From Shaw, 1976)

Zone	Tonnes	% Zn	% Cu	gpt Ag	% Cd	% Pb	% Fe
oxide	1,492,000	9.11	0.21	33.6	0.094	0.210	24.00
sulfide	3,067,000	7.87	0.16	4.1	0.070	--	20.33
copper	103,000	2.26	3.44	35.3	0.016	--	8.95
"protore"	1,037,000	5.14	0.10	15.4	0.040	--	24.17
Total w/o protore	4,661,000	8.14	0.25	14.4	0.076	0.067	21.25
Total w/ protore	5,698,000	7.60	0.22	14.4	0.070	0.055	21.79

Note: Tonnage and silver grade have been converted to metric units; tonnes rounded to nearest thousand.

6.2.2 1991 and 1993 Historic "Geological Reserve" Estimate by Cyprus Minerals Company

Cyprus made a number of estimates of "geologic reserves" during their tenure on the property. In late 1990 after drilling the first three of their core holes, Cyprus estimated that the "geologic underground zinc sulfide reserves" at Crypto were 3.75 million tonnes grading 7.87% Zn (at a 2% Zn cutoff), 0.234% Pb, and 0.117 oz Ag/ton (Cyprus/Mitsui Joint Venture Geologists, 1990). This estimate was based on review of all available assay and geologic sections as well as plan-level maps that had been generated by prior operators combined with the results of their own early drilling. Open-pit oxide "reserves," which were based solely on the work of prior operators, were estimated to be 2.8 million tonnes averaging 7% Zn (Cyprus/Mitsui Joint Venture Geologists, 1990). Cyprus continued to update the "reserves" as they completed successive phases of drilling (Bernardi and Ohlin, 1991a, 1991b).

Cyprus estimated a "geological reserve" at Crypto using a cross-sectional method; details are given in Cyprus/Mitsui Joint Venture Geologists (1990). Sections were spaced at distances of 61.0 to 91.4m, and blocks were extended along section halfway between drill intercepts or to a maximum of 91.4m up or down dip in cases where no other drill intercepts were present. Blocks were then extended between sections to either half the distance to the adjacent section or to a maximum of 45.7m at the limit of drilling. Blocks were also constrained by geological features such as faults and dikes. Criteria used in the estimation were a cutoff grade of 2% Zn and a density factor of 9 cubic ft/ton (3.56 g/cm³). No other ore elements were included.

Following the first part of their Phase III drilling in 1991, Cyprus re-calculated the "underground sulfide zinc reserves" for Crypto (Bernardi and Ohlin, 1991b). This 1991 "geological reserve," which was described in summary and commented on by Roscoe Postle and Associates in early 1993 (Agnerian, 1993), incorporated mineralization in both the Main and Deep Zones based on 25 core holes that intersected mineralized zones but did not include significant zinc mineralization encountered in three of the last four core holes drilled later in 1991 by Cyprus to test extensions of the Deep Zone. Drill-hole spacing of the 25 holes used was 91 to 152m (Agnerian, 1993). Subsequently in 1993, it appears that Cyprus re-estimated the resource and included the results of the three additional holes (Rockingham, 2001). Both estimates are summarized in Table 6.2.



Table 6.2 Summary of 1991 and 1993 “Geological Reserve” Estimates by Cyprus Minerals Company

(Modified from Cyprus/Mitsui Joint Venture Geologists, 1990;
Bernardi and Ohlin, 1991b; Rockingham, 2001)

Year	Zone	Tonnes	% Zn	gpt Ag	% Pb
1991	oxide	2,803,000	7.00	na	na
	sulfide	4,901,000	8.52	8.74	0.214
	Total	7,704,000	7.97	na	na
1993	oxide	2,803,000	7.00	na	na
	sulfide	5,442,000	8.68	na	na
	Total	8,245,000	8.11	na	na

Note: Tonnage and silver grade have been converted to metric units;
tonnes rounded to nearest thousand

6.2.3 1995 Historic “Geological Resource” Estimate by Noble Peak Resources Ltd.

In 1995, Noble Peak commissioned an independent estimate from B. Henderson, who used a sectional approach to calculate a “geological resource” (Henderson, 1995). Blocks were defined on section for every drilled interval grading better than 2% zinc, ultimately including 34 drill holes. Blocks were extended halfway to adjacent drill holes along section or, if no other holes were present within 91.4m, to a maximum of 45.7m. These blocks were categorized as “probable.” “Possible” blocks were added to the sections along which no drill information was available but where from adjacent sections it appeared likely that a zone of mineralization would occur. The dimensions of the “possible” blocks were proportional to those of the adjacent “probable” block, and the grades were the same. The blocks were then extended laterally to halfway between sections except where a dike or fault was present, in which case the block was terminated. An effort was made to group blocks into zones and/or “lenses” of mineralization, resulting in 20 lenses in eight zones.

According to Tindale (1997), “Henderson’s reserve calculations expanded on the Cyprus calculations to include isolated intercepts in the Utah and Cyprus holes which in most cases could not be directly correlateable to assumed zones of mineralization.” He further noted that “...Henderson’s calculations do highlight the great quantity of zinc mineralization present in the Crypto deposit...”

Cumulative tonnage and grade figures were calculated for all blocks assigned grades of over 2% Zn and then for all blocks assigned grades of over 4% Zn. The results of these calculations are summarized by “category” and also in terms of sulfide vs. oxide mineralization in Table 6.3.



Table 6.3 Summary of 1995 Historic “Resource” Estimate by Noble Peak Resource Ltd.
(From Henderson, 1995)

	Tonnes	% Zn	% Cu	gpt Ag	gpt Au
2% Zn cutoff					
Total	15,693,784.0	6.17	0.271	13.97	0.170
“probable”	11,791,055.3	6.12	0.286	13.66	0.140
“possible”	3,902,728.7	6.29	0.226	14.93	0.259
oxide	5,065,530.1	6.11	0.427	23.31	0.141
sulfide	10,628,253.8	6.19	0.197	9.52	0.184
4% Zn cutoff					
Total	12,460,030.4	7.02	0.271	14.46	0.167
“probable”	9,094,430.9	7.09	0.285	14.02	0.122
“possible”	3,365,599.6	6.82	0.239	15.66	0.288
oxide	4,093,436.4	6.90	0.433	25.52	0.110
sulfide	8,366,594.0	7.07	0.191	9.05	0.194



7.0 GEOLOGIC SETTING

7.1 Regional Geology

The following information on the regional geology is largely taken from Stokes (1986).

The Crypto zinc property is located on the northwestern edge of the Fish Springs Range, which is in turn located in the northeastern part of the Basin and Range Province of the southwestern United States (Figure 7.1). The Basin and Range physiographic province is characterized by generally north-trending fault-bounded mountain ranges and intervening basins that formed during regional Tertiary extension. The province is bounded on the east by Utah's Wasatch Range lying just east of Salt Lake City and on the west by the Sierra Nevada in eastern California.

Figure 7.1 Physiography of the Eastern Basin and Range Province





From Cambrian through Early Triassic time, western Utah was the site of marine deposition of shelf deposits in the Cordilleran geosyncline. East-directed Paleozoic compressional deformation that affected central and northeastern Nevada did not reach into west-central Utah. Mesozoic sedimentary rocks younger than the Early Triassic are only rarely exposed in western Utah, which appears to have been part of a poorly defined highlands area extending into Nevada at that time. The first intrusive igneous activity in western Utah since the Precambrian is marked by Jurassic intrusions with dates ranging from 140 to 152 Ma in the House Range, Silver Island Mountains, Gold Hill area, and Newfoundland Mountains that are unusual in being located in an extensive sedimentary basin. Late Cretaceous to early Tertiary folding, thrust faulting, and uplift of the Sevier and Laramide orogenies affected central and northeastern Utah but in western Utah have only limited exposures, e.g. Deep Creek Range near the Nevada border. Intermediate volcanic and intrusive activity was widespread in Utah during the middle Tertiary with exposures of these units in the ranges to the east and west of the Fish Springs Range. Intrusive rocks presumed to be Late Eocene in age found in the Fish Springs Range may be early examples of this igneous activity. A separate and distinct volcanic center was located in the approximate center of Juab County with exposures in Desert Mountain, Key Mountain, and the Thomas Range. Less extensive mafic volcanism also occurred during the late Cenozoic in western Utah.

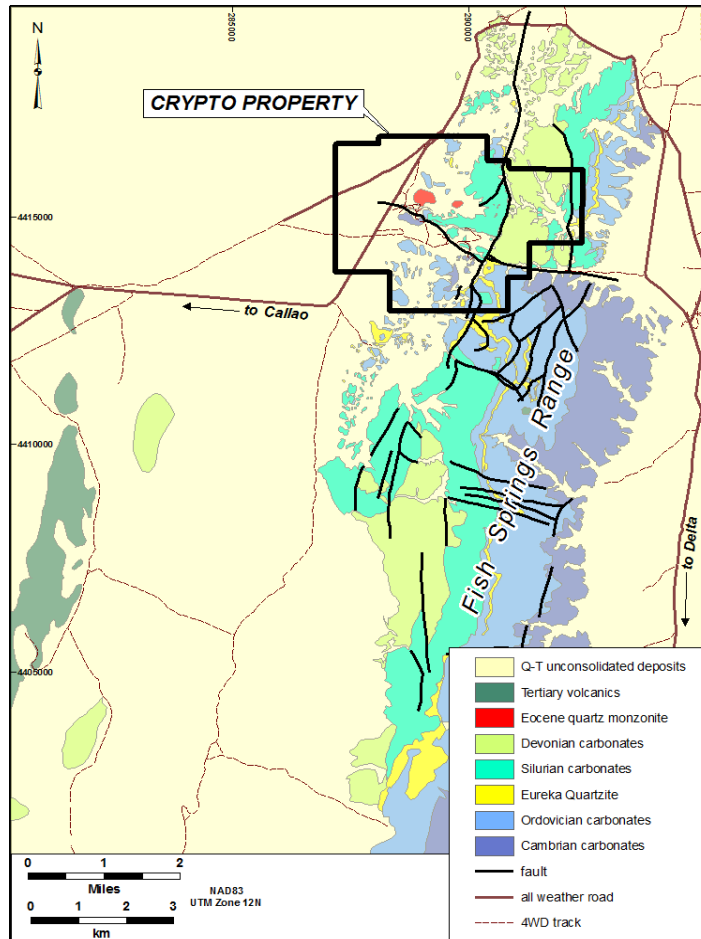
7.2 Local Geology

Generally speaking, the Fish Springs Range is a north-trending horst comprised of Lower Cambrian to Upper Devonian platformal sedimentary rocks that have been homoclinally tilted to the west at generally moderate dips (Hintze, 1980; Lindsey *et al.*, 1989) (Figure 7.2). The sedimentary package, which exceeds 3,500m in total thickness, consists mainly of carbonate rocks, with minor interbedded shales and quartzites. Scattered quartz monzonite intrusive complexes and rhyolite dikes and occasional andesitic plugs intrude the sedimentary rocks locally and are presumed to be Late Eocene age. Tertiary volcanic rocks of latitic, shoshonitic, and rhyodacitic composition are found along with younger alluvium in basins adjoining the Fish Springs Range.

The general structure of the Fish Springs Range is relatively simple, the dominant element being a series of northerly trending extensional faults related to the development of the Basin and Range Province. Most are normal with west-side down and small to moderate displacements. Other than the Juab fault described below, faulting and/or folding are of minor significance within the northern end of the Fish Springs Range as evidenced by regional mapping to date.



Figure 7.2 Geology of the Fish Springs Range Showing the Crypto Property
(Provided by Lithic Resources Ltd., 2009)



7.3 Property Geology

The following description of the Crypto property geology is synthesized from various Utah (Hehn, 1979-1983; Shaw, 1979; Shaw and O'Toole, 1975) and Cyprus (Cyprus/Mitsui Joint Venture Geologists, 1990; Bernardi and Ohlin, 1991a, 1991b) reports, together with observations and interpretation by Lithic personnel and consultants. The property is predominately underlain by a sequence of lower Cambrian to upper Devonian platformal carbonate units, mainly dolostones with lesser, generally thin-bedded limestones and minor interbedded quartzites and shales (Figure 7.3 and Figure 7.4). From youngest to oldest, the stratified rocks include the following divisions:

Lower Devonian Sevy Dolomite – light gray, fine-grained, thin- to medium-bedded, banded dolostone



Middle Silurian Laketown Dolomite;

Thursday Member – interbedded dark to pinkish gray, medium to coarsely crystalline dolostone;

Lost Sheep Member – light olive gray, fine to medium crystalline dolostone in lower portion; medium dark gray dolostone with 10% chert as nodules and stringers;

Harrisite Member – thick-bedded, medium dark gray, finely crystalline dolostone with 10-15% dark brown chert as nodules and stringers;

Bell Hill Member – banded, light to dark gray, finely to coarsely crystalline dolostone

Upper Ordovician Ely Springs Dolomite;

Floride Member – light gray, thin to medium bedded, finely crystalline limestone;

Lower Member – also known as Fish Haven Dolomite – medium-bedded, medium gray, finely crystalline limestone in lower portion; dark gray, cliff-forming dolostone which may be attenuated in places in upper portion.

Middle Ordovician Eureka Quartzite – thin- to thick-bedded, shattered, white to light gray, medium- to fine-grained orthoquartzite and quartz sandstone;

Watson Ranch Quartzite – yellowish-brown, friable, calcareous sandstone with fucoidal markings

Lower to Middle Ordovician Pogonip Group;

Deadman Springs Dolomite – thin- to medium-bedded, light reddish brown, sandy dolostone;

Kanosh Shale – olive-gray shale with interbedded fossiliferous, thin-bedded limestone;

Juab Limestone – medium- to thick-bedded, medium gray, cliff-forming limestone;

Wah Wah Limestone – very thin- to medium-bedded, medium gray, silty limestone with interbedded, siltstone and intraformational conglomerate;

Fillmore Formation – thin-bedded, medium gray intraformational conglomerate interbedded with light olive-gray, silty shale;

House Limestone – thin- to medium-bedded, light bluish gray, finely crystalline limestone.

Lower Ordovician to Upper Cambrian Notch Peak Formation – medium- to thick-bedded, dark gray, cliff-forming dolostone with some thin interbeds of medium to light gray limestone near top

Upper Cambrian Orr Formation;

Sneakover Limestone Member – medium to light gray limestone in bottom portion; thin- to medium-bedded silty limestone in upper portion;

Corset Spring Shale Member – greenish shale with interbeds of thin-bedded dark grey limestone;

Johns Wash Limestone Member – medium to dark gray limestone; upper portion dolomitic;

Candland Shale Member – olive-gray shale interbedded with dark grey, fossiliferous, nodular limestone;

Big Horse Limestone – medium gray, partly oolitic in lower portion; thin-bedded in middle portion; dark gray, mottled, partly bioclastic in upper portion; medium-gray, thin- to medium-bedded near top.



Figure 7.3 Stratigraphic Column for the Crypto Property
(Modified from Mitchell and Ohlin, 1991)

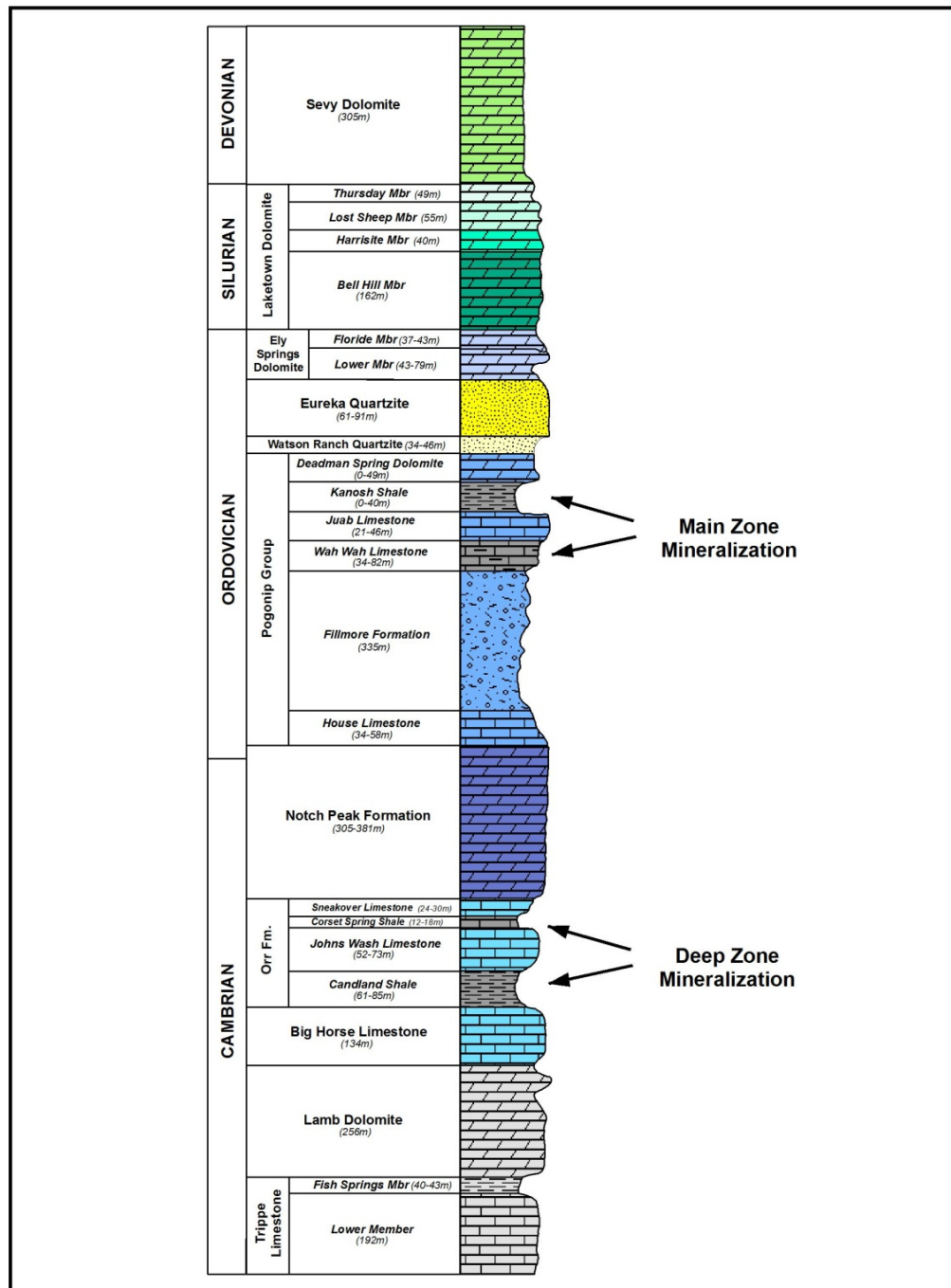
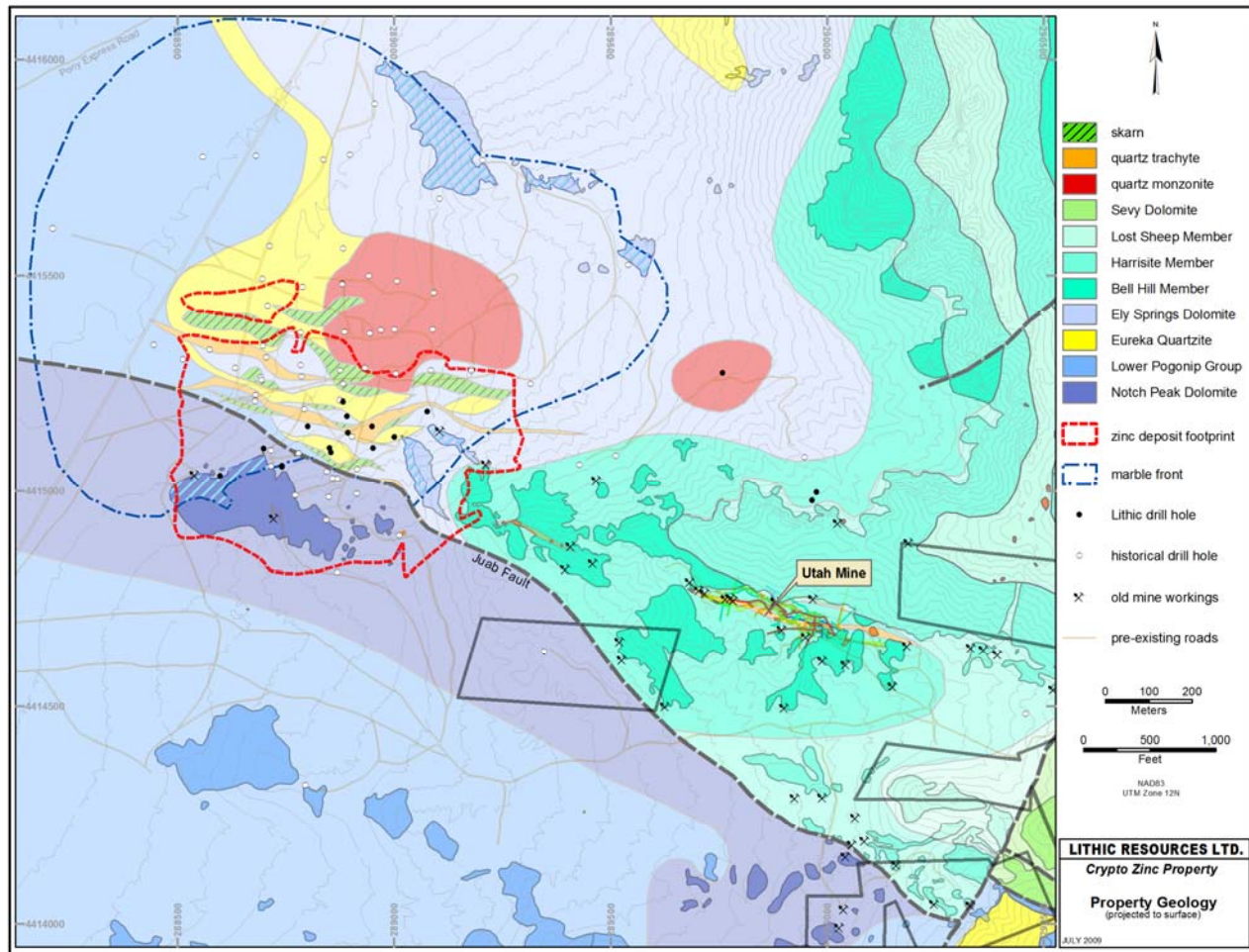




Figure 7.4 Geologic Map of the Crypto Zinc Property
(Provided by Lithic Resources Ltd., 2009)



Outcrop mapping and observations by Lithic geologists coupled with mapping and core logging by Utah and Cyprus geologists indicate that where exposed at surface, the sedimentary rocks strike northerly and have a shallow to moderate westerly dip. In some places, minor northerly trending folds result in a degree of flattening or even dip reversals to the east.

A number of faults have been mapped or are postulated to exist on the property, the most obvious being the Juab fault, a west-northwest-trending, north-dipping normal fault that trends through the middle of the property. The fault is significant enough to have caused an apparent left-lateral offset of the Fish Springs Range and is thought to have on the order of 500-600m of net vertical displacement. The north-trending Overland fault along the western margin of the Fish Spring Range, together with a number of lesser subparallel faults, are normal with west-side down and represent extensional faulting typical of the Basin and Range Province. Various other lesser faults with varying orientations have been interpreted on the property in the past, but the evidence for them is not as clear.



Drilling has revealed that the sedimentary package has been intruded by a late Eocene (38.5 ± 1.0 Ma, K/Ar) felsic intrusive complex which underlies a large part of the property at depth but is not exposed at surface. In the vicinity of the Crypto zinc deposit, it rises to the bedrock surface in a cupola which sub-crops below shallow Pleistocene gravels. Two main phases have been identified so far: a grey, medium-grained, equigranular to weakly porphyritic biotite quartz monzonite and a pinkish buff, medium-grained, equigranular biotite quartz syenite.

Various dikes ranging in composition from porphyritic quartz trachyte to rhyolite are exposed in outcrop or have been observed in drill core and are thought by Lithic geologists to be related to the same intrusive event as the quartz monzonite. The most obvious is the so-called Utah dike, which averages about 15m in width at surface and can be traced for over a kilometer easterly from the Crypto deposit through the area of the Utah mine. Other east-trending dikes of similar composition, some up to 30m wide, have been intersected in drilling.

Thin-bedded carbonate rocks near the intrusive complex, particularly those with shaly partings, have been altered to skarn, marble, and siliceous hornfels. More thickly bedded to massive dolostones tend to be converted to marble. Although dips are shallow to moderate where observed in outcrop, drilling has shown that bedding attitudes in the immediate vicinity of the intrusion have been disrupted such that they can have very steep dips. This has probably resulted from stoping and doming by the intrusion, although drag on the Juab fault may also have been a factor. Thin-bedded limestones of the Orr Formation immediately south of the Juab fault have been folded at depth such that dips near the fault are close to vertical.

Zinc-copper-indium mineralization of the Crypto deposit occurs in portions of the skarn, while molybdenite mineralization occurs both as disseminations in the skarn and in more classic, porphyry-style quartz-pyrite veinlets within the quartz monzonite intrusion itself. High-grade lead-zinc-silver mineralization, including that exploited in the historic Utah and Emma mines, occurs in structurally controlled replacement zones in carbonate rocks peripheral to skarn.

The western half of the Crypto property is mostly overlain by Pleistocene lacustrine deposits from glacial Lake Bonneville, which show wave-cut terraces at a number of levels where they lap against the Fish Springs Range.



8.0 DEPOSIT TYPES

The principal mineral deposits thus far identified in the Fish Springs mining district formed as part of a large skarn/carbonate replacement system. In general, skarns are formed when hydrothermal fluids containing silica, various metals, and other dissolved components are introduced into carbonate host rocks, resulting in the formation of calc-silicate minerals such as garnet, diopside, epidote, biotite, chlorite, amphibole, wollastonite, and idocrase. In more magnesian hosts, humite, periclase, and olivine may be present. Iron oxides such as magnetite and sulfides such as chalcopyrite, sphalerite, pyrite, pyrrhotite, galena, and arsenopyrite are deposited in the system, along with variable amounts of gold and silver. Skarn deposits are often, but not always, associated with intrusive rocks and are generally, but not always, developed in carbonate rocks. They have been classified into seven types on the basis of metallic affinity: Fe, Au, Cu, Zn, W, Mo, and Sn (Meinart *et al.*, 2005).

As defined by Meinart *et al.*, zinc skarns are usually related to oxidized dioritic to high-silica rhyolitic intrusions that may be barren or contain sub-economic copper and/or molybdenum $\pm$ tungsten $\pm$ tin deposits. The skarns are mined primarily for zinc-lead-silver ores and commonly contain recoverable copper, gold, molybdenum, and tin and/or tungsten. Ore is found in the form of stratabound mantos or cross-cutting, chimney-style replacements in limestone and dolostone, often distal (up to several kilometers) from their genetically associated intrusions. Mineralogical and chemical zonations within the skarns are well developed, but contact-metamorphic aureoles are usually absent or weakly developed. In addition to their metal associations, zinc skarns are generally distinguished from other skarns by a distinctive suite of iron and manganese-rich alteration minerals, including olivine, chlorite, pyroxene, garnet, serpentine, amphibole, pyroxenoids, and ilvaite; by the lack of a significant metamorphic aureole centered on the skarn; and by their occurrence along structural and lithologic contacts.

Carbonate replacement deposits ("CRD") have been described by Megaw (1998), Titley (1993), and others as a broader category of high-temperature, carbonate-hosted massive sulfide deposits within which zinc skarns could be placed, but which would also include systems with no calc-silicate development. Contacts between sulfide mineralization and host rocks are generally very sharp, and replacement textures are typical. They generally display a simple, polymetallic assemblage of galena, sphalerite, chalcopyrite, arsenopyrite, and pyrite or pyrrhotite along with carbonate, sulfate, fluorite, and quartz gangue. They also may contain recoverable molybdenum, tungsten, tin, cadmium, gallium, germanium, and indium. Examples are widespread throughout the Cordillera of North and South America, including the zinc-rich Gilman and Leadville deposits in Colorado, the Midway and Ketza River deposits in Canada, and the Charcas, San Martin, and Bismarck deposits in Mexico.

The principal mineral deposits thus far identified on the Crypto property are related to a felsic intrusion of Late Eocene age. A number of Utah's most significant historic mining camps, from which large-scale mineral production has been derived, are based on carbonate replacement and skarn deposits related to similar felsic intrusive systems of late Eocene to early Oligocene age (Krahulec, 2007). Examples include the Main Tintic, Bingham, and Park City districts about 115 to 190km to the east of the Crypto property. In the case of Bingham, the replacement deposits are peripheral and related to the world-class Bingham porphyry copper deposit (Table 8.1). Weaker porphyry systems are also associated with the intrusive bodies at Tintic and Park City.



Table 8.1 Selected Carbonate Replacement Deposit Production in the Western USA
(From Titley, 1993)

District	Production (t)	% Cu	% Pb	% Zn	gpt Ag	gpt Au
Bingham, UT – carb. replacement only	13,476,233	0.44	8.8	3.4	167	2.35
Bingham, UT – all non-porphyry incl. skarn	39,868,000	0.93	4.7	1.9	106	1.85
Tintic, UT	17,521,000	0.90	5.9	1.2	485	4.86
Park City, UT	13,300,000	0.38	8.7	4.5	556	2.28
Gilman, CO	10,586,849	0.90	1.5	8.5	228	1.7



9.0 MINERALIZATION

The most significant mineralization discovered to date on the Crypto property consists of sphalerite with minor chalcopyrite occurring in a series of concordant to discordant skarns and replacement bodies in carbonate rocks south of and adjacent to the quartz monzonite intrusive complex. Two main types of skarn have been distinguished on the basis of mineralogy, generally reflecting the chemistry of the host rock. The most common type is magnesian, consisting of humite $\pm$ magnesioferrite $\pm$ phlogopite along with lesser spinel, periclase, actinolite, forsterite, and tremolite. Humite and forsterite may be partly retrograded to serpentine, brucite, and/or talc. Phlogopite may be partly altered to chlorite, while periclase may be converted to brucite. Magnesioferrite, a Mg-rich member of the magnetite group of minerals, is very abundant and often massive. Magnetite has also been identified, but a significant proportion of what has been historically classified as magnetite in the Crypto area is probably magnesioferrite.

A second and less common type of skarn is more calcareous in composition. It generally exhibits a less disrupted character, with preserved bedding replaced by alternating bands of reddish brown grossularite garnet separated by bands of fine-grained diopside and potassium feldspar, probably reflecting a protolith of thinly bedded limestone with shaly partings. Magnetite/magnesioferrite is occasionally present.

Two main areas of zinc mineralization have been found, the Main and Deep zones, neither of which is exposed in outcrop. The two zones are separated by the Juab fault. Figure 9.1 illustrates a typical cross-section in the Crypto deposit area.

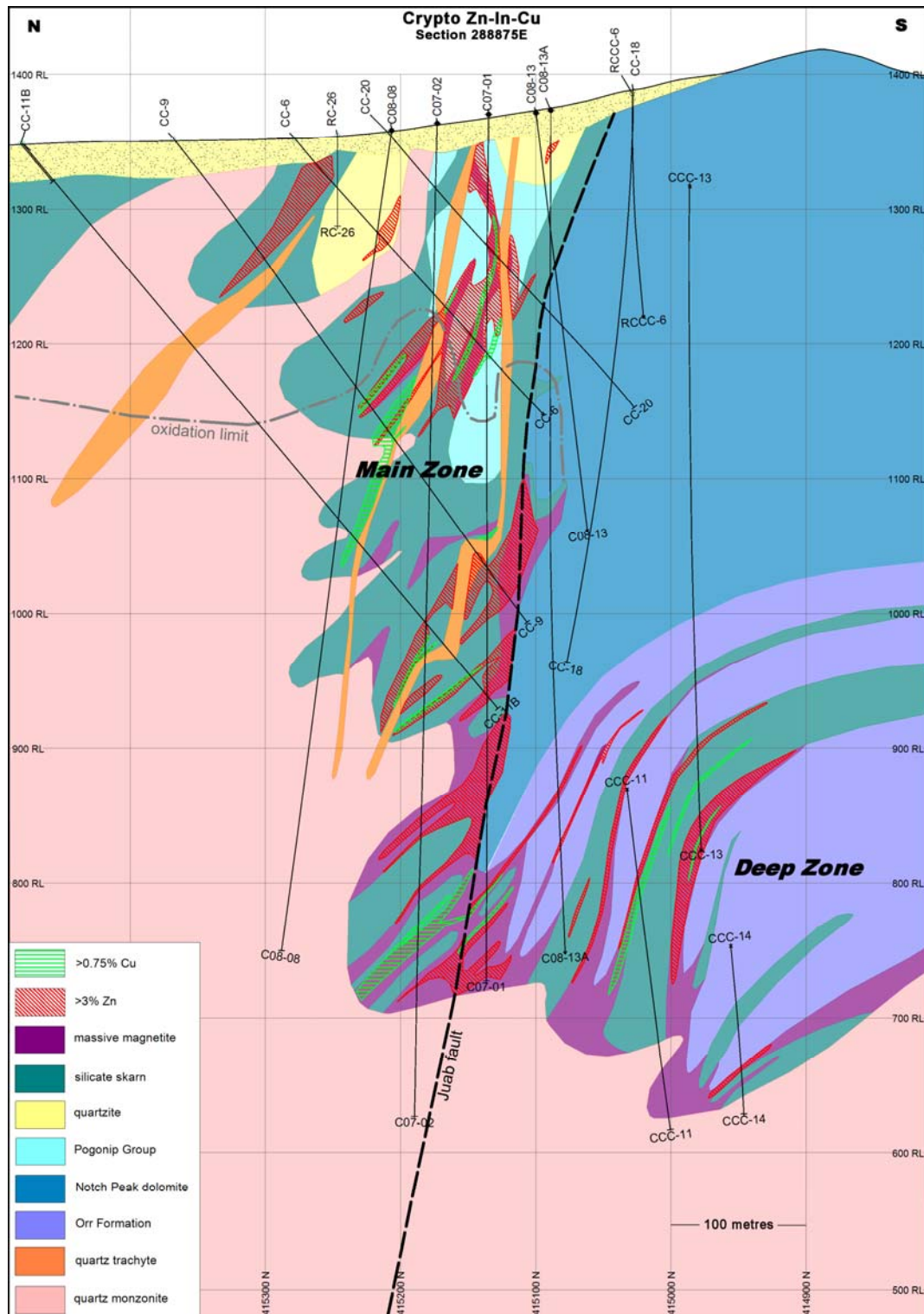
9.1 Main Zone

The Main Zone occurs in Ordovician Pogonip Group carbonate rocks, and possibly in some Ely Springs Dolomite, situated within the hanging wall north of the Juab fault and immediately south of the sub-cropping quartz monzonite cupola. The Main Zone is bounded on the south by the Juab fault and the weakly mineralized and skarn-altered footwall Notch Peak Formation. In the western part of the deposit, sphalerite-chalcopyrite mineralization occurs in irregular bodies of humite-phlogopite skarn, with or without magnesioferrite. Magnesioferrite abundance declines in the eastern part of the zone, and the proportion of coarse-grained phlogopite increases as does the amount of pyrite. However, the overall abundance of pyrite and other iron sulfides such as pyrrhotite in the Crypto system is quite low.

Sphalerite in the Main Zone is medium to coarse grained and red-brown to brown in color. Petrographic work shows that it typically occurs as relatively coarse aggregates up to about 1cm across composed of roughly equant anhedral with a mosaic texture. Individual grains are generally 0.1 to 1mm in size but can range up to 5mm in diameter. Sphalerite also occurs intermixed with or interstitial to magnesioferrite. Sphalerite often contains small amounts of chalcopyrite and pyrrhotite as tiny grains along crystal grain boundaries, randomly or crystallographically oriented arrays of grains within a single sphalerite grain, or as irregular anhedral. Chalcopyrite inclusions in sphalerite may be partly altered to bornite or, rarely, chalcocite. Very small amounts of pyrite and pyrrhotite are found scattered throughout zones of sphalerite mineralization.



Figure 9.1 Cross-section of the Crypto Deposit: Looking East
(Provided by Lithic Resources Ltd., 2009)





Where it does not occur within sphalerite, chalcopyrite tends to be found as disseminated grains and blebs ranging from a few millimeters to a few centimeters in diameter. Copper grades are not directly proportional to those of zinc, its distribution typically only partially overlapping with that of zinc in any given drilled interval. However, there appears to be at least a rough increase in the Cu/Zn ratio with proximity to the intrusion, and discrete zones of copper enrichment are definable.

To date, Main Zone mineralization has been traced with drilling over a length of about 525m, a width of about 150m, and to a depth of 575m and remains open to the west and to depth. Because of strong alteration, probable disruption of bedding by intrusive stoping, and a lack of suitable marker horizons, stratigraphic correlations and the degree of discordancy of skarn and replacement mineralization in this area are difficult to ascertain. In addition, original sedimentary features have been largely obliterated within skarn zones, which may include chaotically disrupted and brecciated textures. However, it appears that bedding tends to dip steeply to the north in the immediate vicinity of the deposit and that mineralization is preferentially developed in more thinly bedded units, probably the Kanosh Shale and Wah Wah Limestone, although portions of the Ely Springs Dolomite may also be involved. More thickly bedded or massive units in the section, particularly dolomitic ones, are more likely to have been marbleized.

The upper part of the Crypto system includes a number of extremely siliceous zones, at least some of which are probably tilted (stoped) blocks of Eureka Quartzite. However, the overall volume of siliceous rock appears to be greater than would be suggested by nearby undisturbed occurrences of this unit, and thus some parts of these zones may represent massive, pervasive silicification of dolostones and limestones resulting in a fractured, dark grey, granular, highly siliceous rock. Quartz-rich zones in the upper portions of the intrusive cupola may, in part, represent partly consumed and dismembered rafts of Eureka Quartzite.

The Main Zone has been oxidized to an average depth of about 250m. Sphalerite and chalcopyrite have been converted to a mixture of smithsonite, hemimorphite, hydrozincite, and zincite, with lesser wulfenite, covellite, franklinite, malachite, and gageite in a matrix of various iron and manganese oxides. The deposit is overlain by Pleistocene gravels ranging in thickness from 2-40m.

9.2 Deep Zone

The Deep Zone is located immediately south of the Juab fault and is hosted predominantly within thinly bedded limestones and shaly members of the Orr Formation, probably the Corset Spring Shale and Candland Shale members. Stratigraphic correlations are much clearer here due to less apparent structural complications within the Juab fault footwall. Mineralization also occurs as proximal skarn along the contact of the Orr Formation and the underlying quartz monzonite intrusive. Mineralization consists of coarse-grained, reddish sphalerite with minor disseminated chalcopyrite, pyrite, and/or pyrrhotite that are found in stratabound bodies of semi-massive to massive magnesioferrite/magnetite intercalated with humite $\pm$ periclase skarn, grossularite-diopside-K feldspar skarn, and marble. The marble tends to contain abundant fracture-fillings of magnesioferrite in proximity to massive magnesioferrite layers. Humite within magnesioferrite-rich zones tends to be serpentized. Significant portions of the massive to thick-bedded dolostones of the overlying Notch Peak Formation have been converted to marble.



At least three separate mineralized horizons have been identified through drilling over an area of about 330m by 225m at depths of between about 450 to 750m. They remain open to the west, south, and possibly the east.

9.3 Skarn-Hosted Indium and Molybdenum

Indium is present in significant quantities in the Crypto deposit. Initial petrographic work and energy dispersive X-ray (“EDX”) analysis have shown that it occurs in the sphalerite lattice in amounts as high as an exceptional 9% by weight along with minor amounts of cadmium and manganese. Sphalerite with high indium content tends to be green in color and typically shows “chalcopyrite disease” textures; Figure 9.2 shows an extreme example of high-indium sphalerite. Despite its essentially exclusive occurrence in sphalerite, there is not a direct relationship between zinc grade and indium grade. The highest indium grades tend to occur in mineralization with a zinc grade of between 0.5 and 5%.

Numerous intervals of skarn mineralization have been found to contain significant levels of molybdenum, although it is not obvious macroscopically. Petrographic work has shown that it occurs as small scattered laths associated with magnesioferrite grains in partly serpentinized humite, apparently as a primary constituent of skarn.

