



**Specialist Consultants
to the Mining Industry**

J2174

NI 43-101 Technical Report on the Hakkari Zinc Project

**Prepared by The MSA Group (Pty) Ltd on behalf of:
Red Crescent Resources Limited**

| | | | |
|-------------------|--|--|--|
| Author(s): | Mike Robertson Dr Brendan Clarke Mike Hall | Principal Consulting Geologist Geological Operations Manager Consulting Resource Geologist | PrSciNat; MSAIMM PrSciNat AusIMM |
|-------------------|--|--|--|

Date: 13 April 2011

Project Code: J2174

A handwritten signature in black ink, appearing to read 'Mike Robertson'.

Primary Authors
Mike Robertson
Mike Hall

A handwritten signature in black ink, appearing to read 'Mike Hall'.

A handwritten signature in black ink, appearing to read 'Mike Venter'.

Peer Review
Mike Venter

INDEPENDENT TECHNICAL REPORT

13 April 2011

The Directors
Red Crescent Resources Limited
Mahatma Gandhi Cad. No: 102/1
Gazi Osman Pasa
Cankaya
Ankara, 06700
Republic of Turkey

Dear Sirs,

The MSA Group (MSA) has been commissioned by Red Crescent Resources Limited (RCR) to provide an Independent Qualified Persons' Technical Report on mineral properties (The Hakkari Zinc Project (HZP)) located in the Republic of Turkey in which RCR has an interest.

MSA has not been requested to provide an Independent Valuation, nor have we been asked to comment on the Fairness or Reasonableness of any vendor or promoter considerations, and we have therefore not offered any opinion on these matters.

MSA has based its review of the HZP on information and independent reports provided by RCR, data collected during the 2010 exploration program, and other relevant published and unpublished data available up to and including March 2011. Site visits were undertaken to the HZP by Mike Robertson between 26 July to 7 August 2009, 20 to 27 June 2010 and 13 to 18 August 2010, by Mike Robertson and Brendan Clarke from 16 to 30 March 2010 and by Brendan Clarke, Mike Hall and Mike Robertson between 4 and 8 December 2010. This NI 43-101 Technical Report has been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) and Form 43-101F1, as issued by the Canadian Securities Administrators (CSA). A final draft of the report was provided to RCR, along with a written request to identify any material errors or omissions prior to lodgment. MSA has provided consent for the release of the NI 43-101 Technical Report in the form and context in which it appears.

The HZP comprises 17 granted licenses located in south-eastern Turkey. Four of the Licenses are Operation Licenses whereas the remainder are Exploration Licenses. RCR has a fully vested 50% interest in 15 of these licenses through a Definitive JV Agreement with Seyitoğlu Madencilik, the original holder of the licenses, now held in an RCR subsidiary company called RCR Seyitoğlu Cinko Madencilik A.Ş. (RCR Zinc or RCRZ). The legal status and rights of RCRZ to these Exploration Licenses has been independently verified by attorneys Cakmak Avukatlik (Cakmak). The present status of these 15 is accordingly based on information provided by Cakmak and copies of the Exploration Licenses have been observed by the author. Furthermore, RCR have operational and explorational agreements

with the current owners of the remaining two licences (The Pentagon and Licence 26), with transfer of the licences to RCR expected in late April 2011.

The mineral properties that form the HZP represent exploration projects which have associated attached risks; however MSA considers nonetheless, that the projects have been acquired on the basis of sound technical merit. The properties are also considered to be sufficiently prospective on the basis that significant quantities of non-sulphide zinc-lead material have been previously mined from informal small-scale workings exploiting the same and/or related mineralized units on adjacent properties. Additionally, RCR undertook systematic exploration programs on two of the licenses, the results of which are reported in this report and were used to formulate the maiden mineral resource estimate for License 5 and a non-compliant mineral resource estimate for The Pentagon License. Therefore, subject to varying degrees of exploration risk, the HZP warrants further exploration and assessment of its specific economic potential, consistent with the proposed programs by RCR. Exploration and evaluation work programs and budgets summarized in the report amount to a total expenditure of approximately USD\$ 4 200 000 for the 2011 exploration season. RCR has prepared staged exploration and evaluation programs, specific to the potential of the projects, which are consistent with the budget allocations. MSA considers that the relevant areas have sufficient technical merit to justify the proposed work programs and associated expenditure.

MSA is an exploration and resource consulting firm which has been providing services and advice to the international minerals industry and financial institutions since 1983. This report has been compiled by Mike Robertson and Mike Hall supported by other suitably qualified specialists. Mr. Robertson is a professional geologist with 22 years experience in the exploration and evaluation of mineral properties and is a full time employee of The MSA Group. He is Principal Consultant (Gold and Base Metals) for The MSA Group and is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP) and the South African Institute of Mining and Metallurgy (SAIMM). Mr Robertson has considerable experience in base metal mineral systems gained during 22 years of exploration experience. He has the appropriate relevant qualifications, experience, competence and independence to be considered a "Qualified Person" under the definitions provided in NI 43-101.

Mr. Hall is a professional geologist with 29 years experience. Mr. Hall has been involved in the design, execution and management of exploration programs, resource and reserve estimations and public reporting on a wide variety of mineral deposit types and commodities. Mr. Hall is Consulting Geologist – Mineral Resources with The MSA Group, a Member of the Australasian Institute of Mining and Metallurgy (AusIMM), is registered with the South African Council for Natural Scientific Professionals and is a Member of the Geological Society of South Africa (GSSA). Mr Hall has the appropriate relevant qualifications, experience, competence and independence to be considered a "Qualified Person" as that term is defined in NI 43-10. Neither MSA, nor the authors of this report, have or have previously had any material interest in RCR or the mineral properties in which RCR has an interest. Our relationship with RCR is solely one of professional association between client and independent consultant. This report is prepared in return for professional fees based upon



agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

Yours faithfully
The MSA Group

A handwritten signature in black ink, appearing to read "Mike Robertson".

Mike Robertson
Principal Consultant

Table of Contents

| | |
|---|-----------|
| INDEPENDENT TECHNICAL REPORT | II |
| 1 SUMMARY | 1 |
| 2 INTRODUCTION | 3 |
| 2.1 Scope of Work | 3 |
| 2.2 Principal Sources of Information..... | 3 |
| 2.3 Qualifications, Experience and Independence..... | 4 |
| 3 RELIANCE ON OTHER EXPERTS | 6 |
| 4 PROPERTY DESCRIPTION AND LOCATION..... | 7 |
| 4.1 RCR Exploration Licenses..... | 7 |
| 4.2 Mineral Tenure | 7 |
| 4.3 Turkish Minerals Legislation | 10 |
| 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY..... | 14 |
| 5.1 Access | 14 |
| 5.2 Climate..... | 14 |
| 5.3 Local Resources and Infrastructure..... | 14 |
| 5.4 Physiography | 15 |
| 6 HISTORY | 18 |
| 7 GEOLOGICAL SETTING | 20 |
| 7.1 Regional Geology..... | 20 |
| 7.2 Property Geology | 20 |
| 8 DEPOSIT TYPES | 25 |
| 9 MINERALIZATION | 31 |
| 9.1 History of Zinc mining in the Hakkari area | 31 |
| 9.2 Style of mineralization | 31 |
| 10 EXPLORATION..... | 38 |
| 10.1 Desktop evaluation and remote sensing exercise..... | 38 |
| 10.2 Reconnaissance site visits | 38 |
| 10.3 Mapping | 38 |
| 10.3.1 Pre-2010 exploration field season mapping | 38 |
| 10.3.2 2010 Exploration Season Mapping | 41 |
| 10.3.2.1 The Pentagon..... | 42 |
| 10.3.2.2 License 5 | 42 |
| 10.4 Grab Sampling | 46 |
| 10.5 Geophysics | 46 |
| 10.6 Trenching | 48 |

| | |
|--|------------|
| 11 DRILLING | 52 |
| 11.1 License 5..... | 53 |
| 11.2 The Pentagon..... | 64 |
| 12 SAMPLING METHOD AND APPROACH..... | 73 |
| 12.1 Stockpile samples | 73 |
| 12.2 Mapping grab samples | 73 |
| 12.3 Channel samples..... | 74 |
| 12.4 Drill core samples..... | 74 |
| 12.5 Mineralogical samples | 75 |
| 13 SAMPLE PREPARATION, ANALYSES AND SECURITY..... | 76 |
| 13.1 Sample Preparation, Analyses and Security..... | 76 |
| 13.2 Quality Assurance and Quality Control..... | 76 |
| 13.2.1 RCR QAQC performance | 78 |
| 13.2.1.1 Blanks..... | 78 |
| 13.2.1.2 Standards | 79 |
| 13.2.1.3 Duplicates..... | 83 |
| 13.2.2 Laboratory QAQC performance | 86 |
| 13.2.3 Umpire laboratory | 92 |
| 14 DATA VERIFICATION..... | 94 |
| 15 ADJACENT PROPERTIES | 96 |
| 16 MINERAL PROCESSING AND METALLURGICAL TESTING..... | 101 |
| 16.1 Bench-scale metallurgical testwork | 101 |
| 16.2 Gravity concentration | 103 |
| 17 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES..... | 106 |
| 17.1 QAQC and Internal Database Verification | 106 |
| 17.2 Resource Estimates | 106 |
| 17.2.1 Geological Interpretation and Modelling..... | 106 |
| 17.2.1.1 License 5..... | 106 |
| 17.2.1.2 Pentagon License..... | 108 |
| 17.2.2 Block Model Creation..... | 108 |
| 17.2.3 Exploratory Data Analysis and Compositing | 109 |
| 17.2.4 Variography | 111 |
| 17.2.5 Estimation Parameters and Grade Estimation | 111 |
| 17.2.6 Validation, Bias and Block Model Grade Distributions..... | 112 |
| 17.2.7 Resource Classification | 112 |
| 17.2.8 Resource Reporting | 113 |
| 18 OTHER RELEVANT DATA AND INFORMATION | 121 |
| 19 INTERPRETATION AND CONCLUSIONS..... | 122 |
| 20 RECOMMENDATIONS | 124 |
| 20.1 License 5..... | 124 |
| 20.2 The Pentagon..... | 124 |

| | |
|---|------------|
| 20.3 Other licenses | 125 |
| 20.4 General recommendations | 125 |
| 20.4.1 Work program: License 5 | 126 |
| 20.4.2 Work program: The Pentagon | 126 |
| 20.4.3 Work program: License 26 | 127 |
| 20.4.4 Other licenses..... | 127 |
| 21 REFERENCES | 129 |
| 22 DATE AND SIGNATURE PAGE | 130 |

List of Tables

| | |
|--|-----|
| Table 4-1 Summary data for the Licence comprising the HZP | 7 |
| Table 8-1 Grade-tonnage attributes of supergene zinc-lead deposits in Turkey and the surrounding region (non-Code compliant) (source: Hitzman <i>et al</i> , 2003) | 29 |
| Table 10-1 Summary of trenching on License 5 | 48 |
| Table 10-2 Dip-corrected grade takeouts for License 5 trenching | 49 |
| Table 11-1 Summary drilling information | 52 |
| Table 11-2 Significant intersections (dip-corrected) from License 5 | 54 |
| Table 11-3 Significant intersections (dip-corrected) from The Pentagon | 65 |
| Table 12-1 Sample types and numbers submitted for mineralogical analysis | 75 |
| Table 13-1 AMIS and Geostats CRM's used during the 2010 exploration program | 77 |
| Table 13-2 Summary of QAQC samples inserted into the HZP sample batches by RCR | 78 |
| Table 17-1 Mineralized Zone Solid Volumes versus Block Model Volumes | 109 |
| Table 17-2 License 5 Drillhole Statistics: Lower Mineralized Zone | 110 |
| Table 17-3 License 5 Drillhole Statistics: Upper Mineralized Zone | 111 |
| Table 17-4 Pentagon License – Lower Mineralized Zone, 5m Below Surface | 111 |
| Table 17-5 Comparison of Drillhole Composite and Estimated Block Means | 112 |
| Table 17-6 In-Situ Inferred Mineral Resources for License 5 Lower Mineralisation | 113 |
| Table 17-7 In-Situ Inferred Mineral Resources for License 5 Upper Mineralisation | 114 |
| Table 17-8 In-Situ Inferred Mineral Resources for the combined License 5 mineralisation | 114 |

| | |
|--|-----|
| Table 17-9 Non-Compliant In-Situ Inferred Mineral Resources for the Pentagon License | 115 |
| Table 20-1 Proposed workplans and budgets for the 2011 exploration season | 128 |

List of Figures

| | |
|--|----|
| Figure 4-1 Location of the RCR HZP licences in Turkey | 9 |
| Figure 5-1 Average climatic conditions in Hakkari (Source: http://www.dmi.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=HAKKARI) | 15 |
| Figure 5-2 Topography of the HZP license areas (elevation data courtesy NASA ASTER GDEM global digital coverage) | 16 |
| Figure 5-3 Typical examples of the topography of the license areas | 17 |
| Figure 6-1 Examples of Roman gallery tunnels exposed in a recently excavated open pit | 19 |
| Figure 7-1 Geological setting of the HZP area (after Yigit, 2009) | 21 |
| Figure 7-2 Regional Geological Setting of the RCR HZP licenses (after Günay and Şenel, 2002) | 22 |
| Figure 7-3 Generalised stratigraphy of project area (after Günay and Şenel, 2002) | 23 |
| Figure 7-4 Brittle fracturing of the dolomite host-rock (left) and possible folding and deformation within the mineralized horizon (right). | 24 |
| Figure 8-1 Grade-tonnage plot for Canadian and worldwide MVT deposits with contained metal content shown on diagonal lines (after Paradis <i>et al</i> , 2007) | 26 |
| Figure 8-2 Histograms of zinc and lead grades for Canadian and worldwide MVT deposits (after Paradis <i>et al</i> , 2007) | 27 |
| Figure 8-3 Schematic representation of MVT-hosted zinc-lead mineralization (after Paradis <i>et al</i> , 2007) | 27 |
| Figure 8-4 Exploration Models – Supergene Zinc Oxide (after Heyl and Bozion, 1962) | 28 |
| Figure 8-5 Exploration Models – Mineralogy observed in progressive wall rock replacement (after Hitzman <i>et al</i> 2003) | 30 |
| Figure 9-1 Mineralization styles observed on RCR licenses | 33 |
| Figure 9-2 Multiple mineralized layers/zones of oxidized zinc-lead mineralization | 36 |

| | |
|--|----|
| Figure 9-3 Cross-sectional view of a subvertical to overturned mineralized zone along a thrust surface. The lowermost (left) portion is dominated by Zn (clearly visible as white smithsonite / hemimorphite), the ore-zone then becomes enriched in Fe and Pb richer higher up (to the right). This location represents the steeply dipping portion of one of the many thrust packages in the area. | 37 |
| Figure 10-1 Schematic reconnaissance structural map of License 5, showing bedding traces (red lines), structural observation points (red dots with associated dip directions) and mineralized zone exposures (orange dots). | 39 |
| Figure 10-2 Competent, erosion resistant dolomitic hangingwall forming a cliff on License 5. The ore zone weathers negatively and outcrops in the vicinity of the geologists | 40 |
| Figure 10-3 Schematic reconnaissance structural map of License 10, showing bedding traces (red lines), mineralized zone exposures (orange dots) and interpreted strike trends of the mineralized zones (orange lines). Note the interpreted synformal structure that appears to be responsible for duplication of the main mapped mineralized zone. | 41 |
| Figure 10-4 Structural data and grab-sample results from the Pentagon | 43 |
| Figure 10-5 West-facing view from outside License 5, showing the projected continuation of the mineralized zone onto the license (the northern steeply dipping zone). Grab samples running in excess of 15% Zn have been collected from this zone on License 5, which has been mined outside of the license in the immediate foreground | 44 |
| Figure 10-6 Mapped mineralisation and structural measurements on License 5, overlain on QuickBird imagery | 45 |
| Figure 10-7 Location and results of 110 rock chip samples collected within the HZP | 46 |
| Figure 10-8 West-facing resistivity (upper image) and chargeability (lower image) sections centred on holes 5DD002 and 5DD003 on License 5 | 47 |
| Figure 10-9 Trench plan of License 5, showing trenches in relation to mapped mineralization (orange) and bedding dip/strike measurements | 50 |
| Figure 10-10 Example of an excavated trench on License 5 (left) and marked-up exposed face ready for channel sampling (right) | 51 |
| Figure 11-1 Diamond drilling rig on License 5 | 54 |
| Figure 11-2 Borehole collars and traces on License 5, draped on QuickBird imagery. Contour interval is 20 m | 55 |
| Figure 11-3 Core photograph of typical oxidised and variably friable mineralized material (MZ) intersected on License 5 from boreholes 5DD002 and 5DD003 | 56 |

| | |
|---|----|
| Figure 11-4 Strip logs from 5DD001 and 5DD002, showing lithologies logged and Zn, Pb and Ag assay results | 57 |
| Figure 11-5 Strip logs from 5DD003 and 5DD004, showing lithologies logged and Zn, Pb and Ag assay results | 58 |
| Figure 11-6 Strip logs from 5DD005 and 5DD006, showing lithologies logged and Zn, Pb and Ag assay results | 59 |
| Figure 11-7 Strip logs from 5DD007 and 5DD008, showing lithologies logged and Zn, Pb and Ag assay results | 60 |
| Figure 11-8 Strip logs from 5DD009 and 5DD010, showing lithologies logged and Zn, Pb and Ag assay results | 61 |
| Figure 11-9 Strip logs from 5DD011 and 5DD012, showing lithologies logged and Zn, Pb and Ag assay results | 62 |
| Figure 11-10 Strip logs from 5DD013 and 5DD014, showing lithologies logged and Zn, Pb and Ag assay results | 63 |
| Figure 11-11 North facing view from a vantage point south of 5DD003 showing antiformal axis developed in the foreground. Small workings are present in the bottom right of the photograph | 64 |
| Figure 11-12 Borehole collars and traces on The Pentagon, draped on Quickbird imagery. Contour interval is 20 m | 66 |
| Figure 11-13 Remnant highwalls comprising hangingwall (right) and footwall (left) contact zones to the partially mined mineralized zone on The Pentagon. The zone dips steeply to the south (right) | 67 |
| Figure 11-14 Core photographs of typical intersections from the Pentagon (holes PENDD006 and PEND010) | 68 |
| Figure 11-15 Strip logs from PEND001 and PEND002, showing lithologies logged and Zn, Pb and Ag assay results | 69 |
| Figure 11-16 Strip logs from PEND003 and PEND004, showing lithologies logged and Zn, Pb and Ag assay results | 70 |
| Figure 11-17 Strip logs from PEND005 and PEND006, showing lithologies logged and Zn, Pb and Ag assay results | 71 |
| Figure 11-18 Strip logs from PEND007 and PEND008, showing lithologies logged and Zn, Pb and Ag assay results | 72 |
| Figure 12-1 Core storage facility located immediately outside Hakkari | 74 |

| | |
|---|-----|
| Figure 13-1 Performance of RCR-inserted blanks for Zn and Pb | 79 |
| Figure 13-2 Performance of RCR-inserted AMIS standards relative to Zn% certified value | 80 |
| Figure 13-3 Performance of RCR-inserted GBM standards relative to Zn% certified value. Note the two 30% values (detection limit) for GBM 903-12 as discussed in text. | 81 |
| Figure 13-4 Performance of RCR-inserted GBM standards relative to Pb% certified value. | 82 |
| Figure 13-5 Performance of RCR-inserted standards relative to Ag (ppm) certified value. | 83 |
| Figure 13-6 Performance of RCR-inserted duplicates for Zn, Pb and Ag | 84 |
| Figure 13-7 RD plots of RCR-inserted duplicates for Zn, Pb and Ag | 85 |
| Figure 13-8 Performance of laboratory-inserted blanks for Zn and Pb | 86 |
| Figure 13-9 Performance of laboratory-inserted blanks for Zn | 87 |
| Figure 13-10 Performance of laboratory-inserted blanks for Zn | 88 |
| Figure 13-11 Performance of laboratory-inserted blanks for Pb | 89 |
| Figure 13-12 Performance of laboratory-inserted blanks for Ag | 90 |
| Figure 13-13 Performance of laboratory-inserted blanks for Ag | 91 |
| Figure 13-14 Original (ALS Chemex) vs Umpire (ACME) results for Zn, Pb and Ag | 93 |
| Figure 15-1 Informal small-scale mining sites adjacent to RCR licenses 5, 8 and 10 | 98 |
| Figure 17-1 Oblique SW-facing view of the License 5 Upper and Lower mineralized zones wireframes. No vertical exaggeration. | 107 |
| Figure 17-2 Zn Distribution in License 5 Lower Mineralisation | 109 |
| Figure 17-3 Zn Distribution in License 5 Lower Upper Mineralisation | 110 |
| Figure 17-4 Grade Tonnage Curve: License 5 Lower Mineralisation | 116 |
| Figure 17-5 Grade Tonnage Curve: License 5 Upper Mineralisation | 117 |
| Figure 17-6 Grade Tonnage Curve: License 5 Combined Mineralisation | 117 |
| Figure 17-7 Non-compliant Grade Tonnage Curve: Pentagon | 118 |
| Figure 17-8 Plan View of License 5 Zn % in the Lower Mineralisation Block Model | 119 |
| Figure 17-9 Plan View of License 5 Zn % in the Upper Mineralisation Block Model | 120 |