Finally, small amounts of two bismuth minerals tentatively identified as bursaite ($\text{Pb}_5\text{Bi}_4\text{S}_{11}$) and tsumoite (BiTe) have been identified in skarn from the eastern part of the deposit. Analytical data show that in addition to the main elements of interest – Zn, Cu, In, and Mo – trace elements enriched to varying degrees in skarn mineralization include Cd, Ag, Mn, Sn, Co, and Au.

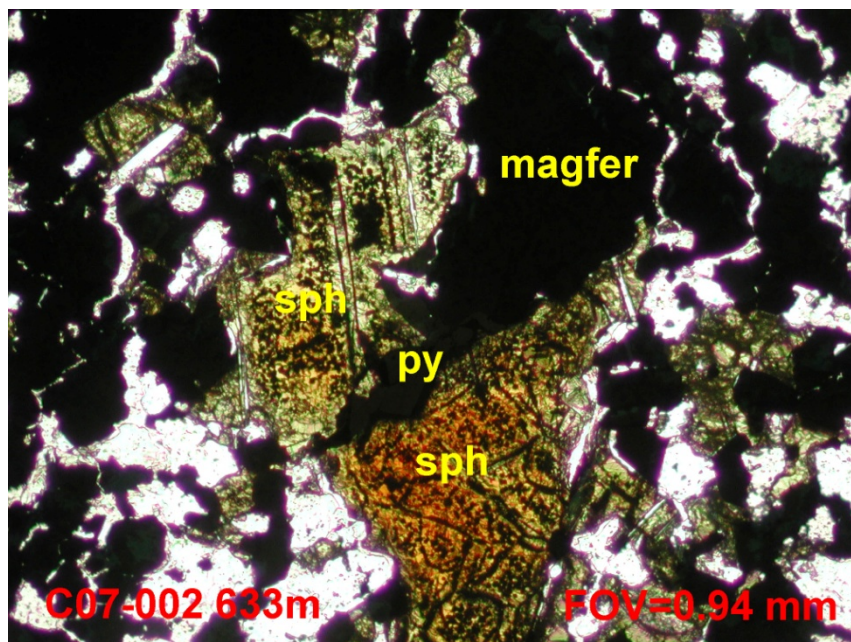
9.4 Other Skarn Occurrences

Utah drill hole CC-43 intersected a 3.05m interval grading 7.65% Zn, 3.50% Cu, and 0.100% Mo within a 7.6m interval of semi-massive to massive sulfides at a depth of 889m and a horizontal distance of about 650m to the east of the Main Zone. Pyrite, chalcopyrite, sphalerite, and molybdenite in this interval occur as veins, masses, and strong disseminations in a thinly bedded limestone with shaly partings. A highly siliceous rock immediately above this interval was logged as quartzite, but its biotite and sulfide content as well as its location within an argillically and propylitically altered granite suggest that it may be a highly siliceous intrusive phase. The presence of disseminated magnetite over a 70m interval in the shaly limestone below the sulfide mineralization suggests incipient skarn development, potentially related to the main Crypto hydrothermal system.

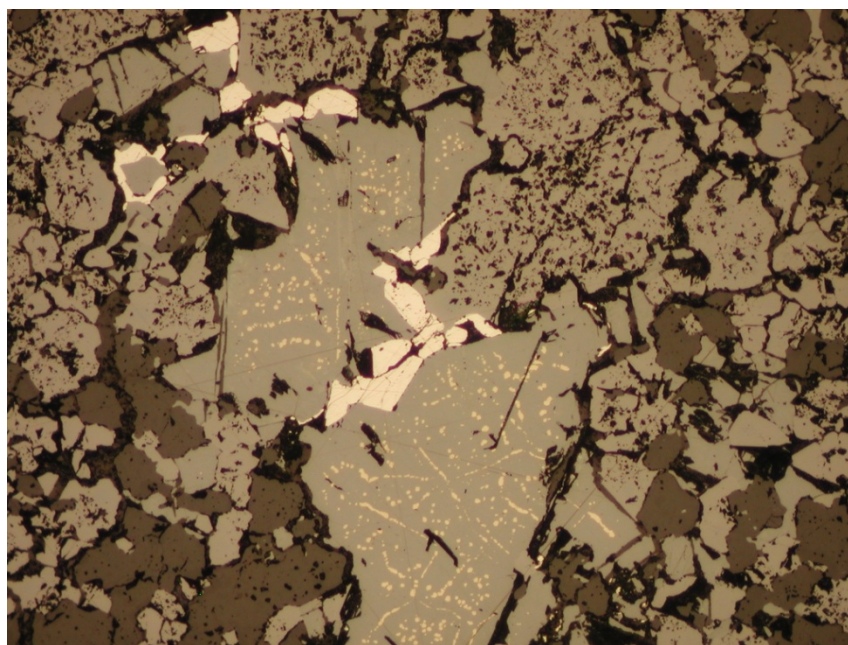
Although drilling north of the main intrusive cupola is sparse and generally shallow, several historic drill holes intersected narrow intervals of skarn zinc mineralization in this area, suggesting potential to discover additional resources here.



Figure 9.2 Sphalerite with High Indium Content Exhibiting “Chalcopyrite Disease” Textures
High-indium sphalerite from Main Zone – plane polarized light



High-indium sphalerite (same view as 9.2a) – reflected light





9.5 Replacement Style Ag-Zn-Pb

In the eastern portion of the property, silver-rich galena with minor sphalerite and pyrite occur in steeply dipping, structurally controlled, and somewhat discontinuous replacement zones within the Ely Springs and Laketown dolomites. The most significant zone outlined to date is that exploited by the historic Utah and Galena mines, where mineralization occurs in the vicinity of but not immediately adjacent to the Utah dike. A total of about 3,960m of workings on six levels were accessed via the 246.9m Utah shaft. The Galena mine immediately to the west was accessed via the 213.4m Galena shaft and included a total of about 915m of workings, one of which connected with the Utah mine on the 512ft (156m) level. Mine development extended between 152 and 243m to the west and east respectively of the Utah shaft. Minor production of similar mineralization was derived from the Emma mine and to a much lesser extent from a number of small excavations to the southeast, including the Wilson and Carnation mines. Most of the total production from the Fish Springs district between 1890 and 1953 came from the replacement mineralization in the Utah, Galena, and Emma mines (Perry and McCarthy, 1976).

Underground mapping by Utah on the uppermost 269- and 440ft (82- and 134m) levels of the Utah mine indicated that the best mineralization occurred in the central part of the mine where a pipe-like structure with a diameter of approximately 60m resulted from the intersection of fault structures. Mineralization consisted of irregular pods of anglesite, cerussite, smithsonite, covellite, willemite, malachite, hemimorphite, aurichalcite, and wulfenite in a matrix of iron and manganese oxides situated adjacent to, but generally not within structures. The cores of larger masses of ore as well as mineralization below the water table in the deepest parts of the mine showed that these oxidation products were derived from a relatively simple sulfide mineralogy of galena and pyrite with minor sphalerite and chalcopyrite.

Gorman and Jones (1981) noted that silver and lead grades tended to increase with depth and reported that grades above the 440-level (134m level) averaged 5.5% lead and 754g Ag/t, while the grades on the lowermost 812-level (247m level) were 24% Pb and 1,166g Ag/t. A deep drill hole (CC-43) completed by Utah below the Utah workings intersected a 2.87m interval grading 6.8% Zn, 3.8% Pb, and 167.1g Ag/t approximately 230m below the lowermost mine level, indicating that mineralization continues to depth.

Lithic drill hole C08-07A was aimed to test the down-plunge extension of the Utah mine zone between the lowermost mine workings and the intercept in hole CC-43. It unexpectedly intersected unmineralized Eureka Quartzite at the point where mineralization was projected to be present. The Eureka Quartzite is not mineralized elsewhere on the property and is not considered to be a favorable host for the development of skarn or replacement-style mineralization. It is not a thick unit and as a result, the potential for additional Utah zone mineralization in the adjacent carbonate rocks remains.

Lithic drill hole C08-11 intersected a wide interval of replacement-style silver-zinc-lead mineralization to the east of the Main Zone, including a 10.83m interval grading 253.8g Ag/t, 4.28% Zn, and 0.68% Pb. Numerous other intercepts of high-grade silver mineralization within the oxide zone were encountered in historic drilling, including 10.21m grading 207.8g Ag/t, 12.81% Zn, and 0.98% Pb in hole CC-34 and 3.56m grading 361.5g Ag/t, 10.19% Zn, and 12.95% Pb in hole CC-27. These intercepts and others suggest significant potential for other high-grade replacement zones in the Crypto vicinity, similar to but distinct from that mined historically at the Utah mine.



9.6 Molybdenum

In addition to disseminations in skarn, molybdenite occurs in porphyry-style quartz-pyrite veinlets; larger, banded, quartz-pyrite veins; and as fracture coatings in the quartz monzonite intrusion underlying the Deep Zone. More intensely mineralized zones in the intrusion tend to be argillically altered and sericitized and include small amounts of oxidized, disseminated pyrite. The general distribution of mineralization on the Crypto property, with a lower molybdenum-bearing zone grading upwards and outwards through copper, zinc, and then lead and silver-rich zones with increasing distance from the quartz monzonite intrusion, suggests that mineralization at Crypto may be related to a large underlying porphyry molybdenum system. Agnerian (1993) reported that hole CCC-15 contained an intersection of 0.5% to 3% MoS₂ over 18.6m.



10.0 EXPLORATION

Lithic acquired the Crypto zinc property from EuroZinc in 2005. In continuing the compilation of historic results, Lithic found that all historic drill core had been lost.

Since 2006, Lithic has conducted exploration that included photogrammetry, a helicopter-borne magnetic survey, a pole-dipole IP survey, 10,639m of core drilling, and preliminary metallurgical testwork. In addition, the existing computer database was enhanced and corrected using original data records.

Lithic's drilling activities are described in Section 11.0; its metallurgical investigations are described in Section 16.0.

10.1 Photogrammetry

In 2006, Lithic contracted with Eagle Mapping to carry out a program of 1:8,000-scale color aerial photography over the general property area and to construct a detailed (2m contour) 1:2,000-scale topographic map and orthophoto of the central portion of the property. These maps were used as a base for further work.

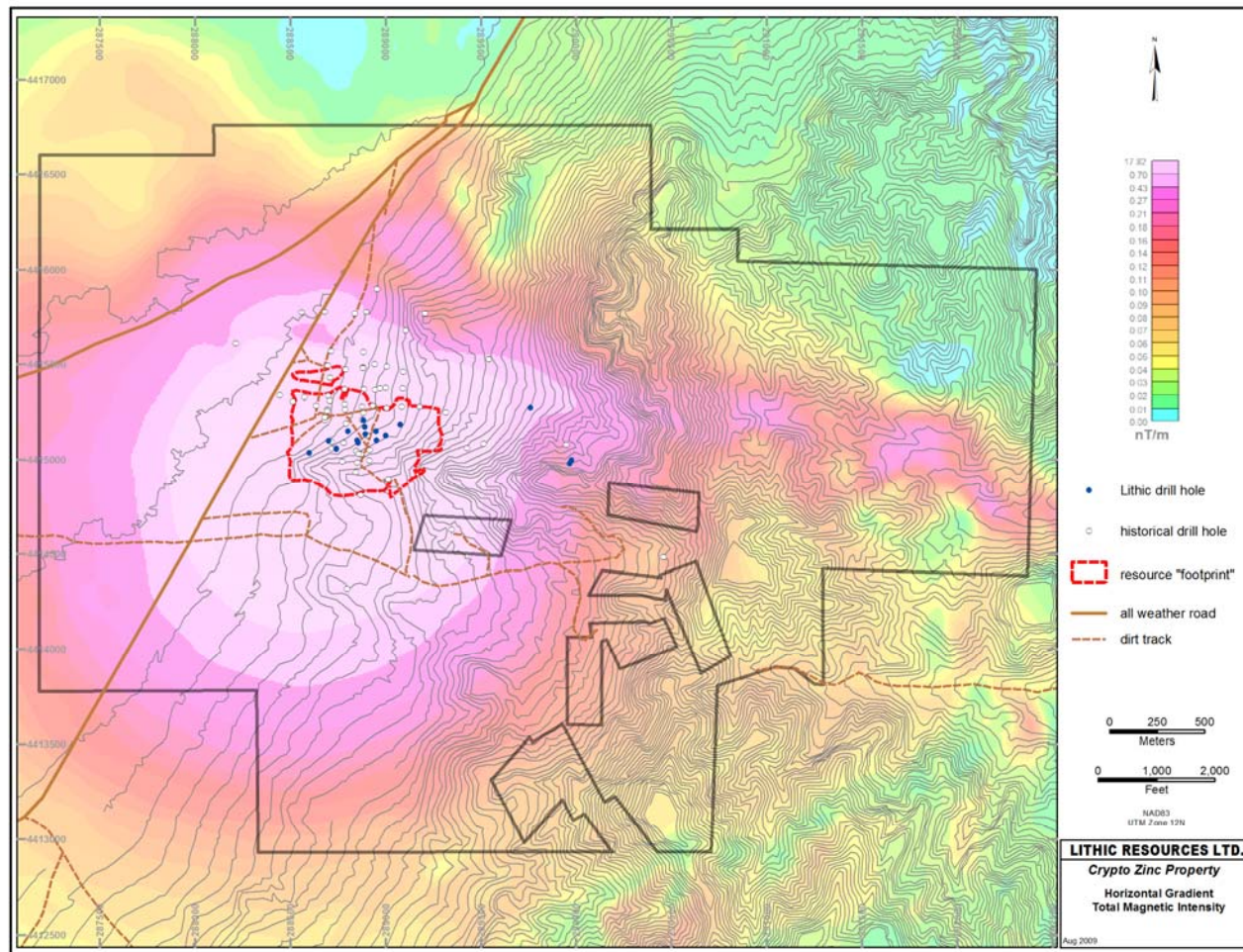
10.2 Magnetic Survey

In 2006, McPhar Geosurveys Ltd. was contracted to carry out a high-resolution, helicopter-borne magnetic survey of the general property area. Approximately 1,018 line-km of survey were flown at a line spacing of 100m and a mean terrain clearance of 30m for the magnetometer. Deliverables included plots of total field magnetic, reduction to pole, first and second vertical derivatives, horizontal gradient, and analytic signal data.

Figure 10.1 illustrates the calculated horizontal gradient of total magnetic intensity in the property area and shows a massive positive magnetic anomaly centered on the Crypto deposit.



Figure 10.1 Calculated Horizontal Gradient of Total Magnetic Intensity – Crypto Area
(Provided by Lithic Resources Ltd., 2009)



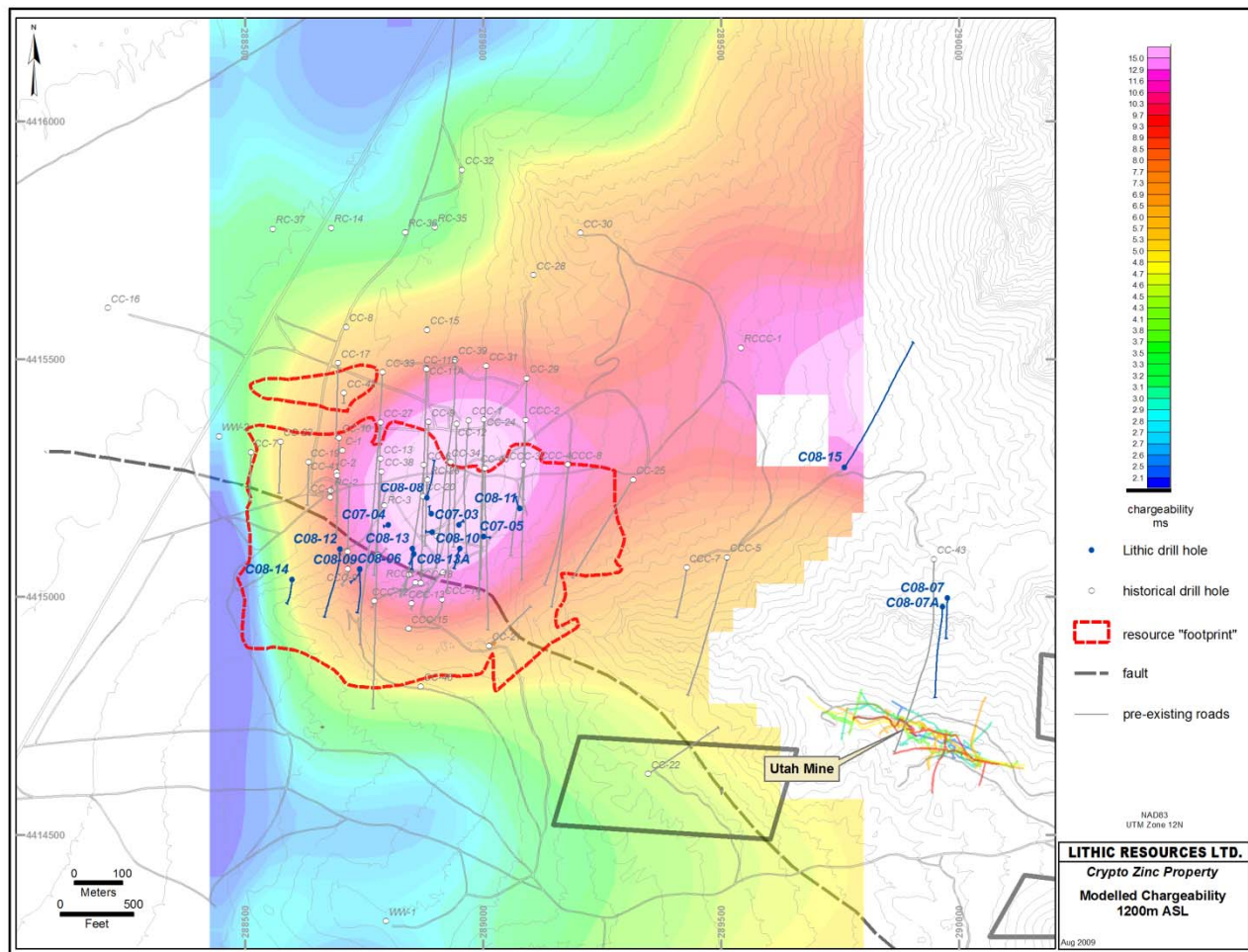
10.3 Induced Polarization Survey

In 2006, Peter E. Walcott and Associates Limited carried out a pole-dipole IP survey over the central part of the property. Approximately 25km of surveying on lines spaced 200m apart were completed using an “A” spacing of 100m. Deliverables included a series of pseudosections and plan views, including modeled data at elevations of 1200, 1300, and 1400m ASL.

The results of the survey showed a distinct chargeability anomaly apparently centered on known zinc mineralization, as well as a separate and similar but somewhat deeper anomaly located approximately 1km to the east. Figure 10.2 illustrates a plan of modeled chargeability values at an elevation of 1200m ASL. Lithic drillhole C08-15 targeted the eastern anomaly and intersected both intrusive rocks and sections of carbonates with varying development of skarn along with geochemically elevated levels of zinc.



Figure 10.2 Plan of Modeled Chargeability in the Central Part of the Crypto Property
(Provided by Lithic Resources Ltd.; Elevation is 1200m ASL)





11.0 DRILLING

11.1 Summary

Four campaigns of drilling involving a total of 85 core and RC exploration holes totalling 38,138m have been carried out on the Crypto property. Table 11.1 summarizes the drill-hole data in the database, while Figure 11.2 shows the distribution of holes on the property. Down-hole depths range from a few tens of meters to approximately 1,000m. The majority of these holes were either inclined due south or were vertical and tested the Crypto deposit area on north-south sections at a rough average spacing of about 75m.

Table 11.1 Crypto Mineral Resource Drilling Database Summary

Company	Period	Hole Numbers	Core		RC		Total	
			No.	Meters	No.	Meters	No.	Meters
Pinnacle Mines	1958-1959	C1,C2	2	228.6	--	--	2	228.6
Utah International*	1961-1985	CC1 to 46 RC2-4,14,26,35-37	39	16,555.8	8	609.5	47	17,165.3
Cyprus Minerals	1990-1991	CCC1 to 15 RCCC-1, 6	17**	9,434.6	2	670.6	19	10,105.2
Lithic Resources	2007-2008	C07-1 to 5 C08-6 to 15	17***	10,638.9	--	--	17	10,638.9
Totals			75	36,857.9	10	1,280.1	85	38,138.0

* Two Utah holes with prefixes of WW are not included in this table; they are in the database but appear to be water wells and have no assays.

** Includes two holes (CCC-6B and CCC-10A) that wedged off existing drill holes.

*** Includes holes C08-7A and C08-13A drilled from same sites as holes C08-7 and C08-13, respectively, but at different orientations.

11.2 Historic Drilling

Pinnacle's holes were drilled by Kissner Drilling Company of Cedaredge, Colorado, and were collared at BX size, reducing to AX size down the hole. The first few of Utah's holes were drilled by Nichols Drilling Company; the remainder, as well as Cyprus' holes, were drilled by Boyles Brothers. Records are incomplete, but it appears that for the both the Utah and Cyprus drilling, core holes were generally initiated at NQ size or equivalent, reducing to BQ size or further as down-hole conditions required. Apparently for Cyprus' Phase I drilling, it was intended that the upper portions of the angle core holes be drilled with rotary drilling, but that was not successful, and core drilling was used instead (Cyprus/Mitsui Joint Venture Geologists, 1990).

Other than a few of the earliest holes, most of the historic drill holes on the property were surveyed down hole, the method varying between operators (Rockingham (2001) and Agnerian (1993) incorrectly reported that the Utah holes had not been surveyed). Utah's gyroscopic data were collected by Mollen-



Hauer Surveying Company, and Lithic has copies of their survey reports. Utah's dip-test data were recorded in an internal corporate memo from 1967, now in Lithic's files. Cyprus' gyroscopic data were collected by Navi-Drill, and Lithic has copies of their survey reports. Lithic personnel were able to locate most of the historic drill collars and surveyed their geographic location using a differential GPS.

Bernardi and Ohlin (1991b) noted that previous holes drilled at inclinations of 55° or less at Crypto tended to shallow, which meant that intercepts could be shallower and further south than originally thought.

MDA has no further details on drilling procedures by previous operators.

11.3 Drilling by Lithic Resources Ltd.

For its 2007-2008 drilling program, Lithic used Connors Drilling LLC of Montrose, Colorado. Lithic's program initially involved one Atlas Copco CS-14 drill. A Longyear 44 drill rig was subsequently added and then replaced with a second CS-14. Once bedrock was reached, all holes were started at HQ size, producing a 63.5mm-diameter core. When necessary to overcome drilling difficulties, a number of the holes were reduced in size to NQ, a 47.625mm-diameter core.

The core was placed in 1.2m-long, three-run wooden core boxes at the drill site. Drillers measured the core recovery as the core was put into the core boxes. Loaded core boxes were then trucked a few hundred meters to Lithic's on-site core logging, sampling, and storage facility.

Once delivered to Lithic's on-site facility, the core was measured for RQD and core recovery, and core markers were converted to metric units. Subsequently, all core was digitally photographed, wet and dry, in a fixed setup to assure constant exposure, distance, and focus, before being geologically logged and marked for sampling.

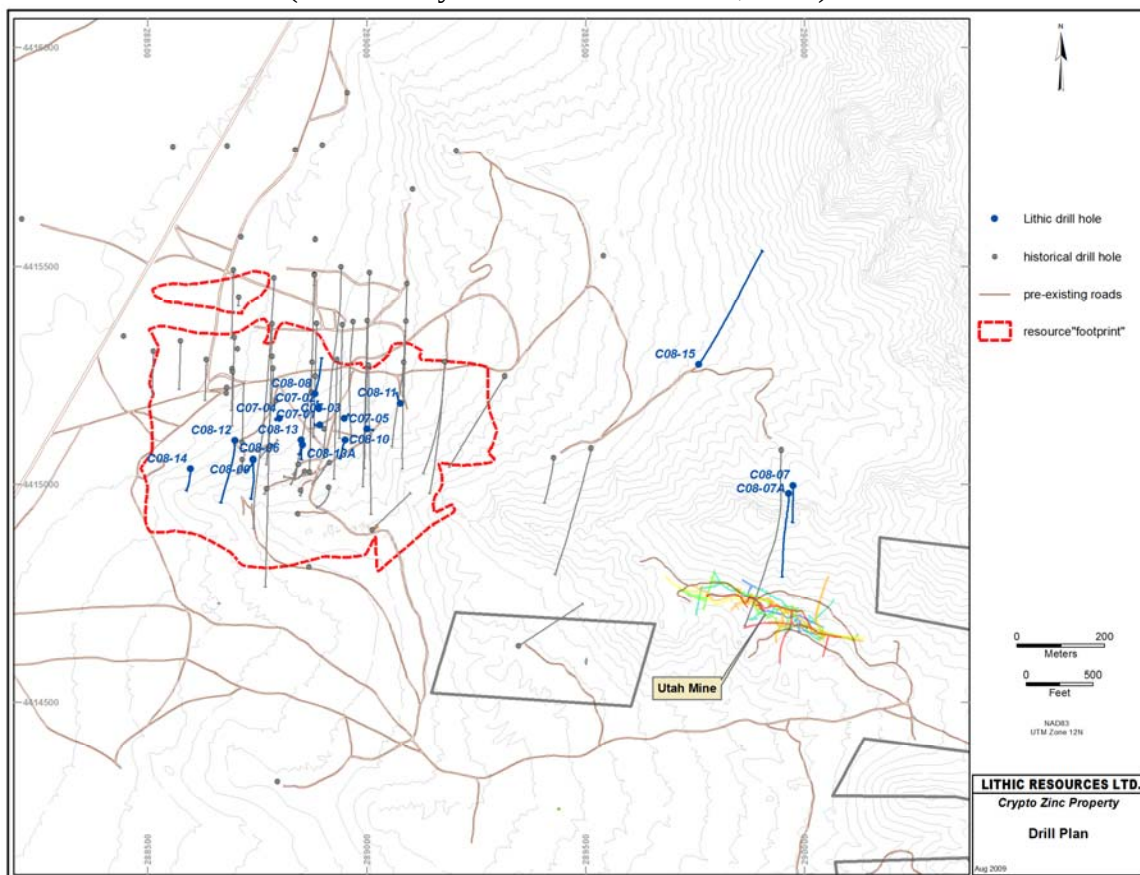
The down-hole orientations of the drill holes were measured by a technician from International Directional Services using a gyroscopic instrument not affected by magnetic variations. The instrument was lowered to the bottom of each hole, and measurements were digitally recorded every 15.2m (50ft) as it was raised back up the hole. Recorded data included depth, azimuth, inclination, and temperature. Finally, corrected survey data were derived on site and delivered as a digital file to Lithic's on-site staff.



Figure 11.1 Drilling by Lithic on the Crypto Property
(Crypto resource approximately underlies the center of the image.)



Figure 11.2 Location of Drill Holes on the Crypto Property
(Provided by Lithic Resources Ltd., 2009)





12.0 SAMPLING METHOD AND APPROACH

12.1 Sampling and Assaying

12.1.1 Historic Sampling

Utah's samples of core ranged from 0.5 to 5m in length, but the majority were between 1 and 2m. Cyprus' core samples ranged in length from 0.3 to 4m, but the majority were between 1.5 and 2m in length. There are no detailed descriptions of sampling procedures available for either company, but reports of the re-logging of significant quantities of Utah core by Cyprus suggest that Utah had followed the then-current industry standard of splitting the core in half, with one half retained and the other sent to the laboratory. Cyprus used the same standard sampling methodology and, as was standard practice at the time, did not insert quality control samples of their own (pers. comm., M. Bernardi - Cyprus Project Manager). Although no relevant information is available, it should be assumed that Utah also did not insert their own quality control samples.

12.1.2 Lithic Sampling

Samples were selected and marked by Lithic's geologist as the core was being logged. Sample intervals were chosen on the basis of lithology, mineralization, and alteration and ranged in length between a minimum of about 0.5m and a maximum of about 2m. Local employees directly supervised by the geologist then either sawed the core in half using a water-cooled diamond saw or, if the core was fragile, contained potentially soluble minerals, or was otherwise unsuitable for sawing, split it in half using a hydraulic core splitter.

12.2 Core Recovery Determinations

12.2.1 Historic Core Recovery

All of the historic drill campaigns recorded core recovery data and the current Lithic data set includes over 12,600 individual core recovery records. The average core recovery for all of the historic drilling is approximately 85%, with 10% of the drill runs having less than 50% core recovery. There is a general correlation within the data set between core recovery and core diameter with the smaller core (AX and BX) having lower recoveries, on average, than the larger NX core. The great majority of the historic drilling is NX-size core.

12.2.2 Lithic Core Recovery

Core recovery data was noted by the drillers for all 17 Lithic core holes. Lithic field technicians separately collected core recovery data for the upper half of drill hole C07-01 and the full lengths of hole C07-03 and C08-07A through C08-15. The average core recovery for both data sets is greater than 97% with just 2% and 3% of the drill runs, for the driller and Lithic data sets, respectively, having less than 50% core recovery. The generally excellent core recovery lends confidence to the current resource estimate.



13.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

13.1 Historic Sampling

Sampling information and analytical data for historic drill holes are only available as recorded in historic drill logs. Although assay certificates were not available for either Utah's or Cyprus' work, it is known that Cyprus' samples were analyzed by ALS Chemex ("Chemex") at their laboratory in Sparks, Nevada (pers.comm, Bernardi, M.) for a suite of elements including Zn, Cu, Pb, Ag, Au, Co, Mn, Mo, Ni, and Fe (Agnerian, 1993).

Drill logs for Pinnacle's two holes included data for Cu, Pb, Zn, Ag, and Au for almost all sampled intervals, as well as sporadic data for Fe, Sn, Mo, and Co. Cyprus' drill logs included assay data for Cu, Pb, Zn, and Ag for all holes, as well as Au, Fe, Cd, and As data for some intervals in some holes. Utah's drill logs included data for Cu, Pb, Zn, and Ag for all holes, as well as sporadic data for Au, Fe, Sn, Sb, Mo, Co, Cd, As, W, Bi, Mn, and Ni.

No information is available regarding details of analytical methods or any security measures that might have been taken with sampling in historic drill campaigns.

There is no information concerning quality assurance/quality control analyses on the historic drill data.

13.2 Sampling by Lithic Resources Ltd.

Following core splitting, samples were placed in fabric bags labelled with a sample number. A tag with the sample number was placed into each bag. Bags were then sealed and stored in a 6m locked storage container of the type used in rail, truck, and ship transport, which had been modified for use in the field. Samples were delivered by Lithic personnel to Chemex's laboratory in Elko, Nevada, on a weekly to bi-weekly basis. At the request of Chemex, samples estimated to contain more than about 10% zinc on the basis of their sphalerite content were segregated and labelled as "high grade" before delivery to the laboratory. A series of "overlimit" protocols was established for Zn, Ag, Cu, Pb, and Mo, in which samples which exceeded the limits of a given analytical technique were automatically scheduled for re-assay with a technique suited for higher-grade material.

Regular samples were dried, weighed, crushed, split, and pulverized at the laboratory in Elko before being analyzed for gold. Analysis was by Chemex's AA23 method of fire assay fusion of a 30g subsample followed by atomic absorption analysis ("FA-AA"). Sample pulps were then sent to Chemex's Vancouver laboratory to be analyzed for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, and Zr using their ME-MS61 method of combined ICP-MS and ICP-AES technology following a four-acid digestion. The upper concentration limit for most metals of interest was 10,000ppm or 1%. Samples exceeding this limit were re-assayed using one of the techniques described below.

Samples that had been segregated as "high grade" were dried, weighed, crushed, split, and pulverized before being analyzed for gold in Elko using Chemex's AA23 30g FA-AA method. Sample pulps were



then sent to Chemex's Vancouver laboratory to be analyzed for Ag, As, Bi, Cd, Cu, Mo, Pb, and Zn using their "ore grade" OG-62 method of combined atomic absorption and ICP-AES technology following a four-acid digestion. Regular samples whose metal contents exceeded the limits of the ME-MS61 method were re-assayed by the OG-62 method. Samples that were found to contain greater than 30% zinc using the OG-62 method were re-assayed using Chemex's ME-CON02 method. Indium was not determined in the OG-62 method, and samples were either re-assayed for indium through ME-MS61 if zinc contents were low enough or through a concentrate method such as ME-CON02 or ME-MS61c if they were too high.

13.3 Lithic Quality Control Protocol

A quality-control ("QC") protocol involving a variety of standards and duplicates as well as a blank was implemented by Lithic for all samples from the project. Every 11th sample was either a standard (chosen on the basis of mineralization type and expected grade), a duplicate of some type, or a blank.

A series of commercially available certified standards was chosen and purchased on the basis of expected types and grade ranges of mineralization, including low- and high-zinc values in oxide and sulfide mineralization (Table 13.1). The standard to be used at any given point was chosen on the basis of the mineralization in nearby core. Standards were stored at Chemex's lab and inserted into the sample stream by Chemex personnel as per Lithic's written directions with each shipment. Standards used are listed in Table 13.1.

Table 13.1 Certified Analytical Standards Used in Lithic Drilling Program

Sample	Type	Zn	+/-	Cu	+/-	Pb	+/-	Ag	+/-
GBM 396-10	oxide	10,601 ppm	217	2,897 ppm	48.2	1,018 ppm	22.3	11.6 ppm	0.22
GBM 996-7	oxide	110,344 ppm	1,007.7	23,483 ppm	224.3	38,879 ppm	478.8	125.1 ppm	2.12
CDN-FCM-2	sulfide	1.739 %	0.104	0.756 %	0.046	0.479 %	0.038	73.9 g/t	7.3
CDN-HLHZ	sulfide	7.66 %	0.36	0.76 %	0.03	0.815 %	0.06	101.2 g/t	10.8
CDN-HLLC	sulfide	3.01 %	0.17	1.49 %	0.06	0.29 %	0.03	65.1 g/t	6.7
CDN-HLHC	sulfide	2.35 %	0.11	5.07 %	0.27	0.17 %	0.01	111.0 g/t	8.6

(GBM series: Geostats Pty; CDN series: CDN Resource Laboratories):

Several types of duplicates were used as follows:

- preparation duplicate: second, duplicate pulp from the original sample reject was requested
- assay duplicate: duplicate analysis of the first pulp from a given sample was requested
- field duplicate: second half of core collected in the field

Blank material was collected from an outcrop of barren Tertiary rhyolite about 32km south of the Crypto property and inserted into the sample stream at the Crypto site.



14.0 DATA VERIFICATION

From the perspective of data verification, there are two classes of data in the Crypto database. First in terms of verifiability, there are data generated by Lithic. MDA was able to verify these through a combination of site visits, discussions with the Lithic employees who originated the information, and checking of original sources such as laboratory certificates and data files.

Second in terms of verifiability are the historic data. Most of these exist in paper records that Lithic inherited from prior operators. These paper records are completely plausible, but most are photocopies of the original documents. An unfortunate deficiency is the lack of original analytical certificates, even as photocopies. Cyprus' analytical work was carried out at Chemex (now ALS Chemex), and the records are still available in the latter's files. Lithic has made inquiries in the hope of obtaining permission to get these original certificates from Cyprus' successor but has not been successful. The closest thing to an original source for historic assays is entries in photocopies of drill logs.

MDA has audited the historic database using the available sources, as described in the following sections, and has no reason to suspect that any systematic problems exist. However, MDA cannot state that it has checked the historic database using entirely original sources.

14.1 Verification of Historic Data

14.1.1 Assay Table

MDA received a copy of the historic assay table in the form of an ExcelTM spreadsheet containing 4,347 records. MDA checked 1,028 or about 24% of the records against the entries in old drill logs. The fields that MDA checked were Ag (oz), Pb (%), Cu (%), Au (oz) and Zn (%). The error rates that MDA found were as follow:

Element	Ag	Pb	Cu	Au	Zn
Error Rate	0.2 %	0.2 %	0.3 %	0.5 %	0.2 %

The errors that MDA identified would not have had a significant effect on the resource estimate. It is assumed but cannot be proven that assay entry errors in the 76% of the historic assay table that MDA did not check would have a similarly insignificant effect.

14.1.2 Collar Table

Some earlier workers at Crypto located the drill-hole collars on a project-specific grid. Lithic uses a UTM grid system based on NAD83. Lithic identified as many of the old drill-hole sites as it could in the field, in part by using aerial photographic images to locate former sites. In those cases in which it was able to identify the sites, Lithic re-surveyed the locations using a differential GPS. Of 68 holes in the database drilled by former operators, Lithic was able to re-survey 45 collar locations.

MDA had little means at its disposal to verify the locations of old collars. MDA did do a plausibility check, using a geo-registered ortho-photo obtained from Lithic. MDA checked for plausibility by



looking at the recorded location of the drill hole on the ortho-photo, checking the image for evidence of old disturbance suggestive of drill sites or drill access roads. It was possible to check 67 of the 68 historic drill holes this way, and the locations of all 67 recorded in the current collar table are plausible. The one hole that could not be checked has a recorded location outside the area of the ortho-photo.

14.1.3 Geologic Data Table

The Crypto geology table contains 4,062 lithologic intervals, 3,124 of which are in historic drill holes. MDA checked these against photocopies of the drill logs. All of the checks that MDA did were done on the historic holes. MDA checked the interval limits of 429 records and found that the database differed from the logs in nine instances, none of which would have a significant effect on the geologic model. MDA checked the lithologic coding of 304 records and found differences in six instances, none of which would have a significant effect on the geologic model. It should be noted that differences between interpretations by successions of workers probably account for some of these differences.

14.1.4 Down-Hole Survey Table

As discussed in Section 11.2, other than a few of the earliest holes, most of the historic drill holes on the property were surveyed down hole, and Lithic has survey reports or other documentation of the results from Utah and Cyprus' drilling.

According to information in a table (Table 14.1) obtained from Lithic, the down-hole orientations of the historic drill holes were obtained by one of three methods:

Table 14.1 Down-Hole Survey Methodology for Historic Drilling

Number of Holes	Down-Hole Orientation Method
11	dip test
43	gyroscopic
4	measured from paper section
29	none (collar only)

Lithic reports that for the Utah holes where dip information is shown as "measured from paper section," Lithic personnel derived the dips by measuring on original Utah sections.

MDA has not verified the down-hole surveys for the historic drill holes.

14.2 Verification of Data Generated by Lithic Resources

Data generated by Lithic are the most verifiable, and MDA checked them using different procedures than those employed for the historic data.



14.2.1 Assay Table

Lithic provided MDA with an assay table for use in modeling. In related work, Giles Peatfield, P.Eng., a consultant independent of Lithic, compiled an assay table independently of Lithic, for use in evaluating the quality assurance/quality control (“QA/QC”) data from the Crypto Project (Section 14.3). Peatfield received the analytical data in digital form, directly from the laboratories. MDA obtained a copy of the assay table compiled by Peatfield and used tools available in Microsoft Access™ database software to compare the Peatfield and Lithic tables. The only significant difference that MDA found was one indium analysis that was in the Peatfield table and was not in the Lithic table. This was resolved.

14.2.2 Collar Table

Lithic’s collar table was compiled directly from data transmitted by email from the field, where collar locations were determined using a differential GPS. The Lithic collar table is, in effect, the original. MDA did not independently survey the collar locations.

14.2.3 Geologic Data Table

MDA worked with Lithic in the field during three separate visits and again modeling the geology of the deposit on sections at MDA’s office. MDA viewed drill core and otherwise worked closely with Lithic on the geologic model. While the geological interpretations are primarily the product of work by Lithic personnel, MDA gained a high level of confidence in the geological data by working closely with Lithic.

14.2.4 Down-Hole Survey Table

The down-hole orientations of Lithic’s drill holes were measured in the field by International Directional Services (“IDS”) using a gyroscopic survey instrument. The down-hole survey readings were transmitted from IDS to Lithic’s office as digital data files, via email. There is typically one such file for each hole. Lithic compiled its down-hole survey table from those individual data files.

MDA checked Lithic’s down-hole survey table by compiling its own down-hole survey table using the individual IDS batch files, obtained from Lithic. MDA did not consider it necessary to request that IDS send the batch files directly to MDA independently of Lithic. MDA used tools available in Microsoft Access™ database software to compare the two down-hole survey tables and found no issues.

14.3 Quality Assurance/Quality Control

14.3.1 General

No QA/QC data are available for the historic drill data and it is not known if past operators conducted any QA/QC analyses.

Section 13.3 describes the QA/QC protocol used for Lithic’s core drilling in 2007 and 2008. Every 11th sample was a standard, a blank, or one of three types of duplicates (field, preparation, or assay).



Giles R. Peatfield, a consulting geologist independent of Lithic, reviewed and analyzed Lithic's QA/QC data (Peatfield, 2009). All assay data were sent directly to Peatfield by Chemex. Peatfield's conclusions are summarized here, and his full report is included as Appendix B.

As described in Section 13.2, Chemex's ME-MS61 ICP analysis method was used for samples with lower metal contents, and the ME-OG62 method was used for "high grade" samples. Gold was analyzed with the Au-AA23 method (FA-AA).

14.3.2 Certified Standards

Sulfide standards with certified values for gold, silver, copper, lead, and zinc were obtained from CDN Resource Laboratories Ltd. ("CDN"). (Peatfield listed three CDN standards, but information provided by Lithic (Table 13.1) indicated there was a fourth CDN standard – CDN-HLHC. Lithic reports that the standard CDN-HLHC was only used once but was inadvertently mislabeled in the dataset used by Peatfield.) Standards from oxidized material with certified values for silver, copper, lead, and zinc were obtained from Geostats Pty. Ltd. ("Geostats"). There were also standards assays for indium, cadmium, gallium, and germanium, although there were no certified values for these elements.

Peatfield concluded from his analysis that the results for the CDN and Geostats standards for silver, copper, lead, and zinc were, in general, acceptable. Although a very small number of results for the standards lay outside acceptable limits, they were not far enough outside to be of serious concern.

The same standards were also analyzed for indium, cadmium, gallium, and germanium. Because there were no certified values for these elements, the results did not address accuracy but rather were a very rough measure of the precision of assays for these elements. Peatfield noted that almost all analyses lay within $\pm 10\%$ of the mean but that the analyses for these four elements were less than optimally precise. He concluded that the levels of these trace elements should be determined in concentrates during metallurgical testing and that specific standards should be in place at that time.

14.3.3 Blanks

Peatfield reported that coarse "blank" samples were included in the 2008 core drilling. He noted that assays to date lead one to question if the assumption that the blank material had negligible metal content was, strictly speaking, true.

Peatfield analyzed results of assays for gold, silver, copper, lead, zinc, molybdenum, indium, cadmium, gallium, and germanium and concluded that, on balance, the results for blanks were not perfect but acceptable, especially for zinc, lead, copper, and indium, which are the metals of main interest.

14.3.4 Duplicate Assays

Field, laboratory preparation, and assay laboratory (the lab made two analyses of a single pulp) duplicate assays were obtained by Lithic for 2007 and 2008 drilling, and Peatfield made correlation plots for all three types of duplicates and both methods of analyses (MS61 and OG62). He concluded that, in general and especially for the metals of principal interest, the duplicate analyses suggested relatively good precision.



14.3.5 QA/QC Summary

Overall Peatfield concluded that the results of the various quality control procedures show that assay data from Lithic's 2007 and 2008 core drilling are, in general terms, acceptable.

Peatfield noted that establishing sampling and QC protocols for the project was an evolving process and that there are still unresolved procedural issues. He recommended that a more rigorous method of inserting control samples be instituted for future drilling, particularly for sample shipments for "high grade" assays, which need to have controls inserted in regular rotation, perhaps with different standard materials. Insertion of control samples for the drilling programs should be keyed to sample shipments, rather than being established beforehand on the basis of drilling intervals.

Peatfield also recommended that for future drill programs, alternate material should be found for blanks because there are some minor concerns about the levels of a few of the analyzed elements in the rhyolite used as blank material for the 2007-2008 drilling.



15.0 ADJACENT PROPERTIES

MDA is not aware of any relevant work on properties immediately adjacent to Crypto.



16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Ken Major, P. Eng. is the author of Section 16.0.

16.1 Pre-Lithic Metallurgical Testing

In early 1991, Cyprus completed bench-scale metallurgical test work on both the oxide and sulfide mineralization. Flotation tests were conducted on samples of drill core taken from three separate zones of sulfide mineralization (Bernardi and Ohlin, 1991a). A total of 44 samples of sulfide mineralization were used to construct two composites of zones K and F (Main Zone) from two separate mineralized intervals in hole CCC-1 and one composite from one mineralized interval in DDH-CCC-6 (Deep Zone). A total of 13 flotation tests were performed on these composites. Results of this testing are shown in Table 16.1 (Pacic, 1991a, 1991c). After grinding to 58% minus 200 mesh, zinc recovery of 98% was achieved in rougher flotation (Pacic, 1991). Through two stages of cleaning, zinc concentrate ranging between 54% and 60% zinc and with over 90% recovery was obtained (Pacic, 1991) leading to the conclusion that a high quality zinc concentrate can be produced in a conventional flotation process and that the concentrate meets the standard chemical classification for smelting or electrolytic treatment.



Table 16.1 Flotation Tests on Sulfide Mineralization by Cyprus in February 1991
(From Pacic, 1991c)

Test #	Head Assays	Calculated Head	2 nd Cleaner Concentrate		Rougher Concentrate		Grind	Regrind
	Zn %	Zn %	Zn %	Recovered Zn %	Zn %	Recovered Zn %	% -200 mesh	yes/no
K Zone in CCC-1 (Main Target)								
CRY-13	10.10	9.74	55.40	93.77	45.27	98.70	48.88	No
CRY-7		10.61	58.50	96.48	48.66	98.57	56.16	No
CRY-3		9.00	-	-	48.93	97.74	61.46	No
CRY-1		10.22	-	-	50.01	98.28	61.46	No
F Zone in CCC-1 (Main Target)								
CRY-11	8.98	9.20	60.10	85.19	30.96	98.51	59.41	Yes
CRY-8		8.75	59.60	89.20	32.84	97.91	64.92	Yes
CRY-6		7.67	49.30	84.95	34.41	96.53	68.19	No
CRY-5		7.88	-	-	31.68	98.37	68.19	No
CRY-4		8.04	-	-	31.13	97.95	68.19	No
CRY-2		8.94	-	-	36.58	98.13	68.19	No
CCC-6 (Deep Target)								
CRY-10	10.90	11.58	52.90	86.31	42.88	90.21	51.51	No
CRY-9		11.24	54.10	86.80	41.85	90.44	62.80	No
CRY-12		11.07	54.20	85.21	43.36	90.20	65.58	No

16.2 Metallurgical Testing by Lithic Resources Ltd.

16.2.1 Sulfide Mineralization Tested by G & T Metallurgical Services Ltd.

Based on the results of Lithic's drilling on the Crypto property, the main area of the deposit has recoverable values of copper, zinc, indium, and magnetite. Lithic authorized the completion of a preliminary metallurgical test program at G&T Metallurgical Services Ltd.'s ("G&T") facilities in Kamloops, BC to evaluate the main sulfide deposit for recovery of zinc and copper. Samples were provided by Lithic, and compositing instructions were provided by KWM Consulting. The following sections describe that testing and its results. Use of the term "ore" in this section is meant to describe well-mineralized rock but does not reflect an economic assessment of the mineralization.

16.2.1.1 Metallurgical Sample Composites

Lithic arranged for the drill core assay rejects to be delivered to G&T's facilities. The assay rejects had been stored as the individual intervals defined by the drill core program.

The interval assays had been provided to KWM Consulting for evaluation. It was determined that the samples could be composited into samples representing three different types of mineralization: Copper – Zinc Ore, High-Grade Zinc Ore ("High Zn"), and Low-Grade Zinc Ore ("Low Zn"). The definitions were based on the following criteria:



- Copper – Zinc Ore: Cu-Zn, copper values greater than 0.40%
- High Zinc Ore: High Zn, zinc values greater than 5.00%
- Low Zinc Ore: Low Zn, zinc values greater than 0.50% and less than 5.00%.

The composites were created based on the weighted values of the intervals. The weighted values were based on the lengths of the intercepts. The resulting interval composites were:

- Cu-Zn: 0.75% Cu, 10.24% Zn
- High Zn: 9.53% Zn
- Low Zn: 3.59% Zn

The weighted intervals were combined by G&T prior to testing. For comparison, the assays of these samples were:

- Cu-Zn: 0.78% Cu, 11.4% Zn
- High Zn: 9.45% Zn
- Low Zn: 3.46% Zn

16.2.1.2 G&T Metallurgical Test Program

Information provided by Lithic had identified the samples to be from the sulfide zone. The program developed by G&T focused on the conventional processes to generate independent copper and zinc concentrates. The primary objectives of the test program were to determine the:

- Ore Work Index
- Effect of grind on open-circuit rougher flotation
- Recovery of copper to a copper concentrate
- Recovery of zinc to the zinc concentrate
- Grade (%Cu) of the copper concentrate
- Grade (%Zn) of the zinc concentrate
- Deportment of secondary values of indium, gold and silver
- Regrind requirements

The initial testwork focused on the Cu-Zn ore composite. A Bond ball mill work index was completed on this composite to provide background for the preliminary sizing of the grinding equipment. The initial grinding and flotation tests focused on determining the grind requirements to maximize recovery to the respective rougher flotation concentrates.

After determining the target grinds, an open-circuit differential flotation program was developed. Chemistry provides for the selective flotation of the copper sulfide mineralization prior to the zinc sulfide mineralization. To minimize the recovery of zinc to the copper flotation concentrate, there is a requirement to add zinc mineral depressants. The addition of copper sulfate is required to promote the recovery of zinc to the zinc concentrate.

After determining the target operating parameters based on the Cu-Zn composite, open-circuit tests were then completed on the High Zn and Low Zn composites. The early tests identified that the copper in the



feed was insufficient to warrant continuing to recover the copper to a copper concentrate. Subsequent tests on the High Zn and Low Zn composites focused on the recovery of Zn to a zinc concentrate.

On completion of the open-circuit tests, locked-cycle tests were completed on all three composites to determine the metal recovery and the composite grades.

Analysis of the concentrates identified the recovery of indium to the zinc concentrate.

The test program also included very preliminary results to evaluate the potential to recover a magnetite concentrate from the skarn deposit. Tests were completed on various process streams to also identify the location for the magnetite recovery circuit in the flowsheet. The initial results indicated that it was possible to recover a magnetic concentrate from various streams. Based on these results, it was determined that the best location in the flowsheet was to treat the final tailings. Treating the feed stream or various intermediate streams resulted in a significant loss of copper and zinc to the magnetic concentrate. These would be impurities in the marketability of the magnetic concentrate. The resulting flowsheet to generate a marketable magnetite would be more complex.

16.2.1.3 Metallurgical Results

A Bond ball mill work index test was completed on the Cu-Zn composite. The test indicated a work index of 13.2 (metric), classifying the ore as moderate hardness.

The initial flotation tests were completed to determine a target primary grind. The association of hardness and grind are required to determine the energy requirements of the grinding circuit. The target grind, P80, of the Cu-Zn ore was determined to be 65 microns. Subsequent testing on the Low Zn and High Zn composites indicated that these ores behaved very similarly to the Cu-Zn ore, and similar criteria were adopted. Calibration of the lab grinding mill indicated that similar grinds were attained for the same grinding time. As a result, energy requirements are expected to be similar.

Open-circuit bench-scale testing to evaluate the recovery of copper and zinc determined that the use of zinc depressants, ZnSO_4 and NaCN , was essential to control the recovery of zinc to the copper concentrate thereby optimizing the performance of the zinc recovery circuit. The open-circuit testwork also indicated that rougher concentrate regrinds were essential for both the copper and zinc circuits in order to optimize the concentrate grades and recoveries.

The open-circuit testwork provided the preliminary criteria to develop flotation locked-cycle test procedures. Locked-cycle tests were completed to confirm recoveries and concentrate grades identified by the open-circuit tests.

Assays indicate that there are secondary payable minerals that will be recovered to the concentrates, including gold, silver, and indium. The recovery of these metals is inherent to the flowsheet with the metals following the recoverable sulfides. Deleterious elements were not found to be present in the copper and zinc flotation concentrates at penalty levels however it was recommended by G&T that future work should monitor bismuth concentration as it approached threshold limits depending on the smelter accepting the concentrate.



Preliminary metallurgical work has also indicated a potential to recover magnetite (skarn deposit) from the flotation tails.

The metallurgical balances for the locked-cycle tests were:

Cu-Zn Composite

Flotation Stream	Cu-Zn Composite		Assay (percent)			Distribution (percent)		
No.	Product	Weight %	Cu	Zn	Fe	Cu	Zn	Fe
1	Copper Rougher Feed	100.0	0.80	11.0	24.0	100.0	100.0	100.0
10	Copper Concentrate	1.3	31.4	8.36	24.7	49.6	1.0	1.3
20	Zinc Concentrate	20.4	1.24	50.4	9.3	31.5	93.6	7.9
21	Final Tail	78.3	0.19	0.76	27.8	18.9	5.4	90.8

Low Zn Composite

Flotation Stream	Low Zn Composite		Assay (percent)			Distribution (percent)		
No.	Product	Weight %	Cu	Zn	Fe	Cu	Zn	Fe
1	Zinc Rougher Feed	100.0	0.17	3.63	41.1	100.0	100.0	100.0
10	Zinc Concentrate	5.4	1.91	55.1	7.5	59.8	82.5	1.0
11	Total Tail	94.6	0.07	0.67	43.0	40.2	17.5	99.0

High Zn Composite

Flotation Stream	High Zn Composite		Assay (percent)			Distribution (percent)		
No.	Product	Weight %	Cu	Zn	Fe	Cu	Zn	Fe
1	Zinc Rougher Feed	100.0	0.22	10.7	21.5	100.0	100.0	100.0
10	Zinc Concentrate	19.2	0.83	53.2	10.2	72.7	95.0	9.0
11	Total Tail	80.8	0.07	0.66	24.2	27.3	5.0	91.0



16.2.1.4 Metallurgical Projections

The preliminary testwork completed by G&T for the Crypto project has been used to develop the metallurgical projections for the sulfide ore. In developing the projections, it has been assumed that the copper recovery circuit will not operate when the mill feed grades are expected to be below 0.4% Cu. With the limited testwork that has been completed, other assumptions are that:

- Zinc recovery projections are linear for zinc feed grades greater than 1.0% Zn.
- Indium (In) recovered to the zinc concentrate

Cu-Zn Ore Projections:

- Copper Concentrate
 - o %Cu: 32.0
 - o %Zn: 6.0%
 - o Recovery Cu: 50%
 - o Recovery Zn: 3%
- Zinc Concentrate
 - o %Zn: 52.5%
 - o Recovery Zn: $(1.55 \times \%Zn(\text{feed}) + 75.43)\%$
 - o Recovery In: $(-1.93 \times \%Zn(\text{feed}) + 68.1)\%$

Zn Ore Projections:

- Zinc Concentrate
 - o %Zn: 52.5%
 - o Recovery Zn: $(1.55 \times \%Zn(\text{feed}) + 78.43)\%$, max 95%
 - o Recovery In: $(-1.93 \times \%Zn(\text{feed}) + 76.8)\%$

16.2.1.5 Process Description

The metallurgical testwork that has been completed by G&T confirms that the sulfide zone of the Crypto project will be amenable to processing using a conventional copper – zinc differential flotation process. The process flowsheet will include crushing and grinding facilities to generate a flotation feed with a nominal P80 of 65 microns.

For ores with sufficient copper to operate an economic recovery process, zinc depressants will be added to the flotation feed slurry to minimize zinc recovery to the copper rougher concentrate. Copper rougher concentrate will be reground to 15 microns prior to three stages of copper cleaner flotation to produce a concentrate grading 32% Cu.

Tailings from the copper flotation circuit will be fed to the zinc flotation circuit. CuSO_4 will be added to the slurry to activate the zinc (sphalerite) for flotation. Zinc rougher concentrate will be reground to 35 microns prior to three stages of zinc cleaner flotation to produce a concentrate grading 52.5% Zn.

Concentrates from the flotation process will be thickened and filtered to provide dry concentrates that will be shipped to the respective smelters.



16.2.2 Oxide Mineralization Tested by Kappes Cassiday & Associates

Exploration drilling has identified significant intercepts of oxide zinc mineralization. Similar to the methodology used for the sulfide mineralization, a composite of the intercepts was made to complete some preliminary tests to determine the potential to recover the zinc. Kappes, Cassidy and Associates (KCA) completed a zinc mineral evaluation program and conducted sulfuric acid leaching tests (Albert, 2009). The acid leaching test results indicated a potential to extract 95% of the zinc from the ore into solution. In addition to dissolution of zinc the leach tests also indicated that 78% of the copper and 37% of the indium were extracted from the ore. There was no work completed to determine the process method and resulting recovery of zinc, copper or indium from the acid solution. There are proven technologies available that will be evaluated in future test programs.

16.3 Future Work

These preliminary metallurgical results will provide the criteria and support for additional testwork required for prefeasibility and feasibility studies. Sample selection for future programs should use new core. The grinding program will influence the dimensions of the core, depending on what the other requirements for the core are. The selection of samples should also include the opportunity to analyze geological ore types.

The next stage of metallurgical testing should include:

- Grinding work index – SAG, rod mill, ball mills for identified ore types
- Grind optimization study
- Flotation reagent optimization
- Flotation optimization of secondary minerals
- Regrind optimization
- Column flotation (cleaners) evaluation
- Thickening
- Filtering
- Pilot plant studies (if flowsheet complexities are identified)
- Zinc oxide leach testing to determine process design criteria and recovery rates for Zn, Cu, and In.



17.0 MINERAL RESOURCE ESTIMATES

This section describes the first NI 43-101-compliant, publicly released mineral resource estimate for the Crypto project. No estimate of mineral reserves has been made for this report.

17.1 Introduction

Lithic requested that MDA update the resource estimates on the Crypto zinc-copper-indium deposit; historic resource estimates are described in Section 6.2. As of October 2009, 85 drill holes totaling 38,138m exist in the Crypto deposit area. The Crypto drill-hole assay database contains 6,503 zinc assays, 6,505 copper assays, and 2,269 indium assays. Other metals are not considered to be economically significant by Lithic and therefore were not estimated.

The resource estimates include the data and analyses resulting from Lithic's 2008 work program at the Crypto project. This program included the completion of 17 diamond drill core holes. The Crypto drilling primarily targeted sulfide-bearing skarn mineralization, both north and south of the Juab fault. The oxide zone was drilled in the upper parts of holes aimed at testing the lower sulfides. All of the Crypto sample data were used in developing the geologic and mineral models, estimating the resources, and determining resource classification. However, the reported resource estimates for Crypto are hampered by having substantially fewer indium analyses than zinc and copper. This has resulted in an excessively harsh limitation to the amount of Indicated material at Crypto.

The work done by MDA for the current resource estimates included assisting Lithic personnel in the geological interpretations. MDA and Lithic worked together on the geologic interpretations on site and with access to logs and core. While MDA constructed the mineral domains, Lithic actively participated in checking and offering suggestions for modification. Those domains were largely defined by the geology, in conjunction with sample assay grades that formed the basis of the resource models. Four models were made:

- lithologic and density,
- zinc,
- copper, and
- indium.

MDA made three site visits and audited the data derived from drilling, while Mr. Giles Peatfield analyzed QA/QC data (see Section 14.3).

17.2 Resource Classification

MDA classified the Crypto resources in order of increasing geological and quantitative confidence into Inferred and Indicated categories as defined by the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" in 2005 so as to be in compliance with NI 43-101. CIM mineral resource definitions are given below:



Mineral Resource

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase 'reasonable prospects for economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

Inferred Mineral Resource

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

Indicated Mineral Resource

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.



Measured Mineral Resource

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

17.3 Crypto Resource Estimates

17.3.1 Procedures

Upon completion of the database validation process, MDA constructed 11 unevenly spaced cross sections 25m to 100m apart and looking west at 270°. The sections were spaced to best fit the existing drilling. One set of sections was made for each of zinc, copper, indium, and lithology. Drill-hole information, including rock type and metal grades, along with the topographic surface were plotted on the cross sections.

Quantile plots of zinc (%), copper (%), and indium (g/t) were made to help define the natural populations of metal grades to be modeled on the cross sections. The plots were reviewed with all metals grouped together, but also with the sulfide evaluated separately from the oxide.

Color-coded assays corresponding to population breaks indicated by the quantile plots along with the geological interpretation were used in the creation of distinct mineral domains. These, in turn, were used to control the estimation. The mineral domains as modeled and drawn on the cross sections are not strict "grade shells" but are created using geologic information for defining orientation, geometry, continuity, and contacts in conjunction with the grades. Each of these domains represents a distinct style of mineralization with unique statistical characteristics. These cross sections were sliced to level plan on 3m intervals to coincide with the block-model block size in that direction. The 11 sliced sections were reinterpreted on 279 3m-separated levels, and these were used to code domain percentages into the block model.

17.3.2 Geologic Background

The Crypto zinc-copper-indium deposit occurs as carbonate-rock-hosted, sphalerite and chalcopyrite-bearing skarn mineralization peripheral to the quartz monzonite intrusive basement rock. Stratabound skarn mineralization is preferentially hosted within thin-bedded limestone and minor calcareous siltstone horizons though proximal skarn does form within the more massive carbonate rocks along the intrusive contact. The extent of the mineralization as currently defined is, on average, 830m vertically, 800m



along strike, and almost 400m in width in multiple zones. The deposit strikes roughly 270° and dips variably to the north from 40° and 80° but averages 60°.

There are two relatively distinct areas to the Crypto deposit – the Main Zone north of the Juab fault and the Deep Zone at depth south of the Juab fault. Figure 9.1 presents a cross section showing the relationship of these areas. The Main Zone skarn mineralization and enclosing alteration are often discontinuous due to disruption of favorable bedding horizons by structural complications and intrusive stoping. Observations to date indicate that magnesian skarn is dominant and that massive magnesioferrite/magnetite is very abundant. However, some high-grade zinc and copper mineralization occurs within high-sulfide skarn with limited or no magnesioferrite/magnetite content. The Main Zone does extend to the sub-alluvium surface, where it has been oxidized to a variable depth of between 100m and 200m. The oxide areas have altered metal distributions from the original hypogene mineralization.

The Deep Zone stratabound mineralization is more continuous and stratigraphic correlations are much clearer within the Juab fault footwall. The stratabound mineral horizons, which can be up to 25m thick, dip steeply to the north immediately above the intrusive contact though become less steep with increasing elevation. Significant thickness of mineralization also occurs as sub-horizontal proximal skarn along the contact of the quartz monzonite intrusive. Calcareous skarn predominates within the Deep Zone, although magnesian skarn is common.

Crypto deposit sulfide mineralization consists of coarse-grained, brown to reddish sphalerite with lesser disseminated chalcopyrite, pyrite, and/or pyrrhotite, with the mineral grade, in general, associated with skarn alteration. In the Main Zone, higher-grade mineralization (i.e., increased sphalerite and/or chalcopyrite content) is associated with pervasive magnesian skarn alteration in which all primary textures generally have been destroyed and there is often evidence of multiple pulses of alteration/mineralization. Deep Zone sulfide mineralization generally occurs in massive magnesioferrite/magnetite intercalated with humite ± periclase skarn, while the calcareous skarn consisting of grossularite, Fe-rich diopside and K-feldspar is rarely mineralized. Retrograde alteration, in the form of serpentine or epidote, is common. Decreasing mineralization is generally accompanied by decreasing intensity of skarn development. In the Deep Zone, fracture-fillings of magnesioferrite in dolomitic marble are common in proximity to intercalated layers of massive magnesioferrite/magnetite.

Copper grades are not directly proportional to those of zinc, its distribution typically only partially overlapping with that of zinc in any given drilled interval. However, there appears to be at least a rough increase in the Cu/Zn ratio with proximity to the intrusion, and discrete zones of copper enrichment are definable. Indium is associated with zinc and the petrographic work has indicated that it occurs primarily in the sphalerite lattice. There is not though a direct relationship between zinc grade and indium grade and the highest indium grades tend to occur in mineralization with a zinc grade of between 0.5 and 5%.



17.3.3 Geologic Model

MDA used a combination of lithology, angles to core axes, structural data and logged sulfide percentages to construct a geologic model which formed the basis for the density model used in the estimate. Because the metals behave differently, MDA also modeled zinc, copper, and indium separately. Table 17.1 presents a list of mineral domains and materials defined for this model. While all metals are globally spatially related, they are not necessarily locally spatially related, thereby requiring separate domains for each metal. The three mineral domains of each metal were constructed by MDA but checked for reasonableness by Lithic.

Table 17.1 Coding and Description of the Crypto Geologic Model

Domain Code	Description
101 201 301	Zinc: Low-grade associated with weak skarn Copper: Low-grade associated with weak skarn Indium: Low-grade associated with weak skarn
102 202 302	Zinc: Mid-grade associated with moderate skarn Copper: Mid-grade associated with moderate skarn Indium: Mid-grade associated with moderate skarn
103 203 303	Zinc: High-grade associated with pervasive skarn Copper: High-grade associated with pervasive skarn Indium: High-grade associated with pervasive skarn
99	Unmineralized or discontinuously mineralized country rock outside of the above mineral domains was not modeled due to insufficient assay data

17.3.4 Sample Coding and Compositing

The metal mineral-domain polygons were used to code drill samples. Quantile plots, along with global zone statistics and spatial location of higher grades, were made to assess validity of these domains and to determine capping levels. After these analyses, MDA chose to cap 23 samples. Descriptive statistics of these sample grades by domain are given in Appendix C.

Compositing was done to 3m down-hole lengths, honoring all material-type and mineral-domain boundaries. The 2m by 2m by 3m blocks inside each mineral domain were estimated using only composites from inside their respective domain. Composite descriptive statistics are presented in Table 17.2.



Table 17.2 Descriptive Statistics of Metal Domain Composites

Zinc Composites

Domain	Valid N	Total Length (m)	Median (%)	Mean (%)	Std.Dev.	CV	Minimum (%)	Maximum (%)
101	1221	2932.5	0.34	0.65	0.73	1.12	0.01	4.71
102	526	1224.4	3.77	4.03	2.50	0.62	0.21	15.30
103	153	348.8	14.56	16.66	6.53	0.39	5.65	42.74

Copper Composites

Domain	Valid N	Total Length (m)	Median (%)	Mean (%)	Std.Dev.	CV	Minimum (%)	Maximum (%)
201	940	2189.9	0.14	0.16	0.09	0.61	0.00	0.65
202	352	769.0	0.45	0.49	0.20	0.41	0.05	2.03
203	136	277.4	1.15	1.46	1.01	0.69	0.12	7.30

Indium Composites

Domain	Valid N	Total Length (m)	Median (g/t)	Mean (g/t)	Std.Dev.	CV	Minimum (g/t)	Maximum (g/t)
301	302	665.3	3.82	4.28	2.73	0.64	0.08	21.80
302	570	1510.9	23.41	30.82	22.00	0.71	3.57	167.39
303	79	321.6	136.74	152.29	57.13	0.38	61.83	490.00

17.3.5 Density

The density values used in the updated resource estimate are based on 427 density measurements collected by Lithic from diamond drill core in the Crypto resource area. The samples were grouped according to sulfide concentration, metal domain, and lithology. Because most of the Crypto core is solid and unfractured, no adjustments were made to the mean grades of the measured data.

The density values assigned to the various lithologies and domains are given in Table 17.3.

Table 17.3 List of Density Values Used in Model

Model Code	Density	LG Zn	MG&HG Zn	LG Cu	MG&HG Cu	LG Cu&Zn	MG&HG Cu&Zn
	g/cm ³	g/cm ³	g/cm ³	g/cm ³	g/cm ³	g/cm ³	g/cm ³
Alluvium	1.80						
Carbonate	2.65	NA	NA	NA	NA	NA	NA
Silicified Rock	2.45	NA	NA	NA	NA	NA	NA
Skarn	2.90	2.94	3.06	3.09	3.11	3.02	3.09
Magnetite	3.85	3.89	3.76	3.83	3.97	3.86	3.87
Rhyolite	2.60	NA	NA	NA	NA	NA	NA
Intrusive	2.60	NA	NA	NA	NA	NA	NA

LG = low-grade; MG = mid-grade; HG = high-grade



17.3.6 Resource Model and Estimation

The Crypto resource block model replicates the relatively complex metal distributions and geometries. Because of the rather contorted geometries, two passes using Inverse Distance techniques were made in the estimate; a long pass to insure filling in all the blocks and a short pass for the Indicated classification. Indium search parameters were particularly long because of the limited amount of analytical data.

Correlograms were made in numerous orientations and with numerous lag lengths but dominantly within the plane of mineralization. Interestingly, the zinc and indium structures are similar. Copper is distinct. But in all cases, the strike continuity is substantially shorter than the dip. The estimation parameters are given in Table 17.4.



Table 17.4 Crypto: Estimation Parameters for Mineral Resources

Description	Parameter
SEARCH ELLIPSOID PARAMETERS: Zinc (Low-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor (high-grade restriction: grade in %Zn and distance in m)	250 / 250 / 50 (1.5 / 200)
Second Pass Search (m): major/semimajor/minor	70 / 70 / 15
SEARCH ELLIPSOID PARAMETERS: Zinc (Mid-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	200 / 200 / 40
Second Pass Search (m): major/semimajor/minor	70 / 70 / 15
Third Pass Search (m): major/semimajor/minor (Oxide Zone only) (high-grade restriction: grade in %Zn and distance in m)	90 / 90 / 15 10.0 / 40
SEARCH ELLIPSOID PARAMETERS: Zinc (High-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	150 / 150 / 40
Second Pass Search (m): major/semimajor/minor	50 / 50 / 10
SEARCH ELLIPSOID PARAMETERS: Copper (Low-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	250 / 250 / 50
Second Pass Search (m): major/semimajor/minor	70 / 70 / 15
SEARCH ELLIPSOID PARAMETERS: Copper (Mid-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	200 / 200 / 40
Second Pass Search (m): major/semimajor/minor	70 / 70 / 15
SEARCH ELLIPSOID PARAMETERS: Copper (High-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	150 / 150 / 30
Second Pass Search (m): major/semimajor/minor	50 / 50 / 10



Table 17.4 Crypto: Estimation Parameters for Mineral Resources (continued)

Description	Parameter
SEARCH ELLIPSOID PARAMETERS: Indium (Low-Grade)	
Samples: minimum/maximum/maximum per hole all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	300 / 300 / 50
Second Pass Search (m): major/semimajor/minor	70 / 70 / 15
Third Pass Search (m): major/semimajor/minor (Oxide zone only)	90 / 90 / 15
(high-grade restriction: grade in ppm In and distance in m)	(10 / 40)
SEARCH ELLIPSOID PARAMETERS: Indium (Mid-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	300 / 300 / 60
(high-grade restriction: grade in ppm In and distance in m)	(20 / 200)
Second Pass Search (m): major/semimajor/minor	70 / 70 / 15
(high-grade restriction: grade in ppm In and distance in m)	(20 / 40)
SEARCH ELLIPSOID PARAMETERS: Indium (High-Grade)	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 8 / 2
Search Bearing/Plunge/Tilt (all searches)	0° / -60° / 0°
First Pass Search (m): major/semimajor/minor	200 / 200 / 40
Second Pass Search (m): major/semimajor/minor	60 / 60 / 20

MDA classified the Crypto resources by a combination of distance to the nearest sample and the number of samples, while at the same time taking into account amount of underlying data and understanding and use of the geology. The criteria for resource classification are given in Table 17.5. There are no Measured resources within the deposit, primarily due to complexity of the mineralization but also due to limited drill data. The maximum distance criteria for Indicated within the Main Zone is less than that used for the Deep Zone due to the greater variability in domain morphology and metal grades. While MDA is confident that the indium zones do continue as modeled, mostly because of their relationship with zinc (the probable location of indium metal), MDA cannot be sure of the grades, and hence the unfortunately small amount of Indicated material. None of these issues deter from the overall confidence in the global project resource, but they do detract from confidence in some of the accuracy which MDA believes is required for Measured and Indicated resources. Without the downgrading for indium, the Indicated zinc and copper material would likely be two times larger than presently reported.



Table 17.5 Criteria for Crypto Resource Classification

Description for All Metals	Criteria
<u>Measured</u>	
None	
<u>Indicated (Main Zone)</u>	
Maximum distance to nearest sample	40m
And	
Minimum number of holes	2
And	
Minimum number of samples	2
<u>Or</u>	
Max. distance to nearest sample	20m
And	
Minimum number of holes	1
And	
Minimum number of samples	2
<u>Indicated (Deep Zone)</u>	
Maximum distance to nearest sample	50m
And	
Minimum number of holes	2
And	
Minimum number of samples	2
<u>Or</u>	
Max. distance to nearest sample	30m
And	
Minimum number of holes	1
And	
Minimum number of samples	2
<u>Inferred</u>	
Those blocks inside the domains that are not classified as Indicated	
Description for final classification	
<u>Measured</u>	
None	
<u>Indicated</u>	
If zinc and indium are Indicated, or 1) zinc is Indicated outside indium zones, or 2) copper is Indicated outside zinc and indium zones	
<u>Inferred</u>	
If either zinc or indium are Inferred or copper is Inferred outside zinc and indium zones	

(note, there are no Measured, Indicated or Inferred resources outside the defined mineral domains)

Because of the requirement that the resource exists “in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction,” MDA is reporting the resources at approximate economic cutoff grades that are reasonable for deposits of this nature that will likely be mined by some combination of open-pit and underground methods but mostly underground. As such, some economic considerations were used to determine cutoff grades at which the resource is presented.



MDA considered reasonable metal prices and extraction costs and recoveries, albeit in a general sense, and dropping it a bit to account for that material that would become economic using internal cutoffs.

The Crypto reported resource is summarized in Table 17.6, while the total Crypto resources are tabulated in Table 17.7. The stated resources are fully diluted to 2m by 2m by 3m (vertical) blocks and are tabulated on a zinc-equivalent (“ZnEq”) cutoff grade of 3.0%. All material, regardless of which metal is present and which is absent, is tabulated. Because multiple metals exist, but do not on a local scale necessarily co-exist, the ZnEq grade is used for tabulation. Using the individual metal grades of each block, the ZnEq grade is calculated using the following formula:

$$\%ZnEq = \%Zn + (0.0284 * \text{ppm In}) + (2.5 * \%Cu)$$

This formula is based on prices of US\$0.80 per pound zinc, US\$2.00 per pound copper, and US\$500.00 per kilogram of indium. No metal recoveries are applied, as this is the *in situ* resource. Typical cross sections through the Crypto block model showing zinc, copper, indium, and zinc equivalent grades are given in Figure 17.1, Figure 17.2, Figure 17.3, and Figure 17.4

The decision as to the appropriate mining method for the Crypto deposit awaits further evaluation, and there is the potential that a combination of open-pit and underground methods would be optimal. The lower cut-off used for the oxide material reflects the potential for open-pit mining scenarios for this near-surface material. The 2m by 2m by 3m block size likely understates the dilution expected from standard open-pit mining methods, but this block size was used to provide the operator the option for evaluating the deposit, either in total or within specific areas, using underground mining methods. For evaluating open-pit methods, a more appropriate larger block size and dilution can be easily achieved by re-blocking.