List of Appendices

Appendix 1 : Glossary and Definition of Terms Used

Appendix 2 : Certificate of Qualified Persons

Appendix 3 : Independent Legal Opinion on RCR rights and title to HZP Tenements

Appendix 4 : Contractual agreements for The Pentagon and Licence 26

Appendix 5 : Metallurgical Test Work Reports

1 SUMMARY

The Hakkari Zinc Project (HZP) is located in the Hakkari and Sirnak Provinces of south-eastern Turkey, close to the borders with Iraq and Iran. The HZP comprises 4 Operation Licenses and 13 Exploration Licenses covering a cumulative area of 264.63 km² and is located within a broad 60 km long east-west belt extending westwards from approximately 10 km west of the town of Hakkari.

Red Crescent Resources Limited (RCR) is the 100 per cent owner of Red Crescent Resources Holding Anonim Şirketi which has a fully vested 50% interest in 15 of the licenses through a Definitive JV Agreement with Seyitoğlu Madencilik, the original holder of the licenses, now held in an RCR subsidiary company called RCR Seyitoğlu Cinko Madencilik A.Ş. (RCR Zinc or RCRZ). RCRZ have also formalised mining and exploration agreements with the current Operating Licence (OL) holders on two operating Licences (The Pentagon and Licence 26) and await formal transfer of these licences to RCRZ, expected in late April 2011.

The project area is situated within the northern margins of the Arabian Platform within a north facing fold and thrust belt known as the Border Folds region. The fold and thrust belt comprises a sequence of marine platform carbonate dominated rocks and interbedded subordinate clastic units.

Non-sulphide zinc-lead mineralization appears to be restricted to a sequence of Triassic to Cretaceous shallow water “reef-type” limestones, with subordinate interbedded fine-grained rocks which have a variable clastic component. Mineralization outcrops within a series of thrust packages that have a general east-west trend and lie within a district of at least 60 km strike length. Mineralization is dominated by smithsonite and hemimorphite with variable amounts of iron oxide and subordinate hydrozincite and cerrusite in a matrix of calcite, barite and quartz. Mineralization varies in style from tabular zones of variable thickness (<0.5 m to 13 m) to cross cutting breccia zones to disseminated mineralization occupying pore spaces and fracture planes.

The presence of multiple mineralized zones, separated by metres to tens of metres, was confirmed during the 2010 exploration program and correlates with observations on adjacent licenses. The non-sulphide zinc-lead deposits and occurrences within the Hakkari project area are considered to represent supergene weathered derivatives of primary Mississippi Valley Type (MVT) zinc-lead sulphide deposits. Up to 6% sphalerite has been observed in samples from various stockpiles, while lead occurs as both cerrusite and galena. Sulphide-dominant mineralization has also been reported by small-scale mining operators in the district.

Although no modern systematic exploration has been historically carried out in this district prior to 2009, small-scale informal mining of high grade non-sulphide zinc-lead mineralized zones has been ongoing for a long time. Old Roman workings testify to the exploitation of lead in the upper parts of these zones. Small-scale mechanized

mining (hydraulic excavators and dump trucks) has seen increased activity over the last five years in line with increased zinc demand from China. In excess of 600 000 tonnes of zinc-lead material have been officially recorded as sold under contracts through traders with typical grades (certified by SGS and Alfred Knight Laboratories) ranging from 25% to 40% Zn and 4% to 8% Pb. A significant proportion of this material has been mined from areas adjacent to and between the RCR licenses.

During 2010, RCR executed a systematic exploration program geared at defining maiden, code-compliant mineral resources on two of its Licenses. The exploration program comprised mapping, grab and trench (channel sampling) and diamond core drilling and resulted in the issuing of a maiden Inferred Mineral Resource of 2.41 Mt at 1.92% Zn, 0.54% Pb and 1.67 g/t Ag at a cutoff grade of 0.5% for License 5. A non-compliant estimation for the Pentagon of 198.2 kt at 10.53% Zn, 1.11% Pb and 14.73 g/t Ag (at a cutoff grade of 0.5% Zn) was also stated.

Preliminary metallurgical test work conducted on samples from stockpiles associated with adjacent small-scale mining operations has indicated that this material is amenable to direct acid leaching and RCR have demonstrated through gravitational concentrator testwork that concentration of ores by gravitational upgrading is feasible, with a 7.5% Zn feed being upgradeable to 22.5% Zn.

The potential for defining additional new resources and upgrading currently-defined resources is regarded as significant, particularly given that significantly less than 1% of RCR's mineral tenure holdings have been tested through systematic exploration. Higher grade zones have been identified on both The Pentagon and in other areas on License 5. The latter are however subject to systematic sampling to establish bulk grades and will be tested systematically during the forthcoming year. Additionally, License 26 has been historically mined and a fast-tracked exploration program will be implemented in order to define a maiden mineral resource on License 26.

RCR intend to establish a mobile gravitational concentration plant on site in the third quarter of 2011.

2 INTRODUCTION

2.1 Scope of Work

The MSA Group (MSA) was commissioned by Red Crescent Resources Limited (RCR) to provide a Technical Report on RCR's 13 Exploration Licenses and 4 Operation Licenses located in south-eastern Turkey in which RCR holds, or has the right to acquire, a majority interest through its Joint Venture agreement with the Seyitoğlu family vested in an RCR subsidiary company called RCR Seyitoğlu Cinko Madencilik A.Ş. (RCR Zinc or RCRZ). These 17 Licenses together comprise the Hakkari Zinc Project (HZP).

This Technical Report has been prepared to comply with disclosure and reporting requirements set forth in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), Companion Policy 43-101CP, and Form 43-101F1 of December 2005 and the Mineral Resource and Reserve classifications adopted by CIM Council in August 2000.

All monetary figures expressed in this report are in United States of America dollars (US\$) unless otherwise stated. A glossary of all technical terms and abbreviations is attached as **Appendix 1**.

2.2 Principal Sources of Information

MSA has based its review of RCR's HZP on information provided by other independent parties from work commissioned by RCR, from RCR itself based upon actual relevant works completed, the 2010 MSA-managed exploration program as well as other relevant published and unpublished data. A listing of the principal sources of information is included at the end of this Technical Report. Site visits were made by the Qualified Person (QP) Mike Robertson during the period 26 July to 7 August 2009, 20 to 27 June 2010 and 13 to 18 August 2010, by Brendan Clarke and Mike Robertson from 16 to 30 March 2010, and by Mike Robertson, Brendan Clarke and Mike Hall (Qualified Person) from 4 to 8 December 2010 to the 17 licences comprising the HZP and forming the subject of this report. QP Certificates are included in **Appendix 2**. We have endeavoured, by making all reasonable enquiries, to confirm the authenticity and completeness of the technical data upon which the Technical Report is based. A final draft of the report was also provided to RCR, along with a written request to identify any material errors or omissions prior to lodgement.

The mineral properties that form the HZP are exploration projects, which have associated attached risks; however MSA considers, nonetheless, that the projects have been acquired on the basis of sound technical merit. The properties are also considered to be sufficiently prospective on the basis that significant quantities of non-sulphide zinc-lead mineralization have been mined from informal small-scale workings exploited on related mineralized units on adjacent properties. Therefore,

subject to varying degrees of exploration risk, the HZP warrants further exploration and assessment of its potential, consistent with the proposed programs by RCR.

Exploration and evaluation work program costs are summarised in Table 20-1. RCR has prepared phased exploration and evaluation work programs, specific to the potential of the license areas, which are consistent with the budget allocations. The projects have evolved on the basis of ongoing exploration since October 2008 and MSA considers that the relevant areas have sufficient technical merit to justify the proposed programs and associated expenditure.

This Technical Report has been prepared on information available up to and including 31 March 2011.

2.3 Qualifications, Experience and Independence

MSA is an exploration and resource consulting and contracting firm, which has been providing services and advice to the international mineral industry and financial institutions since 1983. This report has been compiled by Mike Robertson and Mike Hall. Mr Robertson is a professional geologist with 22 years experience, the majority of which has involved the exploration and evaluation of gold and base metal properties in Africa, the Middle East, Australia, Canada, Mexico, Russia and the CIS states.

Mr Robertson is Principal Consultant – Gold and Base Metals with MSA, a Member of the South African Institute of Mining and Metallurgy (SAIMM) and a Professional Natural Scientist (PrSciNat) registered with the South African Council for Natural Scientific Professions. Mr Robertson has the appropriate relevant qualifications, experience, competence and independence to act as a “Qualified Person” as that term is defined in NI 43-101.

Mr. Hall is a professional geologist with 29 years experience. Mr. Hall has been involved in the design, execution and management of exploration programs, resource and reserve estimations and public reporting on a wide variety of mineral deposit types and commodities. Mr. Hall is Consulting Geologist – Mineral Resources with The MSA Group, a Member of the Australasian Institute of Mining and Metallurgy (AusIMM), is registered with the South African Council for Natural Scientific Professionals and is a Member of the Geological Society of South Africa (GSSA). Mr Hall has the appropriate relevant qualifications, experience, competence and independence to be considered a “Qualified Person” as that term is defined in NI 43-10.

Peer review has been undertaken by Mr Mike Venter, who is a professional geologist with 17 years experience in the exploration of mineral properties. Mr Venter is a Professional Natural Scientist (Pr.Sci.Nat) registered with the South African Council for Natural Scientific Professions and is a Member of the Geological Society of

South Africa and Society for Economic Geologists. Mr Venter is a Principal Consulting Geologist with MSA and is based in MSA's Cape Town office.

Neither MSA, nor the author of this report, has or has had previously, any material interest in RCR or the mineral properties in which RCR has an interest. Our relationship with RCR is solely one of professional association between client and independent consultant. This report is prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

3 RELIANCE ON OTHER EXPERTS

RCR's projects are understood to consist of a total of 28 granted Exploration and Operation Licenses, in which RCR holds a controlling right in terms of a Joint Venture (JV) agreement signed with the Seyitoğlu family. This report deals exclusively with 17 of these licenses that collectively form the HZP and cover an aggregate but non-contiguous area of 264.63 km² issued in terms of the Turkish Mining Law, 2005.

The legal status and rights of RCR to 15 of these Exploration and Operation Licenses has been independently verified by attorneys Cakmak Avukatlik ("Cakmak") and the relevant report, dated 22 December 2010, is attached as **Appendix 3**. The present status of tenements listed in this report is accordingly based on information provided by Cakmak. This report as well as copies of the Exploration and Operation Licenses have been viewed by the primary author. Additionally, RCR has operational and exploration agreements on two of the licences (The Pentagon and Licence 26), with transfer of these licences to RCR expected to occur in late April 2011. Copies of these agreements are provided in **Appendix 4**.

The authors of this report are not qualified to provide extensive comment on legal and environmental issues associated with the HZP. Comment on legal and environmental issues is for introduction only, and should not be relied on by the reader.

The metallurgical test work documented in this report was undertaken under the direction of Mike Plaskitt, a professional metallurgist. An independent review of this work was conducted by Ewald H. O. Meyer, a Professional Engineer registered with the Engineering Council of South Africa and a Member of the South African Institute of Mining and Metallurgy.

In compiling this report, the author has also relied extensively on reports and personal communications with Messrs Alan M. Clegg Pr.Eng FSAIMM (RCR Executive Chairperson), Doug Taylor (RCR Director for Business Development and Strategy), Mark Grodner Pr.Sci.Nat (consultant to RCR) and Muhammed Arar (RCR Director of Exploration).

4 PROPERTY DESCRIPTION AND LOCATION

4.1 RCR Exploration Licenses

The HZP is located in the Hakkari and Sirnak Provinces of south-eastern Turkey, close to the border with Iraq. The 13 RCR Exploration Licenses (ELs) and 4 Operation Licenses (OL's) are located in a broad 60 km long east-west belt extending from approximately 10 km west of Hakkari (Figure 4-1). The 17 license areas cover a total area of 264.63 km². These licences are summarised in Table 4-1.

Table 4-1
Summary data for the Licence comprising the HZP

| | Licence name | Licence Type | Area (km ²) |
|-------|--------------|--------------|-------------------------|
| 1 | 1 | PL | 19.85 |
| 2 | 2 | PL | 19.50 |
| 3 | 3 | PL | 19.64 |
| 4 | 4 | PL | 19.07 |
| 5 | 5 | OL | 33.00 |
| 6 | 6 | PL | 19.93 |
| 7 | 7 | PL | 19.67 |
| 8 | 8 | PL | 13.13 |
| 9 | 9 | PL | 19.98 |
| 10 | 10 | OL | 18.01 |
| 11 | 11 | PL | 12.88 |
| 12 | 11a | PL | 13.29 |
| 13 | 12 | PL | 11.21 |
| 14 | 24/1 | PL | 17.59 |
| 15 | 24/2 | PL | 1.92 |
| 16 | 26 | OL | 2.59 |
| 17 | The Pentagon | OL | 3.38 |
| Total | | | 264.63 |

4.2 Mineral Tenure

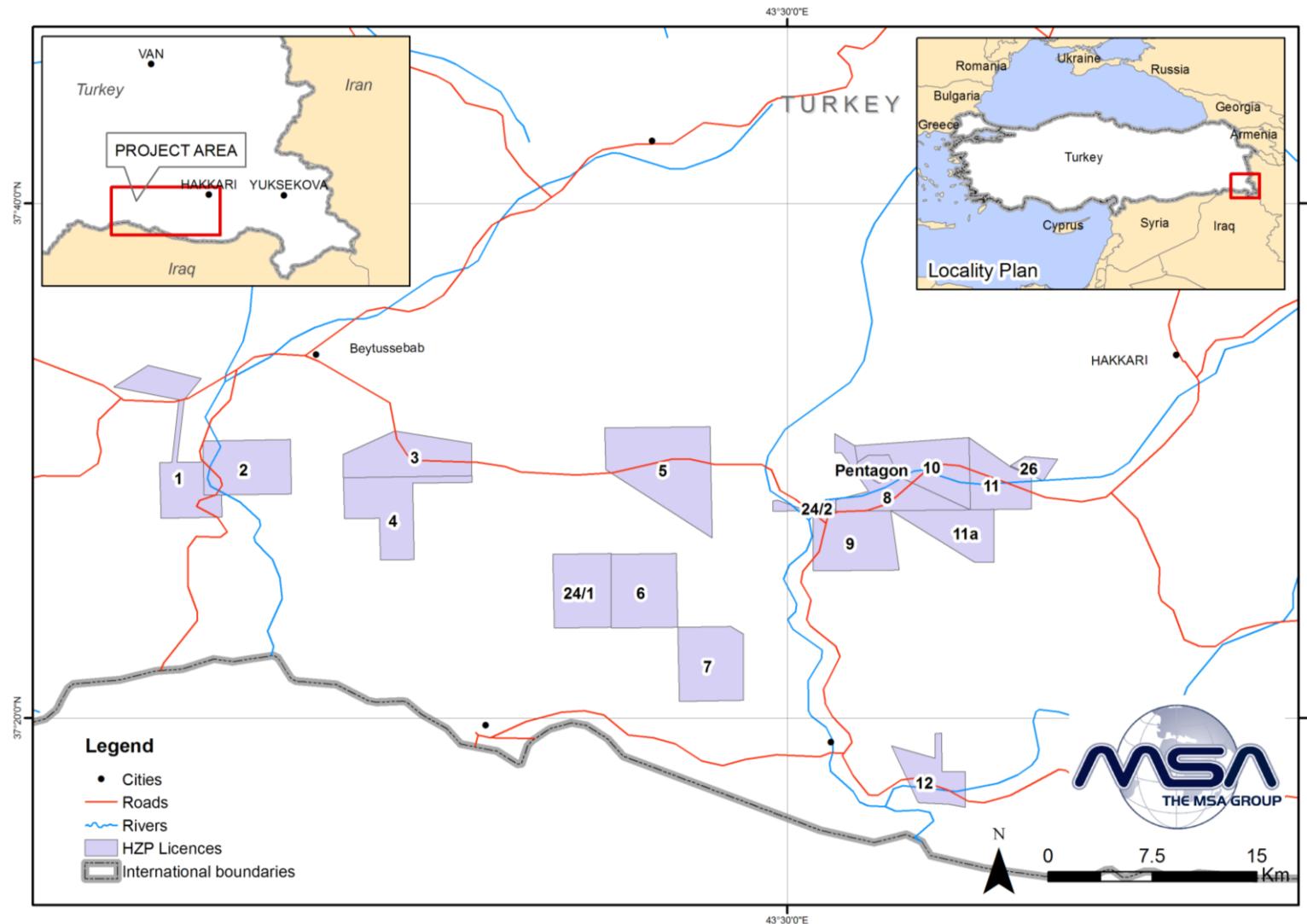
A legally binding Framework Agreement (FA) was concluded and signed between the original licence holders, the Seyitoğlu family company Seyitoğlu Madencilik, and RCR in 2009. A subsequent Definitive Agreement (DA) between RCR and Abdulkadir Seyitoğlu, Kadri Seyitoğlu, Melal Kazar (Seyitoğlu Madencilik or SM) was entered into to create a Joint Venture Company RCR Seyitoğlu Cinko Madencilik A.Ş. (RCR Zinc or RCRZ). The principal activity of this company will be the exploration and exploitation of zinc and associated lead resources to be defined within the strategy defined below. This agreement covers all but two of the HZP

Licences (Licence 26 and The Pentagon), for which RCR currently has operational and exploration agreements in place, with transfer to RCR expected in late April 2011. The transfer of The Pentagon Licence has been executed through a transfer of the Licence from Merzigo to Ber Mining. Ber Mining have subsequently signed a transfer agreement of the Licence to Cifci, which will be transferred to RCR. Licence 26 will be transferred to RCR through an agreement with a group of local licence holders (collectively referred to as KC). Copies of these agreements are provided in **Appendix 4**.