Table 17.6 Summary Table of Crypto Resources

Cutoff ZnEq%	Tonnes	ZnEq (%)	Zn (%)	Zn (tonnes)	Zn (lbs)	Cu (%)	Cu (tonnes)	Cu (lbs)	In (g/t)	In (kg)
Project-wide Indicated Resources										
3.00	6,298,000	6.87	4.75	299,136	659,482,000	0.322	20,299	44,752,000	46.2	291,000
Project-wide Inferred Resources										
3.00	15,832,000	6.95	5.08	804,836	1,774,360,000	0.359	56,901	125,446,000	34.9	551,900



Table 17.7 Crypto Total Resource ZnEq Tabulation

Indicated Resources - Oxide

Cutoff ZnEq%	Tonnes	ZnEq (%)	Zn (%)	Zn (tonnes)	Zn (lbs)	Cu (%)	Cu (tonnes)	Cu (lbs)	In (g/t)	In (kg)
0.50	1,657,000	3.92	3.22	53,377	117,677,000	0.191	3,159	6,963,000	7.67	12,700.00
1.00	1,114,000	5.48	4.54	50,536	111,413,000	0.263	2,925	6,449,000	10.31	11,500.00
1.50	903,000	6.48	5.38	48,542	107,017,000	0.309	2,790	6,150,000	11.68	10,500.00
2.00	735,000	7.56	6.28	46,155	101,755,000	0.363	2,670	5,887,000	13.22	9,700.00
2.50	610,000	8.65	7.19	43,873	96,724,000	0.417	2,545	5,610,000	14.61	8,900.00
3.00	498,000	9.97	8.31	41,427	91,331,000	0.483	2,407	5,305,000	15.97	8,000.00
3.50	413,000	11.37	9.49	39,154	86,319,000	0.556	2,295	5,059,000	17.39	7,200.00
4.00	350,000	12.73	10.68	37,402	82,458,000	0.618	2,165	4,774,000	17.90	6,300.00
4.50	310,000	13.83	11.66	36,158	79,716,000	0.665	2,061	4,543,000	17.99	5,600.00
5.00	288,000	14.53	12.30	35,415	78,076,000	0.692	1,992	4,391,000	17.76	5,100.00
6.00	248,000	16.00	13.62	33,754	74,416,000	0.756	1,873	4,129,000	17.20	4,300.00
7.00	226,000	16.93	14.45	32,618	71,911,000	0.802	1,811	3,993,000	16.81	3,800.00
8.00	210,000	17.62	15.04	31,636	69,745,000	0.839	1,765	3,892,000	17.05	3,600.00

Inferred Resources - Oxide

Cutoff ZnEq%	Tonnes	ZnEq (%)	Zn (%)	Zn (tonnes)	Zn (lbs)	Cu (%)	Cu (tonnes)	Cu (lbs)	In (g/t)	In (kg)
0.50	6,625,000	3.33	2.74	181,398	399,913,000	0.132	8,725	19,235,000	10.72	71,000.00
1.00	4,644,000	4.45	3.73	173,414	382,312,000	0.165	7,680	16,932,000	12.55	58,300.00
1.50	3,805,000	5.17	4.38	166,747	367,614,000	0.186	7,073	15,594,000	13.19	50,200.00
2.00	3,100,000	5.95	5.09	157,793	347,873,000	0.211	6,525	14,384,000	13.49	41,800.00
2.50	2,513,000	6.81	5.87	147,588	325,376,000	0.241	6,051	13,339,000	13.82	34,700.00
3.00	2,027,000	7.78	6.76	137,115	302,286,000	0.274	5,560	12,257,000	14.10	28,600.00
3.50	1,736,000	8.55	7.46	129,572	285,656,000	0.298	5,178	11,416,000	14.18	24,600.00
4.00	1,472,000	9.41	8.26	121,587	268,054,000	0.325	4,788	10,556,000	14.05	20,700.00
4.50	1,240,000	10.37	9.13	113,274	249,726,000	0.358	4,441	9,791,000	13.97	17,300.00
5.00	1,071,000	11.27	9.94	106,390	234,550,000	0.389	4,163	9,178,000	13.85	14,800.00
6.00	887,000	12.47	11.03	97,869	215,765,000	0.429	3,804	8,387,000	13.83	12,300.00
7.00	758,000	13.51	11.95	90,618	199,778,000	0.471	3,572	7,876,000	13.84	10,500.00
8.00	699,000	14.03	12.42	86,788	191,335,000	0.486	3,397	7,488,000	13.94	9,700.00

Indicated Resources - Sulfide

Cutoff ZnEq%	Tonnes	ZnEq (%)	Zn (%)	Zn (tonnes)	Zn (lbs)	Cu (%)	Cu (tonnes)	Cu (lbs)	In (g/t)	In (kg)
1.00	13,609,000	3.85	2.26	307,154	677,158,000	0.233	31,709	69,906,000	35.5	483,400
1.50	10,734,000	4.54	2.76	295,840	652,215,000	0.263	28,198	62,166,000	39.9	427,800
2.00	8,528,000	5.27	3.32	283,221	624,395,000	0.285	24,261	53,487,000	43.6	372,000
2.50	6,974,000	5.95	3.89	271,055	597,573,000	0.297	20,739	45,722,000	46.4	323,800
3.00	5,800,000	6.60	4.44	257,709	568,151,000	0.309	17,892	39,446,000	48.8	283,100
3.50	4,906,000	7.21	5.00	245,173	540,513,000	0.314	15,395	33,940,000	50.4	247,200
4.00	4,267,000	7.73	5.46	233,175	514,063,000	0.318	13,586	29,951,000	51.9	221,300
4.50	3,711,000	8.26	5.92	219,552	484,030,000	0.327	12,127	26,736,000	53.7	199,100
5.00	3,207,000	8.81	6.41	205,555	453,172,000	0.334	10,708	23,607,000	55.1	176,600
6.00	2,411,000	9.91	7.43	179,137	394,929,000	0.329	7,934	17,491,000	58.3	140,700
7.00	1,788,000	11.10	8.47	151,385	333,746,000	0.347	6,208	13,686,000	62.2	111,300
8.00	1,250,000	12.68	9.91	123,881	273,111,000	0.370	4,627	10,200,000	64.9	81,100

Inferred Resources - Sulfide

Cutoff ZnEq%	Tonnes	ZnEq (%)	Zn (%)	Zn (tonnes)	Zn (lbs)	Cu (%)	Cu (tonnes)	Cu (lbs)	In (g/t)	In (kg)
1.00	39,667,000	3.50	2.08	823,240	1,814,934,000	0.251	99,444	219,237,000	28.0	1,111,400
1.50	28,848,000	4.34	2.71	780,918	1,721,629,000	0.295	85,131	187,681,000	31.6	912,800
2.00	21,119,000	5.29	3.49	736,446	1,623,586,000	0.334	70,559	155,556,000	34.3	724,000
2.50	16,420,000	6.18	4.26	699,237	1,541,554,000	0.358	58,799	129,630,000	36.0	591,100
3.00	13,805,000	6.83	4.84	667,714	1,472,057,000	0.372	51,342	113,191,000	37.4	516,400
3.50	11,820,000	7.43	5.40	638,081	1,406,729,000	0.385	45,473	100,252,000	37.7	446,100
4.00	10,324,000	7.97	5.91	610,274	1,345,424,000	0.397	40,933	90,241,000	37.5	387,300
4.50	9,176,000	8.43	6.33	581,283	1,281,509,000	0.409	37,531	82,742,000	37.9	347,900
5.00	8,141,000	8.90	6.75	549,674	1,211,824,000	0.417	33,972	74,895,000	39.0	317,300
6.00	6,297,000	9.91	7.62	479,601	1,057,338,000	0.443	27,895	61,497,000	41.7	262,300
7.00	4,637,000	11.13	8.68	402,413	887,169,000	0.470	21,789	48,035,000	44.9	208,100
8.00	3,474,000	12.35	9.81	340,995	751,766,000	0.481	16,704	36,827,000	47.1	163,600



Figure 17.1 Crypto Block Model Section 288875 - %Zn

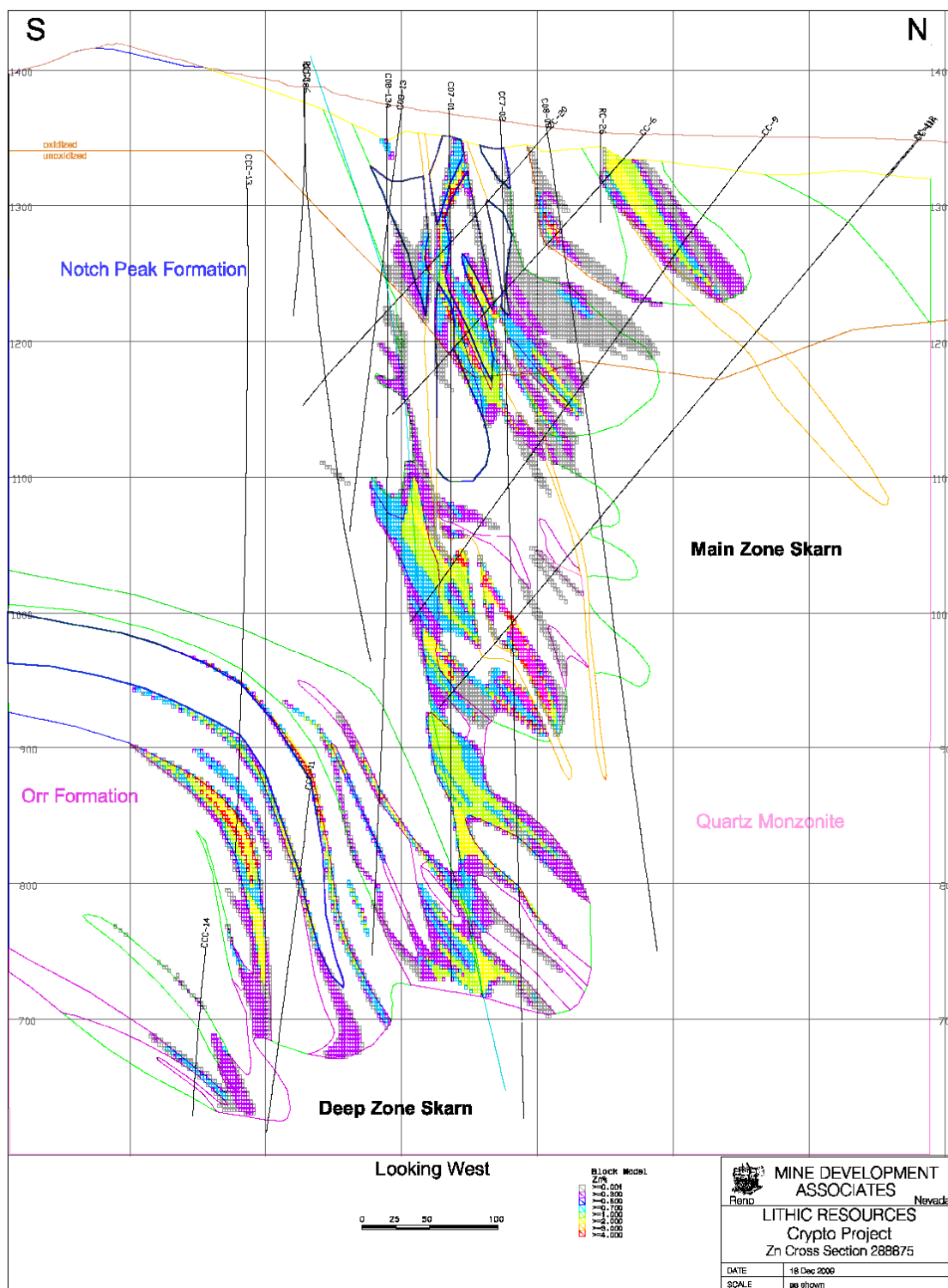




Figure 17.2 Crypto Block Model Section 288875 - %Cu

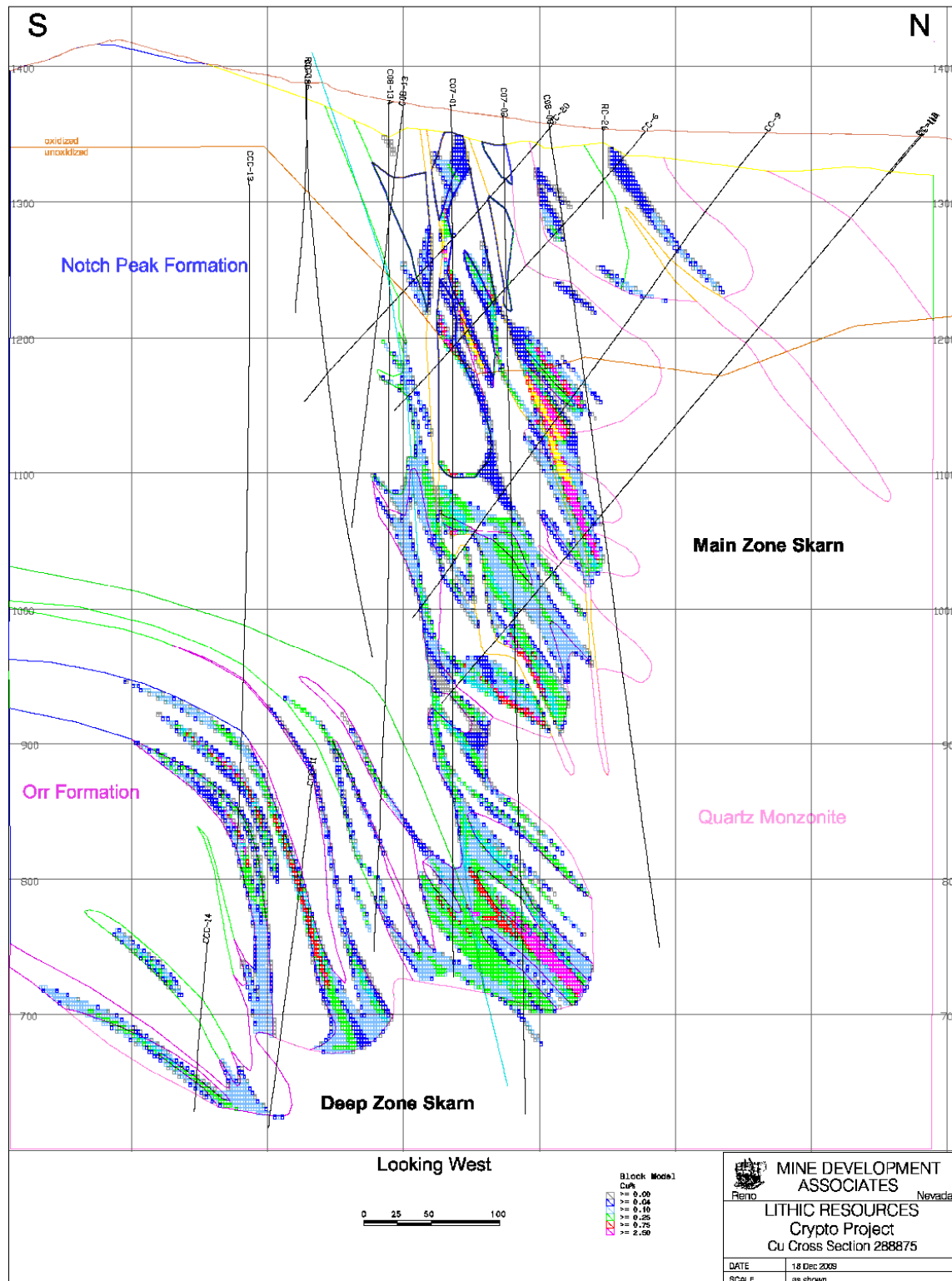




Figure 17.3 Crypto Block Model Section 288875 – ppm In

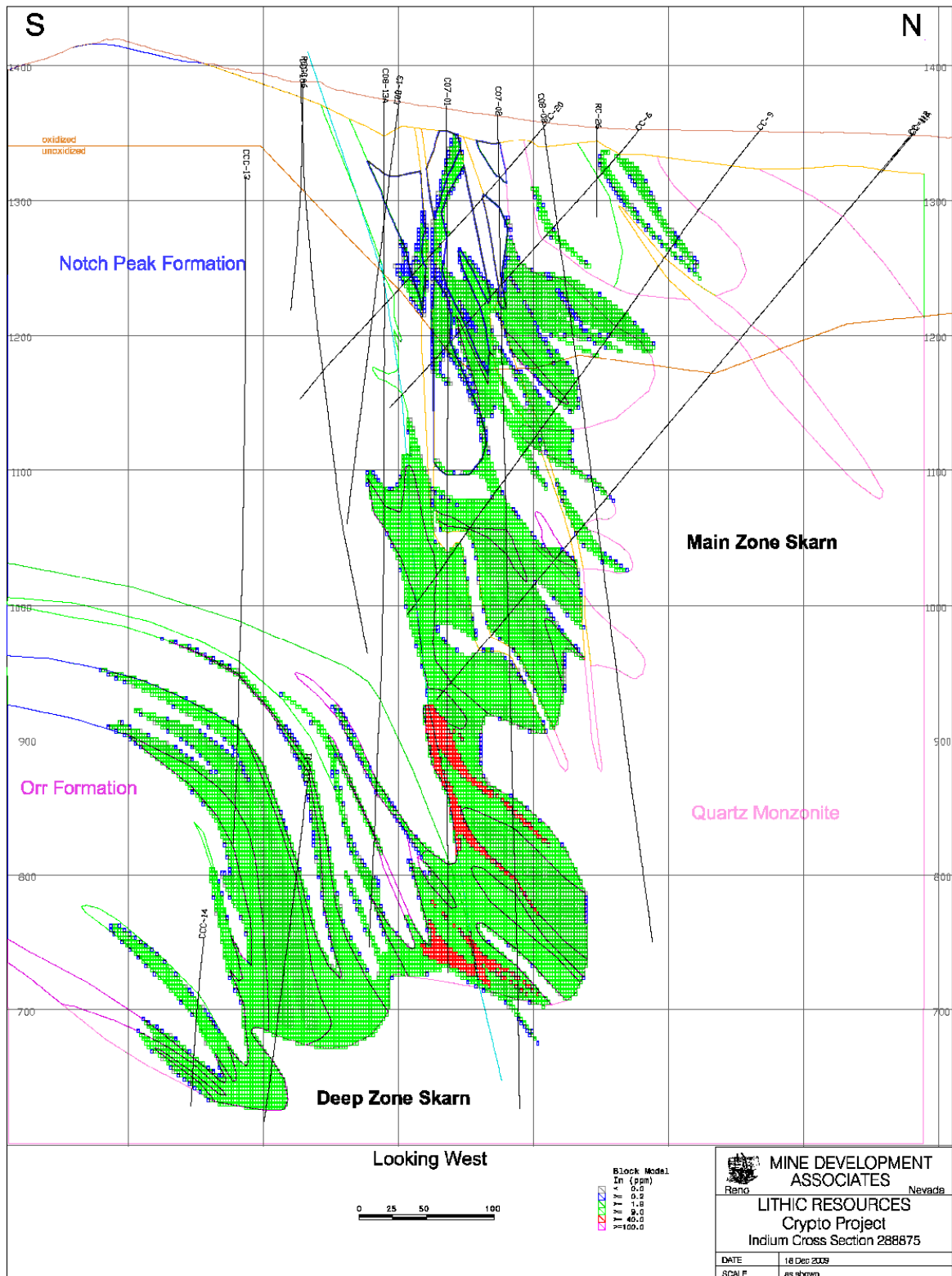
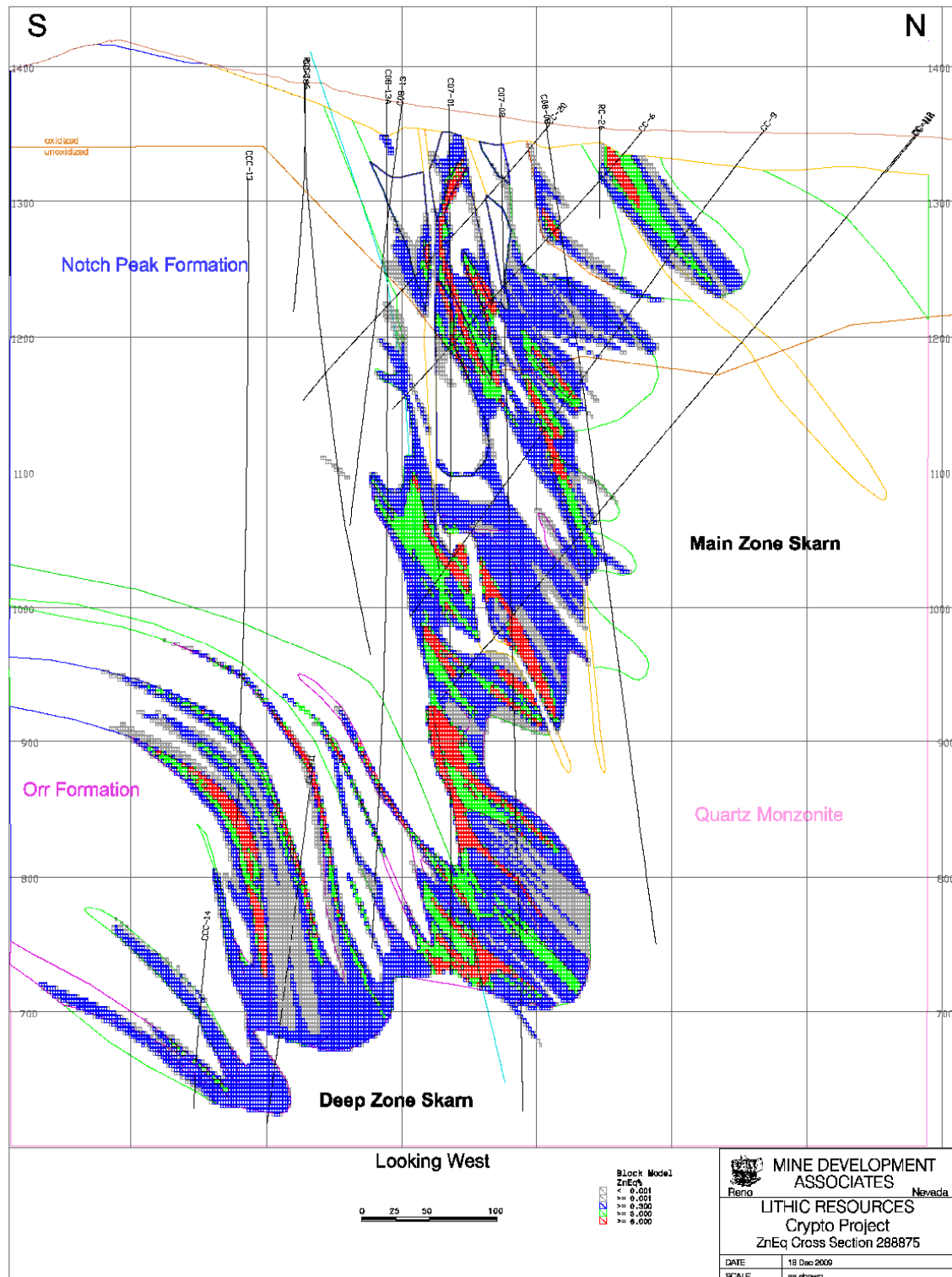




Figure 17.4 Crypto Block Model Section 288875 - %ZnEq





Checks were made on the Crypto resource model in the following manner:

1. Cross sections with the mineral domains, drill-hole assays and geology, topography, sample coding, and block grades with classification were plotted and reviewed for reasonableness;
2. Block-model information, such as coding, number of samples, and classification, were checked visually on the computer by domain and lithology on cross sections and level;
3. Cross-section mineral domain volumes to level mineral domain volumes were checked;
4. Nearest-neighbor and ordinary kriging models were made for comparison;
5. A simple polygonal model was made with the original modeled section domains; and
6. Quantile-quantile plots of assays, composites, and block-model grades were made to evaluate differences in distributions of metals.

In the end, it is deemed that the resource estimates are reasonable, honor the geology, and are supported by the geologic model.

17.3.7 Discussion, Qualifications, Risk, and Recommendations

The detailed work completed by Lithic and MDA on the geologic model, and the data defining the model, has resulted in a resource estimate of high quality. The risk is mostly related to the deposit type. Skarn deposits, such as Crypto, often have relatively complicated and rapidly changing grades and geology. This downside would mostly be alleviated through additional drilling. The upside is clearly dominated by the ability to increase the amount of higher classification material with an increase in indium sample assays. The relatively small amount of Indicated material within the current resource is due to the many fewer samples with indium grades. An increase in indium sample assays would also result in a likely increase in overall indium grade if the tenor of the new sample assays was similar to the existing assays. The current high-grade search restrictions used in the resource estimate serve to constrain the higher grade values resulting in lower indium grades within the Inferred material. Upgrading the classification of material with additional samples would therefore also likely increase the indium grade of this same material. There is also good potential to increase the size of the deposit by targeting extensions of mineralization primarily to the east, west and south.



18.0 MINERAL RESERVES ESTIMATE

No Mineral Reserves have been estimated for this report.



19.0 OTHER RELEVANT DATA AND INFORMATION

To the authors' knowledge, there is no information or data beyond that presented in this report that is relevant to making this report complete, understandable, and not misleading.



20.0 INTERPRETATION AND CONCLUSIONS

MDA has reviewed the project data and the Crypto drill-hole database and has visited the project site. MDA believes that the data provided by Lithic are generally an accurate and reasonable representation of the Crypto zinc project.

Since 1953, a total of eight companies have held the Crypto property. Four of these companies, including Lithic, have drilled the property. Historic production in the district came from high-grade lead-silver ores from oxidized, carbonate replacement deposits prior to 1953. Since then, the most significant mineralization discovered to date on the Crypto property consists of sphalerite with minor chalcopyrite occurring in a series of concordant to discordant skarns and replacement bodies in carbonate rocks in proximity to the quartz monzonite intrusive complex. Two mineralized zones have been identified – the Main and Deep zones, separated by the Juab fault.

This report provides the first NI 43-101-compliant resource for the Crypto zinc-copper-indium project. The deposit, the data defining the deposit, and consequently the resulting resource estimate are considered high quality. But like all skarn deposits, this deposit brings with it complexities due to relatively complicated and rapid changing geometries, grades and geology. The risks imparted into the deposit and resource estimate can be minimized through additional drilling.

The upside to this project is dominated by the very good possibility to increase resource classification just by getting more indium sample assays. The relatively small amount of Indicated material is due to the many fewer samples with indium grades because historic operators did not analyze for indium. It is very likely that much of the inferred resource can be upgraded to higher classification. An upgrade in classification would also likely be accompanied by an undetermined increase in indium grade, since the high-grade search restrictions used in the resource estimate constrain the high-grade and cause the Inferred material to be of generally lower grade than Indicated material.

The potential to expand the known resource is good and the potential to discover additional resources is considered very good.

While the existing metallurgical testwork is preliminary, it does show that a saleable zinc concentrate, with saleable indium, and a separate saleable copper concentrate with saleable gold and silver are achievable. But because the testwork is preliminary, there is room to optimize the recovery and processing.



21.0 RECOMMENDATIONS

The work that has been completed to date has demonstrated that Lithic's Crypto project is a property of merit and justifies additional work as described in this Section.

Substantial Indicated and Inferred resources of skarn-hosted zinc, copper, and indium have been outlined at the Crypto property, mainly in sulfide mineralization but also in the upper near-surface oxidized extensions of these sulfide bodies. These defined resources remain open for expansion to the east, west and south, and there is very good potential for the discovery of new, similar zones beyond these extensions. In addition, significant intercepts of high-grade, replacement-style, silver-zinc-lead mineralization and porphyry and/or skarn-style molybdenum mineralization have been encountered in both Lithic's and historic drilling on the property. Additional expenditures are clearly warranted to further explore the potential associated with the Crypto deposit as well as these ancillary targets.

21.1 Phase One Work Program

A Preliminary Economic Assessment ("PEA") should be completed in order to refine priorities for further work on the Crypto deposit and is not only warranted but recommended.

Nevertheless, Phase One work is expected to include exploration for resource expansion through drilling of approximately 20,000m of core drilling, possibly including some reverse circulation drilling, but budgeting considers only core. Further drilling at Crypto should focus on the following objectives:

- the expansion of existing resources by drilling open-ended extensions thereof,
- the identification of new zones of mineralization away from existing resources but in similar stratigraphic settings, particularly in the region between the existing resources and skarn-type copper-zinc-molybdenum mineralization encountered in historic drill hole CC-43 located some 650m to the east, and
- exploration drilling aimed at testing ancillary silver-zinc-lead and molybdenum targets elsewhere on the property.

In addition, metallurgical testwork is justified to optimize reported recoveries but the magnitude of the metallurgical studies in Phase One will be dictated by the results of the PEA. The preliminary metallurgical testwork completed in 2009 provided an indication of the basic recoverability of zinc, copper, and indium from the Crypto deposit. Continued testwork should build on these results and should be designed to optimize recoveries and identify costs and concentrate values but completed in such a fashion that it could be used in prefeasibility and feasibility studies. A dedicated program of core drilling will be required to provide material for testing and should focus on sampling a variety of mineralization styles across the resource base; of the \$1.575 million recommended for metallurgy in Table 21.1, approximately \$750,000 is for drilling. Testwork should include studies of mineralogical characterization, grinding optimization and work index, flotation optimization (including that of secondary minerals), regrind optimization, column flotation (cleaners) evaluation, thickening, filtering, and, if flowsheet complexities are identified, pilot plant studies.

An approximate budget (US\$) for a Phase One program is given in Table 21.1.



Table 21.1 Phase One Recommendations and Associated Costs

Task	Estimated Cost
Preliminary Economic Assessment	\$ 100,000
Exploration Drilling	\$ 3,022,000
Analytical	\$ 233,000
Metallurgy (including drilling)	\$ 1,575,000
Engineering and Resource Estimation	\$ 150,000
Personnel	\$ 833,000
Camp and other Site Costs	\$ 487,000
Subtotal	\$ 6,400,000
10% contingency	\$ 640,000
Budget Amount	\$ 7,040,000

21.2 Phase Two Work Program

Should the results of the Phase One program be positive, then a Phase Two program could include underground bulk sampling, continued metallurgical optimization, drilling, and advanced engineering studies as well as environmental work.

Environmental baseline studies would be warranted upon receipt of the PEA demonstrating economic viability, particularly since disturbances from historical mining and exploration activities pre-dating Lithic's involvement are present on the property. Some of these baseline studies should be initiated in Phase One if the PEA demonstrates Crypto to be economic. Hydrologic investigations, most likely involving the drilling of a number of holes as well as the testing and monitoring of existing water wells, are needed for general project permitting purposes as well as to identify supplemental water sources.

The budget for all this work, which would form the basis of at least a pre-feasibility study, could be in the order of US\$20 million.



22.0 REFERENCES

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23.0 DATE AND SIGNATURE PAGE

Effective Date of report:

December 23 2009

The data on which the contained resource estimates are based was current as of the Effective Date.

Completion Date of report:

December 23 2009

“Paul Tietz”

Paul Tietz, C. P. G.

Date Signed:

December 23 2009

“Steve Ristorcelli”

Steven Ristorcelli, C. P. G.

Date Signed:

December 23 2009

“Ken Major”

Ken Major, P.Eng.

Date Signed:

December 23 2009

“Giles Peatfield”

Giles R. Peatfield, Ph.D., P.Eng.

Date Signed:

December 23 2009



24.0 CERTIFICATE OF AUTHORS

I, Paul Tietz, C. P. G., do hereby certify that I am currently employed as Senior Geologist for Mine Development Associates, Inc. located at 210 South Rock Blvd., Reno, Nevada 89502 and:

1. I graduated with a Bachelor of Science degree in Biology/Geology from the University of Rochester in 1977, a Master of Science degree in Geology from the University of North Carolina, Chapel Hill in 1981, and a Master of Science degree in Geological Engineering from the University of Nevada, Reno in 2004.
2. I am a Certified Professional Geologist (#11004) with the American Institute of Professional Geologists.
3. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101. I am independent of the Issuer applying all of the tests in section 1.5 of National Instrument 43-101.
4. I am jointly responsible for all sections of this technical report titled Technical Report on the Crypto Zinc Project, Juab County, Utah for Lithic Resources Ltd. dated December 23, 2009 (“Technical Report”) except for Section 14.3 and Section 16.0.. I visited the project March 26, 2008, and again June 9 through June 13, 2008.
5. I have not had prior involvement with the property that is the subject of this Technical Report.
6. As of the date of the certificate, to the best of my knowledge, information and belief, the technical report contains the necessary technical information to make the technical report not misleading.
7. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated December 23 2009.

“Paul Tietz”

Paul Tietz

Paul Tietz

Print Name of Qualified Person



AUTHORS' CERTIFICATES

I, Steven Ristorcelli, C. P. G., do hereby certify that I am currently employed as Principal Geologist by Mine Development Associates, Inc., 210 South Rock Blvd., Reno, Nevada 89502 and:

1. I graduated with a Bachelor of Science degree in Geology from Colorado State University in 1977 and a Master of Science degree in Geology from the University of New Mexico in 1980. I have worked as a geologist for a total of 32 years since my graduation from undergraduate university.
2. I am a Registered Professional Geologist in the states of California (#3964) and Wyoming (#153) and a Certified Professional Geologist (#10257) with the American Institute of Professional Geologists.
3. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
4. I am jointly responsible for all sections of this technical report titled Technical Report on the Crypto Zinc Project, Juab County, Utah for Lithic Resources Ltd. dated December 23, 2009 ("Technical Report") except for Section 14.3 and Section 16.016.2.
5. I have not had prior involvement with the property that is the subject of the Technical Report. I visited the property on April 6, 2009.
6. As of the date of the certificate, to the best of my knowledge, information and belief, the technical report contains the necessary technical information to make the technical report not misleading.
7. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated December 23, 2009.

"Steve Ristorcelli"

Steven Ristorcelli
Print Name of Qualified Person



AUTHORS' CERTIFICATES

I, Christiaan F. Staargaard, do hereby certify that I am President and Chief Executive Officer of Lithic Resources Ltd., 912-510 West Hastings St., Vancouver, B.C., Canada V6B 1L8 and:

1. I graduated with a Bachelor of Science degree in Geological Sciences from The Pennsylvania State University in 1977 and a Master of Science degree in Geochemistry from Queen's University in Kingston, Ontario in 1981. I have worked as a geologist in the field of mineral exploration since 1979 for a total of 30 years.
2. I am a Registered Professional Geoscientist (#20008) in the Province of British Columbia.
3. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. However, I am not independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
4. I am jointly responsible for the sections of this technical report titled Technical Report on the Crypto Zinc Project, Juab County, Utah for Lithic Resources Ltd. dated December 23, 2009 ("Technical Report") other than Sections 14, 16 and 17.
5. I had no involvement with the property that is the subject of the Technical Report before it was acquired by Lithic Resources in June 2005. I have visited the property on numerous occasions since then.
6. As of the date of the certificate, to the best of my knowledge, information and belief, the technical report contains the necessary technical information to make the technical report not misleading.
7. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated **December 23, 2009**.

"C.F. Staargaard"

C.F. Staargaard

Print Name of Qualified Person



AUTHORS' CERTIFICATES

I, Kenneth W Major, do hereby certify that I am employed as a Mineral Processing Consultant for KWM Consulting Inc., 12576 – 206 St., Maple Ridge, BC, Canada, V2X 3M2.

1. I graduated with a Bachelor of Engineering, Metallurgical degree from McGill University in Montreal in 1976. I have worked as a metallurgist in the field of mineral processing for a total of 33 years since my graduation from university.
2. I am a Registered Professional Engineer in the Province of British Columbia (#13149).
3. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
4. I am responsible for the Metallurgical and Mineral Processing Section 16.016.2 of this technical report titled Technical Report on the Crypto Zinc Project, Juab County, Utah for Lithic Resources Ltd. dated December 23, 2009 (“Technical Report”).
5. I have not had prior involvement with the property that is the subject of the Technical Report.
6. As of the date of the certificate, to the best of my knowledge, information and belief, the technical report contains the necessary technical information to make the technical report not misleading.
7. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. I consent to the filing of the Technical Report with any securities regulatory authority, stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated December 23, 2009.

“Ken Major ”

Ken Major

Ken Major

Print Name of Qualified Person



AUTHORS' CERTIFICATES

I, Giles R. Peatfield, P.Eng., do hereby certify that:

1. I am currently a self-employed Consulting Geologist with an office at 104-325 Howe Street, Vancouver, British Columbia, V6C 1Z7.
2. I am a Member of the Association of Professional Engineers and Geoscientists of British Columbia, and of the Geological Association of Canada, of the Canadian Institute of Mining and Metallurgy, of the Association of Applied Geochemists, and of the Society of Economic Geologists.
3. I have worked as a geologist for over forty years since graduation; as a graduate student, as an employee of a major mining company and for over 20 years as an independent consultant.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I am responsible for the preparation of the report included as Appendix B and am jointly responsible for the preparation of Section 14.3 of the technical report titled **Technical Report on the Crypto Zinc Project, Juab County, Utah for Lithic Resources Ltd.**, dated December 23, 2009 (the "Technical Report") relating to the Crypto project. I have not visited the property.
6. I have not been intimately involved with the planning and execution of exploration on the subject property, but have reviewed the assay data, with regard to quality control issues, as well as making recommendations regarding assay procedures.
7. I have not had prior involvement with the property area that is the subject of the Technical Report, prior to Lithic Resources assuming control of the project.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101. For greater clarity, I do not hold, nor do I expect to receive, any securities or any other interest in any corporate entity, private or public, with interests in the properties that are the subject of this report or in the properties themselves, nor do I have any business relationship with any such entity apart from a professional consulting relationship with the property owner, nor do I to the best of my knowledge hold any securities in any corporate entity with property within a two (2) kilometre distance of any of the subject property.
10. I have read National Instrument 43-101 and Form 43-101F, and attest that the Technical Report has been prepared in compliance with that instrument and form.

Dated December 23 2009.

"Giles R. Peatfield "

Giles R. Peatfield, Ph.D., P.Eng.

Giles R. Peatfield

Print Name of Qualified Person

Appendix A

Crypto Project Mining Claims and Lease as of September 2, 2009

Crypto Project Mining Claims and Lease as of September 2, 2009

(Modified from tabulation by Gatten, 2009)

Table A.1. Unpatented Mining Claims

Name	Number	Acres	Registered Owner	BLM Maintenance Due Date - Paid
Crypto Zn 150	359567	8.26	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 151	359568	13.09	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 154	359571	16.41	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 155	359572	4.13	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 156	359573	7.63	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 157	359574	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 158	359575	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 159	359576	5.74	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 160	359577	6.89	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 164	359581	12.4	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 165	359582	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 166	359583	12.4	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 167	359584	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 168	359585	12.4	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 169	359586	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 170	359587	6.2	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 171	359588	17.22	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 172	359589	13.77	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 173	359590	10.1	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 174	359591	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 175	359592	15.15	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 176	359593	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 177	359594	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 178	359595	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 186	359603	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 187	359604	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 188	359605	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 189	359606	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 190	359607	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 191	359608	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 192	359609	10.33	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 193	359610	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 194	359611	17.22	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 195	359612	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 196	359613	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 197	359614	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 198	359615	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 199	359616	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 200	359617	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto Zn 201	359618	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
Crypto 1	378462	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 2	378463	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 3	378464	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009

Name	Number	Acres	Registered Owner	BLM Maintenance Due Date - Paid
Crypto 4	378465	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 5	378466	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 6	378467	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 7	378468	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 8	378469	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 9	378470	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 10	378471	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 11	378472	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 12	378473	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 13	378474	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 14	378475	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 15	378476	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 16	378477	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 17	378478	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 18	378479	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 19	378480	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 20	378481	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 21	378482	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 22	378483	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 23	378484	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 24	378485	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 25	378486	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 26	378487	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 27	378488	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 28	378489	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 29	378490	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 30	378491	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 31	378492	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 32	378493	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 33	378494	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 34	378495	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 35	378496	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 36	378497	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 37	378498	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 38	378499	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 39	378500	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 40	378501	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 41	378502	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 42	378503	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 43	378504	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 44	378505	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 45	378506	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 46	378507	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 47	378508	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 48	378509	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 49	378510	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 50	378511	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 51	378512	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009

Name	Number	Acres	Registered Owner	BLM Maintenance Due Date - Paid
Crypto 52	378513	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 53	378514	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 54	378515	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 55	378516	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 56	378517	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 57	378518	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 58	378519	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 59	378520	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 60	378521	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 61	378522	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 62	378523	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
Crypto 63	378524	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 9	404217	10.33	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 10	404218	10.33	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 11	386147	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 12	386148	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 13	386149	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 14	386150	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 15	386151	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 16	386152	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 21	404219	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 22	386158	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 23	386159	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 24	386160	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 25	386161	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 26	386162	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 27	386163	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 28	386164	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 29	386165	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 30	386166	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 31	386167	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 32	386168	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 33	386169	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 34	386170	20.66	LITHIC RESOURCES LTD	SEPT. 1, 2009
PONY 35	390306	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 36	390307	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 37	390308	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 38	390309	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 39	390310	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 40	390311	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 41	390312	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 42	390313	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 43	390314	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 44	390315	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 45	390316	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 46	390317	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 47	390318	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 48	391816	20.66	N.P.R. (US), INC.	SEPT. 1, 2009

Name	Number	Acres	Registered Owner	BLM Maintenance Due Date - Paid
PONY 49	390319	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 50	391817	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 51	391818	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 52	391819	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 53	391820	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 54	391821	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 55	390320	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 56	390321	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 57	390322	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 58	390323	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 59	390324	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 60	390325	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 61	390326	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 62	390327	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 63	390328	6.5	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 64	390329	5.0	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 100	404220	20.66	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 101	404221	10.33	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 102	404222	5.15	N.P.R. (US), INC.	SEPT. 1, 2009
PONY 103	404223	5.15	N.P.R. (US), INC.	SEPT. 1, 2009

Note: Crypto Zn 155 and Crypto Zn 159 are not visible on Figure 4.3 because they are overlapped by the Ogden, Last Chance, and Remnant patented claims.

Table A.2 Patented Mining Claims

Name	Number	Acres	N.P.R. (US), Inc. % Ownership
Comstock	72037	17.421	100.000
Early Harvest	72037	20.081	100.000
Victor	72037	20.475	100.000
Last Chance	24027	17.06	100.000
Remnant	22719	10.63	100.000
Utah	22018	17.78	100.000
Niger	22191	19.62	100.000
Emma	22994	19.1	66.667
Nevada	24644	15.35	100.000
Mayflower	22109	20.26	83.333
Rubber	21966	6.33	100.000
Ogden	26188	16.25	41.667
Read Iron	22720	20.66	66.667
Galenia	22192	20.66	100.000
Meteor	33045	19.319	100.000
Bonny Doon	33045	17.959	100.000
Last Chance No. 2		7.35	12.500
Black Dragon	22850	19.69	100.000

Note: Acreage for claims not held 100% by NPR is the total claim acreage, not the adjusted acreage based on NPR's percentage of ownership.

Table A.3 Utah Mineral Lease

Lease Number	Acres	Ownership
ML 48312	611.3	N.P.R. (US), Inc.

Appendix B

Peatfield QA/QC Report

Giles R. Peatfield, Ph.D., P.Eng.

Consulting Geologist
 104-325 Howe Street
 Vancouver, B.C. V6C 1Z7
 Telephone: (604) 685-3441
 Telecopier: (604) 681-9855
 email:
 grpeatfield@telus.net

MEMORANDUM

Date: 12 February 2009

To: C.F. Staargaard – Lithic Resources Ltd.

From: Giles Peatfield

Re: Summary of QC data – Lithic’s Crypto project drilling – 2007, 2008:

I have summarised the quality control (“QC”) work for the core drilling campaign at Lithic’s Crypto project in Utah, including work in 2007 and in 2008. This includes Lithic’s drilling only; QC data for earlier drilling were not made available to me.

To complete this review, I have used all assay data generated by ALS-Chemex (“Chemex”), on samples submitted to their preparation laboratory in Elko, Nevada and analysed at their full service facility in North Vancouver. The assay data were sent to me directly by Chemex, and have not been passed through Lithic’s hands.

I have considered several types of QC data, as detailed on following pages. The first is a set of standards monitoring data. I have included charts for Lithic’s inserted standards for core drilling in 2007 and 2008. Certified standards were obtained from CDN Resource Laboratories Ltd. (“CDN”) and from Geostats Pty. Ltd. (“Geostats”). The CDN standards were sulphide standards, with certified values for gold, silver, copper, lead and zinc; the Geostats standards were from supergene (oxidised) material and have certified values for, *inter alia*, silver, copper, lead and zinc. Also presented are charts to show the behaviour of the standards assays for cadmium, gallium, germanium and indium, although there are no certified values for these elements. The second data set involves assays for Lithic inserted “blanks”. The third data set involves results of field, laboratory preparation and laboratory duplicate assays, where these are available.

Establishing the sampling and QC protocols for the Crypto project was an evolving process, as field personnel initially had little experience in rigorous procedures. There are still unresolved procedural issues that will be discussed in more depth in the conclusions section of this memorandum.

Note that there are two types of analyses to consider. The first, for lower metal contents, is the ME-MS61 ICP technique (herein “MS61”). The second, for greater concentrations, is the ME-OG62 technique (herein “OG62”). Gold analyses were by the Au-AA23 method (fire assay with an atomic absorption finish). Details of these analytical procedures can be seen on the ALS Laboratory Group website.