The agreement with the Seyitoğlu family comprises a number of key provisions. RCR has an immediate vested 50% interest in the HZP and has agreed to match the stated, but as yet un-audited historical costs of Seyitoğlu Madencilik by expending US\$4.5 million over two years. RCR has already expended in excess of US\$3.5m from funds raised in the private equity market in November 2009 and February 2010 and latterly during the pre-listing fund raising of September 2010. The two year period is defined as starting once the licenses have been transferred to the jointly owned company RCRZ. RCRZ commenced in Feb 2010, placing RCR's expenditure program on schedule.

The agreement sets out other milestones, including the expectation of the completion of a first Bankable Feasibility Study (BFS) within the two year period and this has been planned and budgeted for accordingly within the required capital raising undertaken to date. The minimum production set for a joint operation within the DA signed is 25 000 tonnes per annum, with a 50:50 profit share envisaged. The DA has no formal clauses governing the specifics of RCR's right to increase its ownership beyond 50%, although it is an accepted principle within the DA that post the matching of historical costs, capital requirements will be covered on the basis of "contribute or dilute" by shareholders. The process plant required in terms of the DA with the Seyitoğlu family as a condition precedent to the initiation of the contribute or dilute principal being applied to the funding for the HZP is being met and exceeded with the mobilisation of a 90 000 tpa capacity Gravity concentrator plant in the 3rd Quarter of 2011, which will increase early cash flow.

Figure 4-1
Location of the RCR HZP licences in Turkey



4.3 Turkish Minerals Legislation

Minerals legislation in Turkey is governed by the **Mining Law No. 3213** published in the Official Gazette No. 18785 dated 15 June 1985, amended by **Law No. 5177** of June 2004. An further Amendment to the Mining Law was published in the Official Gazette on 24 June 2010 to regulate the details of the permitting process in the law and to amend other provisions of the Mining Law. The **Mining Law Implementation Regulation** was published in the Official Gazette No. 27751 dated 6 November 2010.

Under current Turkish mining legislation, ‘underground resources’ are subject to the exclusive ownership and disposition of the State and are not considered a part of the land where they are located. The State delegates its right for exploration and operation to individuals or companies for specific periods by issuing licenses subject to royalty payments to the State.

Only Turkish citizens and the companies established under Turkish laws specifically for mining purposes are entitled to hold mining rights. Foreign capital companies established in Turkey for mining purposes, like RCR, are entitled to hold mining rights as they are deemed Turkish Companies.

The Mining Law categorizes minerals in six groups:

- Sand and gravel [Group I(a)] and clay tile, cement tile or marl [Group I(b)];
- Grounded forms of stones such as calcite, limestone, granite [Group II (a)] and block stones or decorative stones such as marble, granite, travertine [Group II (b)];
- Salts in solution form that can be obtained from sea, lake and spring waters [Group III];
- Energy, metal and industrial minerals (including metals such as gold, silver, copper, brass...etc.) [Group IV];
- Precious metals and gem stones [Group V]; and
- Radioactive minerals and other radioactive substances [Group VI].

The Mining Law allows for overlapping licenses for different category minerals in the same area.

The General Directorate of Mining Affairs (GDMA), a unit of the Ministry of Energy and Natural Resources (MENR), is the authorized body to regulate the mining activities and issue mining licenses.

An **Exploration License or Certificate** (the license issued for the fifth group is named “certificate” in the legislation) is granted by the Mining Department in accordance with the area limitations stated in the Mining Legislation.

The exploration license has three-stages, as follows:

- **“Pre-exploration period”** is the first year after the issuance of the exploration license.
- **“General exploration period”** is the period of two years for Group IV mines and one year for other groups starting from the expiration of the pre-exploration period.
- **“Detailed Exploration Period”** (for Group IV and VI mines only) is the period of four years starting from the expiration of the general exploration period.

Obligations of an Exploration License holder are summarized as follows:

- **Duties and Security Deposit:** Payment of an annual duty as well as 1% of the annual duty times the hectares to be deposited as a security for each license, on an annual basis
- **Submission of Documents:** An annual report, including information regarding work done, the results thereof, and associated expenditures, must be submitted to the Mining Department.

The exploration licenses obtained prior to the Amendment shall be subject to the previous regime, where an exploration license is granted for three-year term and the term of the exploration license may be extended for certain mines (i.e. Group IV) for another two years. If the license holder fails to conduct sufficient exploration activities within the three-year period, the license will be terminated.

Before the end of the exploration license period, the license holder must apply for an **Operation License or Certificate**. If the exploration license holder fails to apply for an Operation License at the end of the license term, the exploration license shall be terminated and the security deposit shall be forfeited. An Operation License is an instrument granting the license holder the right to operate a mine under the Mining Legislation.

The term of an Operation License/Certificate for the first group of minerals may not be less than five years and for the other groups may not be less than ten years. The term of an operation license/certificate may be extended, but may not exceed 60 years.

The license holder may continue exploration activities during the operation period. If the license holder fails to identify the mine reserves within five years (for Group IV mines) and three years (for other groups) upon issuance of the license, the license area shall be divided.

Obligations of an Operation License holder are summarized as follows:

- **Duties and Security Deposit:** Payment of an annual duty as well as 1% of the annual duty times the hectares to be deposited as a security for each license, on an annual basis, and based on the longevity of the license.
- **Submission of Documents:** All technical documents, sales information form, and activity information form relating to operational activities for the year must be submitted to the Mining Department by the end of April each year.
- **Royalty:** Royalties to be paid by the license holder are for Group IV minerals are as follows:
 - Group IV (excluding gold, silver and platinum) 2%
 - Group IV (gold, silver and platinum) 4%

The royalty will be levied by an addition of 30% for mining activities conducted on State owned lands. Additionally, license holders obtain a 50% relief on royalties in the event that the extracted ores are processed in Turkey.

In addition to an Operation License, an **Operation Permit** is required to start production activities. An Operation License covers the area in which the mining activities will be conducted and provides the legal right to use the licensed area whereas the Operation Permit gives the license-holder the right to operate the mine. Operating activities are required to commence within 1 year upon receiving the Operation permit. Failure to commence operations is subject to a penalty of 10% royalty on annual production.

In essence for RCR this means normally its liability would be a 1% royalty on any zinc, lead or other by-product metal or industrial mineral which, in the case of RCRZ is barium sulphate. However as a result of government's commitment to socio-economic development in south-eastern Turkey a special dispensation is given to investors and RCR will enjoy an initial royalty free period of up to 10 years.

The ownership of mineral rights does not cover the ownership of surface rights where the mineral resources are located. It is necessary to create a usufruct or easement right over the mineral exploration area in order to carry out any mining activities. Other legal options to utilise privately-owned lands are purchasing or leasing.

In terms of the 2010 Amendment to the Mining Law, extensions to Exploration Licenses can only be granted upon the supply, from the company, of an exploration report documenting mapping and sampling results and an inferred mineral resource. For the conversion of Exploration Licenses to Operation Licenses, the requirements are:

- Preparation of detailed topographical map of the study area which shows drill holes, sampling points and trenches

- Exploratory activities i.e. mapping, sampling, trenching and drilling must have been conducted on the License
- Samples must be sufficient in number and naturespread to be considered representative
- Detailed geological, geochemical and geophysical maps must be provided, along with geological cross sections
- Three dimensional resource modelling must be carried out
- An indicated/measured resource statement must be prepared

Turkey's policies regarding environmental protection and development are based on the harmonisation of policies and solutions with both European Union and international standards, reinforcement of existing legislation, improvement of environmental management, prevention of pollution and increasing awareness of environmental issues. However, mineral exploration activities are no longer subject to an environmental impact assessment report but must lodge an environmental compliance plan (ECP). The New Law also provides that the Ministry of Environment and Forestry shall finalise the environmental impact assessment transactions for other mining activities within three months following the application. Although this amendment aims to shorten the time spent on bureaucratic transactions, the New Law does not provide any remedy for failure to finalise applications within the required time.

SRK Danışmanlık ve Mühendislik A.Ş. (SRK) have conducted an environmental assessment of RCR's licenses and have concluded that no environmental fatal flaws exist (SRK, 2010). They do, however, highlight the development of hydropower dams downstream in the Zap river valleys as a point that requires consideration, and they additionally note the presence of some ecologically sensitive habitats along the Zap valley. Neither the authors, nor MSA are qualified to provide an opinion regarding the environmental status of the licenses.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access

The nearest airport to the license areas is located in Van, approximately 200 km north-northwest of Hakkari (Figure 4-1). Major road-works are currently in progress, causing some delay, but it is anticipated that these will be completed within the next few years, providing double-lane freeway access from Van to Hakkari. There are regular scheduled commercial flights between Van and other major Turkish cities. A new airport is also being constructed at Yüksekova, approximately 50 km to the east of Hakkari, which will provide quicker access to the HZP (Figure 4-1).

Access to the majority of the license areas is good, with a double-lane sealed road from Hakkari following the course of the Zap River through the license areas. The western licenses are accessed via the sealed road from Çukurca to Şırnak. Sealed roads extend to within 5 km of each of the license areas, and all licenses are accessible by maintained gravel roads.

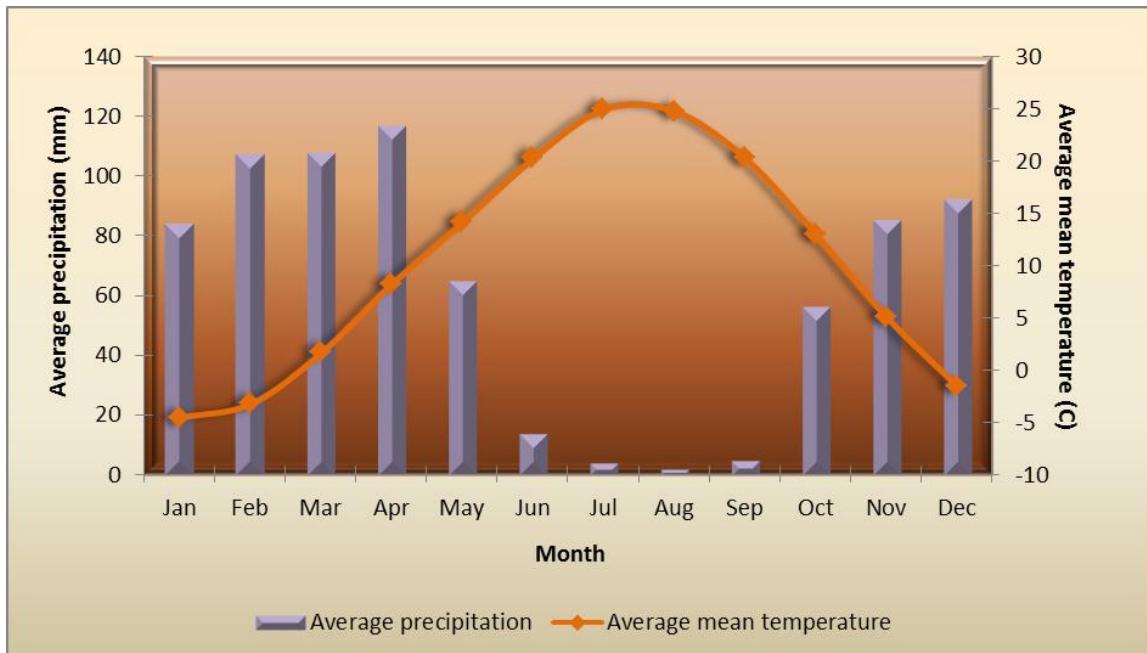
5.2 Climate

The climate in the Hakkari area varies significantly between summer and winter (Figure 5-1). During the summer months (May to August), maximum temperatures readily exceed 40°C. Winter, with associated snowfalls, extends from November to early March and mean temperatures are generally below freezing. During this period, surface exploration is hampered due to access problems associated with snow cover. The summer months are also the driest, with the bulk of precipitation occurring from October to April (autumn, winter and spring months). During the winter months, the bulk of the precipitation occurs as snow.

5.3 Local Resources and Infrastructure

Electricity generation and reticulation is handled by Vangolu Elektrik Dagtim (a subsidiary of the TEDAS, the Turkish electricity company). Power lines extend along all of the main roads and since all license areas are within 5 km of the main roads, there is power available within 5 km of the license areas. Several villages are present within the license areas and all have access to electricity. Water is abundant and is supplied by the Hakkari Municipality (Turkish – Hakkari Belediyesi), who draw from the numerous rivers in the area. Several rivers are present within the licenses, including the Zap River that flows parallel to the main road leading southwards from Hakkari (Figure 4-1). Telecommunication infrastructure is good, with cellular telephone coverage throughout the license areas. Several dams are being constructed in the lower reaches of the Zap River valley, close to the Iraqi border, with the aim of providing hydro-electric energy to the region.

Figure 5-1
Average climatic conditions in Hakkari (Source:
<http://www.dmi.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=HAKKARI>



5.4 Physiography

As Figure 5-2 and Figure 5-3 illustrate, the licenses are located within rugged mountainous terrain, with elevation differences between the river valley floors and mountain tops in excess of 400 m. Outcrop is generally excellent allowing for ease of geological and structural mapping. The steep topography does not present a major problem to the companies currently undertaking small-scale mining in these areas. Well-constructed road systems allow access to these informal mining sites. Other exploration methods, such as drilling from underground drives would not be impacted by the topography.

Figure 5-2
Topography of the HZP license areas (elevation data courtesy NASA ASTER GDEM global digital coverage)

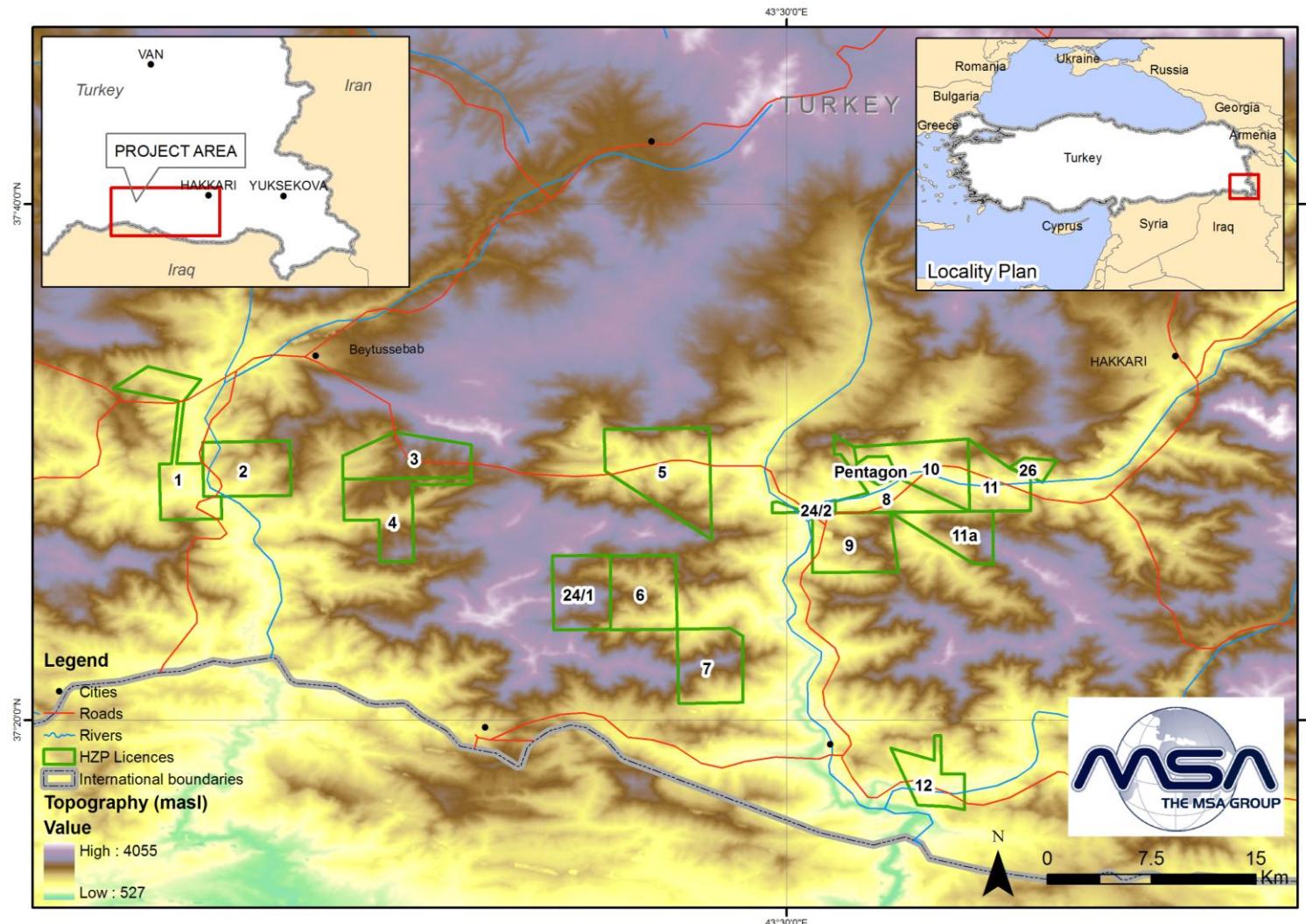
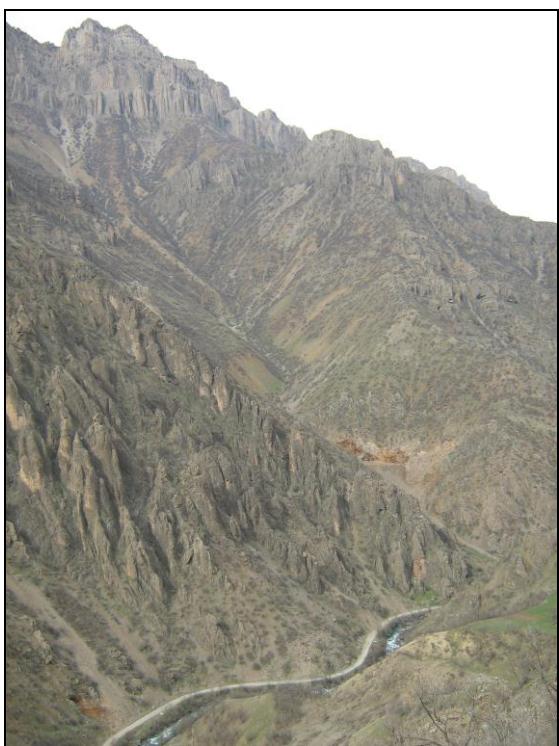
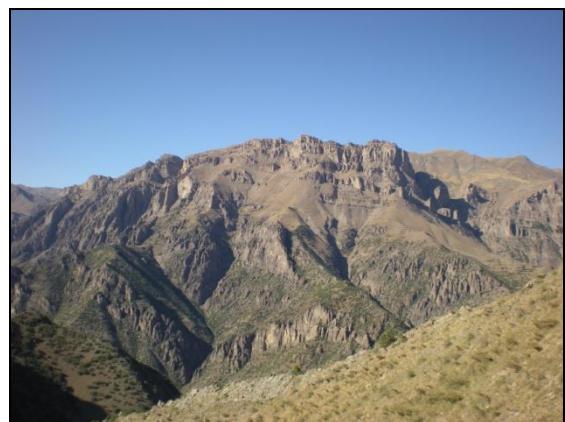
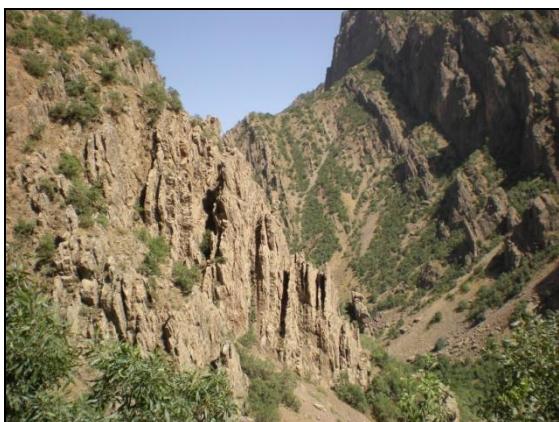
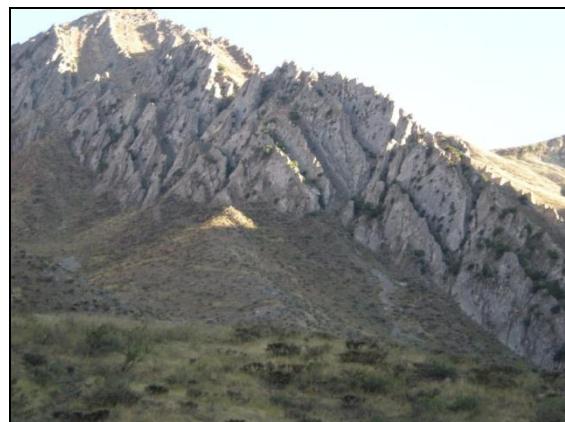
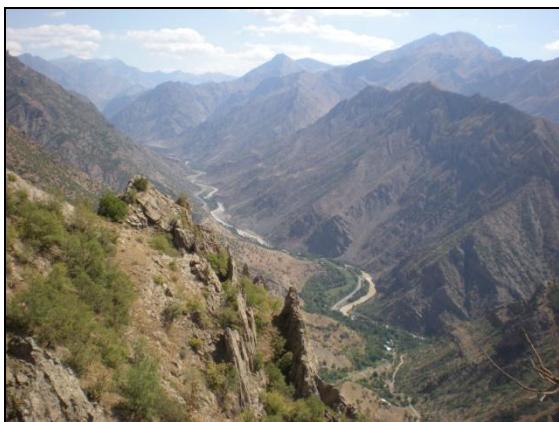


Figure 5-3
Typical examples of the topography of the license areas



6 HISTORY

During Roman and medieval times, the non-sulphide zinc ores known as “*lapis calaminarius*”, “*calamine*”, “*galmei*” or “*galman*” in the Latin-, French-, German-, and Polish-speaking worlds, respectively, were used as source materials for the production of brass (a zinc-copper ± tin alloy) throughout Europe and the Mediterranean regions.

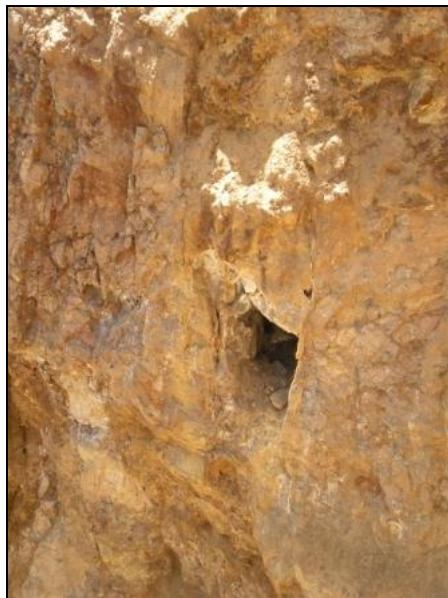
There are many examples of Roman underground mining galleries in the area of interest on the HZP, as for example shown in Figure 6-1. Although these excavations appear to have been focussed more on the upper lead-rich portion of the mineralized zone, it is quite likely that zinc has been sporadically mined around Hakkari for at least 2 000 years. However, the difficulties in beneficiation of smithsonite ores containing 10% to 20% Zn and complex ores containing zinc oxide, silicate, and clays from lack of available extraction technologies, led to large bodies of non-sulphide zinc material being ignored until very recently (Hitzman *et al*, 2003).

Current informal small-scale mining activities are underway on mineralized zones located between licenses 8 and 10 and licenses 5 and 8. Apart from this and similar small-scale mining excavations within the Hakkari area, no records of any previous systematic mineral exploration activities exist.

On licenses currently held by RCR and others, some of which are contiguous and adjacent to RCR licenses, significant mining activities have been ongoing for many years. These have seen increased activity over the last 5 years in line with increased commodities demand from China. In excess of 600 000 tonnes of zinc-lead ores have been officially recorded as sold under contracts through traders with typical grades (certified by SGS and Alfred Knight laboratories) ranging from 25% to 40% Zn and 4% to 8% Pb. A significant proportion of this material has been mined from areas adjacent to and between the RCR licenses. Mining activities on adjacent properties are discussed more fully in Section 15 Adjacent Properties.

This is significant as it points to the potential of the areas of the HZP under investigation, especially in the light of the unusually high grades encountered. Relatively small tonnages are required to be mined, beneficiated and refined to produce significantly economic volumes of base metal products.

Figure 6-1
Examples of Roman gallery tunnels exposed in a recently excavated open pit



7 GEOLOGICAL SETTING

7.1 Regional Geology

The project area is situated within the northern margins of the Arabian Platform (Figure 7-1) that forms part of the Alpine-Himalayan Orogenic Belt (AHOB). This first developed in the Jurassic and continues to evolve to the Present. The AHOB is traditionally subdivided into four tectonostratigraphic domains: from north to south these are the Pontides, Anatolides, Taurides and Border Fold or Arabian Platform regions (Figure 7-1).

The south-eastern AHOB in the project area is characterised by north-vergent fold-and-thrust tectonics with the overriding Taurides separated from the weakly deformed Arabian Platform by the Bitlis suture/thrust (Yigit, 2009).

The rocks of the south-eastern Arabian Platform beneath the Bitlis Thrust can be generally described as a package of autochthonous north-facing folded and thrusted marine platform carbonate-dominated rocks and interbedded subordinate clastic units (Figure 7-2). The northward younging sedimentary succession has been duplicated by a major east-west striking, south directed thrust structure, with licenses 1 to 11a situated in the upper thrust package and license 12 in the lower thrust package (Figure 7-2).

7.2 Property Geology

According to the 1:500 000 scale geological map (Günay and Şenel, 2002), the geology underlying the current study areas consists of 15 sedimentary units ranging in age from the Precambrian-Cambrian boundary to the Paleogene (Figure 7-3). Inspection of the 1:500 000 scale map legend points to several units being diachronous whilst others are separated by major hiatuses. The mapping also shows some lateral discontinuity of sedimentary units, apparently the result of primary facies variations and/or paleotopography rather than tectonic movements.

The target zinc-lead mineralized bodies of the Hakkari region are restricted to the t2k1 neritic limestones (ranging from mid-Triassic to early Cretaceous in age) and are interpreted to have been effective fluid conduits. The t2k1 limestone consists not only of shallower water “reef” type limestones, but also fine grained rocks with a variable clastic component. These dolomitic to cherty rocks have varying bedding thickness from approximately 1 cm to over 1 m and are often stacked as interlayered units of more massive layers alternating with more fissile layers.

The zinc-lead mineralized zones are present as multiple layers ranging in thickness from a few centimetres to a few metres that display visible iron-oxide enrichment and generally weather negatively in relation to the indurated dolomites that are present in the hangingwall and footwall and as interlayered units.

Figure 7-1
Geological setting of the HZP area (after Yigit, 2009)

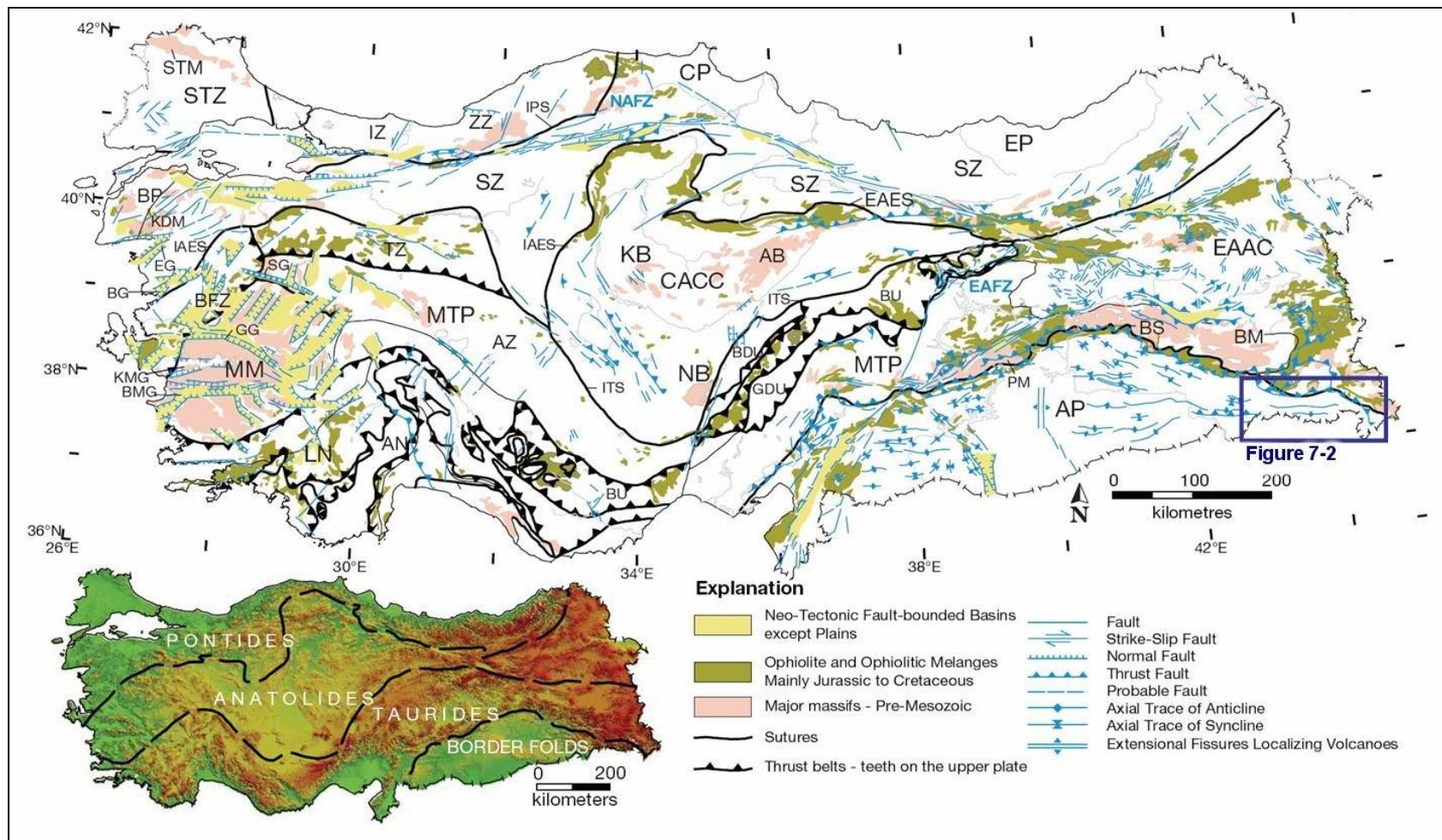


Figure 7-2
Regional Geological Setting of the RCR HZP licenses (after Günay and Şenel, 2002)

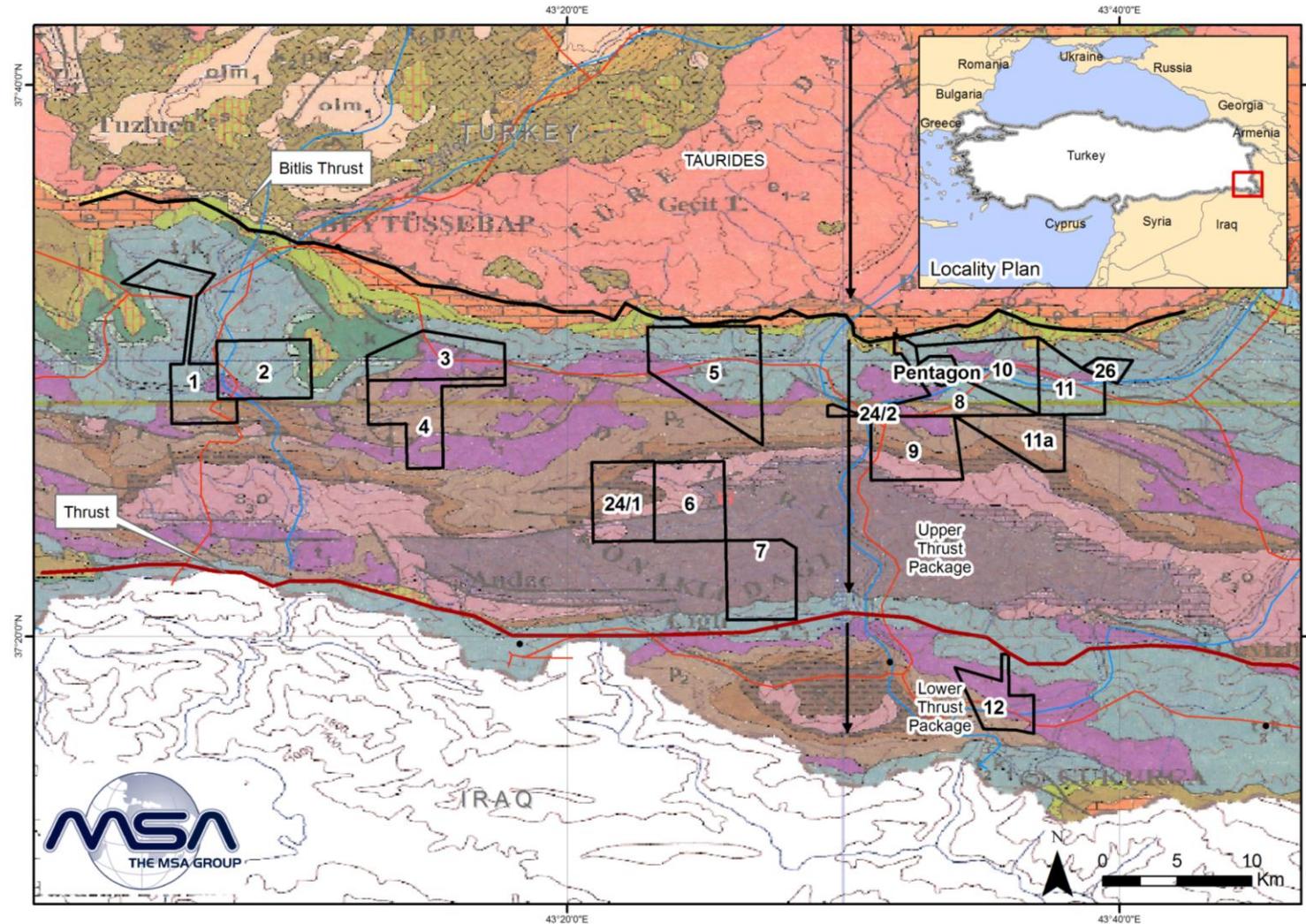
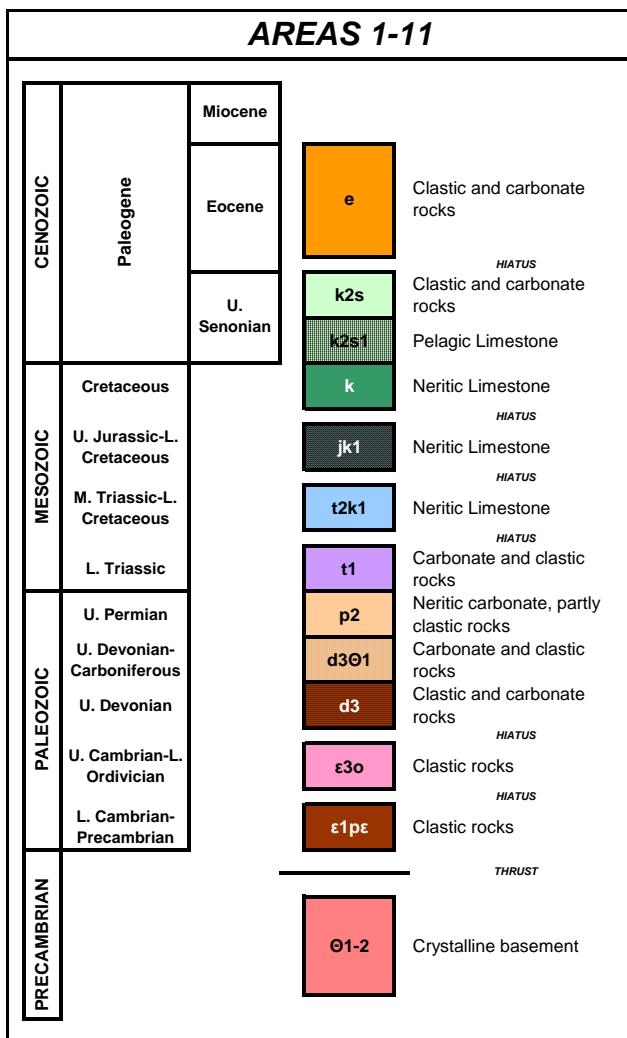


Figure 7-3
Generalised stratigraphy of project area (after Günay and Şenel, 2002)



Zinc mineralization is generally hosted in a more porous “reef limestone” or breccia unit flanked by indurated to cryptocrystalline dolomite or cherty dolomite (Figure 7-4). Both the host limestone and cryptocrystalline hanging- and footwalls are usually structurally deformed, with the more competent dolomitic wall rocks typically exhibiting brittle deformation and the mineralized horizon exhibiting ductile to brittle-ductile behaviour (Figure 7-4). Partial dissolution of the mineralized horizon, presumably by the mineralising fluids, is also commonly observed.