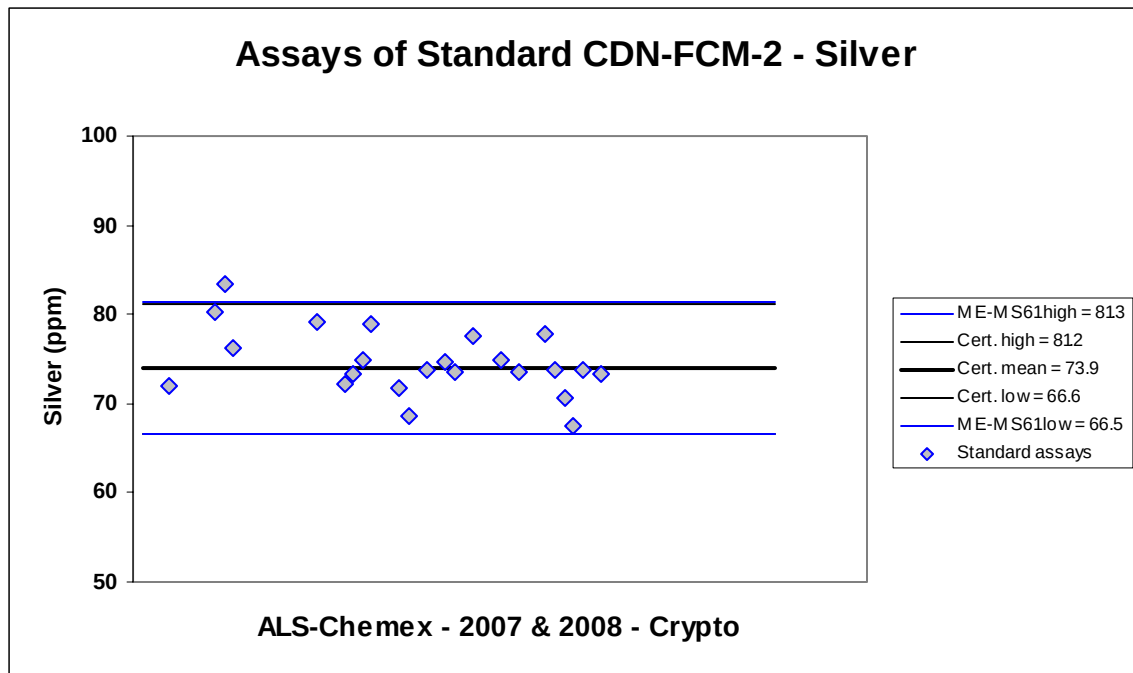
Standards monitoring plots – general comments:

In the preparation of the monitoring charts for standards assays, I have used two sets of limits. The first is that given by the company that prepared and certified the standards. The second is a set designed for the analytical method, based on a formula provided by Chemex, which is in effect $\pm 7\%$ of the mean with a small factor added. In the case of three of the standards used, which were obtained from CDN, there is very little difference between these sets of limits. In the case of the Geostats standards, the certified limits are much more restrictive than the limits calculated for the methods used.

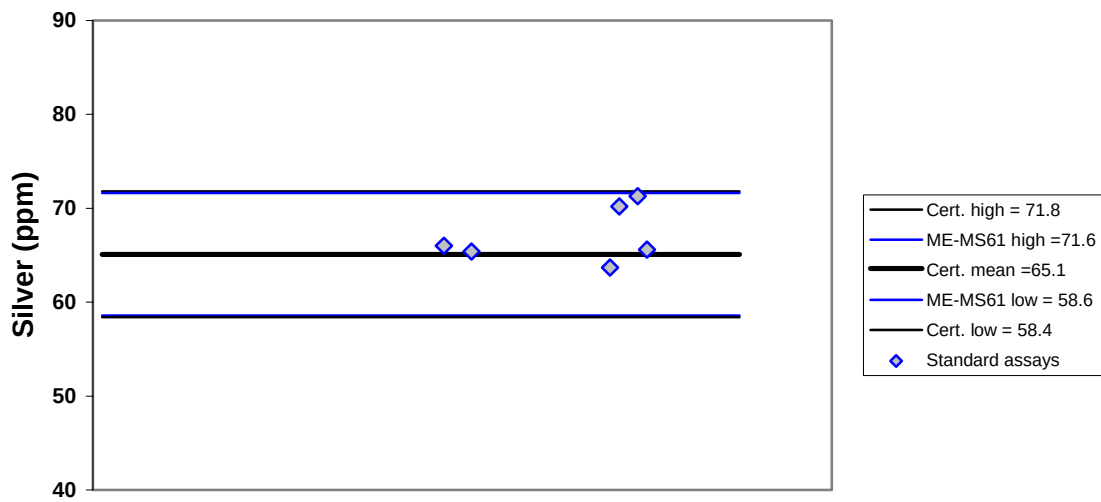
The CDN standards are: CDN-FCM-2 (high sulphide material from Campo Morado, Mexico); CDN-HLLC (high sulphide material from the High Lake deposit, Arctic Canada); and CDN-HLHZ (also high sulphide material from High Lake). The Geostats standards are: GBM396-10 (described as “Low Grade Supergene Pb/Zn ore ex Murchison”) and GBM996-7 (described as “Gossan supergene sulphide ore ex NW QLD.”)

Monitoring plots for certified elements – Lithic inserted standards, 2007 & 2008:

In 2007 and 2008, Lithic used three different CDN standards and two from Geostats, with values tracked for silver, copper, lead and zinc. Monitoring plots for these results follow:

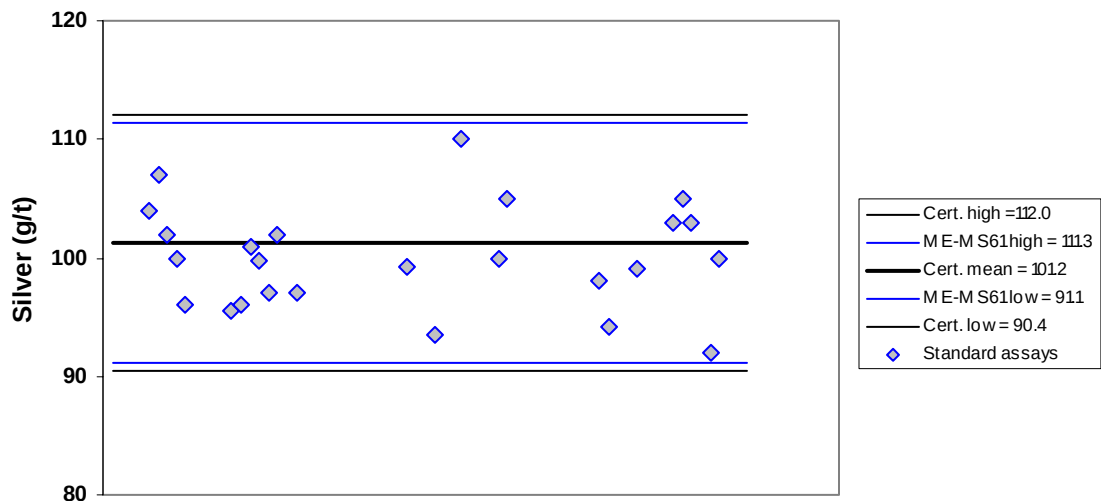


Assays of Standard CDN-HLLC - Silver



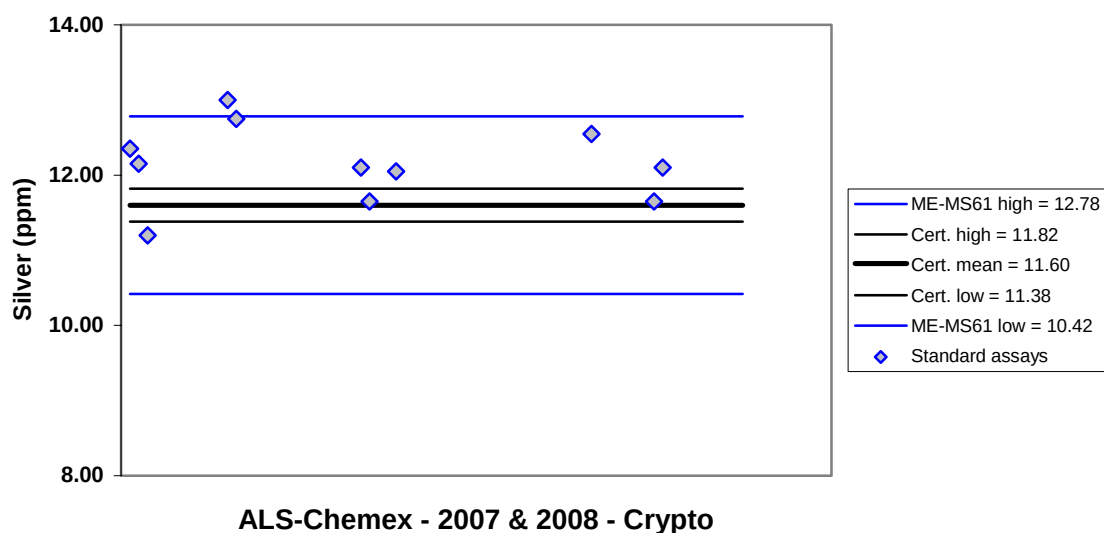
ALS-Chemex - 2007 & 2008 - Crypto

Assays of Standard CDN-HLHZ - Silver

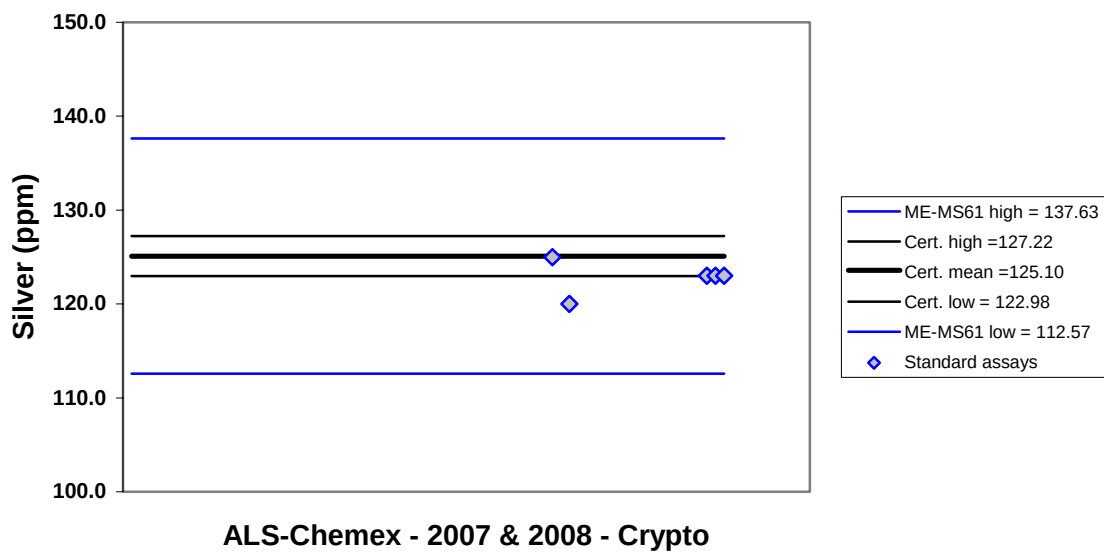


ALS-Chemex - 2007 & 2008- Crypto

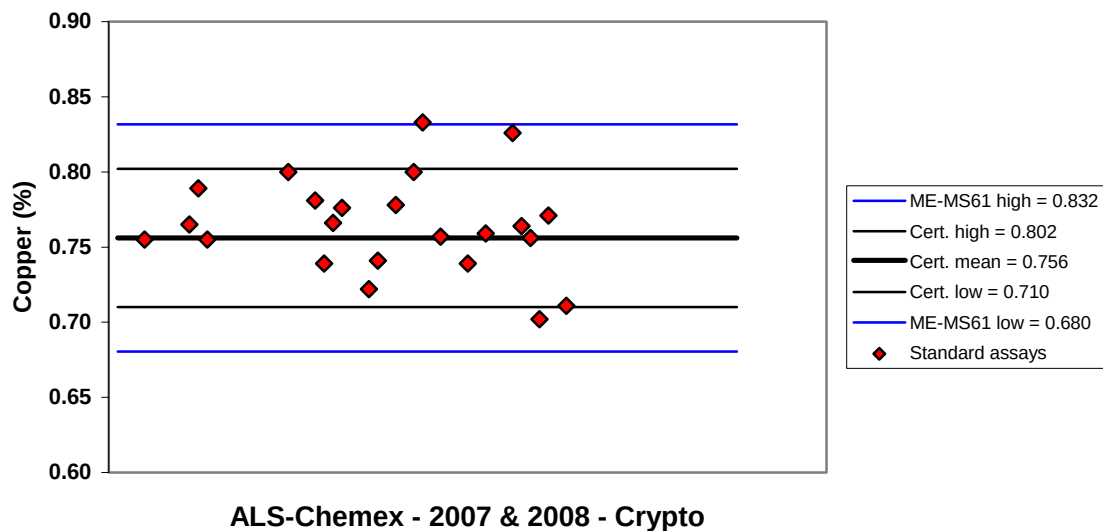
Assays of Standard GBM396-10 - Silver



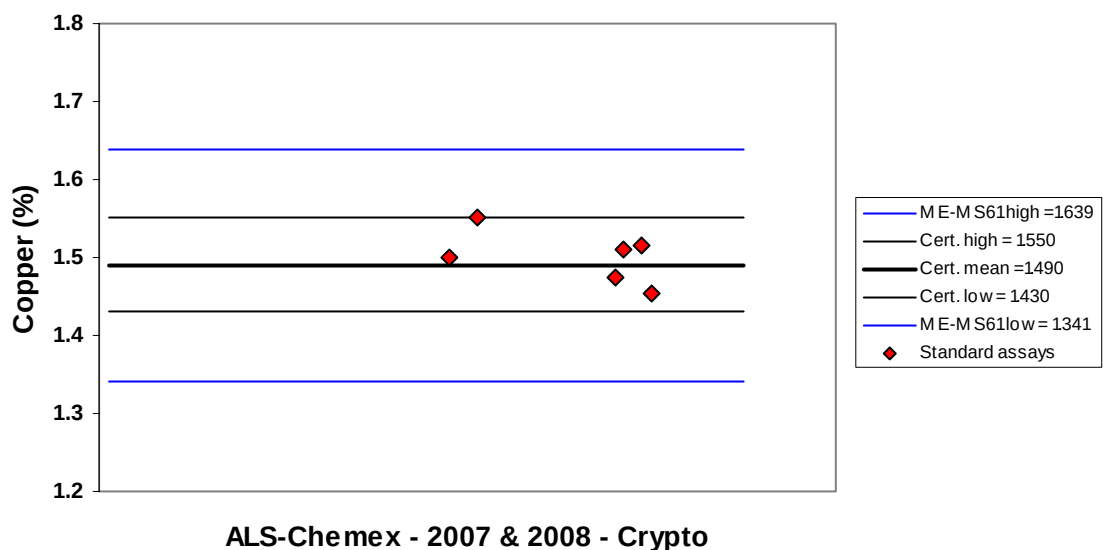
Assays of Standard GBM996-7 - Silver



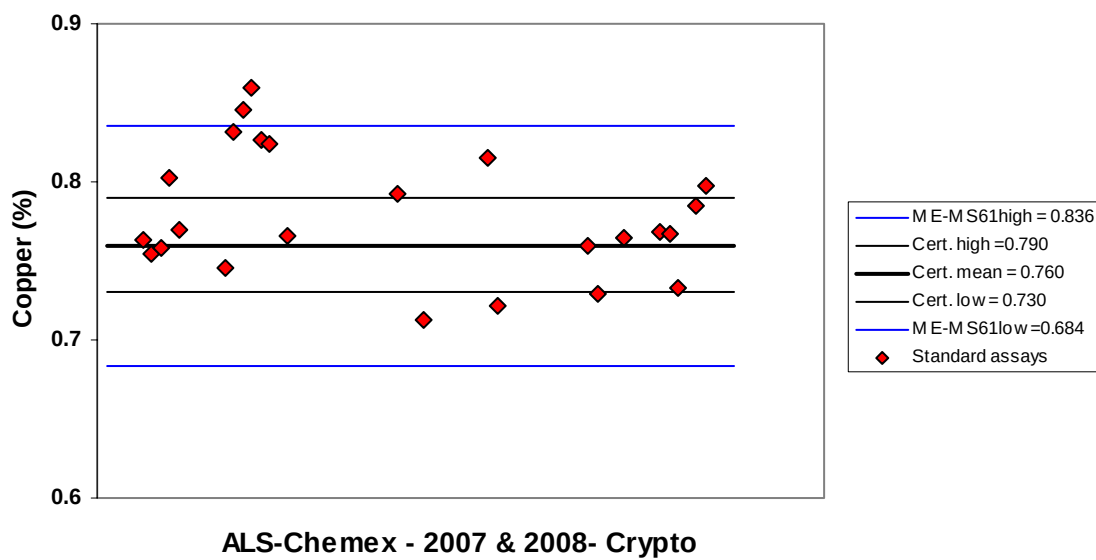
Assays of Standard CDN-FCM-2 - Copper



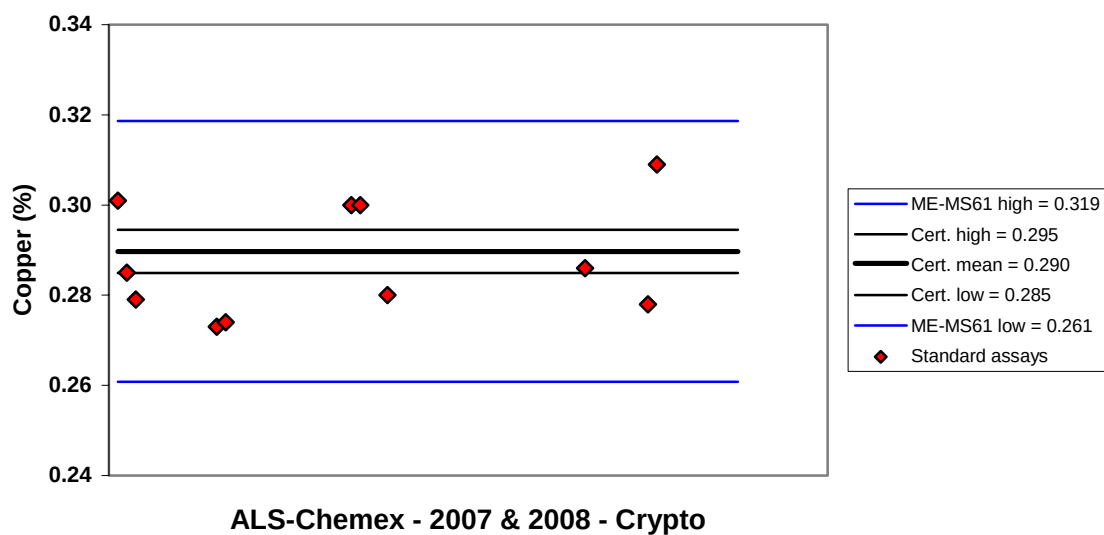
Assays of Standard CDN-HLLC - Copper



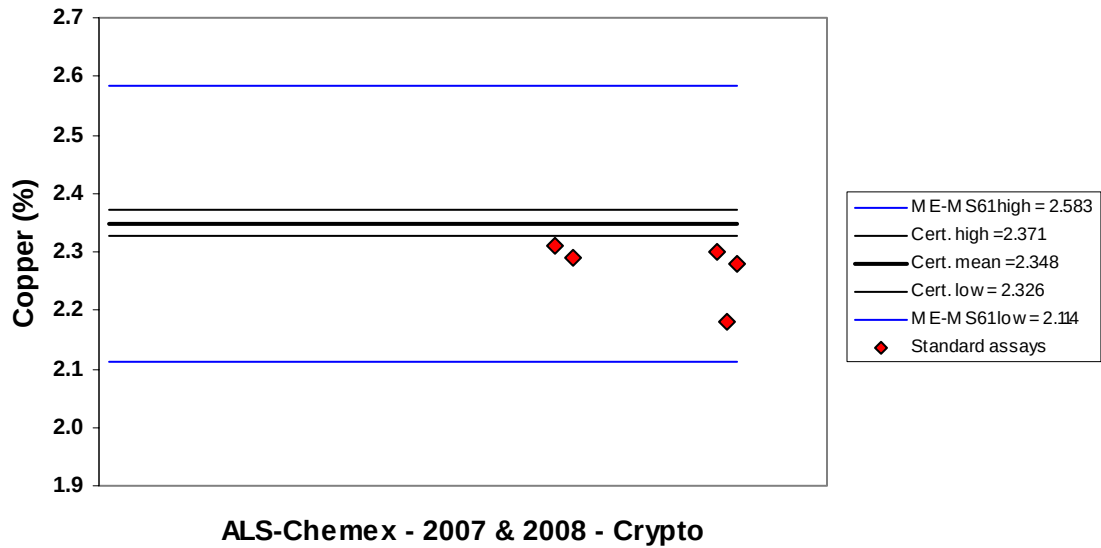
Assays of Standard CDN-HLHZ - Copper



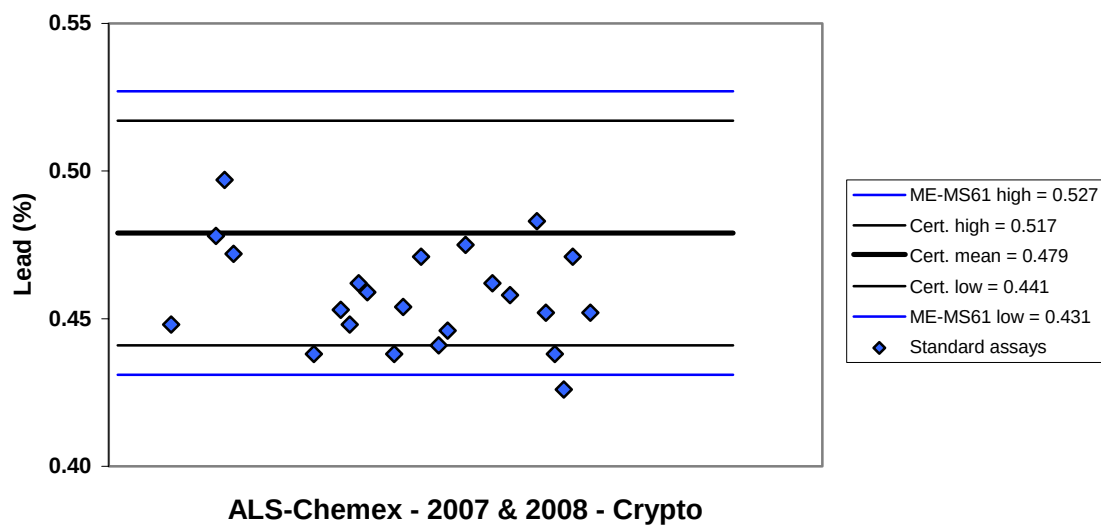
Assays of Standard GBM396-10 - Copper



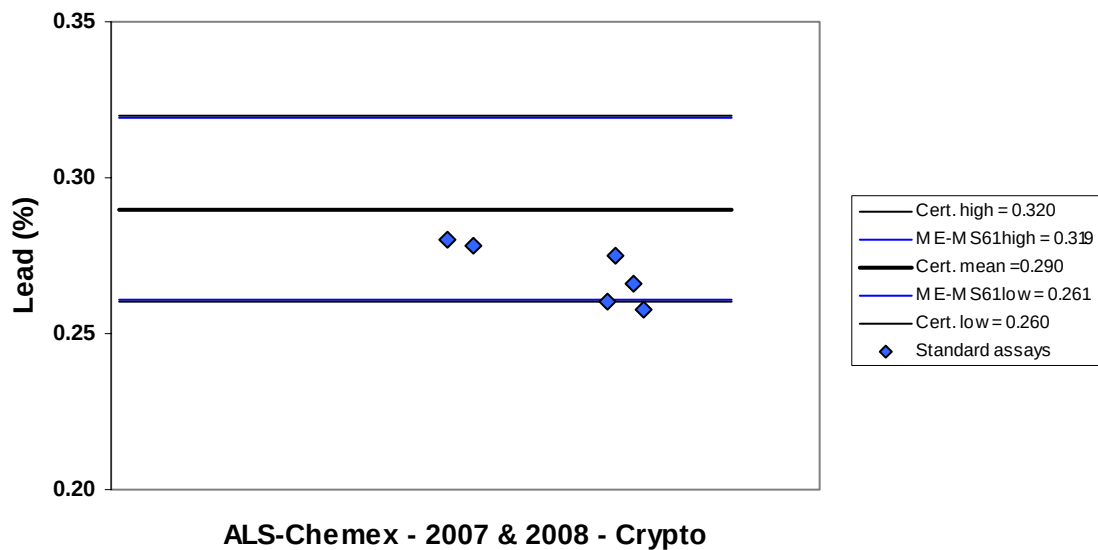
Assays of Standard GBM996-7 - Copper



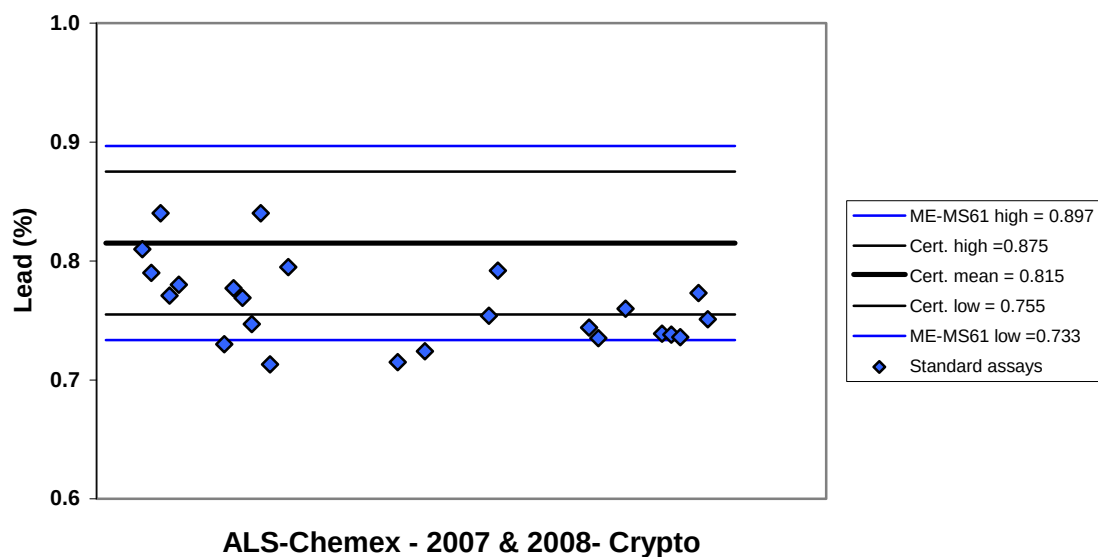
Assays of Standard CDN-FCM-2 - Lead



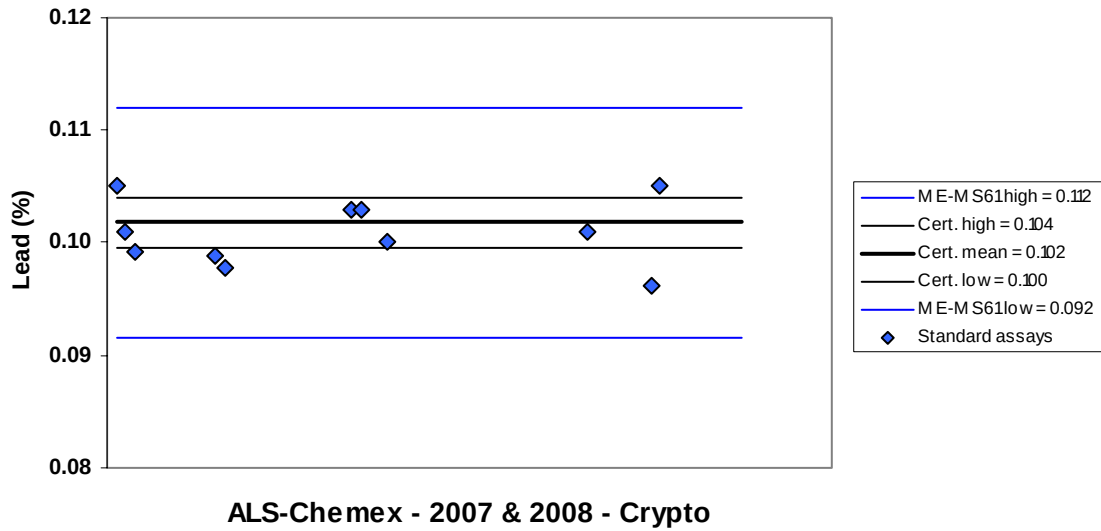
Assays of Standard CDN-HLLC - Lead



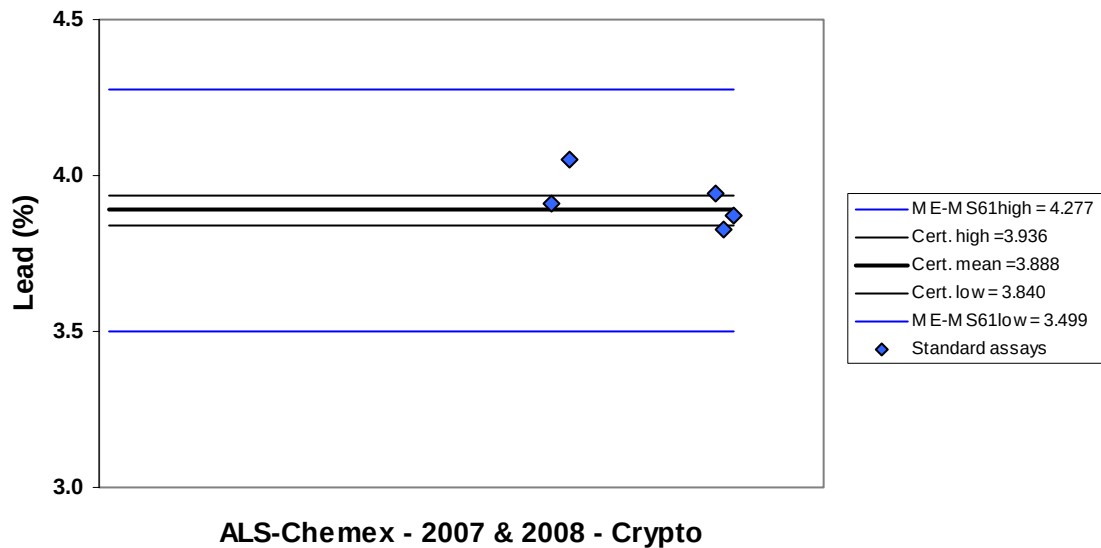
Assays of Standard CDN-HLHZ - Lead



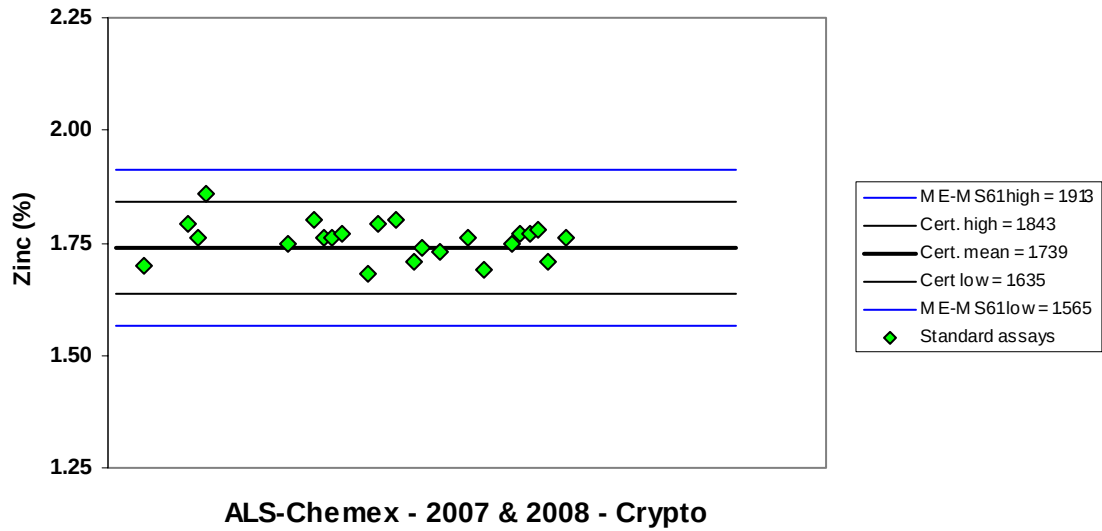
Assays of Standard GBM396-10 - Lead



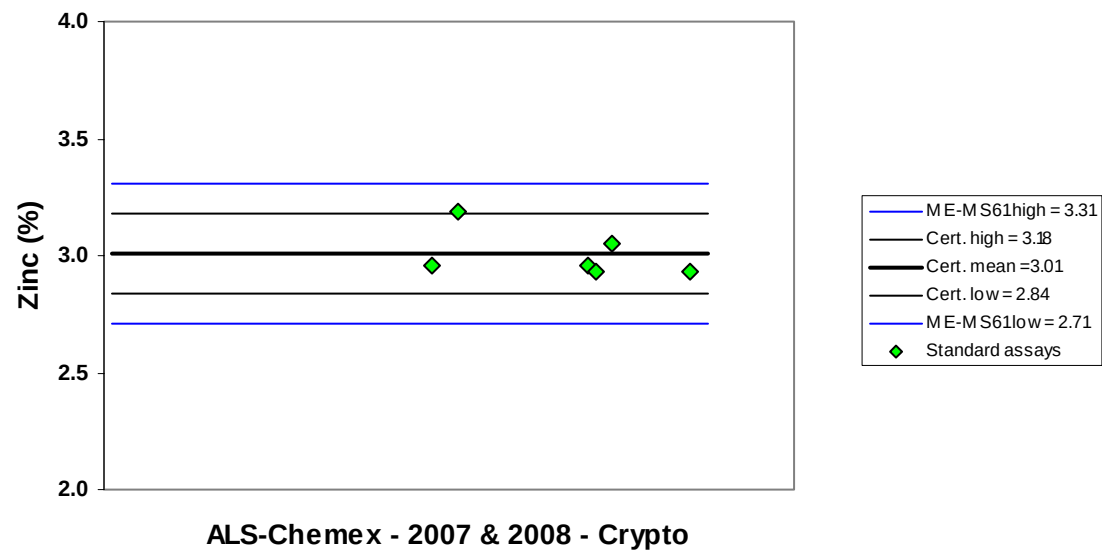
Assays of Standard GBM996-7 - Lead



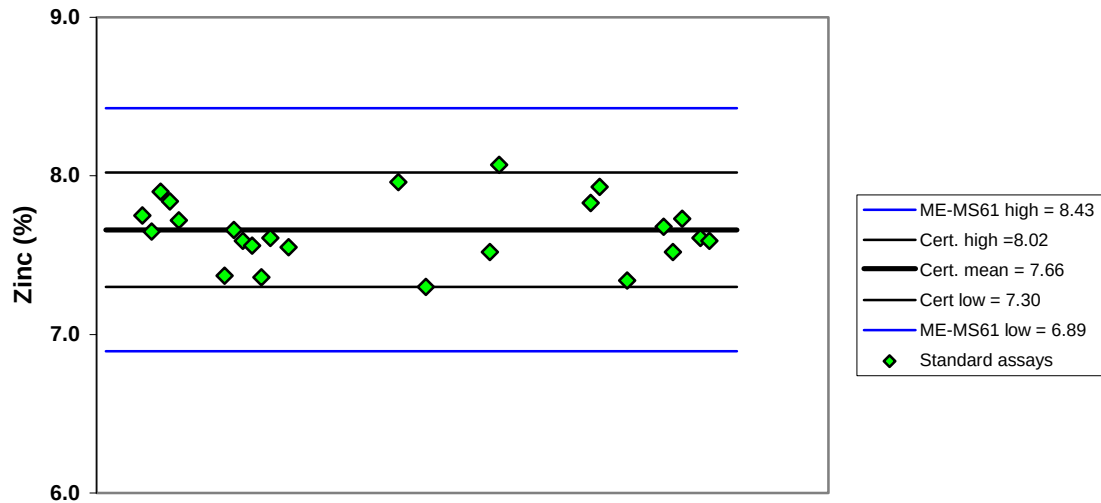
Assays of Standard CDN-FCM-2 - Zinc



Assays of Standard CDN-HLLC - Zinc

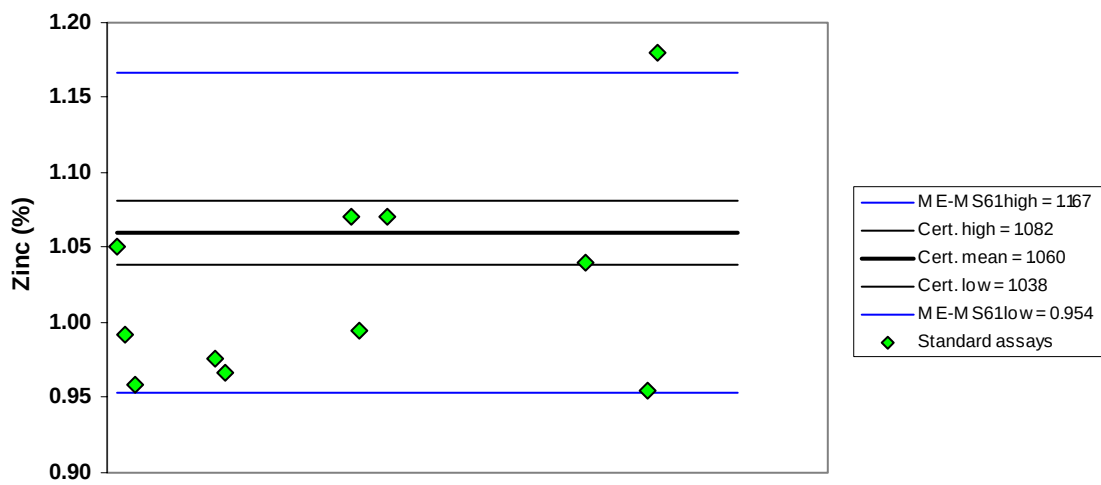


Assays of Standard CDN-HLHZ - Zinc

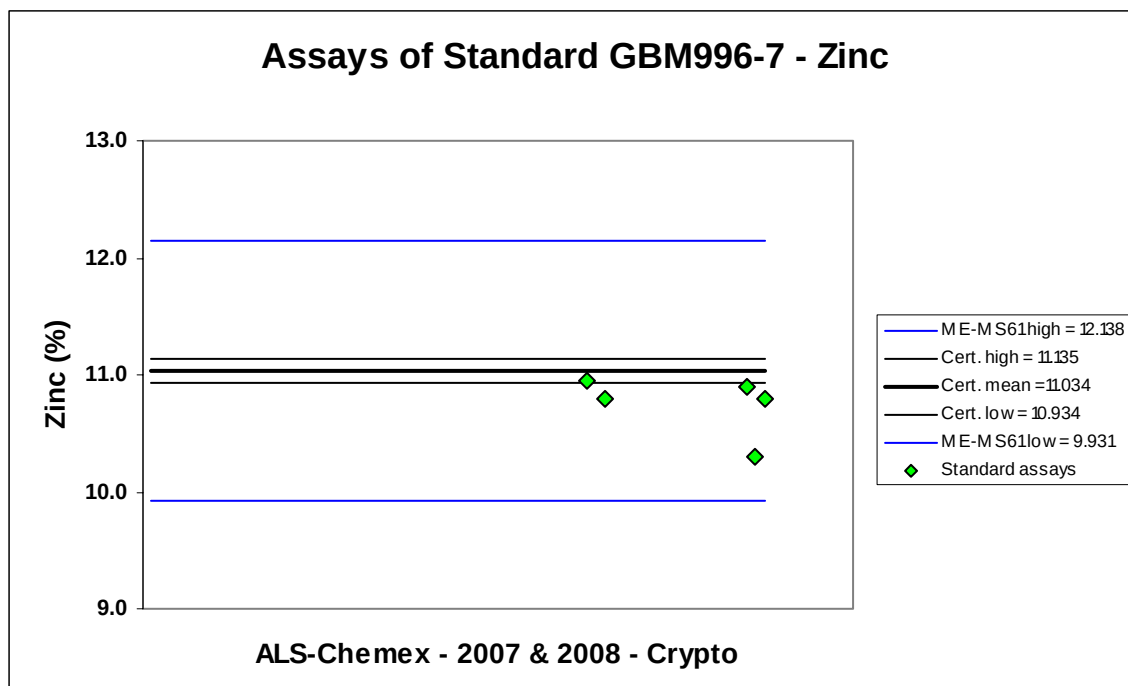


ALS-Chemex - 2007 & 2008- Crypto

Assays of Standard GBM396-10 - Zinc



ALS-Chemex - 2007 & 2008 - Crypto



These plots show that the performance of assays for Lithic inserted standards for the 2007 and 2008 core drilling at Crypto was in general acceptable. A very small number of results lie outside acceptable limits, but not far enough outside to be of serious concern.