Further details are given in Sections pertaining to Mapping, Trenching and Drilling.

Figure 7-4
Brittle fracturing of the dolomite host-rock (left) and possible folding and deformation within the mineralized horizon (right).



8 DEPOSIT TYPES

The age, structural and shallow marine/platform carbonate dominated setting of the project area makes the region an attractive target for Mississippi Valley Type (MVT) zinc-lead sulphide mineralization.

Some zinc-lead sulphide mineralization has recently been identified in the licenses adjacent to the HZP area. The ongoing exploitation and mining (albeit on a small scale) of high grade zinc (as high as 40%) and lead (as high as 8%) non-sulphide material is already suggestive of the development of either supergene or hypogene zinc oxide mineralization, the former related to a buried sulphide parent.

- Supergene deposits form primarily from the oxidation of sulphide-bearing deposits (often MVT) and are typically dominated by smithsonite (ZnCO_3), hydrozincite ($\text{Zn}_5(\text{CO}_3)_2(\text{OH})_6$) and/or hemimorphite ($\text{Zn}_4\text{Si}_2\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$) (Hitzman *et al*, 2003). Three subtypes have been recognized: direct replacement deposits, wall rock replacement deposits and karst fill deposits, of which several combinations have been identified (Hitzman *et al* 2003) (Figure 8-4).
- Hypogene deposits are dominated by zinc silicates and oxides and are divided into two types: structurally controlled deposits comprising of irregular pipes and veins dominated by willemite (Zn_2SiO_4) and stratiform deposits comprising Mn rich lenses of franklinite (($\text{Zn, Fe, Mn}(\text{Fe, Mn})_2\text{O}_4$) and willemite (Hitzman *et al* 2003).

An MSc dissertation describing the lead isotope geochemistry of zinc-lead deposits in Turkey was completed by Ceyhan in 2003. Results from this study suggest that the zinc occurrences in the Hakkari area are stratiform and Mesozoic in age, suggesting a syngenetic type of mineralization.

Following field examination of numerous mineralized exposures within the project area (during the Phase 2 site visit), it is concluded that the major style of zinc-lead mineralization comprises supergene alteration of primary MVT-type zinc-lead deposits. An understanding of the characteristics and geological setting of MVT deposits will therefore assist in understanding the distribution of, and extensions to, known non-sulphide zinc-lead deposits and in further exploration targeting within the project area.

The typical characteristics of MVT deposits are described in Paradis *et al* (2007) and are summarised as follows:

- Primary MVT deposits are stratabound, carbonate-hosted sulphide bodies, composed predominantly of zinc and lead, occurring as sphalerite and galena respectively. The deposits occur mainly in dolomite (less frequently limestone) as open-space fillings, breccias (crackle, mosaic, rubble, solution collapse), structures within interconnected paleokarst networks, replacement of the carbonate host rock, and as sulphide and gangue minerals occupying primary

carbonate porosity. At the deposit scale, mineralization-controlling features are commonly zones of solution collapse breccias.

- They are located in platform carbonate settings, typically in relatively undeformed orogenic foreland rocks, commonly in foreland thrust belts, and rarely in rift zones. Deposits are commonly located close to a carbonate shelf margin, at the transition into slope and basinal shale facies. MVT deposits account for approximately 25% of the world's known zinc and lead resources.
- Major basement faults influence the alignment of deposits within districts, while subsidiary faults tend to create zones of weakness with subsequent dissolution and karsting.
- Orebodies typically occur in clusters within mineralized districts which can extend to hundreds or thousands of square kilometres. An example is the Cornwallis district in Canada which hosts at least 25 deposits containing 75 orebodies. Individual orebodies are generally <2 Mt, are zinc dominant, with grades seldom exceeding 10% zinc + lead combined (Figure 8-1 and Figure 8-2).
- Individual orebodies vary in geometry and are often interconnected. Host structures are commonly zones of highly brecciated dolomite which range from concordant features controlled by individual strata, to discordant features developed over tens of metres across sedimentary strata (Figure 8-3). MVT orebodies are therefore stratabound on a district scale, but typically discordant on a deposit scale.
- Style of mineralization ranges from zones of massive replacement, to open space filling of breccias and fractures, to disseminated clusters of crystals that occupy pore spaces.

Figure 8-1
Grade-tonnage plot for Canadian and worldwide MVT deposits with contained metal content shown on diagonal lines (after Paradis et al, 2007)

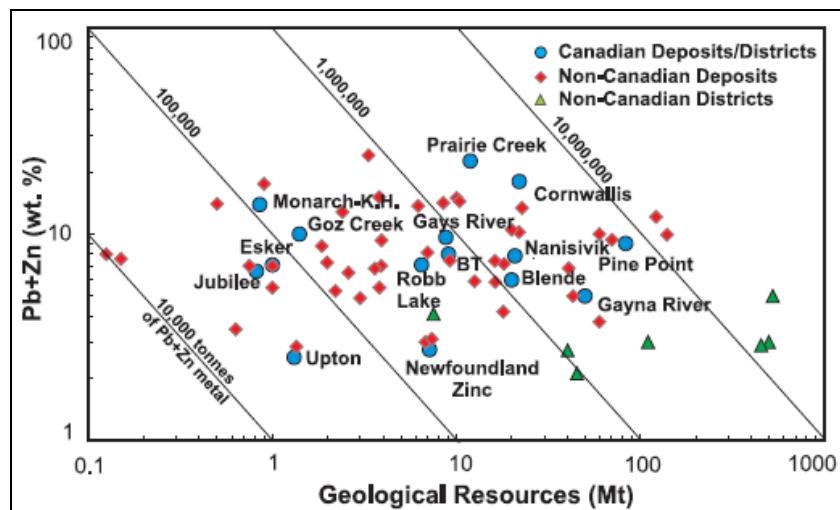


Figure 8-2
Histograms of zinc and lead grades for Canadian and worldwide MVT deposits
(after Paradis et al, 2007)

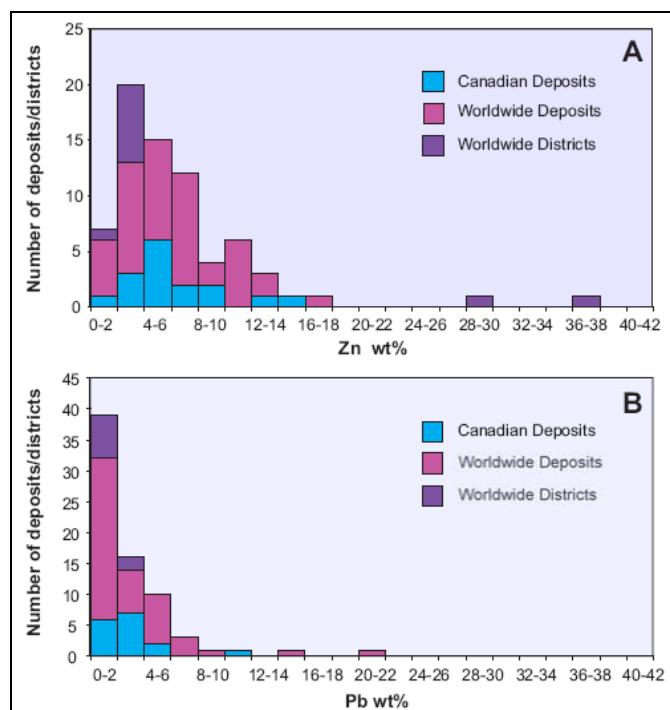
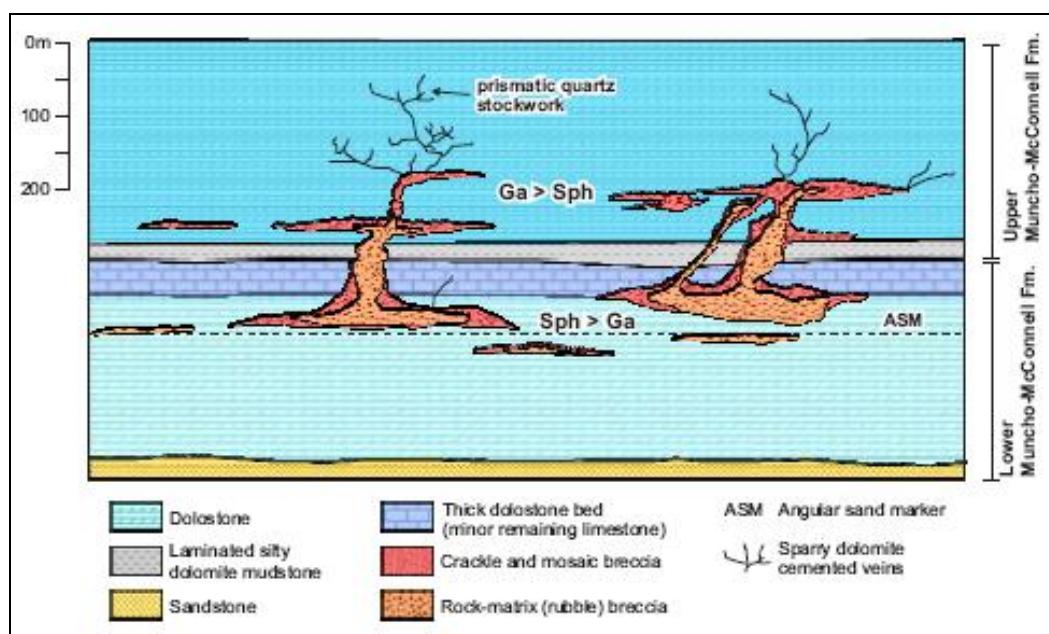


Figure 8-3
Schematic representation of MVT-hosted zinc-lead mineralization (after Paradis et al, 2007)

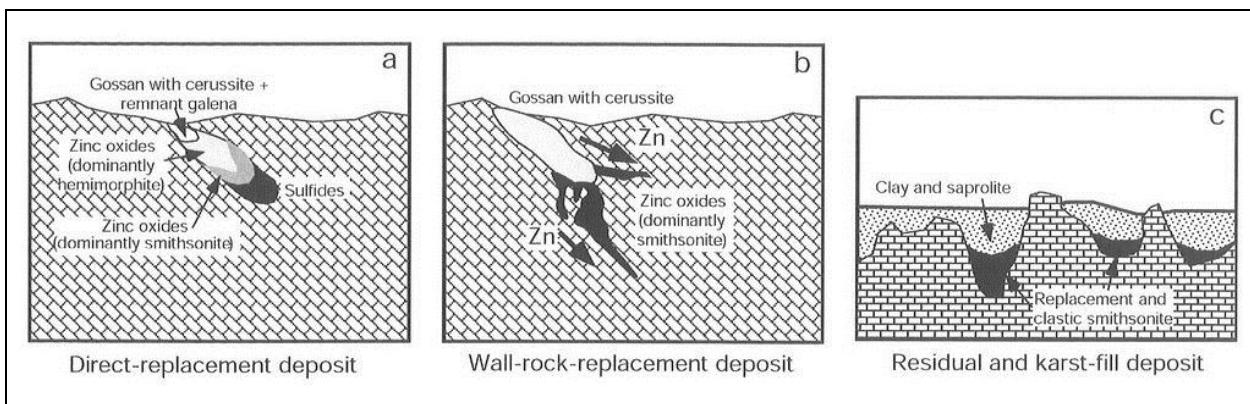


Supergene non-sulphide zinc-lead deposits are formed through the reactivity of acidic, oxidised zinc-lead rich fluids derived from oxidative destruction of zinc-lead bearing sulphide bodies with high reactive carbonate wall rocks (Hitzman *et al* 2003). The formation of these deposits depends on:

- The size and mineralogy of the pre-existing zinc-lead sulphide deposit,
- Exposure of the sulphide deposit to a seasonal fluctuating water table,
- Degree of primary porosity and secondary fault and fracture density, to permit movement of migrating oxidised ground waters,
- A suitable neutralising trap site for deposition of secondary zinc and lead minerals.

Three subtypes of supergene non-sulphide zinc-lead deposits are recognized, namely direct replacement, wall-rock replacement, and residual and karst-fill deposits (Figure 8-4). All three types may be present within a single deposit.

Figure 8-4
Exploration Models – Supergene Zinc Oxide (after Heyl and Bozion, 1962)



According to Boni and Large (2003) the critical geological features for the oxidation of primary (MVT) sulphides and preservation of the secondary zinc minerals include:

- Tectonic uplift subsequent to primary sulphide mineralization, promoting the oxidation and the development of karst systems.
- Brittle fracture of the host rocks promoting the flux of oxidising fluids and mobilisation to favourable depositories
- The presence of sufficient iron sulphide in the primary mineralization as an important control during oxidation, for the generation of acid required for the leaching and transport of zinc.

Characteristic features of non-sulphide supergene zinc-lead deposits include:

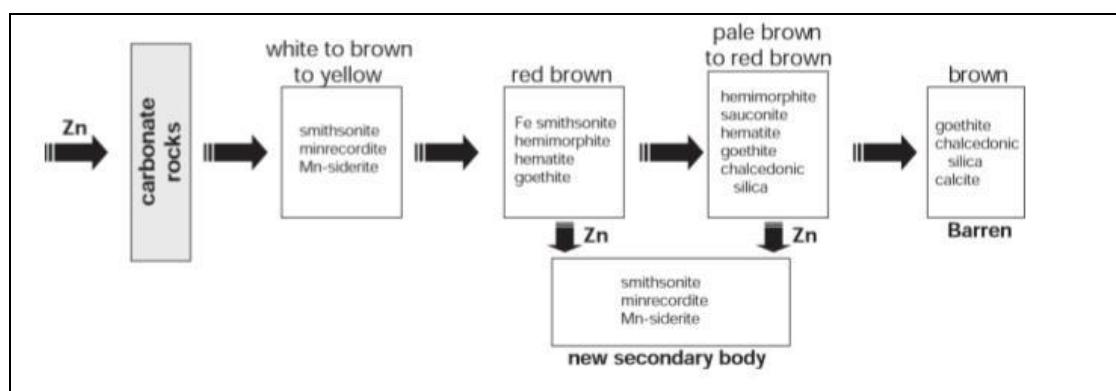
- Features of MVT deposits, as described above, are inherited by supergene deposits.
- Supergene formation through oxidative alteration of a zinc-lead sulphide bearing precursor deposit, typically a MVT deposit.
- The major secondary zinc minerals are smithsonite, hydrozincite, hemimorphite and sauconite, with smithsonite the most stable under atmospheric weathering conditions. Deposits may be mineralogically and metallurgically complex.
- Deposits are preserved in various states. Direct replacement deposits are essentially zinc-lead rich gossans. Original iron sulphide rich deposits may produce enough acid to extensively leach secondary zinc minerals in the near-surface environment.
- Ore textures are varied and often complex and range from massive to brecciated to disseminated, with vuggy to dense mineralization. The most common ore texture is breccia. Several stages of secondary zinc mineralization are normally present, reflecting multi-cyclic oxidation and leaching.
- The grade and tonnage of deposits is a reflection of the primary zinc-lead content; however significant upgrading of parts of these systems is common. A tabular summary of known supergene zinc-lead deposits is contained in Hitzman (2003). Significant deposits in Turkey and the surrounding region are summarized in Table 8-1. The largest known oxide deposit of similar grade characteristics is Angouran in Iran which is hosted in the Zagros fold and thrust belt, an extension of the “Border Folds” belt in south-eastern Turkey in which the HZP area lies.

Table 8-1
Grade-tonnage attributes of supergene zinc-lead deposits in Turkey and the surrounding region (non-Code compliant) (source: Hitzman et al, 2003)

| Deposit | Location | Sulphide Resource | Mixed Oxide-Sulphide Resource | Oxide Resource |
|------------------|----------|------------------------------|--------------------------------------|-------------------------|
| Zamanti District | Turkey | | | 6 Mt at 26% Zn |
| Angouran | Iran | 14.5 Mt at 26.6% Zn, 4.6% Pb | 2 Mt at 31% Zn, 4% Pb | 3.2 Mt at 38% Zn, 2% Pb |
| Mehdiabab | Iran | | 218 Mt at 7.2% Zn, 2.3% Pb, 51g/t Ag | |
| Irankuh | Iran | 15 Mt at 4% Zn, 2% Pb | 4 Mt at 7% Zn, 1% Pb | 14 Mt at 12% Zn + Pb |
| Kuh-e-Surmeh | Iran | 2 Mt at 7% Zn, 4% Pb | | 0.8 Mt at 19% Zn, 7% Pb |

As little is known about the mineralogy, structural setting and style of emplacement of the zinc-lead oxide mineralization in the HZP area, it is difficult (at this stage) to define exactly the appropriate mineralization style. However the direct association of significant iron grades (due to the presence of goethite and hematite after iron rich sulphides) with that of zinc and lead (determined from assays carried out on ROM ore produced as well as visually, from photographs), suggest either wall rock replacement or direct replacement of a precursor MVT type sulphide orebody (Figure 8-5).

Figure 8-5
Exploration Models – Mineralogy observed in progressive wall rock replacement (after Hitzman et al 2003)



9 MINERALIZATION

9.1 History of Zinc mining in the Hakkari area

As discussed in Section 6, small-scale near-surface exploitation of the zinc ores has been occurring for an estimated 2 000 years in the area. No official estimates of historical zinc production from the area exist, although information from local operators suggest hundreds of thousands of tonnes have been extracted at an average grade typically in the region of 25% Zn. This has been officially recorded in recent times, and more specifically in the last four to five years. Within the latter period more than 600 000 tonnes of zinc-lead ores have been mined and sold to traders with SGS certification.