Monitoring plots for un-certified elements – Lithic inserted standards, 2007 & 2008:

For the 2007 and 2008 drill programs, there are also analyses of the same five standards for four trace elements of interest: cadmium, gallium, germanium and indium.

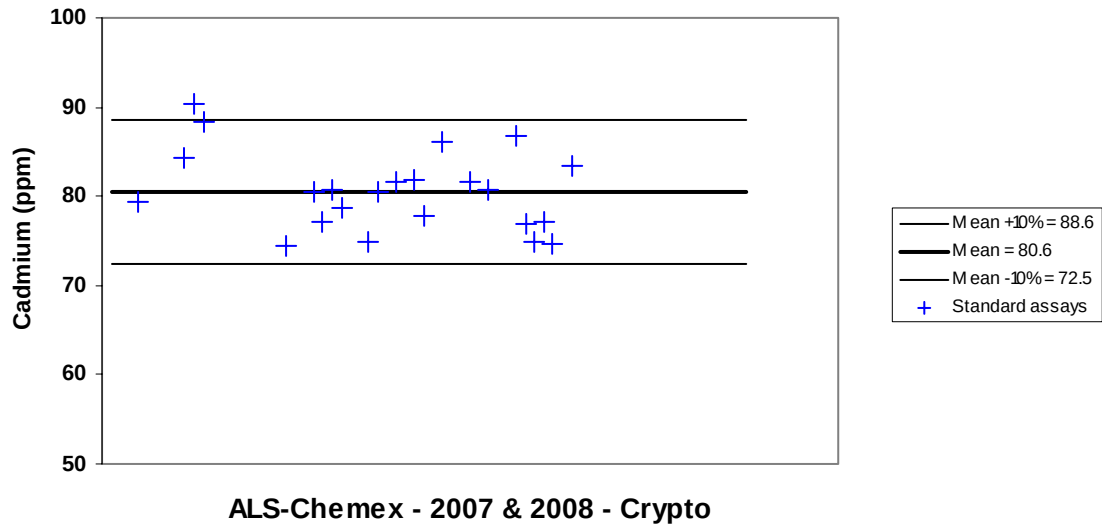
An attempt has been made to show the assay performance for these elements, for the standards in question. The plots on the following pages show the mean $\pm$ 10% values for the total number of analyses for that particular element for each standard.

Clearly, these plots do not speak to accuracy, because there are no certified values to set the accepted levels. Rather, they are a very rough measure of the precision of assays for these elements. The problem is compounded by the fact that there are only a limited number of assays available to calculate the respective means.

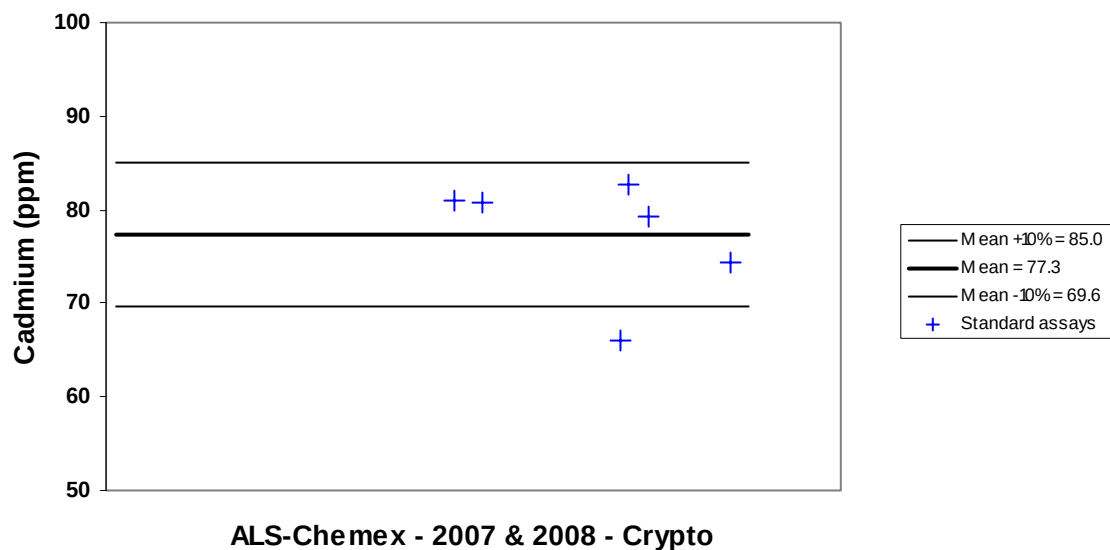
Charts for molybdenum have not been included, as the values in the standards are very low. All five standards have mean values for molybdenum, admittedly in some cases for very few analyses, of less than 100 parts per million. Almost all analyses lie within the $\pm$ 10 percent limits.

There were insufficient data for gold to warrant preparing charts for this metal.

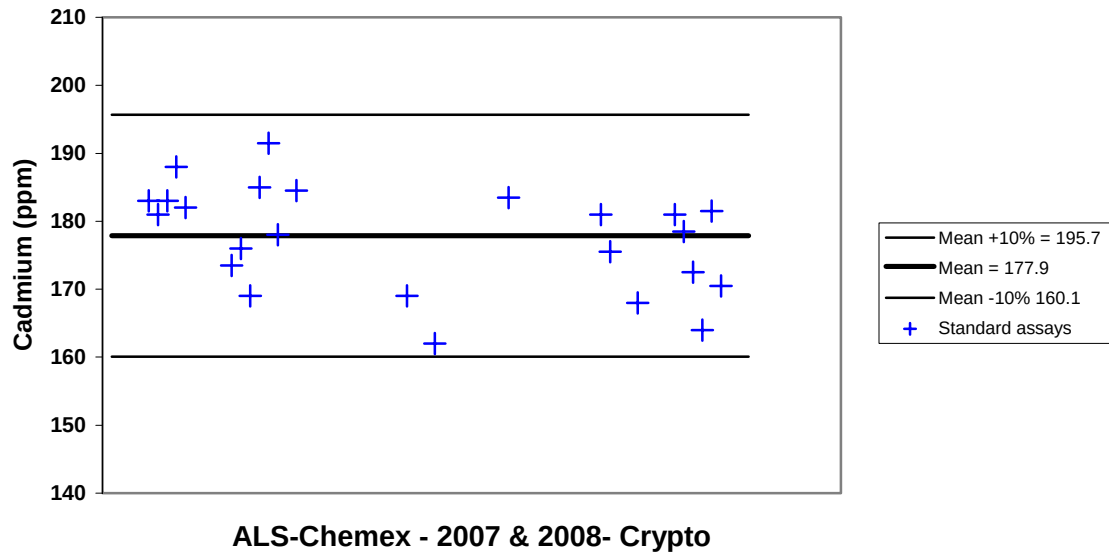
Assays of Standard CDN-FCM-2 - Cadmium



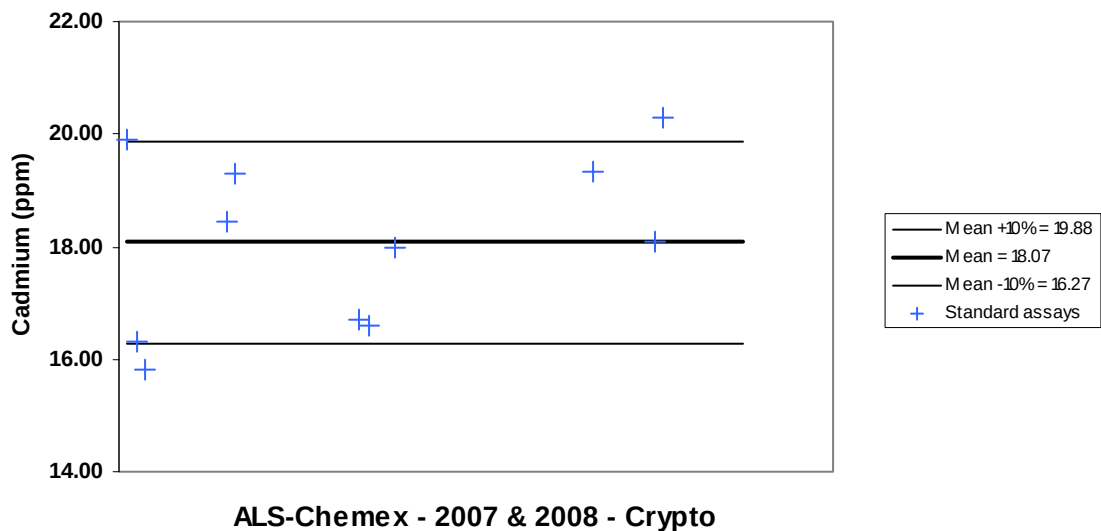
Assays of Standard CDN-HLLC - Cadmium



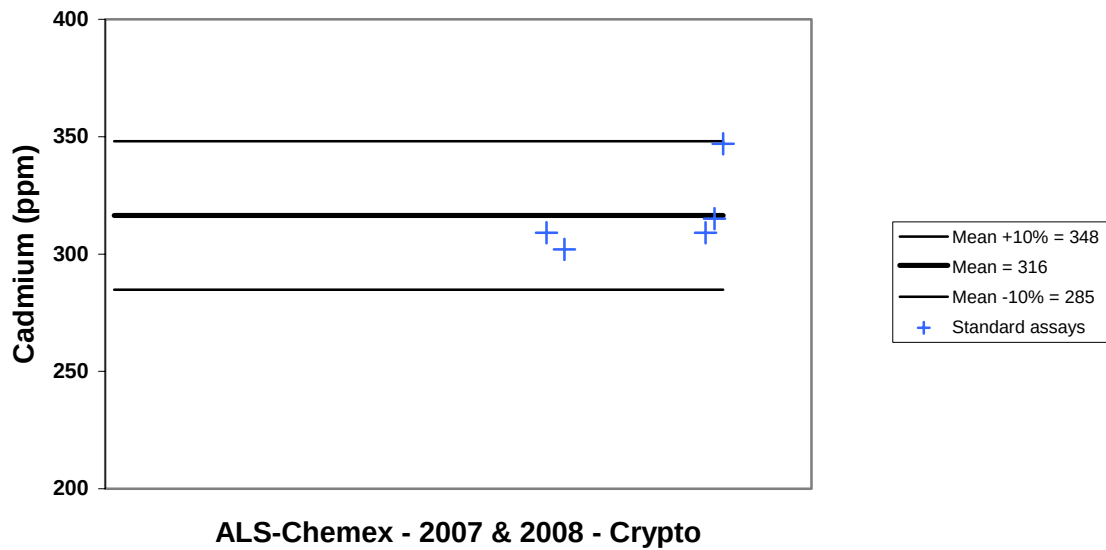
Assays of Standard CDN-HLHZ - Cadmium



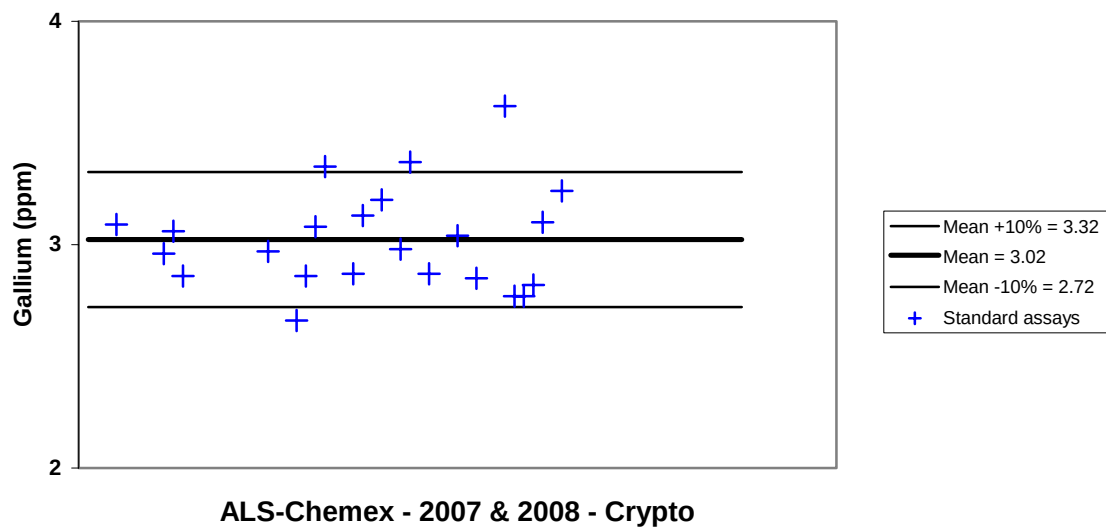
Assays of Standard GBM396-10 - Cadmium



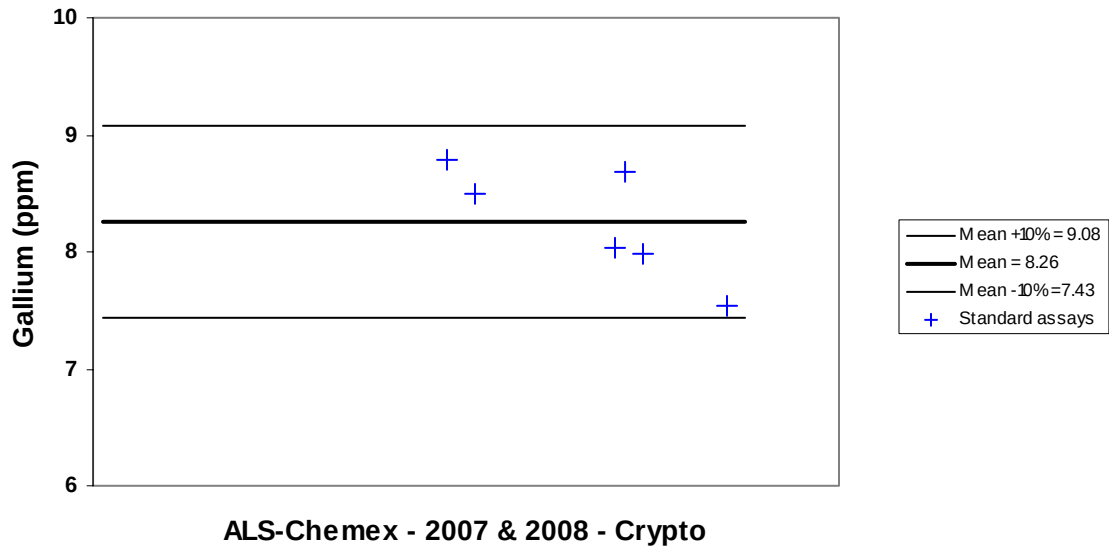
Assays of Standard GBM996-7 - Cadmium



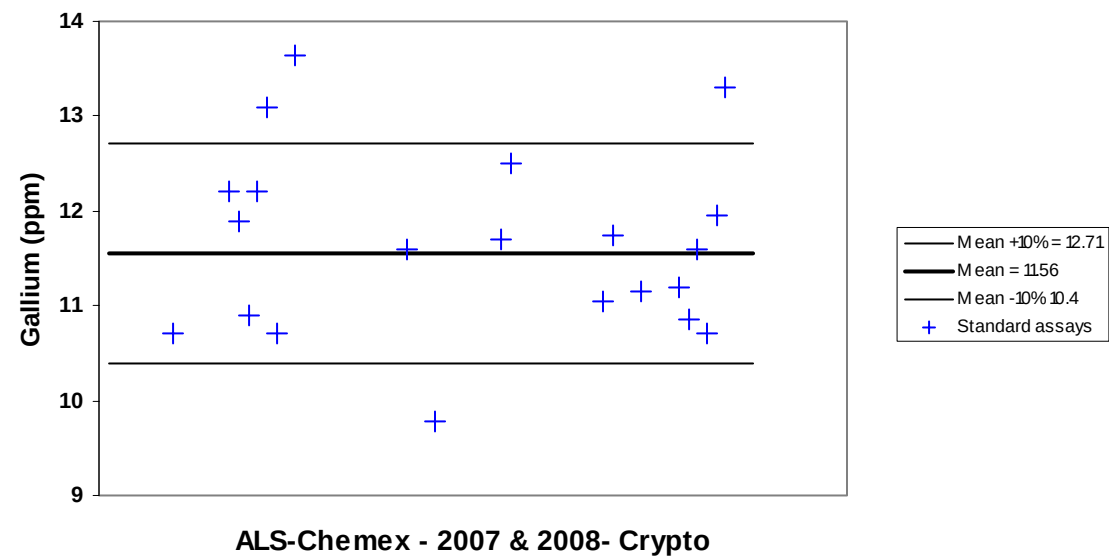
Assays of Standard CDN-FCM-2 - Gallium



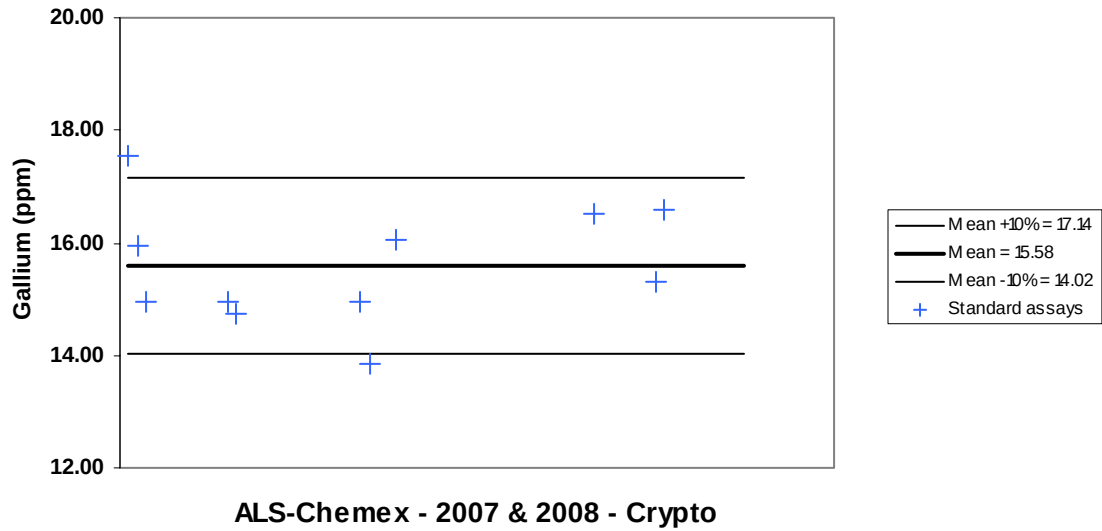
Assays of Standard CDN-HLLC - Gallium



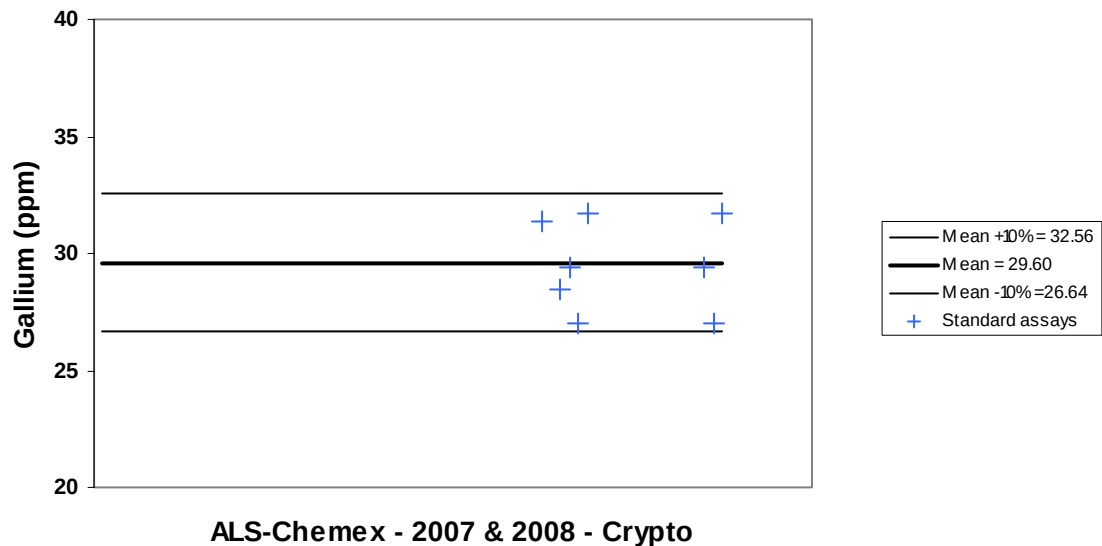
Assays of Standard CDN-HLHZ - Gallium



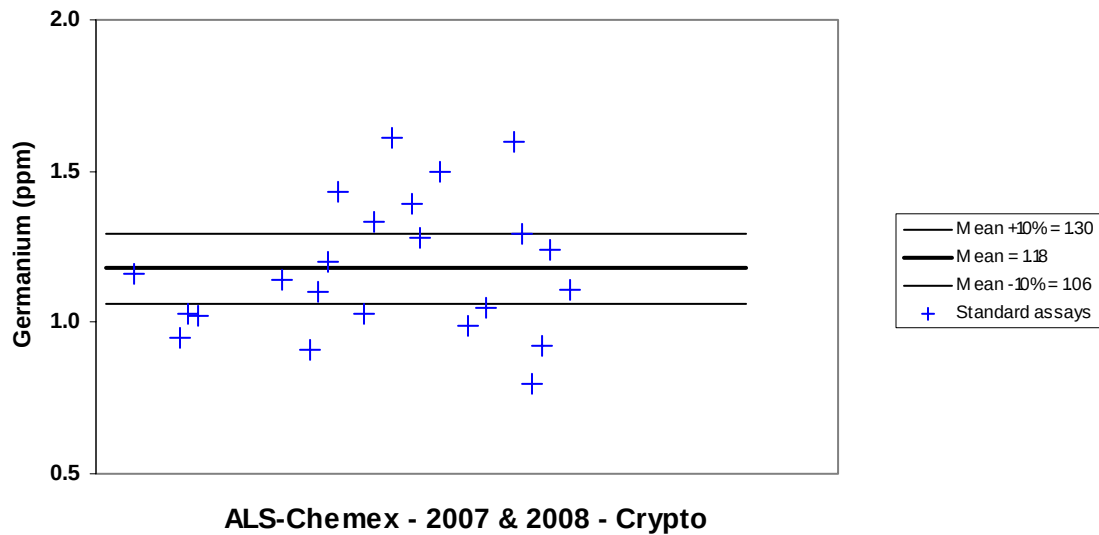
Assays of Standard GBM396-10 - Gallium



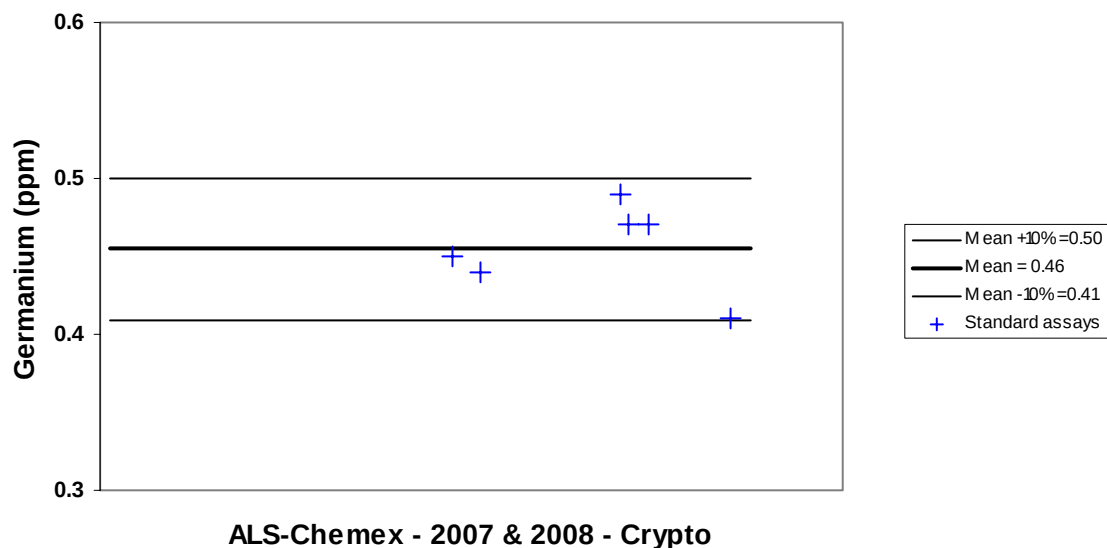
Assays of Standard GBM996-7 - Gallium



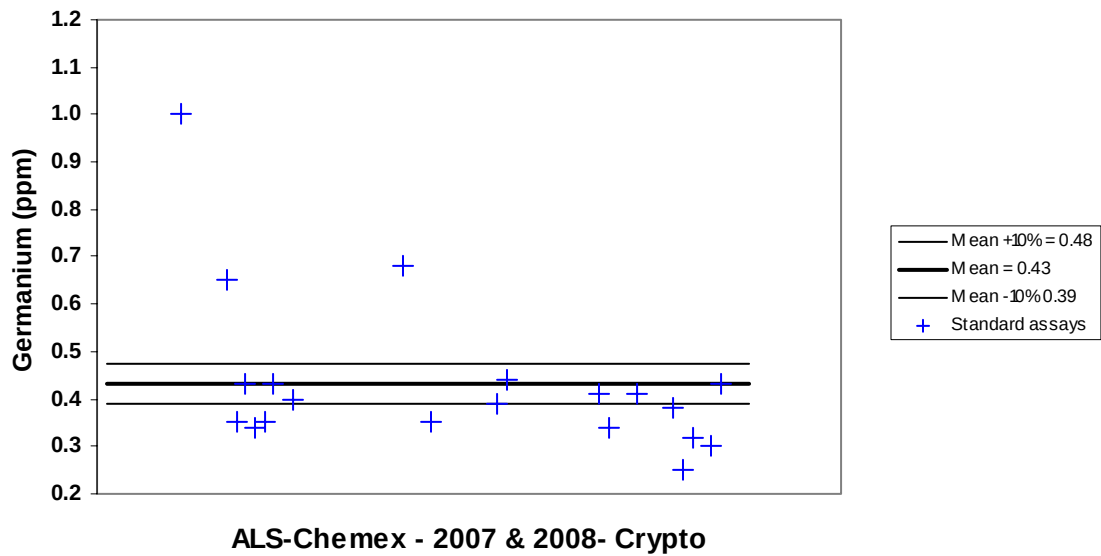
Assays of Standard CDN-FCM-2 - Germanium



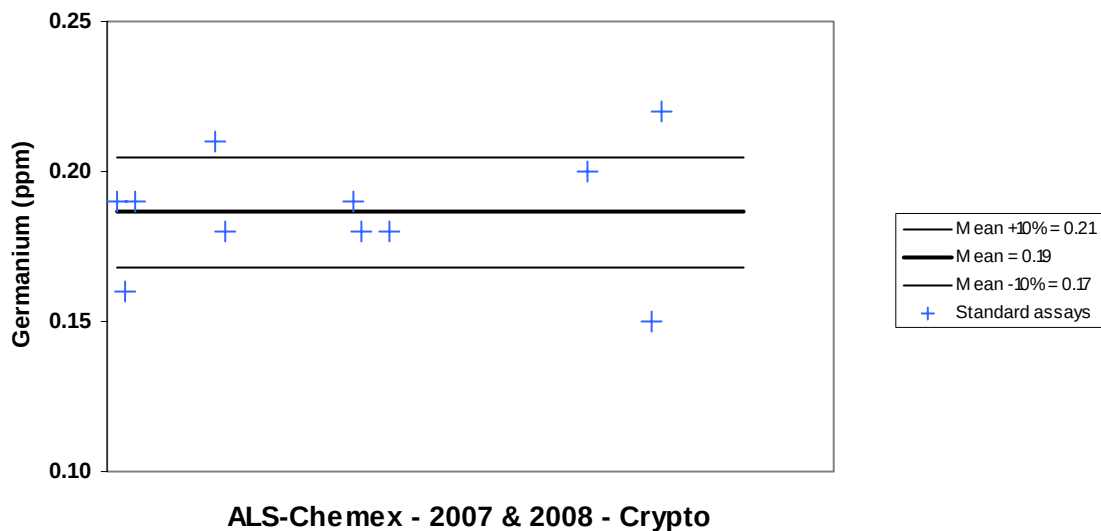
Assays of Standard CDN-HLLC - Germanium



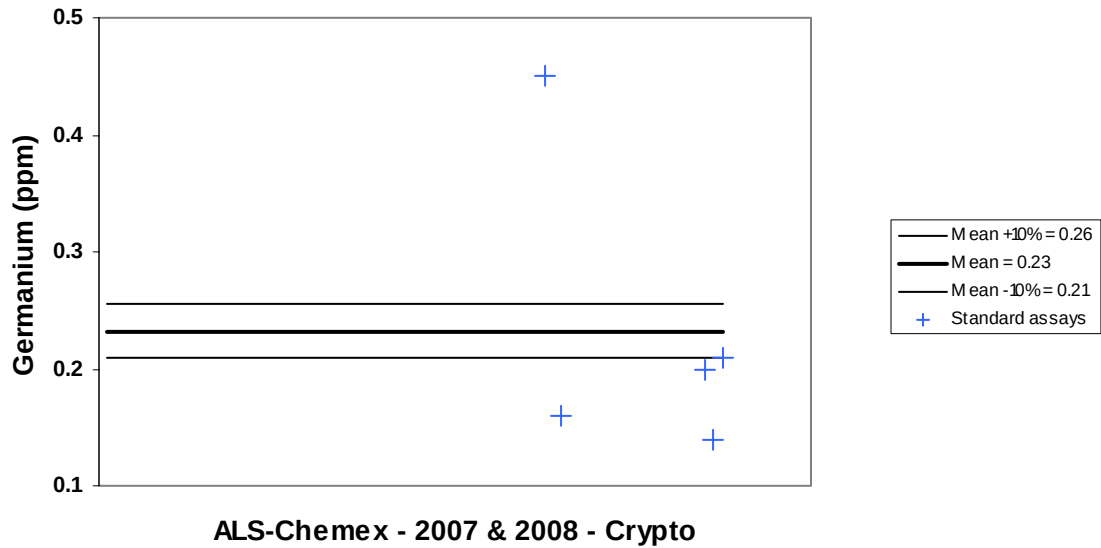
Assays of Standard CDN-HLHZ - Germanium



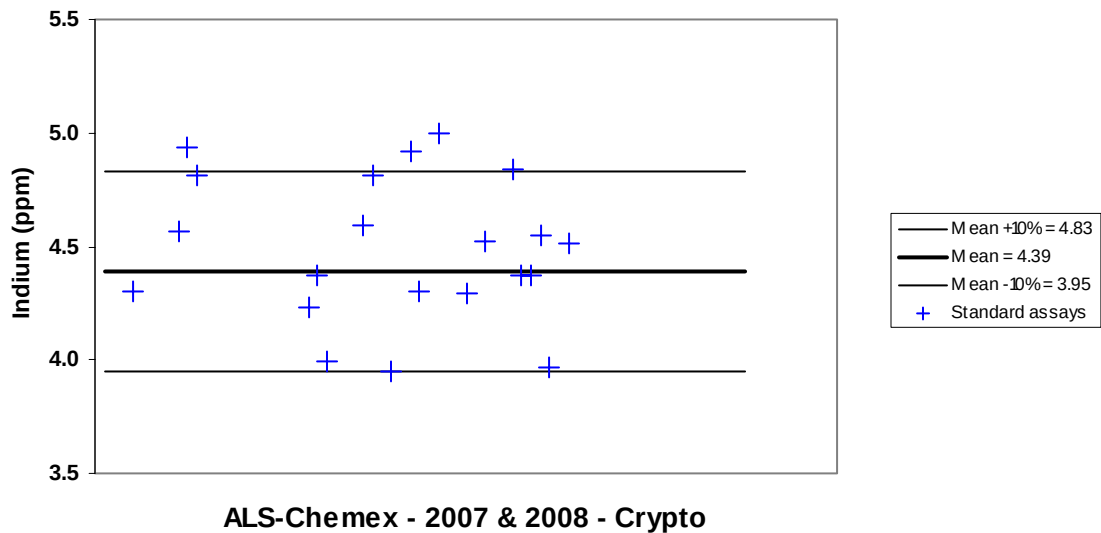
Assays of Standard GBM396-10 - Germanium



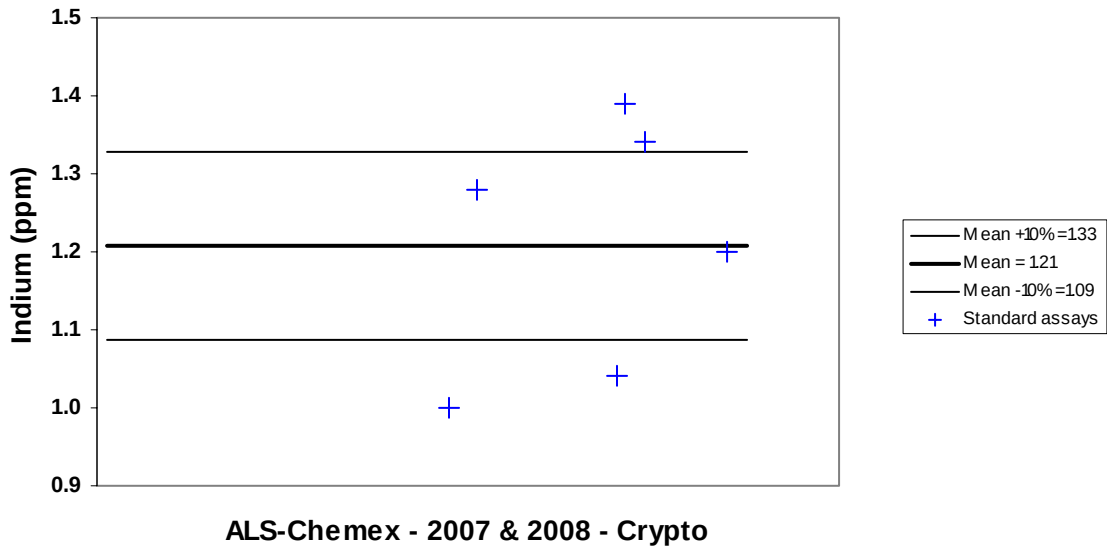
Assays of Standard GBM996-7 - Germanium



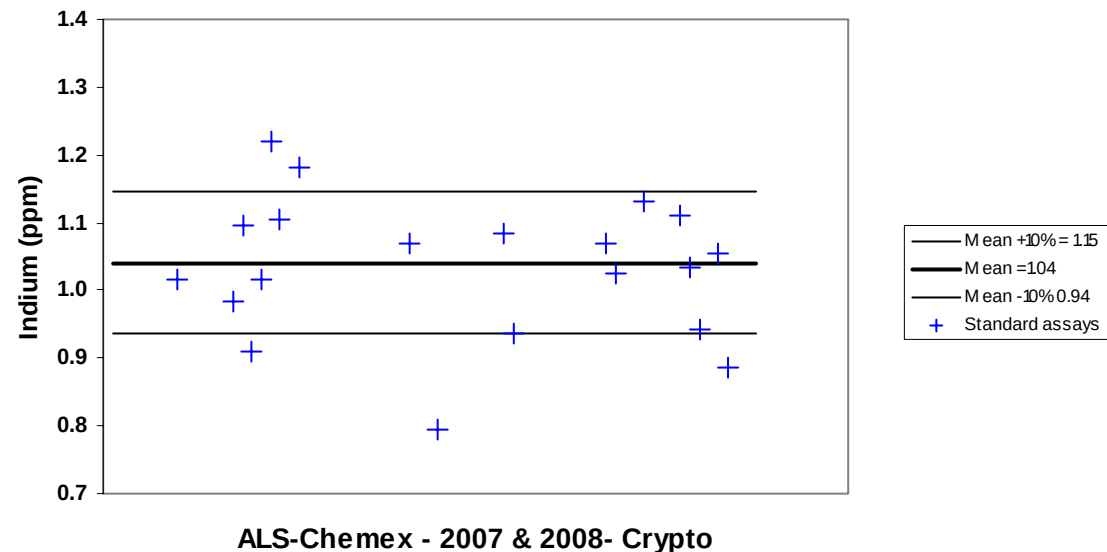
Assays of Standard CDN-FCM-2 - Indium



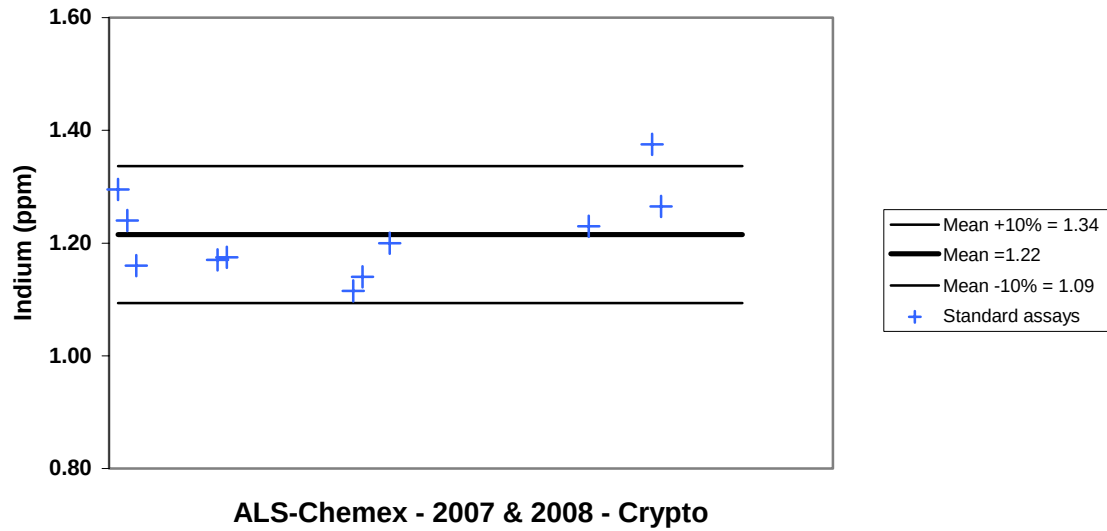
Assays of Standard CDN-HLLC - Indium



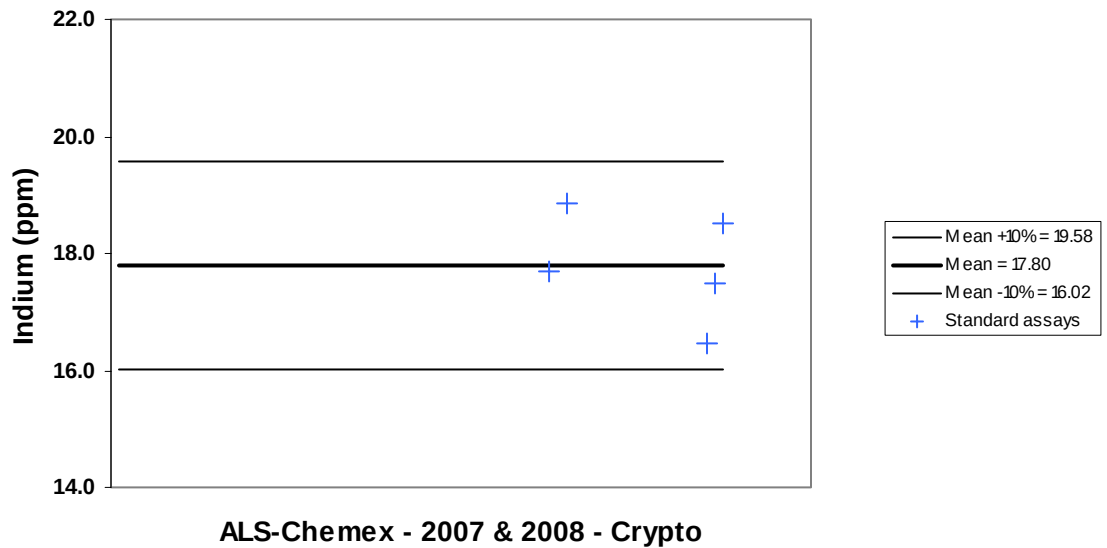
Assays of Standard CDN-HLHZ - Indium



Assays of Standard GBM396-10 - Indium



Assays of Standard GBM996-7 - Indium



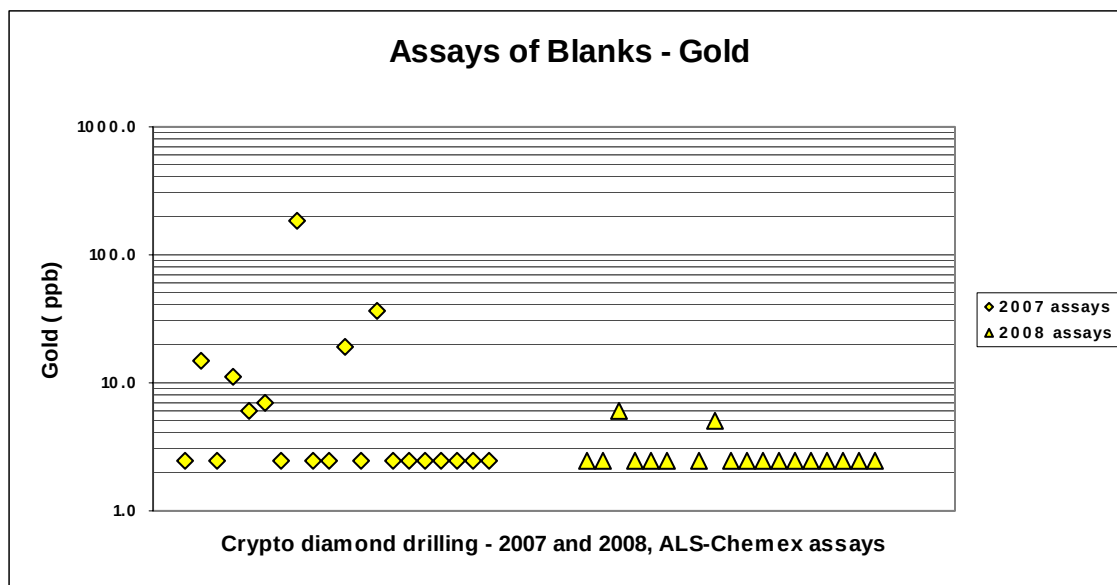
The results shown on these plots suggest that analyses for these four elements are less than optimally precise. Fortunately, those for indium are perhaps the best, which is encouraging as this is the trace element of most interest. Unfortunately, none of the standards has a mean in range of interest for indium; the highest value being 17.8 parts per million for standard GBM996-7.

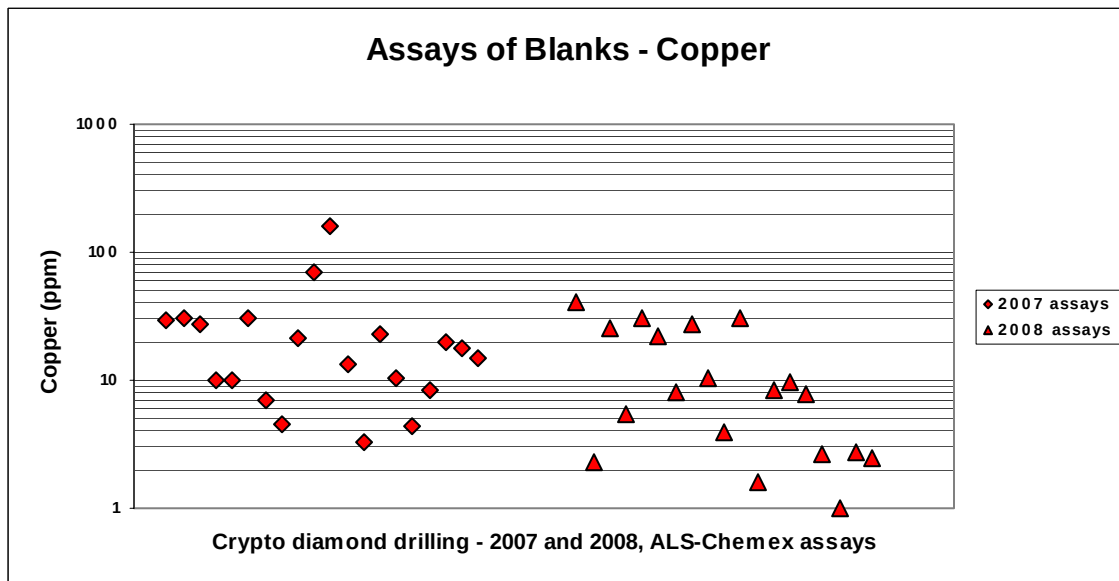
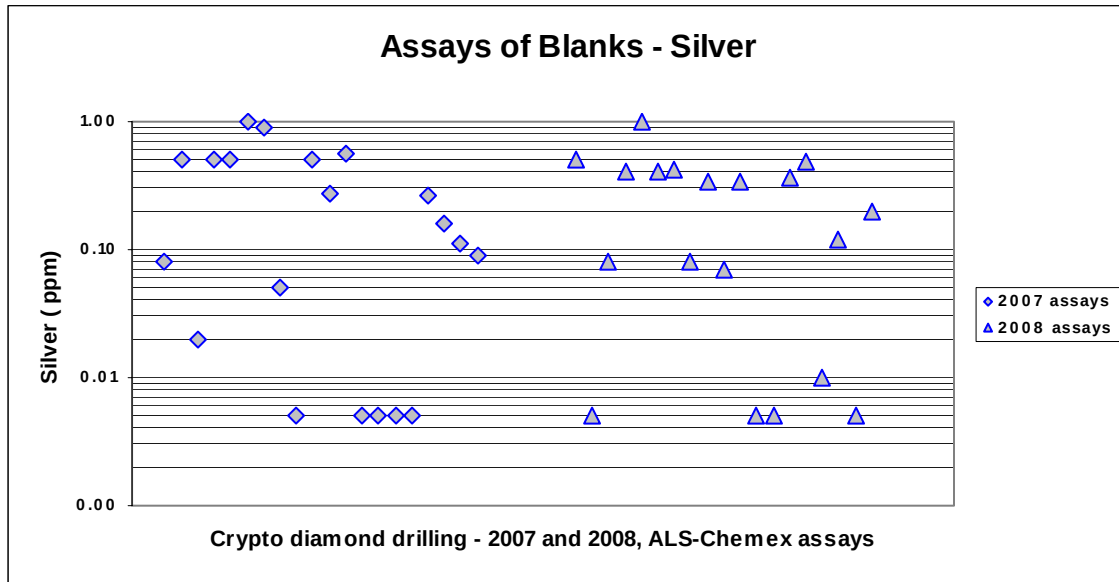
The overall conclusion must be that levels of these trace elements should be determined in concentrates during the metallurgical testing process, and that specific standards must be in place at that time.

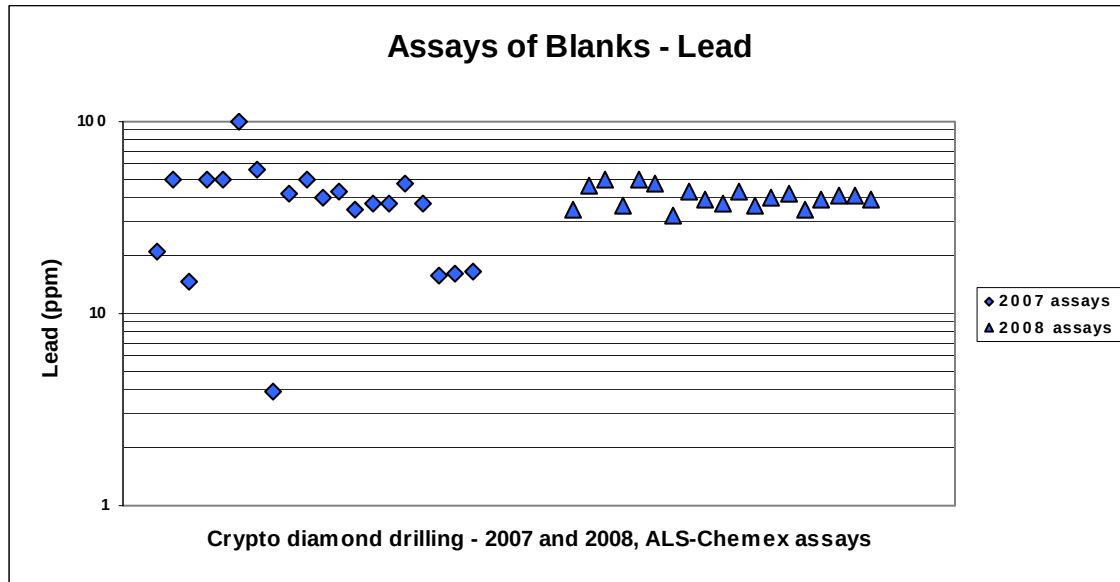
Monitoring plots – Lithic inserted “blanks”, 2007 & 2008 drilling:

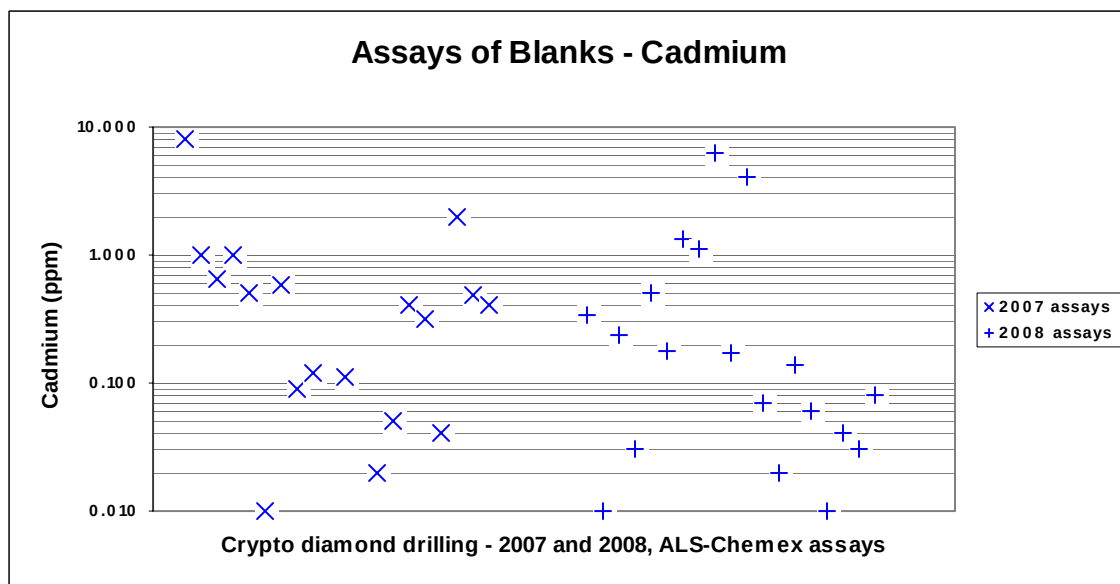
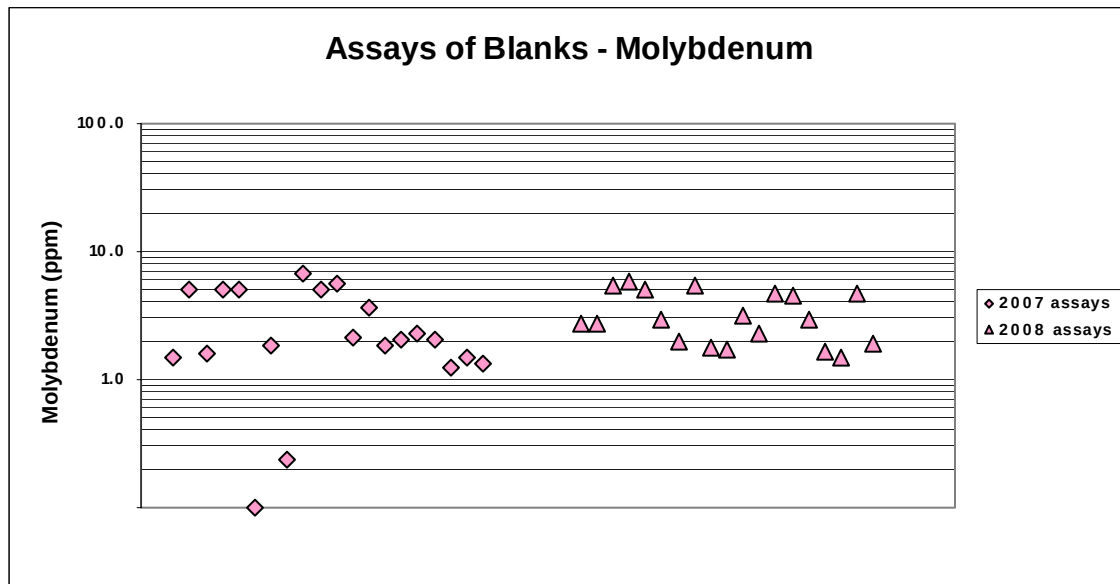
For the Crypto core drilling in 2008, coarse “blank” samples were included. Blanks are inserted to try to evaluate the possibility of contamination from previous samples in the preparation process. The material used was collected from a surface exposure of Tertiary rhyolite well removed from the property, assumed to have a negligible metal content. Assays to date lead one to question if this assumption is strictly speaking true, but on balance the results are satisfactory, with a few caveats.

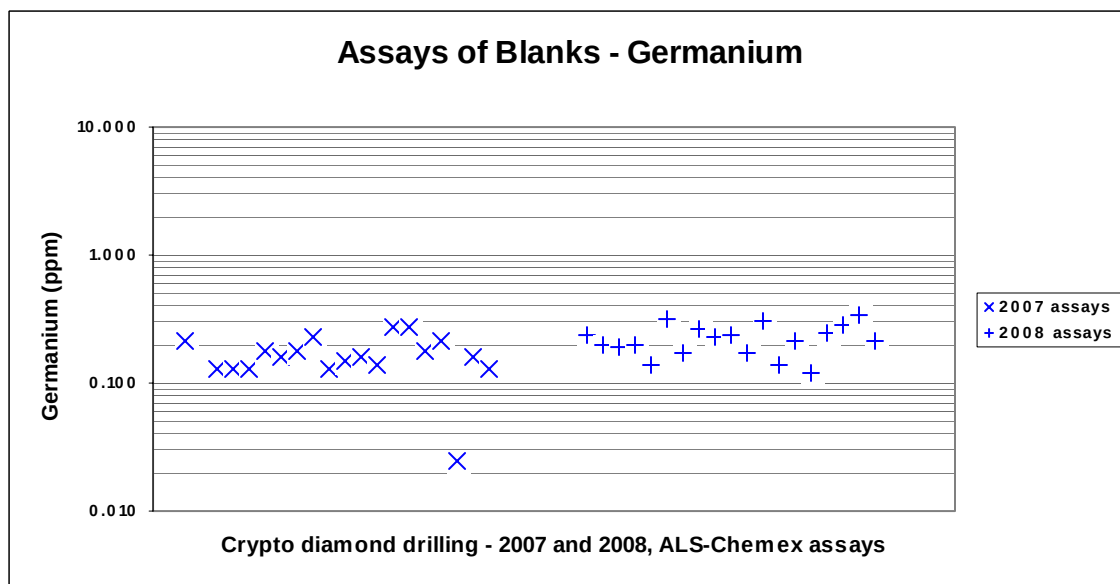
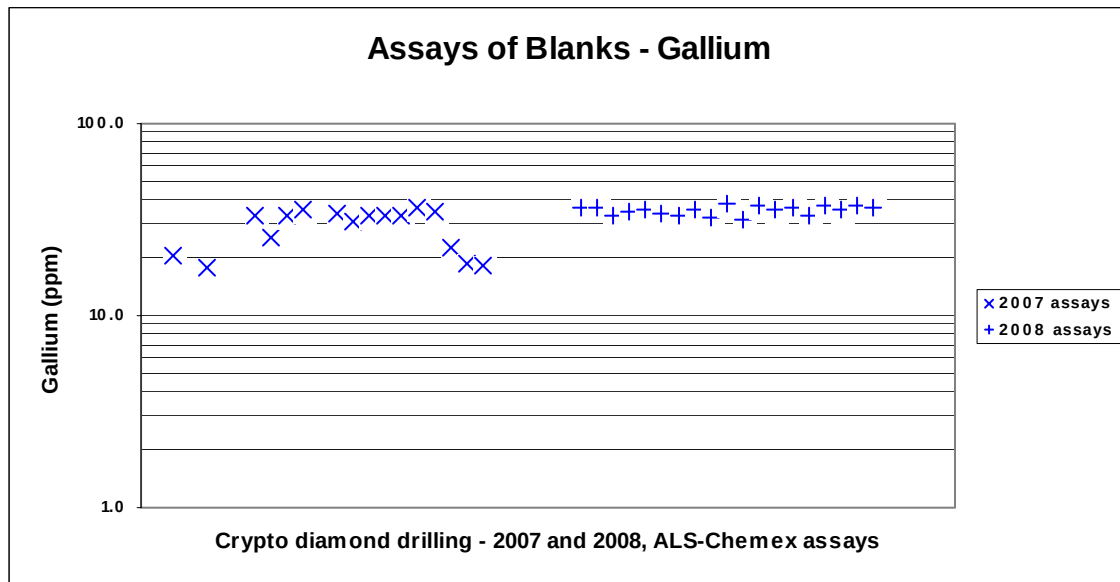
Plots of the performance of blank assays for the two drilling phases are presented on the following pages. Note that the vertical axis scales are logarithmic.

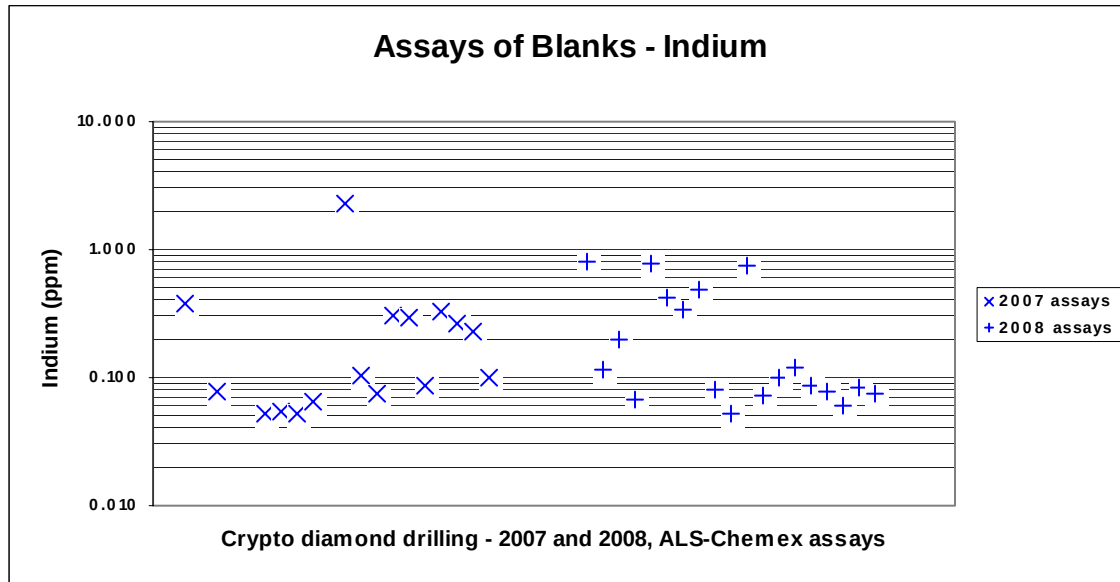












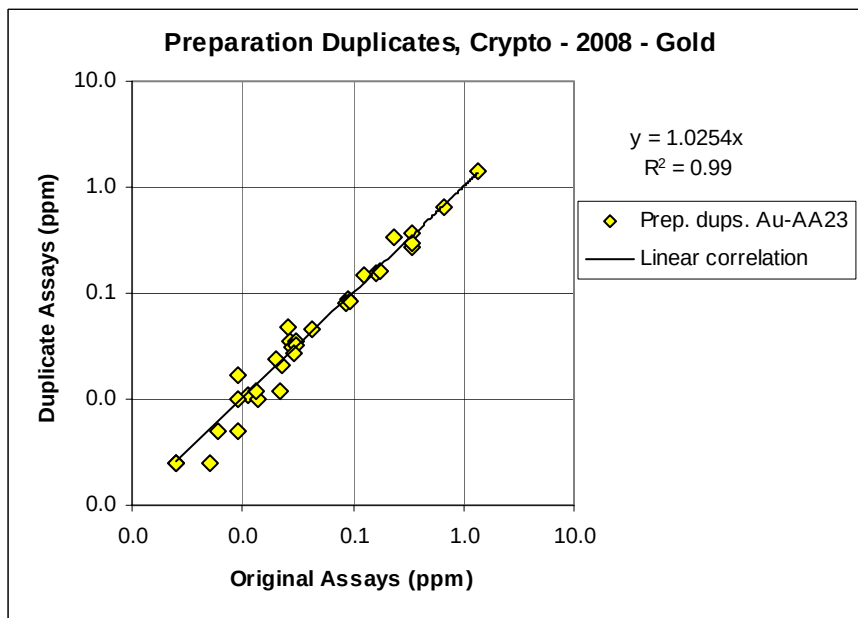
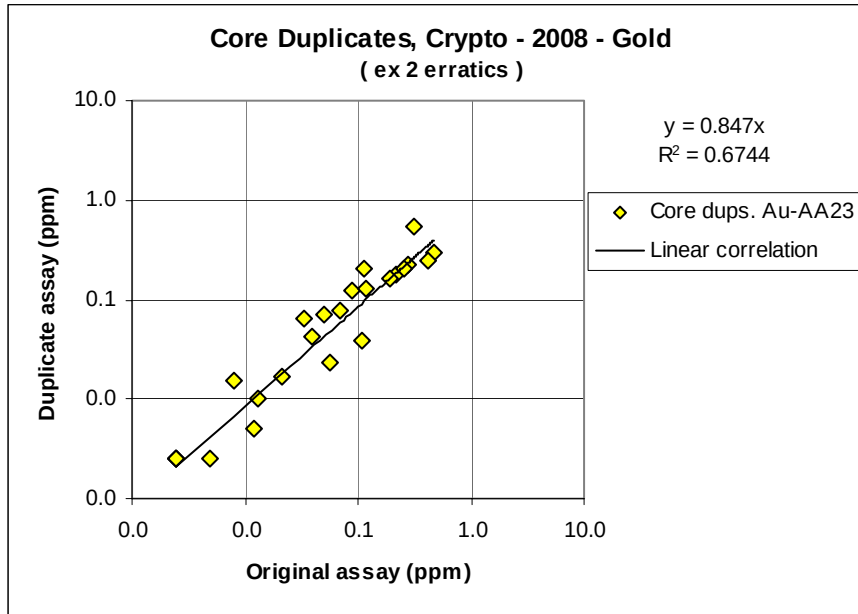
In general, the performance of analysis of these blank samples is not perfect, but is acceptable, especially since the results for the metals of main interest, viz zinc, lead, copper and indium, are reasonable.

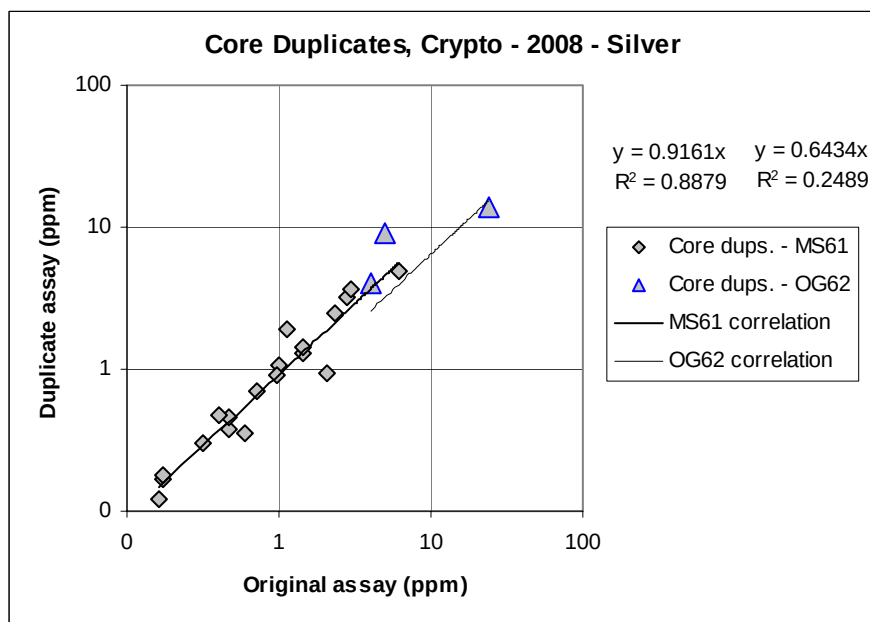
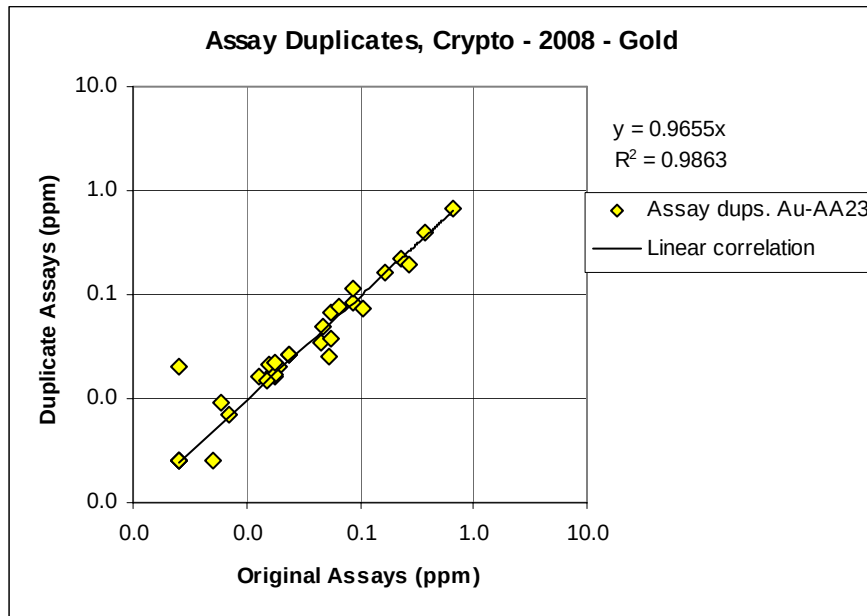
Duplicate assay plots – general statement:

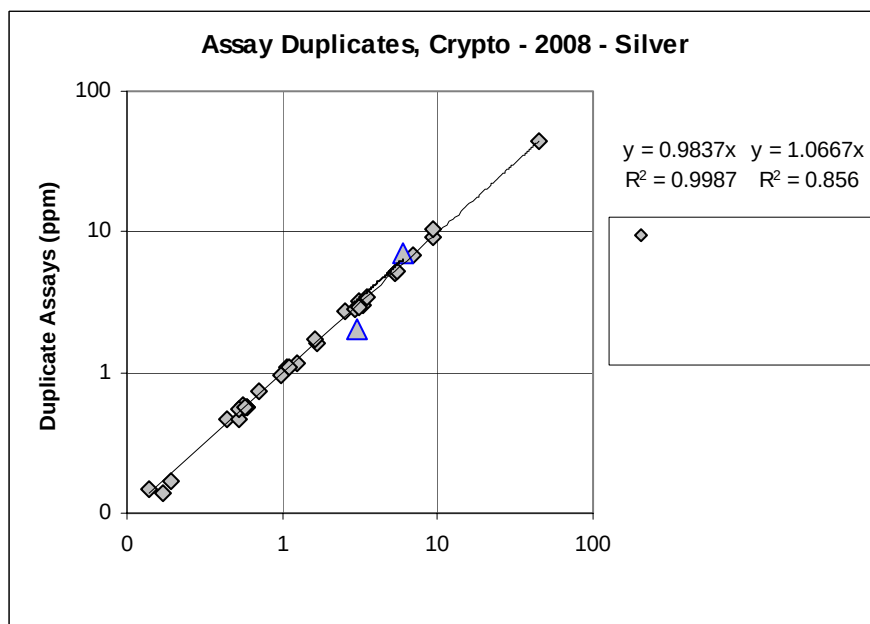
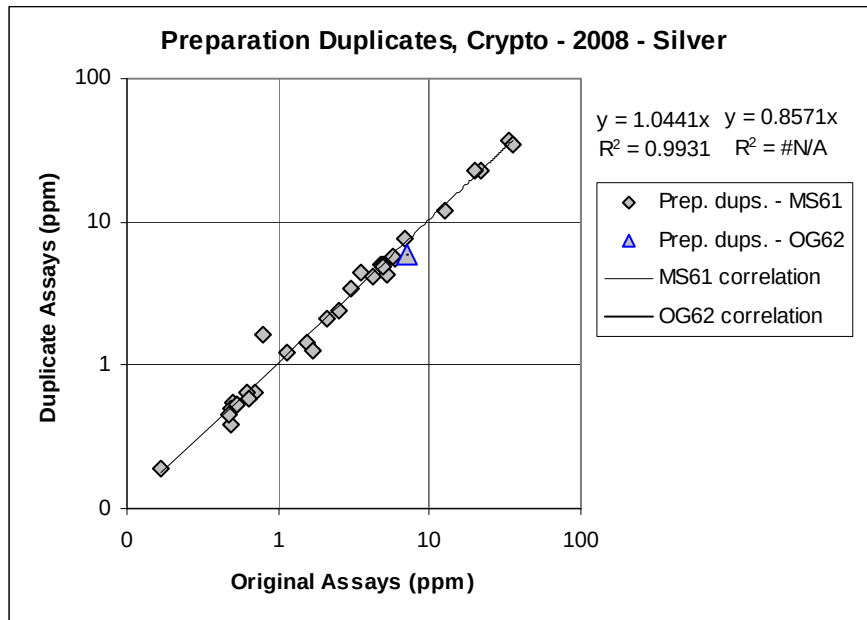
For the 2007 and 2008 diamond drill programs, Lithic inserted: field duplicate samples (sacrificing the second half of core samples); preparation duplicates, where the preparation facility was requested to make duplicate pulps for analysis); and assay duplicates, where the analytical laboratory was requested to make two analyses of a single pulp. These duplicates were meant to be placed at regular intervals in the sample stream, but as selected groups of samples were in some cases separated out for “ore-grade” (OG62) analyses, the order of duplicate sample insertion was not perfect. However, enough duplicate analyses are available to make correlation plots, including analyses by both the MS61 and OG62 methods.

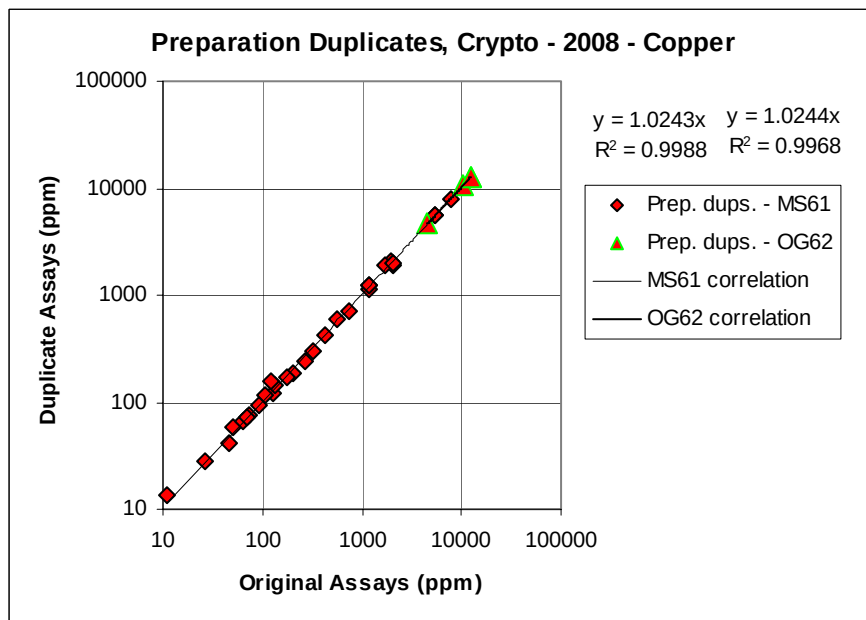
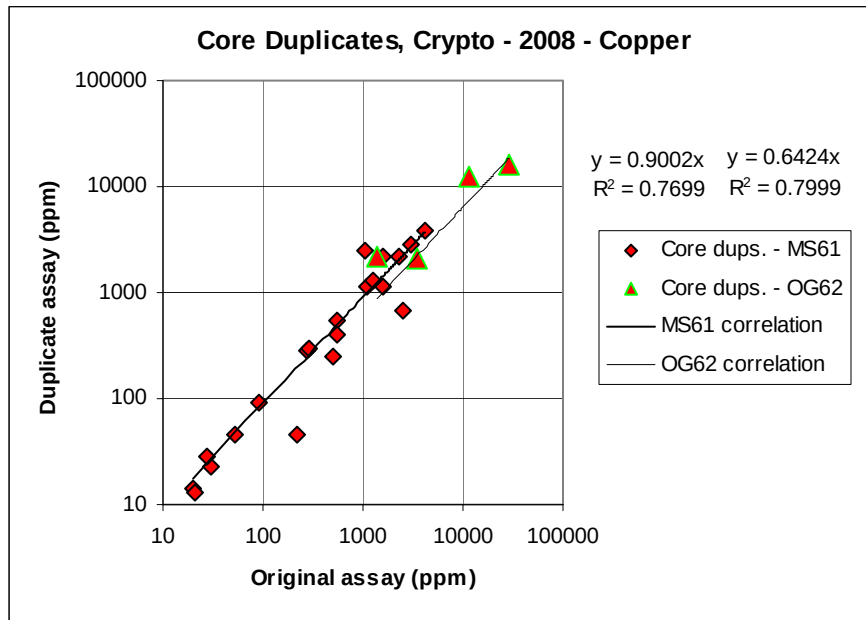
Correlation plots for both drill campaigns follow. Plots are shown separately for all three types of duplicates. The chart titles say 2008, but the data include the 2007 results. In a very few cases, the results suggest sampling mix-ups; these data (totalling three pairs) have been excluded.

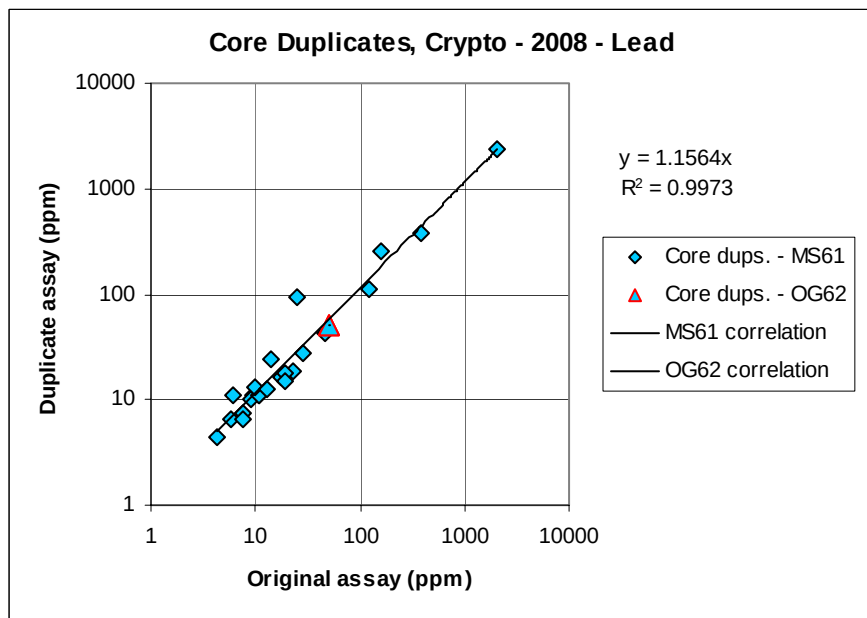
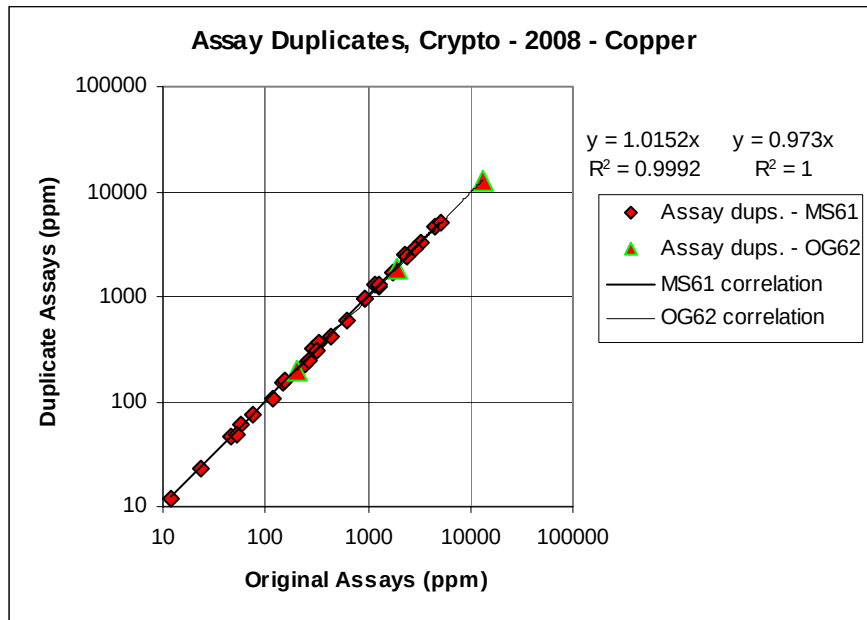
Note the logarithmic scales. Note also that the plots show results for both analytical methods, identified by symbols. In most cases, correlation characteristics are given for data for both methods – the equations to the left are for MS61; to the right for OG62.