9.2 Style of mineralization

The mineralization at HZP best conforms to Hitzman's (2003) direct-replacement deposit type derived from the oxidation of a MVT deposit. These deposits tend to be mineralogically simple and are dominated by the zinc hydroxides of smithsonite, hemimorphite and hydrozincite.

Many of the attributes and textural features of MVT and non-sulphide zinc-lead deposit models are observed in the sites visited. These observations confirm that the dominant mineralization style is that of large-scale and pervasive supergene alteration of primary MVT style sulphide mineralization on a regional scale, with the formation of supergene non-sulphide zinc-lead deposits.

Zinc-lead mineralized horizons are reportedly traceable for several kilometres within a district of at least 60 km strike length; however individual occurrences display varied geometries as indicated below. Examples of the various mineralization styles observed are indicated below and in Figure 9-1.

- Tabular replacement zones of variable thickness, width and strike extent, conformable with respect to host strata.
- Pods parallel to bedding.
- Crosscutting breccia zones which may be interconnected, with open space filling of mineralization.
- Solution collapse zones and breccias, particularly areas of enhanced solution activity. These may produce mineralized bodies with irregular geometry.
- Disseminated mineralization occupying original pore spaces, primarily within breccias.
- Remobilized mineralization along fracture and joint planes.

Based on work conducted to date by RCR and on observations from adjacent small-scale mine workings, in general terms a 15 m to 35 m thick zone of multiple oxidized

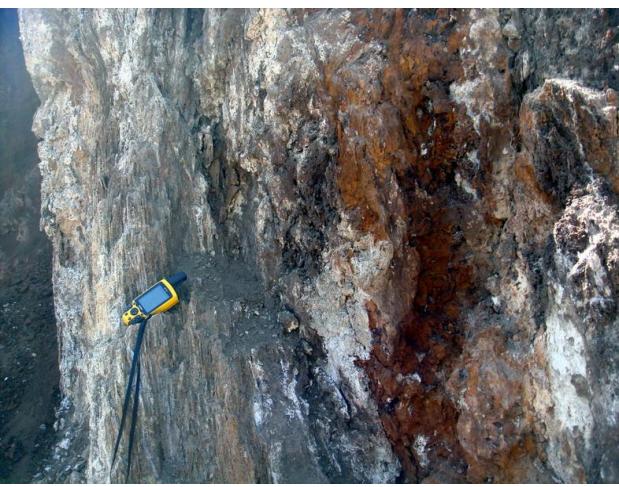
zinc-lead mineralized layers is observed as illustrated in the examples in Figure 9-2. A 2 m to 10 m thick massive mineralized layer is typically present towards the base of this zone, and is overlain by thinner mineralized layers separated by massive to thinly bedded limestone and dolomite, which are in places brecciated and/or vuggy. Discontinuous mineralized stringers and pods as well as remobilized mineralization along fractures and joint planes, are also observed. Small-scale mining in the district has traditionally focused on thick high grade mineralization; the existence of multiple mineralized layers within a potentially bulk mineable zone has only recently been recognized.

Significant variations in iron content are observed between the various non-sulphide zinc-lead deposits. Primary differences in iron content may reflect different pulses of the original mineralizing fluids. In weathered supergene deposits, iron is the most mobile and hence widely distributed element, with zinc intermediate and lead the least mobile. The amount of iron in the system is also a reflection of the original host rock composition, abundance of original iron sulphides, and amount of iron contained in sphalerite (which can vary from yellow through red to brown to black [marmatite] in colour depending on the iron content).

Evidence for several stages of zinc-lead mineralization and leaching are evident, with many sites showing mineralization being more porous and iron-rich in the upper parts (Figure 9-3). For example, the massive smithsonite mineralization is in places partially leached to form porous red-brown smithsonite and hemimorphite. Further leaching in places has resulted in a porous network of hematite-goethite dominated iron oxides.

Although this report is focussed on the RCR zinc portfolio, copper mineralization associated with prominent quartz veining is observed immediately north of license 7 (Figure 9-1). This vein system is reported to extend into license 7.

Figure 9-1
Mineralization styles observed on RCR licenses

| | |
|--|---|
|  |  |
| Massive smithsonite+hemimorphite mineralization (with surficial white hydrozincite coatings) and adjacent iron oxide leached zone | Pinnacle of massive smithsonite mineralization; note large-scale drag folding along below thrust plane in the background |
|  |  |
| Alternating smithsonite+hemimorphite and iron oxide zones | High grade smithsonite zone overlain by partially leached iron oxide zone exposed in underground workings |

| | |
|--|--|
|  |  |
| <p>High grade smithsonite mineralization overlain by partly leached iron oxide zinc mineralization</p> | <p>Thick zone of massive to semi-massive mineralization within a dolomite breccia</p> |
|  |  |
| <p>Massive replacement-style mineralization within altered rock after possible (algal) laminated dolomite</p> | <p>Disseminated iron oxide zinc mineralization in dolomite breccia</p> |

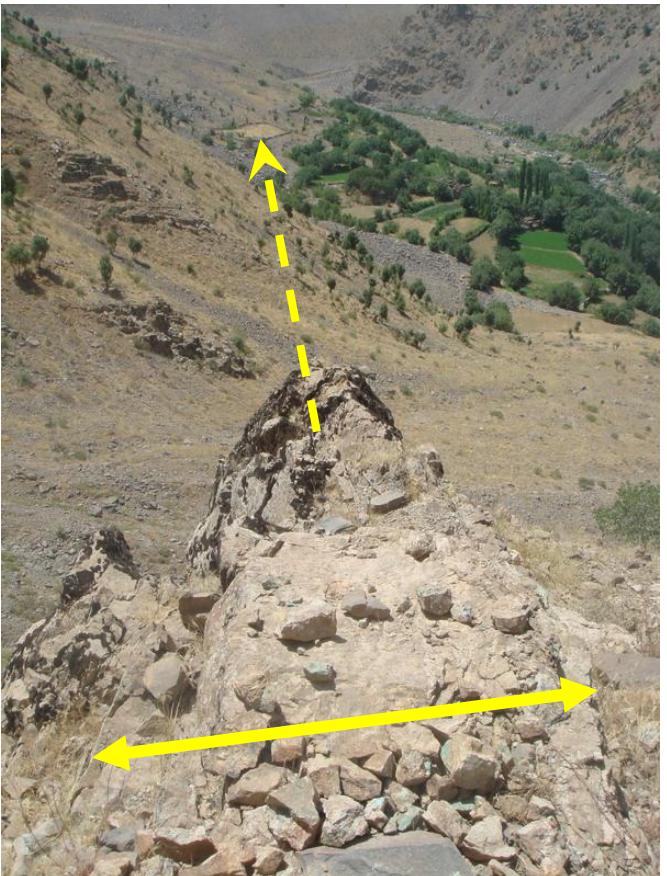
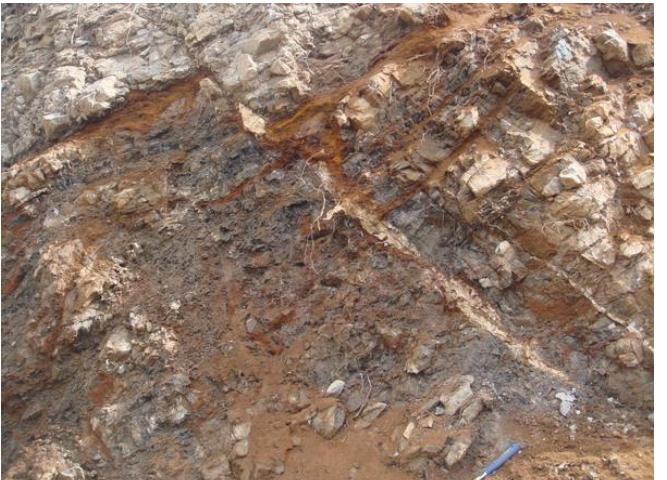
| | |
|--|--|
|  |  |
| <p>Close-up of copper-bearing (malachite + chrysocolla + chalcopyrite) quartz vein shown in adjacent photo. The quartz vein is approximately 1.5 m thick and is laminated indicating multiphase crack-seal development.</p> | <p>Copper-bearing quartz vein, 1.5m wide, 270 m north of License 7; 300 t of material at 5.5 % Cu has been reportedly mined from the eastern extension of this system. The quartz vein reportedly extends to the west in the direction shown.</p> |
|  |  |
| <p>Zinc gossan</p> | <p>Remobilization of mineralization along joints and fractures</p> |

Figure 9-2
Multiple mineralized layers/zones of oxidized zinc-lead mineralization



Massive 5m wide mineralized zone and subparallel hanging wall mineralized layers to the right (close to eastern boundary of license 5)



Multiple mineralized layers in the footwall to the mineralized zone in the photo above (note geologist for scale, mineralized zones indicated by arrows)

Figure 9-3

Cross-sectional view of a subvertical to overturned mineralized zone along a thrust surface. The lowermost (left) portion is dominated by Zn (clearly visible as white smithsonite / hemimorphite), the ore-zone then becomes enriched in Fe and Pb richer higher up (to the right). This location represents the steeply dipping portion of one of the many thrust packages in the area.



10 EXPLORATION

As at the date of this report, RCR's exploration activities on the license areas have comprised a comprehensive desktop study, reconnaissance mapping and sampling on various licenses, and detailed mapping, sampling, trenching and diamond drilling on selected licenses. These activities are elaborated on below.

10.1 Desktop evaluation and remote sensing exercise

In May 2009, RCR commissioned MSA to undertake a desktop evaluation of 11 of RCR's zinc-lead licenses (Licenses 1-11). The objective of the desktop study was to integrate as much available data as possible in order to prioritise and define target areas for a follow up field validation visit. Geological maps of varying scales, published papers and reports, high resolution satellite imagery (QuickBird), ASTER satellite data, JERS radar data and Google Earth software were used during the study.

The study was effective in obtaining a high level understanding of the geology, structure and potential to host zinc-lead mineralization in the 11 license areas. Results of this study were reported in Venter and Robertson (2009).

10.2 Reconnaissance site visits

All of the RCR licenses have been visited and subjected to reconnaissance investigation in the past 2 years, involving grab sample collection, inspection of workings and general geological assessment.

Small-scale mining is being undertaken on License 9, with mineralisation hosted in steeply dipping thrust planes that may have developed along the generally less-competent mineralized horizon. Handheld InnovX XRF results on grab samples from the thrust plane mineralisation range between 0.50 and 6.86% Zn and up to 3.52% Pb. In the south of License 9, lead-rich breccias are known which have reportedly been intermittently worked since Roman times.

10.3 Mapping

Information available to RCR at the onset of exploration activities, coupled with field observations and the outcome of the aforementioned remote sensing exercise, suggested licenses. 5, 8 (and The Pentagon), 9, 10 and 11 were the most prospective for economic zinc-lead mineralization.

10.3.1 Pre-2010 exploration field season mapping

In 2009 and early 2010, limited mapping of mineralization and country rock were undertaken and activities focussed on Licenses 5 and 10. Interpretation of mapping results suggest a series of thrusts developed oblique to the main Bitlis thrust and potential transcurrent offsets of the mineralized zones. In the area of current mining on The Pentagon (between licenses 8-10) a series of mineralized zones, spaced about

50 m apart was found. A mineralized anticlinal structure developed on License 5 was delineated with a width (i.e. half wavelength) of approximately 2 km. Of significance is the strike extent of the mineralized horizon. Each mapped portion (either major thrust surface or flanks of a fold structure) can be traced for over 1 km.

Reconnaissance mapping by RCR on License 5 revealed the presence of a west-northwest trending fold system, with a wavelength in the order of 1 km. The fold system is bounded to the north by a major apparent dextral shear system that trends northwest and is therefore oblique to the fold axial traces (Figure 10-1). As in most of the other license areas, the mineralized zones tend to weather negatively in relation to the footwall and hangingwall sequences (Figure 10-2).

Figure 10-1
Schematic reconnaissance structural map of License 5, showing bedding traces (red lines), structural observation points (red dots with associated dip directions) and mineralized zone exposures (orange dots).

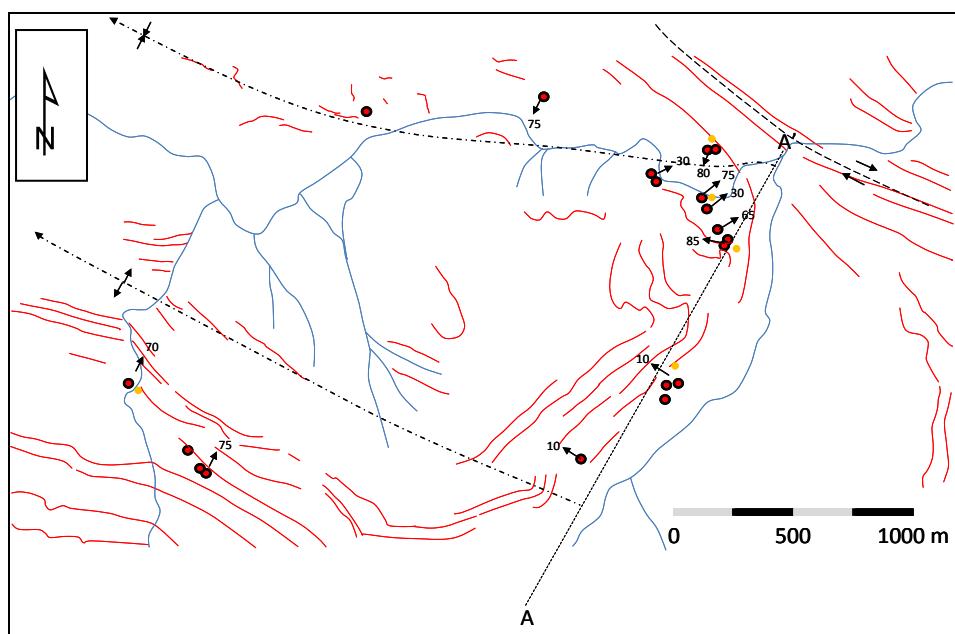


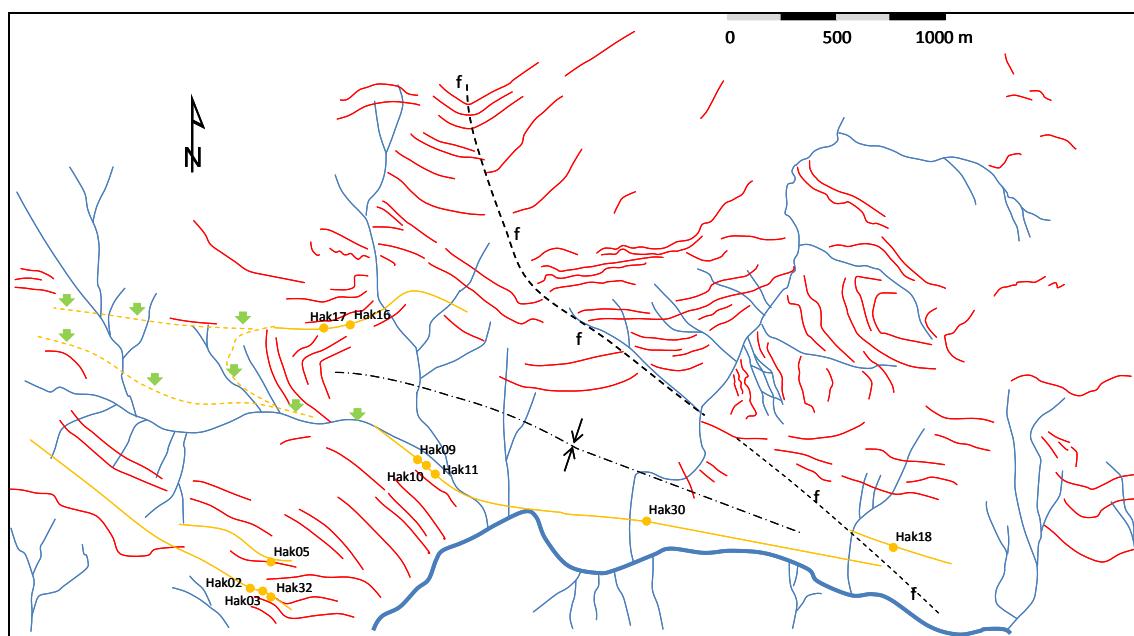
Figure 10-2

**Competent, erosion resistant dolomitic hangingwall forming a cliff on License 5.
The ore zone weathers negatively and outcrops in the vicinity of the geologists**



A similar structural style was revealed on License 10, where apparent duplication of the main mineralized zone is effected by folding about a west-northwest trending synformal axis that is truncated in the southeast by a northwest-striking fault (Figure 10-3).

Figure 10-3
Schematic reconnaissance structural map of License 10, showing bedding traces (red lines), mineralized zone exposures (orange dots) and interpreted strike trends of the mineralized zones (orange lines). Note the interpreted synformal structure that appears to be responsible for duplication of the main mapped mineralized zone.



10.3.2 2010 Exploration Season Mapping

Detailed follow-up geological mapping was carried out on both License 5 and The Pentagon during the 2010 exploration season. Mapping methodology and data capture was governed by the MSA SOP's for the HZP. Key mapping activities included:

- Collection of structural measurements throughout the License areas with specific focus on the central portion of License 5 and the immediate surroundings of the active mining area on The Pentagon.
- Delineation of mineralized horizons throughout the stratigraphy within the areas of interest.

RCR acquired an InnovX handheld XRF analyser during the course of the program which was used to obtain preliminary grade assessments on grab samples collected in the field.

10.3.2.1 The Pentagon

Mapping was initially undertaken on the Pentagon area from 10 May 2010 to 15 May 2010 and again on 21 August 2010. A total of 74 outcrop points were mapped and photographed and captured into the MSA database. Mapping identified several poorly developed mineralized horizons but was unable to extend the known mineralized zone beyond the extents of the current mining area due to extensive scree cover. Mapping observations strongly suggest that the steeply-southward dipping mineralized zone on the Pentagon shallows in dip to the south where it has been partially opened up in small-scale shallow underground workings (Figure 10-4).

10.3.2.2 License 5

Mapping on License 5 was intermittently carried out between 17 May 2010 and 2 October 2010. A total of 172 outcrop points were mapped and photographed and captured into the MSA database. Mapping on License 5 was successful in delineating and extending the known extents of mineralisation on the License, both in the gently dipping area that was drilled, and further to the west and north where new discoveries of steeply dipping mineralisation were made (Figure 10-5). Collectively, mapping delineated a strike extent of ~2.5 km of mineralisation, of which ~1.2 km was drill tested during the 2010 program (Figure 10-6). Mapping in the gently-dipping central part of License 5 partially delineated the outcrop position of the upper mineralized zone intersected in drillholes and described in Section 11.1.