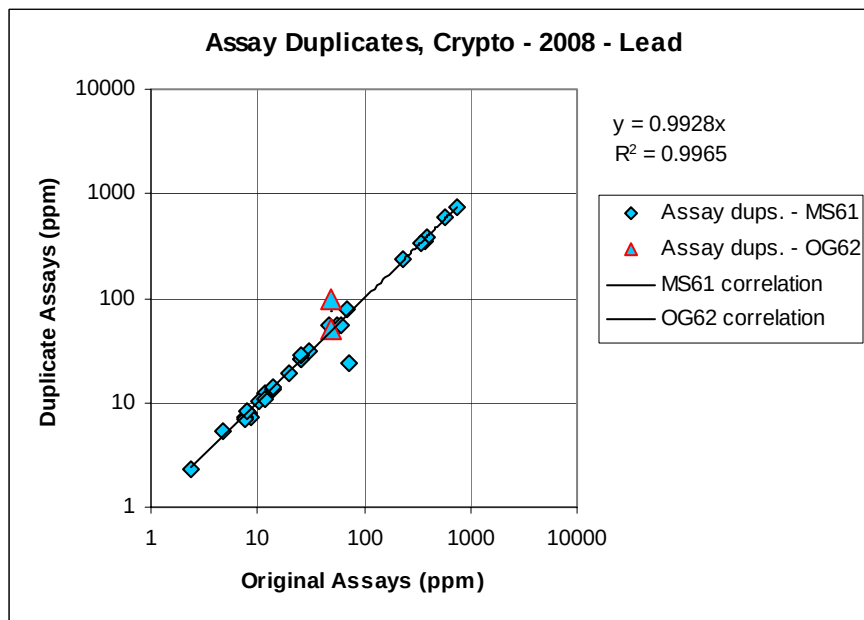
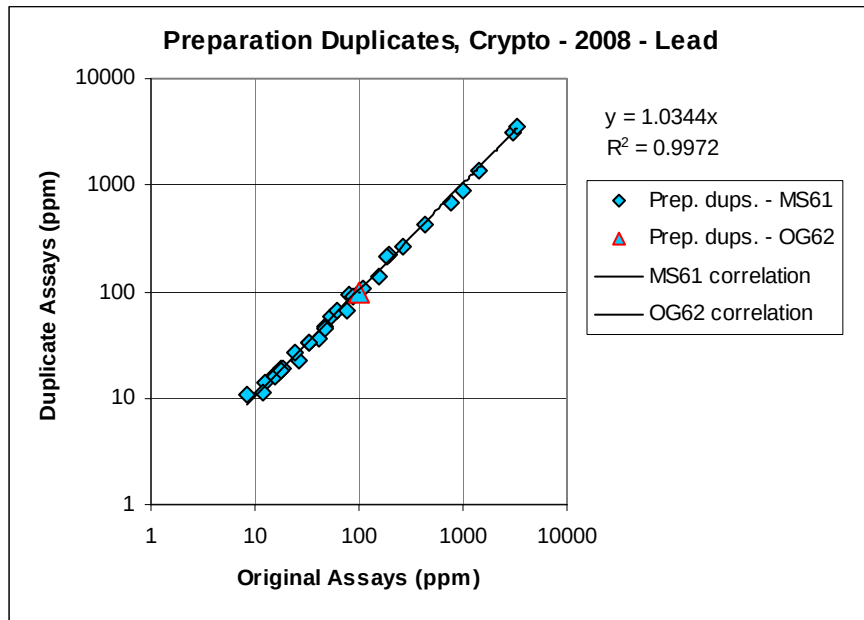


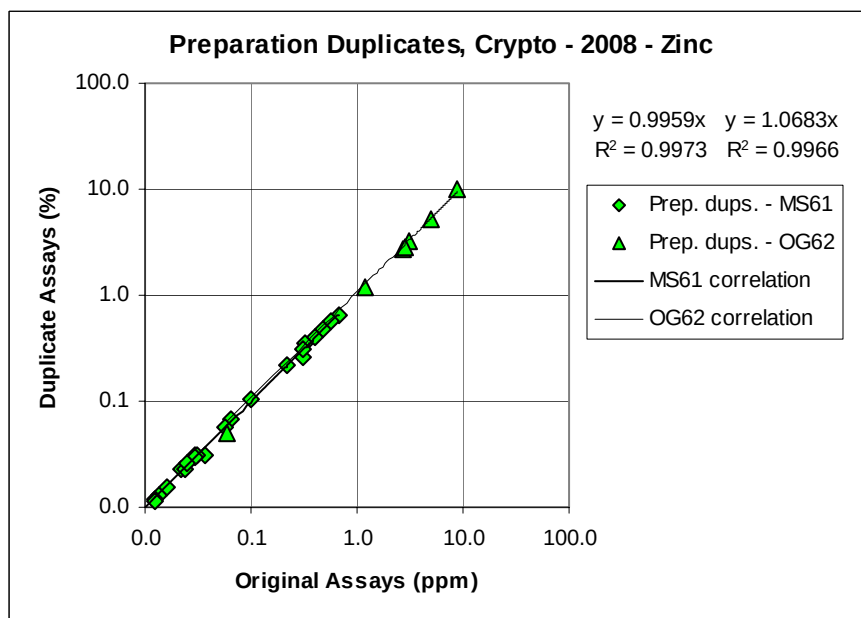
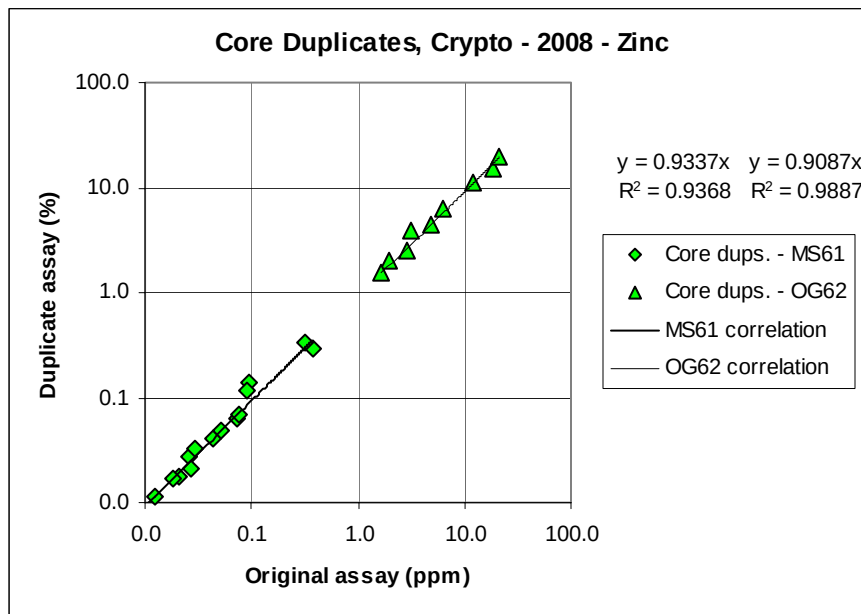


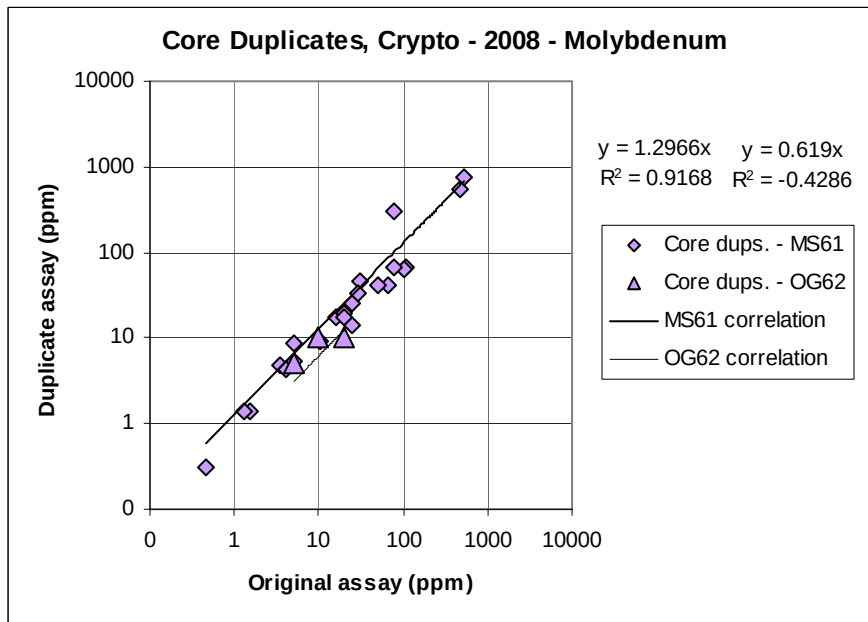
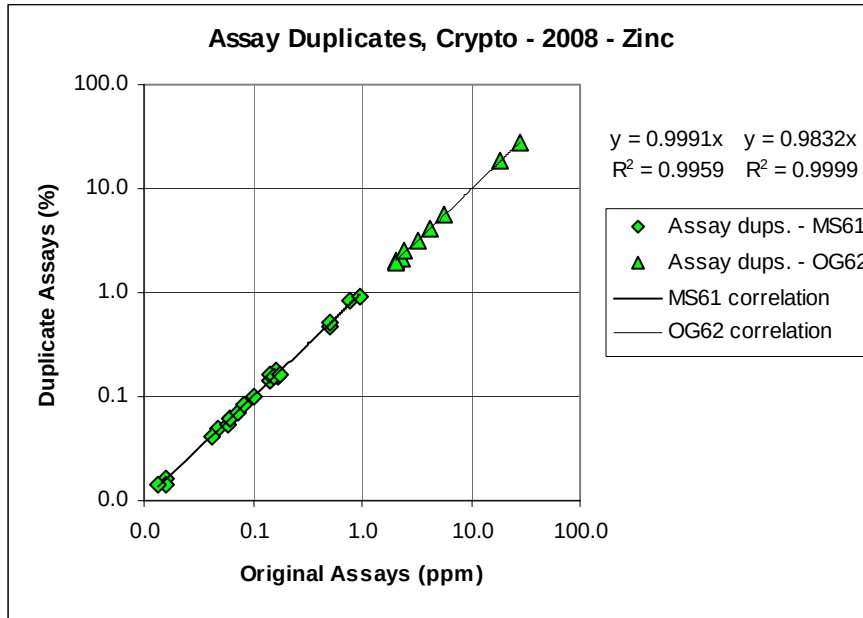


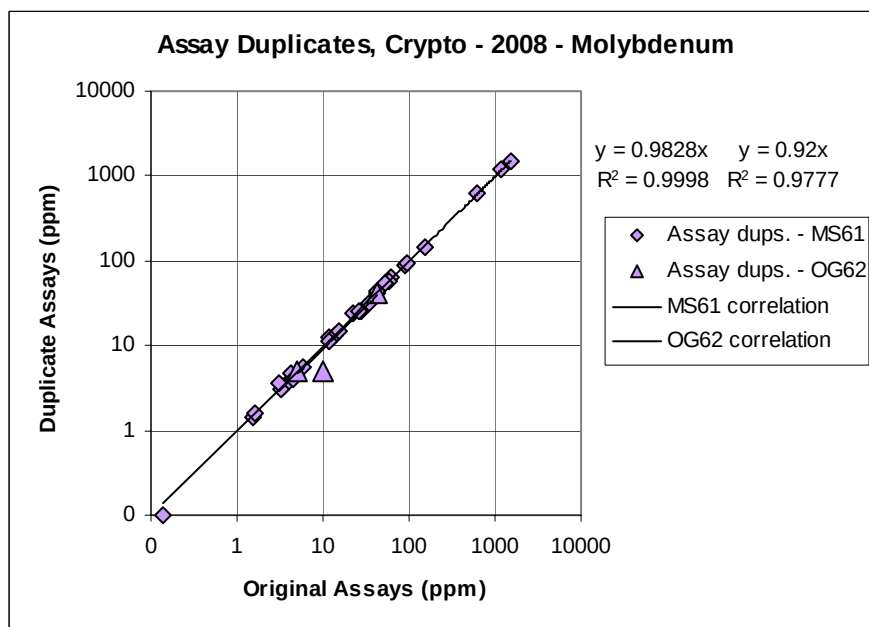
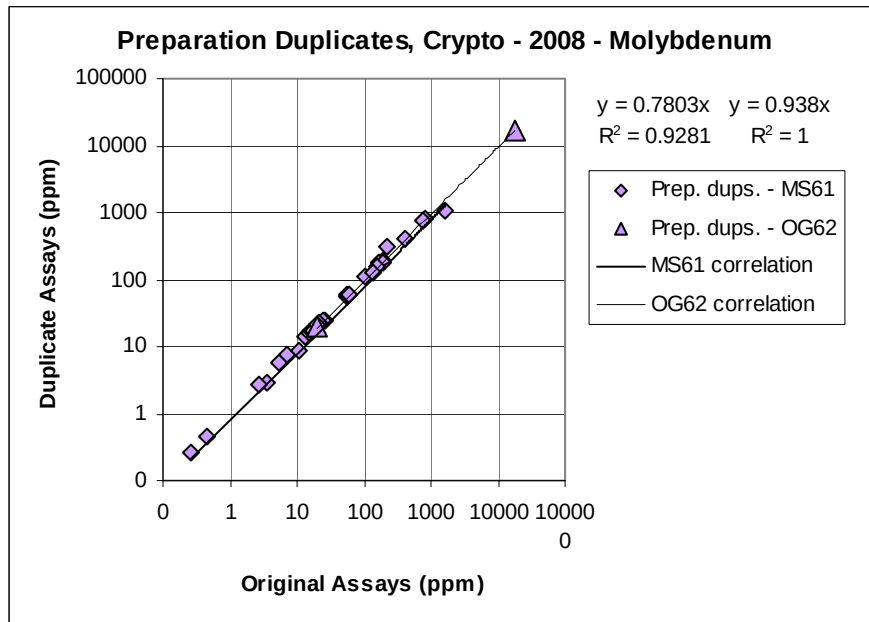


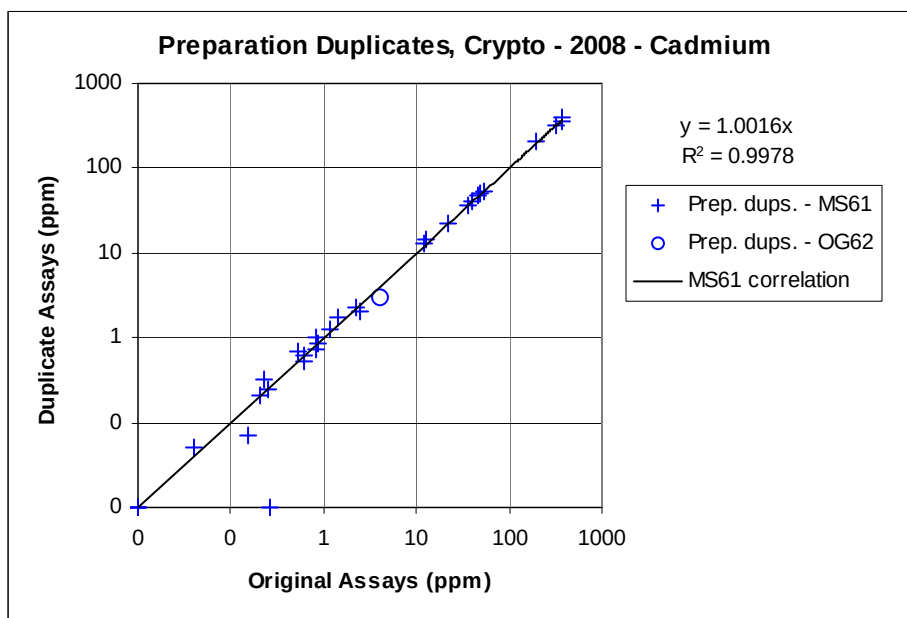
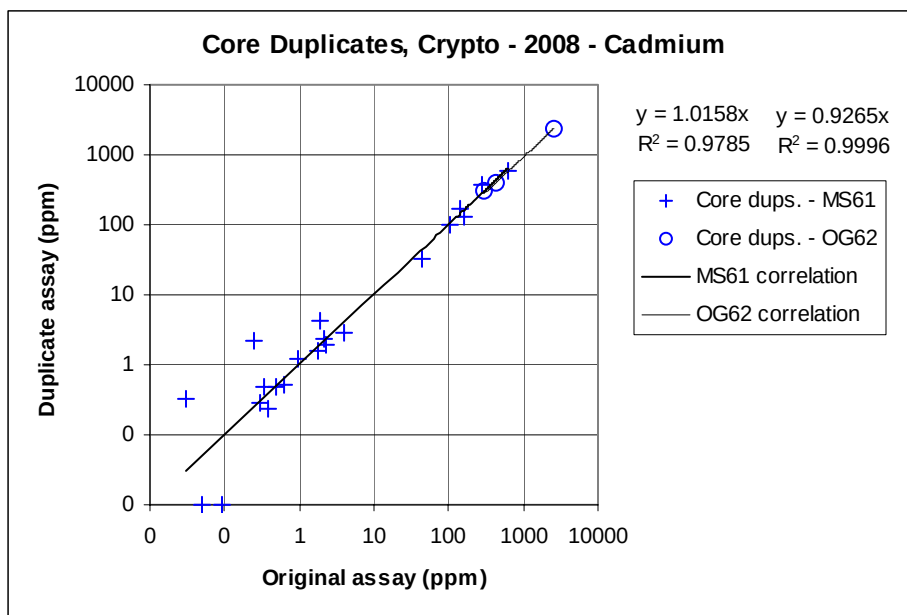


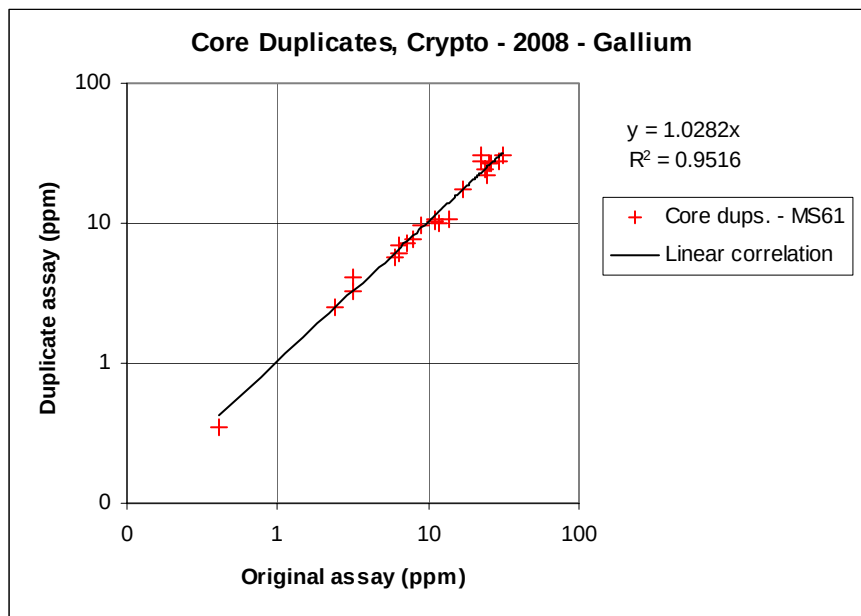
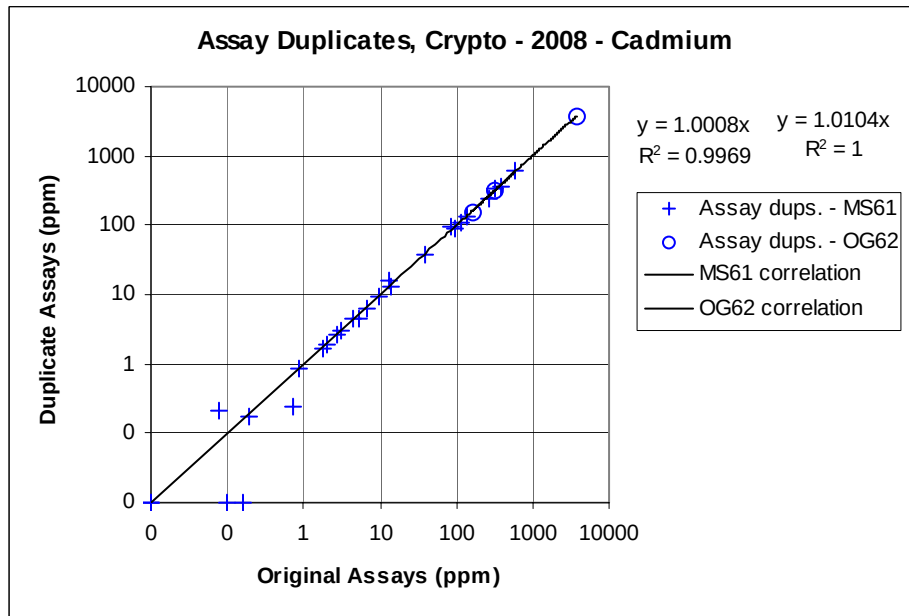


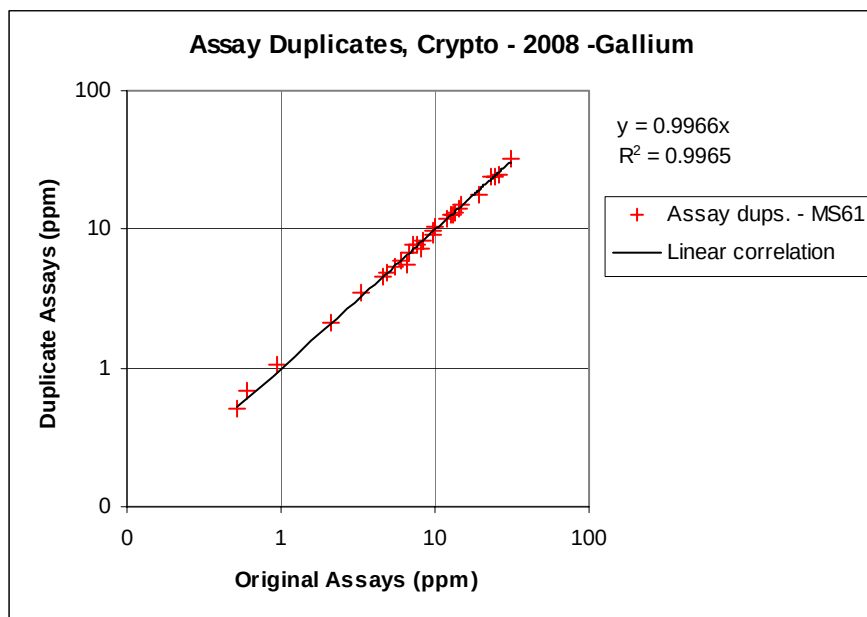
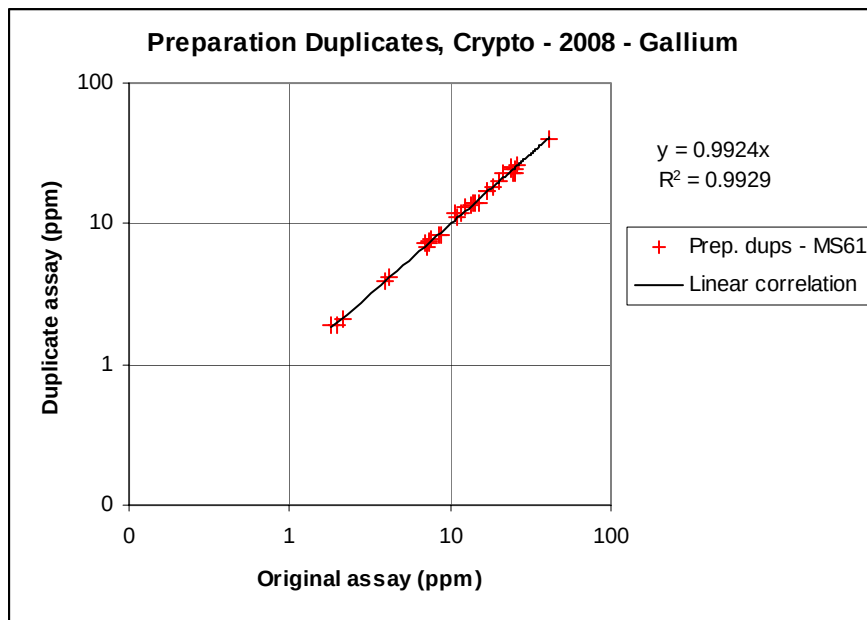


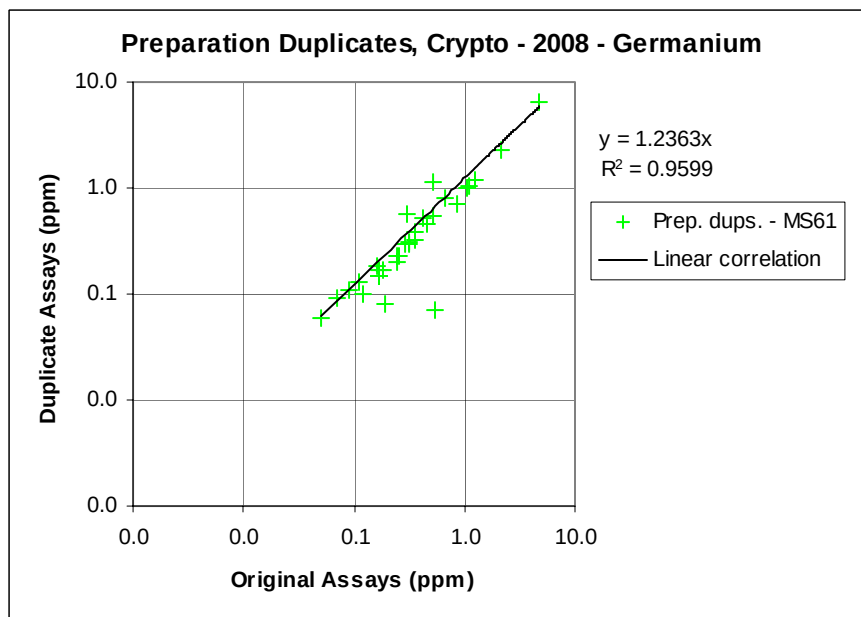
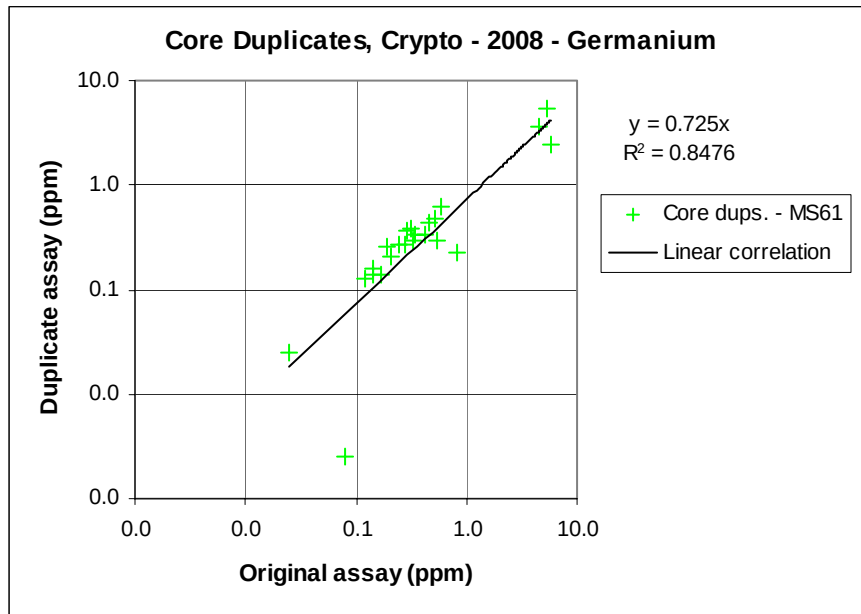


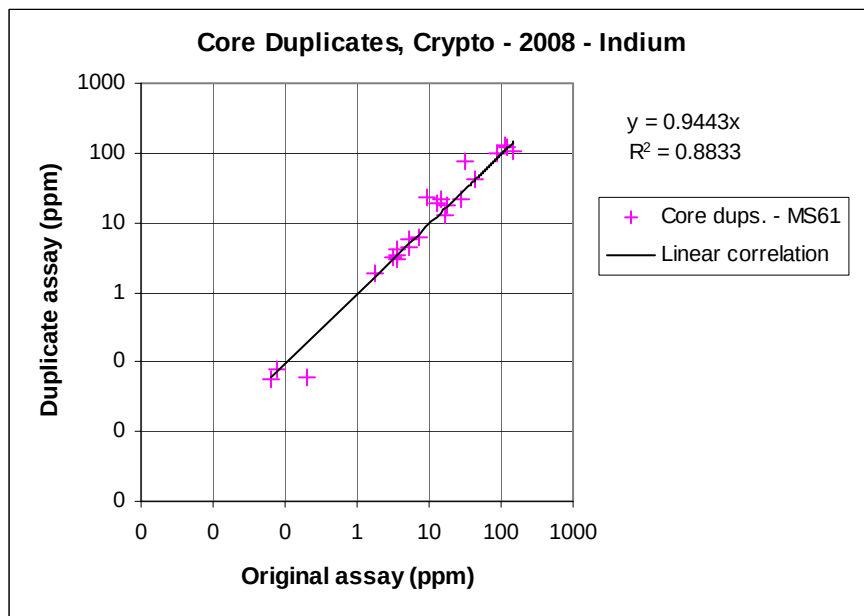
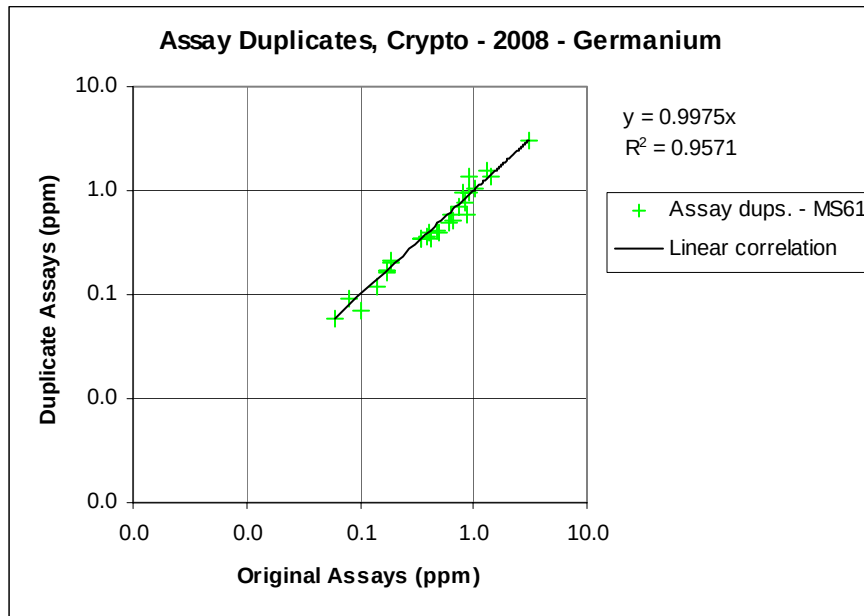


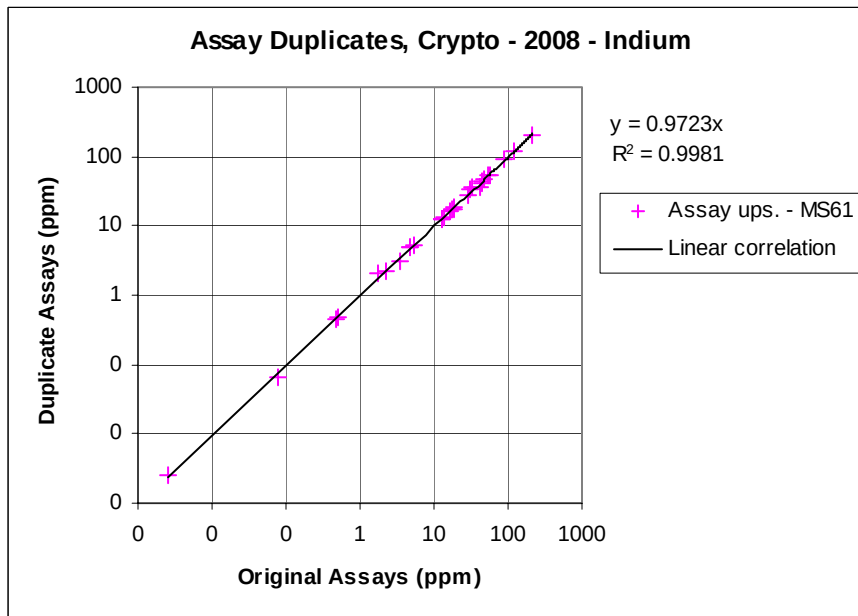
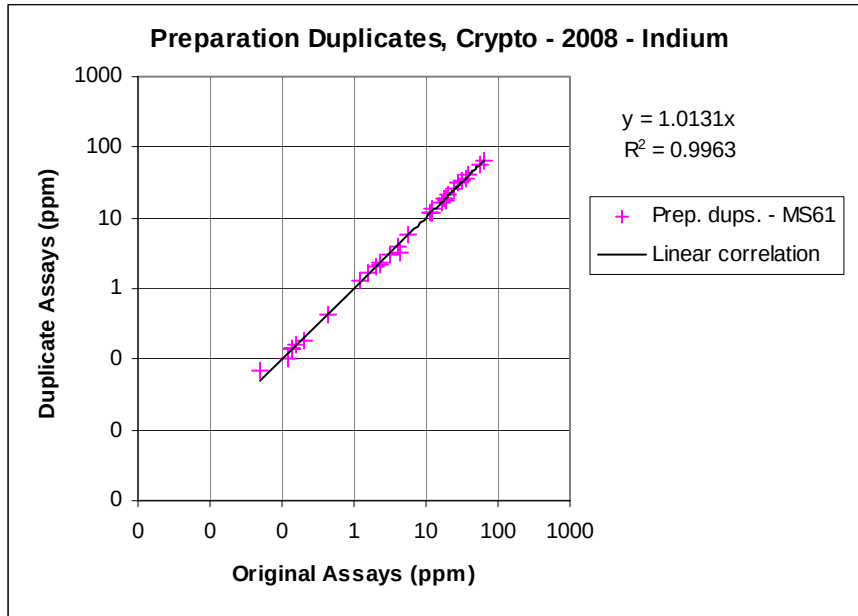












Generally speaking, and especially for the metals of prime interest, the duplicate analyses suggest relatively good precision. As expected, the correlations in most cases are better as one proceeds along the sampling process from core to preparation to pulp re-assay, as one would hope.

Data presented in this review suggest that the various quality control procedures have been successful in showing that assay data from the Crypto diamond drilling in 2007 and 2008 are in general terms acceptable.

Should additional drilling be undertaken, a more rigorous method of inserting control samples should be instituted. In particular, it will be important that larger groups of samples are chosen for individual sample shipments for “ore-grade” assays, and that these shipments have controls inserted in regular rotation. Different standard materials may well be applicable for these shipments. These shipments should be analysed for the entire suite of elements of interest. The main point here is that the insertion of control samples be keyed to sample shipments, rather than being set up beforehand on the basis of drilling intervals.

On the subject of blanks, there are some minor concerns with respect to the levels of a few of the analysed elements in the rhyolite used as a blank. For future drill programs, it would be advisable to look for an alternate material. There is reportedly a massive intrusive body in the general area; it would be a valuable exercise to collect some of this material and have a small number (say ten or so) of samples analysed for the entire suite of elements of interest.

“G. R. Peatfield”

Giles R. Peatfield, Ph.D., P.Eng.

Appendix C

Descriptive Statistics of Metal Domain Samples

Zn Oxide	Zone	101				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	302					15.24	211.62	m	
To	302					17.07	212.20	m	
Length	302	1.81	1.57			0.15	6.09	m	
Zn	302	0.200	0.267	0.283	1.062	0.001	2.500	%	
Zn_cap	302	0.200	0.267	0.283	1.062	0.001	2.500	%	
Zn_dmn	302					100	100		

Zn Oxide	Zone	102				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	291					20.09	208.48	m	
To	291					21.47	210.01	m	
Length	291	1.53	1.45			0.15	8.23	m	
Zn_1	291	1.500	2.241	2.061	0.919	0.001	15.600	%	
Zn_cap	291	1.500	2.241	2.061	0.919	0.001	15.600	%	
Zn_dmn	291					200	200		

Zn Oxide	Zone	103				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	83					17.07	200.44	m	
To	83					18.90	201.63	m	
Length	83	1.33	1.19			0.15	4.05	m	
Zn_1	83	13.800	16.317	8.677	0.532	1.400	43.390	%	
Zn_cap	83	13.800	16.317	8.677	0.532	1.400	43.390	%	
Zn_dmn	83					300	300		

Zn Sulfide	Zone	101				Capping	13	% Zn		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units		
From	1,543					147.37	885.14	m		
To	1,543					149.59	887.88	m		
Length	1,543	1.54	1.52			0.09	7.01	m		
Zn	1,543	0.340	0.736	1.093	1.485	0.001	18.600	%		
Zn_cap	1,543	0.340	0.735	1.079	1.468	0.001	13.000	%		
Zn_dmn	1,543					100	100			

Zn Sulfide	Zone	102				Capping	18	% Zn		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units		
From	535					156.90	747.98	m		
To	535					159.80	751.51	m		
Length	535	1.45	1.50			0.13	4.15	m		
Zn_23	535	4.680	5.047	3.177	0.629	0.034	30.050	%		
Zn_cap	535	4.680	5.015	2.981	0.595	0.034	18.000	%		
Zn_dmn	535					200	200			

Zn Sulfide	Zone	103				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	185					182.58	682.75	m	
To	185					184.56	684.73	m	
Length	185	1.32	1.35			0.06	3.20	m	
Zn_23	185	15.450	16.568	7.314	0.441	0.267	46.500	%	
Zn_cap	185	15.450	16.568	7.314	0.441	0.267	46.500	%	
Zn_dmn	185					300	300		

Cu Oxide	Zone	201				Capping	0.6	% Cu	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	296					17.07	211.62	m	
To	296					18.90	212.20	m	
Length	296	1.48	1.37			0.15	8.23	m	
Cu	296	0.081	0.109	0.108	0.999	0.000	1.295	%	
Cu_cap	296	0.081	0.107	0.094	0.886	0.000	0.600	%	
Cu_dmn	296					100	100		

Cu Oxide	Zone	202				Capping	1	% Cu	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	42					25.30	169.77	m	
To	42					26.21	172.67	m	
Length	42	1.25	1.07			0.45	3.05	m	
Cu_1	42	0.410	0.471	0.263	0.559	0.098	2.100	%	
Cu_cap	42	0.410	0.454	0.188	0.415	0.098	1.000	%	
Cu_dmn	42					200	200		

Cu Oxide	Zone	203				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	18					41.15	197.82	m	
To	18					42.67	199.95	m	
Length	18	1.07	1.11			0.30	2.13	m	
Cu_1	18	1.442	2.605	2.340	0.898	0.713	7.840	%	
Cu_cap	18	1.442	2.605	2.340	0.898	0.713	7.840	%	
Cu_dmn	18					300	300		

Cu Sulfide	Zone	201				Capping	1.5	% Cu	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	1,173					156.67	885.14	m	
To	1,173					158.19	887.88	m	
Length	1,173	1.48	1.52			0.11	7.01	m	
Cu_23	1,173	0.141	0.170	0.154	0.906	0.001	3.300	%	
Cu_cap	1,173	0.141	0.169	0.136	0.804	0.001	1.500	%	
Cu_dmn	1,173					100	100		

Cu Sulfide	Zone	202				Capping	2.5	% Cu	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	506					172.91	878.46	m	
To	506					173.96	882.79	m	
Length	506	1.42	1.40			0.09	4.88	m	
Cu_23	506	0.437	0.490	0.295	0.602	0.003	3.570	%	
Cu_cap	506	0.437	0.490	0.291	0.595	0.003	2.500	%	
Cu_dmn	506					200	200		

Cu Sulfide	Zone	203				Capping	7	% Cu	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	199					203.45	749.81	m	
To	199					203.91	751.33	m	
Length	199	1.29	1.22			0.06	3.29	m	
Cu_23	199	1.095	1.392	1.101	0.791	0.022	14.380	%	
Cu_cap	199	1.095	1.378	0.976	0.708	0.022	7.000	%	
Cu_dmn	199					300	300		

In Oxide	Zone	301				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	104					20.09	175.26	m	
To	104					21.47	176.33	m	
Length	104	1.45	1.50			0.30	3.68	m	
In	104	2.05	3.01	3.43	1.14	0.04	20.40	g /t	
In_cap	104	2.05	3.01	3.43	1.14	0.04	20.40	g /t	
In_dmn	104					100	100		

In Area 1	Zone	302	303				Capping	90	ppm In
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	58					53.10	177.85	m	
To	58					53.60	178.77	m	
Length	58	1.12	1.06			0.20	2.68	m	
In_1	58	18.05	28.42	28.10	0.99	5.41	149.50	g /t	
In_cap	58	18.05	26.56	21.10	0.79	5.41	90.00	g /t	
In_dmn	58					200	300		

In Sulfide	Zone	301				Capping	None		
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	371					149.96	763.83	m	
To	371					150.72	765.35	m	
Length	371	1.38	1.46			0.11	3.05	m	
In	371	4.09	4.67	3.34	0.72	0.16	28.70	g /t	
In_cap	371	4.09	4.67	3.34	0.72	0.16	28.70	g /t	
In_dmn	371					100	100		

In Sulfide	Zone	302				Capping	250	ppm In	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	1,015					156.90	774.80	m	
To	1,015					159.80	776.48	m	
Length	1,015	1.44	1.50			0.15	4.15	m	
In_23	1,015	22.60	31.24	28.71	0.92	0.19	385.00	ppm	
In_cap	1,015	22.60	31.09	27.11	0.87	0.19	250.00	ppm	
In_dmn	1,015					200	200		

In Sulfide	Zone	303				Capping	500	ppm In	
	Valid N	Median	Mean	Std.Dev.	CV	Minimum	Maximum	Units	
From	125					245.52	731.52	m	
To	125					246.74	733.50	m	
Length	125	1.41	1.50			0.30	2.59	m	
In_23	125	137.50	159.20	115.18	0.72	24.50	1055.00	ppm	
In_cap	125	137.50	154.08	85.78	0.56	24.50	500.00	ppm	
In_dmn	125					300	300		