Figure 10-4
Structural data and grab-sample results from the Pentagon

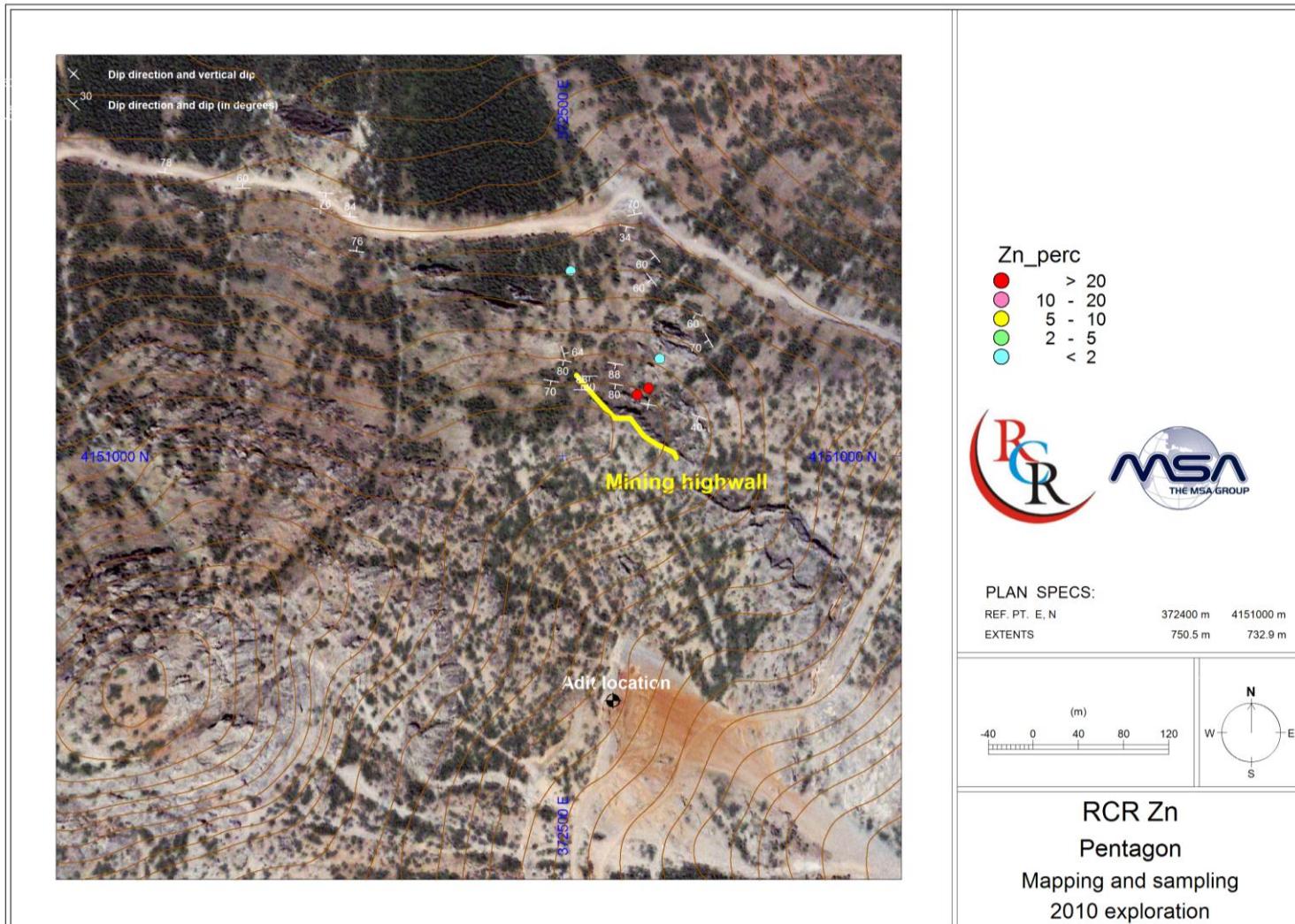


Figure 10-5

West-facing view from outside License 5, showing the projected continuation of the mineralized zone onto the license (the northern steeply dipping zone). Grab samples running in excess of 15% Zn have been collected from this zone on License 5, which has been mined outside of the license in the immediate foreground

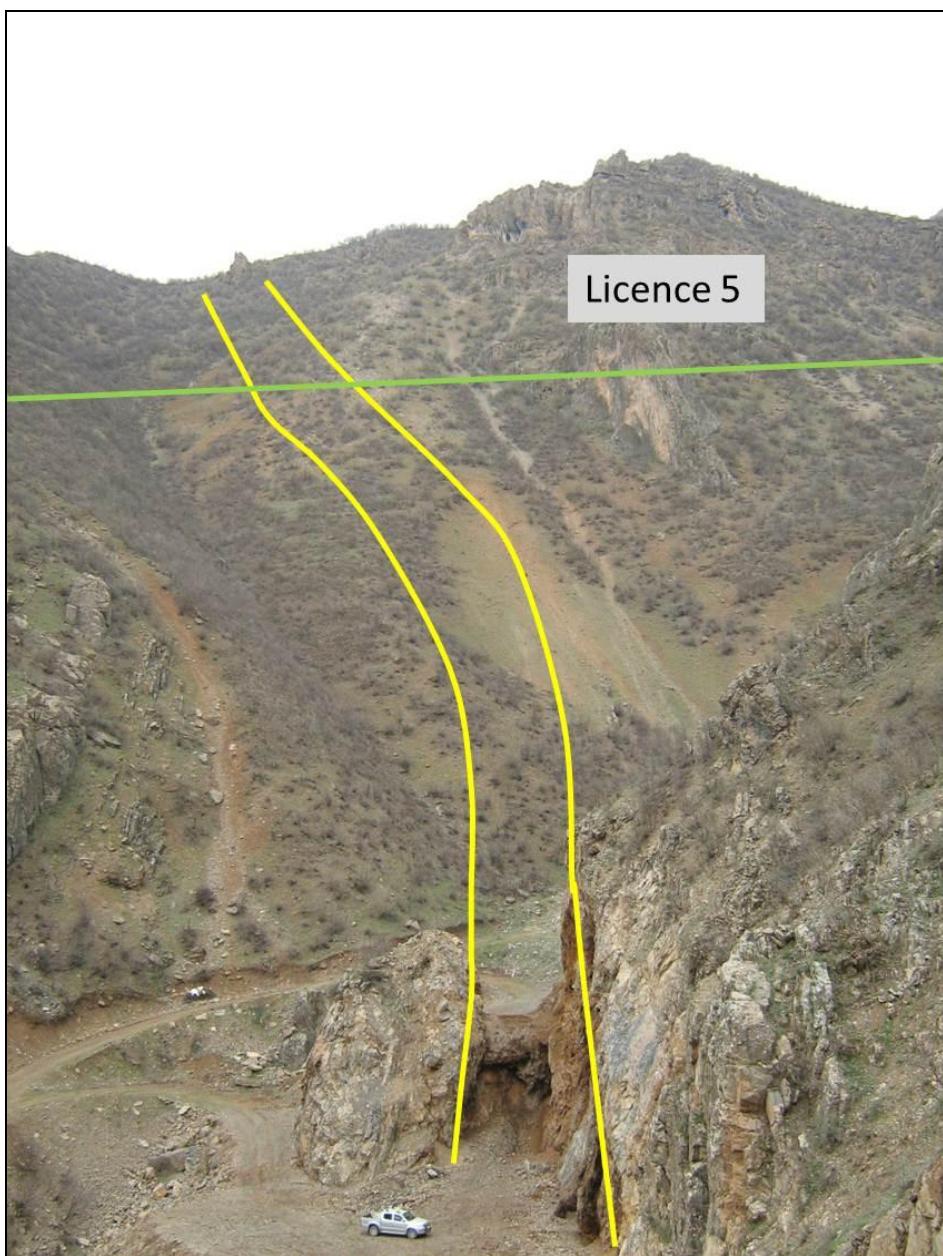
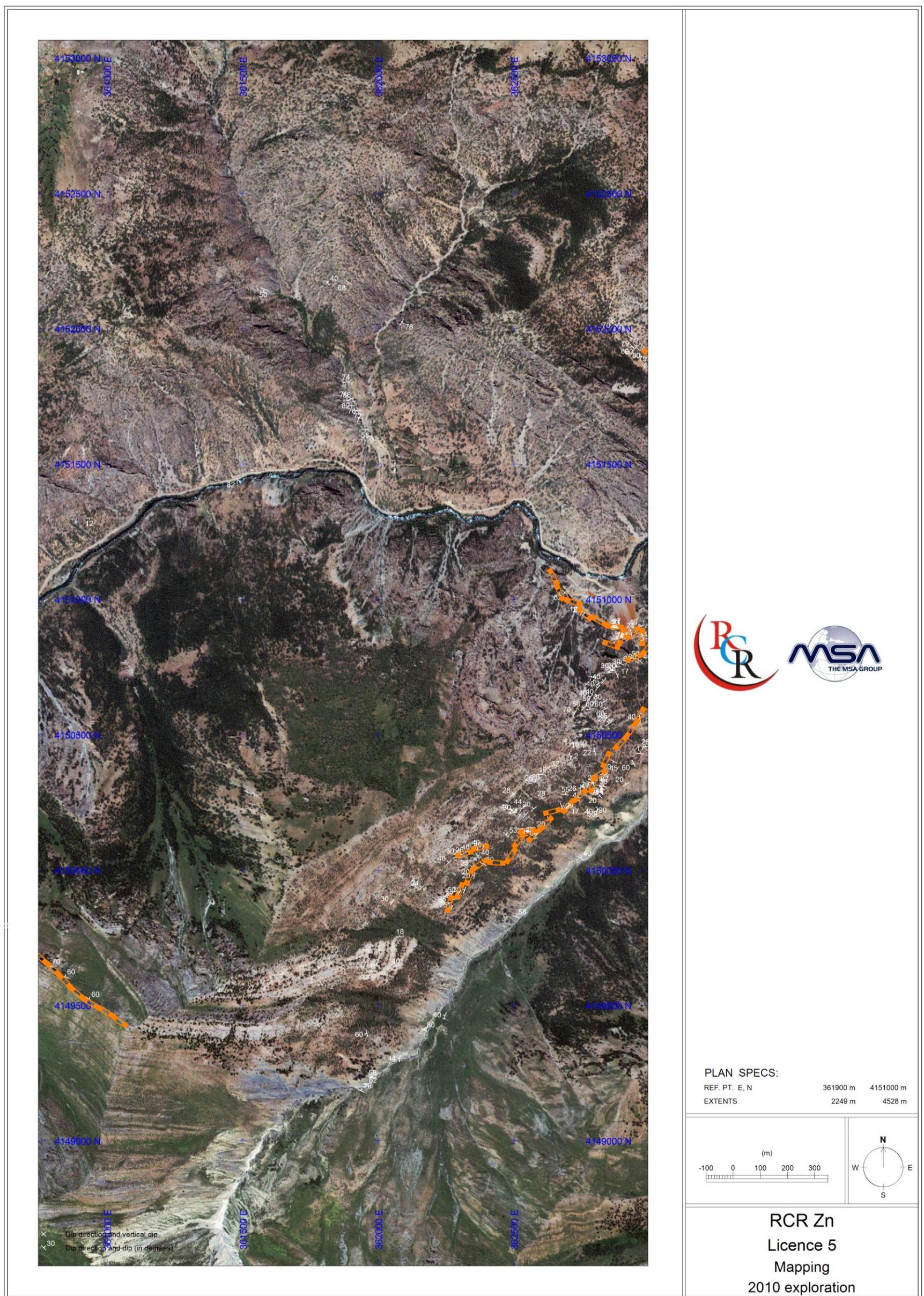


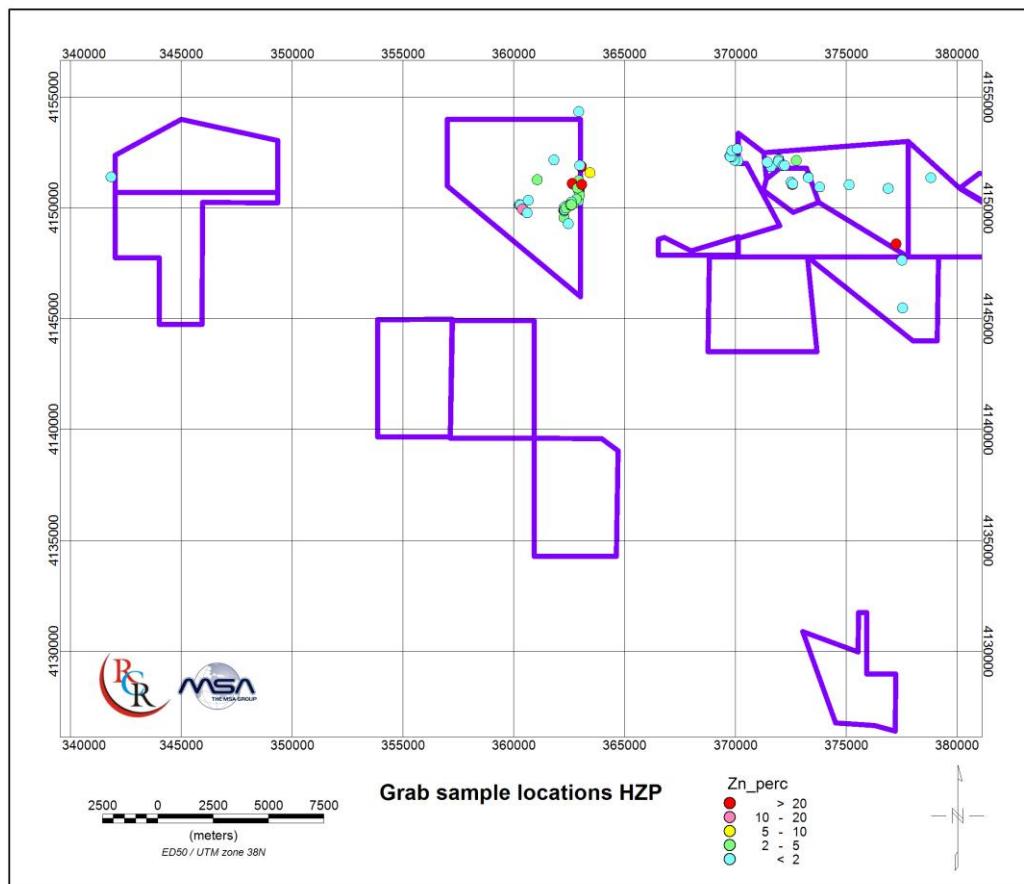
Figure 10-6
Mapped mineralisation and structural measurements on License 5, overlain on QuickBird imagery



10.4 Grab Sampling

A total of 110 samples have been collected to date, with 51 collected prior to the 2010 exploration season and the balance during the course of the exploration program. The sampling inventory comprises 3 “historical” stockpile samples, an additional 3 stockpile samples collected during the current phase of exploration, 10 samples collected from The Pentagon (between Licenses 8 and 10)(see also Figure 10-4) and 94 outcrop samples. None of the samples collected to date are considered representative bulk or channel samples and should be viewed as grab or rock chip samples. The distribution of these samples across the HZP are shown in Figure 10-6.

Figure 10-7
Location and results of 110 rock chip samples collected within the HZP



Sampling is discussed more fully under Section 12.

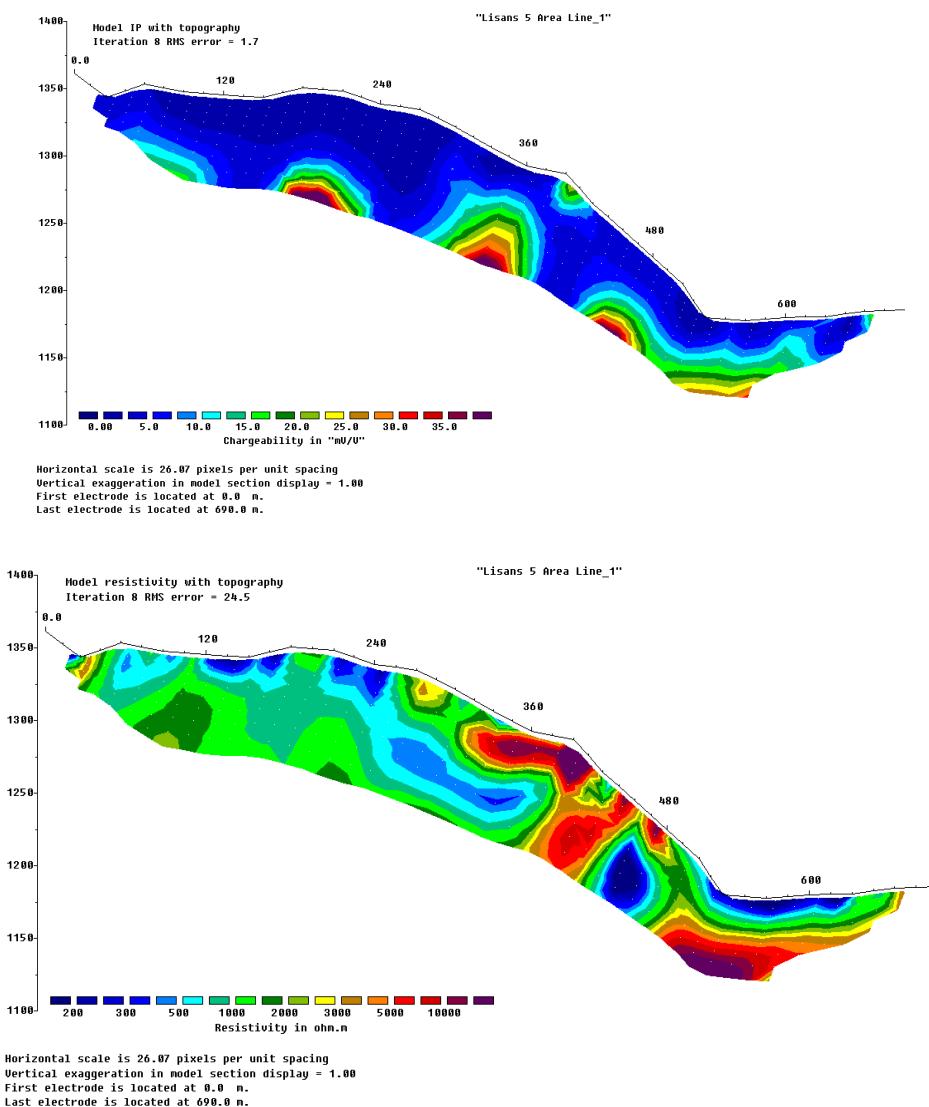
10.5 Geophysics

Three ground Induced Polarisation (IP) lines were run across selected areas on License 5 and The Pentagon. On License 5, a 690 m line was run, trending NNW,

centred over boreholes 5DD002 and 5DD003. A second line was run over the steeply dipping zone mapped in the northeast of License 5. At The Pentagon, a 600 m long NE-striking line was run over holes PENDD001, PENDD003 and PENDD004. An example of one of the processed geophysical IP lines is shown in Figure 10-8.

The results, particularly the chargeability sections, indicate the presence of deeper anomalies that remain to be tested and could potentially represent sulphides at depth. Little to no correlation is noted between mineralized oxide intersections in boreholes and anomalous IP responses, which is expected for the oxide (and hence non-conductive) nature of the mineralisation. Shallow responses may be the result of conductive groundwater localised along structural features.

Figure 10-8
West-facing resistivity (upper image) and chargeability (lower image) sections
centred on holes 5DD002 and 5DD003 on License 5



10.6 Trenching

Trenching was only conducted on License 5 and commenced on 28 October 2010 and was completed on 10 December 2010. A total of 9 trenches and 1 road cut (5RC001) were excavated, mapped, photographed and sampled according to the MSA SOP, for a total of 474.90 m of trenching (Table 10-1). Trenches were sited on the basis of mapping and grab sampling assay results and were used to provide surface control to deeper borehole intersections and were mechanically excavated using an excavator, oriented as close as normal to strike as possible (Figure 10-9). In many cases, steep topography inhibited optimal siting of the trenches and alternative positions had to be established on the basis of actual field conditions. The road cut (5RC001) was oriented subparallel to strike and although it was sampled, the results of this sampling were not included in the resource estimation due to uncertainties in ascertaining true mineralized widths. Channel sampling was conducted across the exposed mineralized material with the orientation of channel samples governed by the disposition of the mineralisation in relation to the trench (Figure 10-10). Trench start and end points were surveyed using a differential GPS upon completion of the trenching exercise.

Table 10-1
Summary of trenching on License 5

| Trench ID | Start date | End date | Length | Start Easting | Start Northing | Start Elevation | End Easting | End Northing | End Elevation | Plunge | Azimuth |
|--------------|------------|------------|--------|---------------|----------------|-----------------|-------------|--------------|---------------|--------|---------|
| 5RC001 | 2010/06/11 | 2010/06/19 | 262.50 | 362696 | 4150229 | 1496 | 362856 | 4150438 | 1465 | -10 | 211 |
| STR001 | 2010/10/28 | 2010/10/28 | 25.00 | 362558 | 4150109 | 1523 | 362553 | 4150133 | 1528 | -10 | 300 |
| STR002 | 2010/10/29 | 2010/10/30 | 27.00 | 362297 | 4149897 | 1629 | 362292 | 4149906 | 1636 | -25 | 310 |
| STR003 | 2010/10/30 | 2010/10/31 | 32.00 | 362352 | 4149989 | 1602 | 362345 | 4150000 | 1605 | -25 | 300 |
| STR004 | 2010/10/31 | 2010/11/10 | 40.00 | 362444 | 4150007 | 1566 | 362441 | 4150007 | 1561 | -35 | 2 |
| STR005 | 2010/12/01 | 2010/12/01 | 21.80 | 362597 | 4150274 | 1547 | 362611 | 4150287 | 1554 | 16 | 28 |
| STR006 | 2010/12/01 | 2010/12/01 | 35.00 | 362601 | 4150150 | 1515 | 362596 | 4150186 | 1516 | 16 | 28 |
| STR007 | 2010/12/07 | 2010/12/07 | 16.00 | 362833 | 4150359 | 1463 | 362829 | 4150307 | 1463 | 10 | 4 |
| STR008 | 2010/12/09 | 2010/12/09 | 5.00 | 362858 | 4150453 | 1455 | 362859 | 4150449 | 1452 | 10 | 82 |
| STR009 | 2010/12/10 | 2010/12/10 | 10.60 | 362985 | 4150849 | 1320 | 362969 | 4150859 | 1306 | 10 | 338 |
| Total length | | | 474.90 | | | | | | | | |

Dip-corrected grade calculations are tabulated below (Table 10-2). It is evident that the trenching program was only partially successful in exposing the entire width of the mineralized zone/s, accounting for the narrow width of most of the trench intersections. In all cases, however, access constraints prevented extension of the trenches to obtain complete intersections across the mineralized zones. The highest grades were obtained in 5TR008 and 5TR009 and demonstrate, together with drillholes 5DD002 and 5DD003, that high grade material is present in the fold hinge of the antiform further described in Sections 11.1 and 17.2.

Table 10-2
Dip-corrected grade takeouts for License 5 trenching

| Trench | From (m) | To (m) | True Width (dip corrected) (m) | Zn (%) | Pb (%) | Ag (ppm) | Total width stratiform mineralisation intersected (m) |
|--------|----------|--------|-----------------------------------|--------|--------|----------|--|
| 5TR001 | 10.20 | 12.83 | 2.13 | 2.6 | 0.2 | 1 | 2.13 |
| 5TR002 | 6.20 | 7.70 | 0.92 | 1.6 | 0.1 | 3 | 0.92 |
| 5TR003 | 6.60 | 8.40 | 0.73 | 2.2 | 0.3 | 4 | 0.73 |
| 5TR004 | 4.66 | 9.00 | 1.72 | 0.6 | 0.0 | 1 | 1.72 |
| 5TR005 | 8.30 | 9.80 | 1.35 | 1.3 | 0.3 | 2 | 1.35 |
| 5TR006 | 11.00 | 26.00 | 11.28 | 2.1 | 0.4 | 1 | 11.28 |
| 5TR007 | 1.60 | 9.80 | 3.34 | 1.8 | 0.4 | 10 | 3.34 |
| 5TR008 | 2.00 | 4.35 | 1.99 | 13.7 | 1.2 | 2 | 1.99 |
| 5TR009 | 7.20 | 8.90 | 1.18 | 4.7 | 6.7 | 1 | 1.18 |

Figure 10-9
Trench plan of License 5, showing trenches in relation to mapped mineralization (orange) and bedding dip/strike measurements

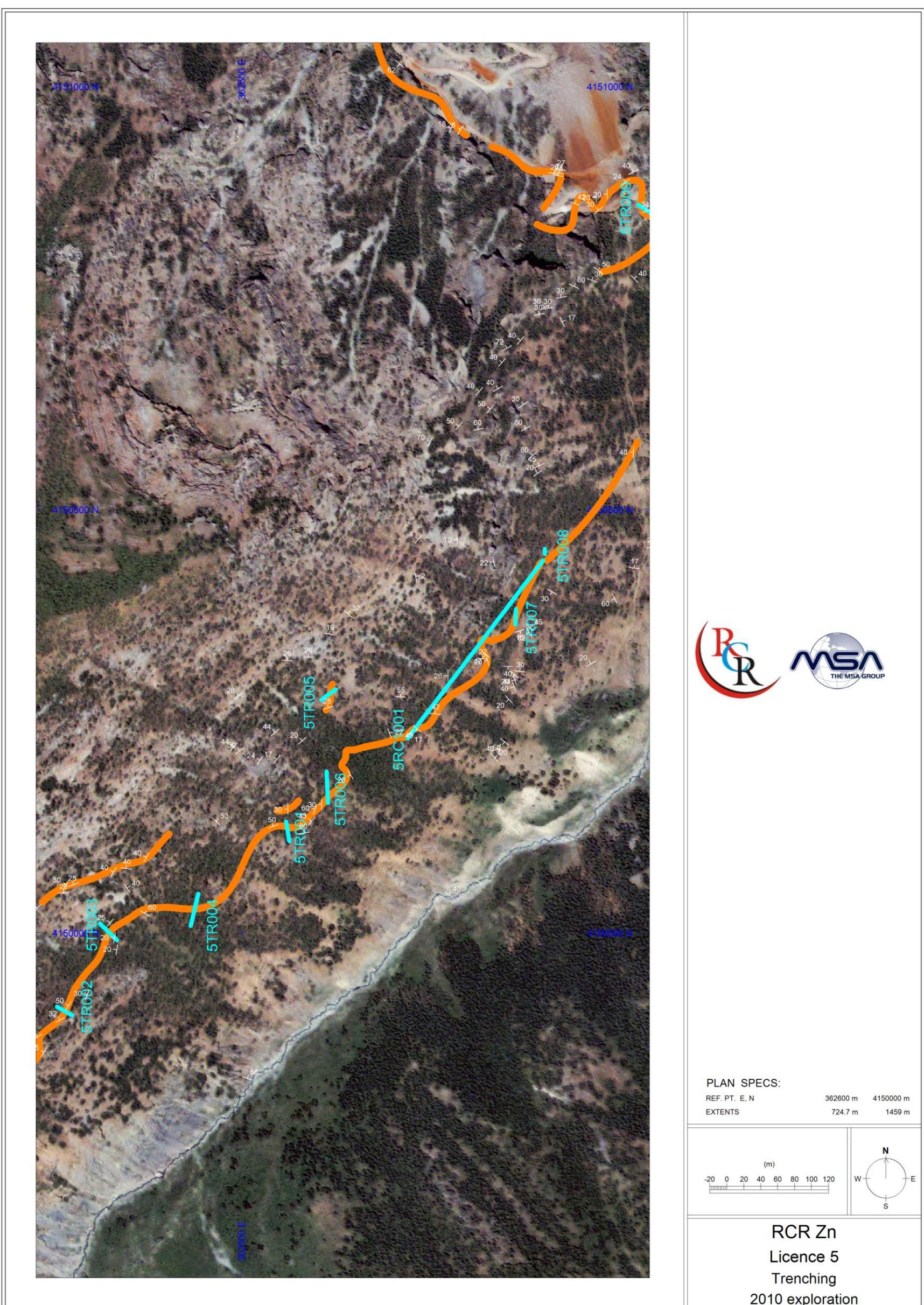
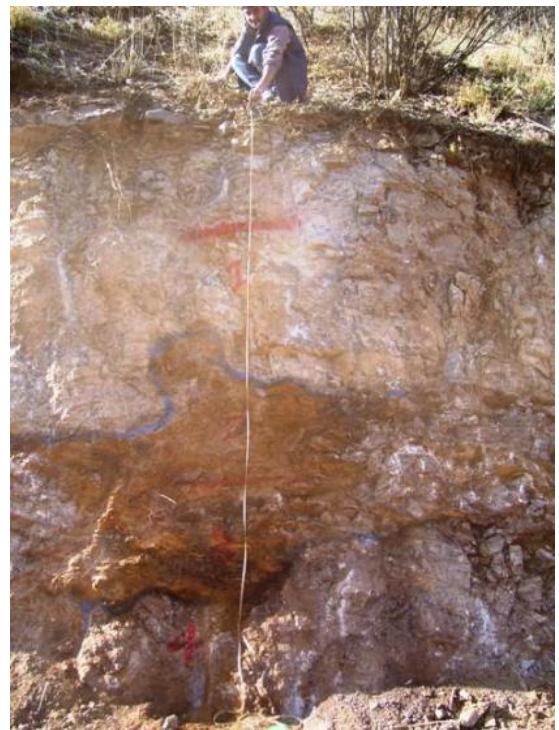


Figure 10-10
Example of an excavated trench on License 5 (left) and marked-up exposed face ready for channel sampling (right)



11 DRILLING

Diamond core drilling was carried out on both License 5 and The Pentagon during the 2010 exploration season. A single rig was contracted from Spektra Jeotek, a Turkish drilling company based in Ankara (Figure 11-1). Drilling commenced on 19 June 2010 and was halted on 18 December 2010 when heavy snow restricted drill site access. A total of 2118.40 m was drilled, the vast majority (~2000 m) drilled at HQ diameter and using a triple tube core barrel. Core logging was conducted according to the MSA Project operating procedures and all data was captured into the MSA Microsoft Access Exploration database. Wherever possible, logging (including core recovery logs, lithology and geotechnical logs) was done at the rig, with sampling carried out at the coresites outside Hakkari. All inclined boreholes were surveyed with a FlexIT® downhole survey tool operated by Spektra Jeotek. Hardcopy survey data were supplied to the geologists on site at nominal 50 m intervals. A summary of the drilling data is supplied in Table 11-1.

Table 11-1
Summary drilling information

| Borehole ID | Start date | End date | End of Hole (EOH) | Easting | Northing | Elevation | Inclination | Azimuth |
|--------------------------|------------|----------------------|-------------------|-----------|------------|-----------|-------------|---------|
| SDD001 | 2010/06/19 | 2010/06/24 | 100.00 | 362692.36 | 4151020.25 | 1191.04 | -90 | 0 |
| SDD002 | 2010/06/25 | 2010/06/28 | 52.70 | 362984.25 | 4150865.25 | 1293.25 | -90 | 0 |
| SDD003 | 2010/06/28 | 2010/06/30 | 56.00 | 362983.25 | 4150865.25 | 1293.25 | -60 | 181 |
| SDD004 | 2010/07/02 | 2010/07/21 | 144.00 | 362861.95 | 4150715.33 | 1382.13 | -90 | 0 |
| SDD005 | 2010/07/07 | 2010/07/17 | 100.20 | 362861.49 | 4150715.91 | 1382.42 | -60 | 190 |
| SDD006 | 2010/07/27 | 2010/08/01 | 100.00 | 362581.64 | 4150252.64 | 1519.64 | -90 | 0 |
| SDD007 | 2010/08/05 | 2010/08/13 | 200.00 | 362644.02 | 4150353.12 | 1535.55 | -90 | 0 |
| SDD008 | 2010/08/14 | 2010/08/19 | 146.50 | 362643.00 | 4150352.14 | 1536.74 | -60 | 220 |
| SDD009 | 2010/08/20 | 2010/08/23 | 100.00 | 362875.77 | 4150849.86 | 1272.06 | -90 | 0 |
| SDD010 | 2010/08/26 | 2010/08/27 | 51.40 | 362688.19 | 4151028.83 | 1198.02 | -90 | 0 |
| SDD011 | 2010/08/29 | 2010/09/06 | 200.30 | 362476.76 | 4150193.75 | 1572.87 | -90 | 0 |
| SDD012 | 2010/10/31 | 2010/11/20 | 231.10 | 362644.24 | 4150355.19 | 1535.59 | -60 | 45 |
| SDD013 | 2010/11/21 | 2010/12/06 | 199.90 | 362642.43 | 4150348.19 | 1536.71 | -60 | 135 |
| SDD014 | 2010/12/09 | Abandoned 2010/12/21 | 11.30 | 362852.16 | 4150520.01 | 1424.34 | -90 | 0 |
| Total meterage Licence 5 | | | 1693.40 | | | | | |
| PENDD001 | 2010/10/01 | 2010/10/02 | 20.30 | 372598.06 | 4151048.59 | 1643.03 | -90 | 0 |
| PENDD002 | 2010/10/03 | 2010/10/04 | 35.80 | 372597.46 | 4151045.27 | 1643.11 | -45 | 200 |
| PENDD003 | 2010/10/04 | 2010/10/06 | 31.90 | 372555.76 | 4151058.93 | 1638.02 | -90 | 0 |
| PENDD004 | 2010/10/07 | 2010/10/08 | 46.20 | 372590.86 | 4151047.24 | 1642.48 | -45 | 240 |
| PENDD005 | 2010/10/08 | 2010/10/09 | 61.50 | 372556.89 | 4151057.69 | 1637.95 | -50 | 250 |
| PENDD006 | 2010/10/09 | 2010/10/10 | 28.60 | 372522.57 | 4151083.80 | 1625.02 | -45 | 225 |
| PENDD007 | 2010/10/10 | 2010/10/11 | 38.00 | 372509.09 | 4151087.08 | 1621.41 | -45 | 220 |
| PENDD008 | 2010/10/11 | 2010/10/12 | 17.20 | 372508.53 | 4151086.06 | 1621.29 | -75 | 220 |
| PENDD009 | 2010/10/12 | 2010/10/13 | 13.50 | 372521.67 | 4151088.60 | 1624.87 | -45 | 180 |
| PENDD010 | 2010/10/14 | 2010/10/18 | 132.00 | 372519.53 | 4151058.36 | 1650.45 | -90 | 0 |
| Total meterage Pentagon | | | 425.00 | | | | | |

Drilling was conducted on a single-shift (12 hours), 7 day a week basis with extended breaks taken in August and September for the Ramadan and Bayram holidays. Average drilling advance was 11.34 m/shift.

11.1 License 5

Drilling on License 5 commenced on 19 June 2010 and continued until 6 September 2010, whereafter the rig was mobilised to The Pentagon. The rig recommenced drilling on License 5 on 31 October and continued until the close of the program due to inclement weather on 18 December 2010. A total of 1693.40 m was drilled on License 5 in fourteen boreholes (Figure 11-2), which includes 76.79 m (uncorrected for dip) logged as mineralized zone (MZ). Typical MZ intersections are shown in Figure 11-3. Approximately 800 m of planned drilling was not completed.

Eleven of the fourteen boreholes intersected MZ. Strip logs displaying lithology and Zn, Pb and Ag grades were compiled for all fourteen holes using Geosoft Target software, and are included as Figures 11-4 to 11-10. Definition of drill targets was achieved through a combination of surface mapping and sampling, structural geological analysis and trenching where appropriate. Access restrictions imposed by the extremely steep topography resulted in multiple, variably oriented boreholes being drilled from the same collar position. Hole 5DD001 did not intersect MZ although this was ascribed to potential coreloss in a particularly friable zone between 20 and 30 m. The initial 30 m of 5DD001 were not drilled using a triple tube corebarrel and the hole was twinned by 5DD010 from the same collar position (using a triple tube core barrel) and intersected a narrow MZ from 26.20 to 27.40 m. Borehole 5DD011 failed to intersect any recognisable mineralized zone whereas 5DD014 had to be stopped prior to completion due to adverse weather conditions and associated unsafe access conditions with the onset of heavy winter snowfall.

Drilling on License 5 has revealed the presence of two discrete mineralized zones (upper and main), each comprising a number of mineralized horizons interstratified with calcareous host rocks. Mineralized widths are variable from a few centimetres to a few metres and although the spacing of drill holes in the 2010 field season does not allow for continuity of individual mineralized layers to be established with confidence, both the upper and main mineralized zones are continuous within the drilled area. Grade persistence in the hanging- and footwall is commonly associated with localised structural remobilisation of the mineralisation along fractures, faults and breccia veins.

Dip-corrected significant (>1 m true width, >1% Zn) intersections are provided in Table 11-2. It is evident that the highest grade intersections are found in the northernmost holes, which are interpreted to fall on or near a major antiformal hinge that can be traced across the river valley to the north (Figure 11-11). Full details on the sampling methodology and assay technique are provided in Sections 12 and 13.

Table 11-2
Significant intersections (dip-corrected) from License 5

| Borehole | From (m) | To (m) | True Width (dip corrected) (m) | Zn (%) | Pb (%) | Ag (ppm) | Total width stratiform mineralisation intersected (m) |
|-------------------|----------|--------|--------------------------------------|--------|--------|----------|--|
| 5DD002 | 6.54 | 10.51 | 2.37 | 4.6 | 4.4 | 3 | 7.67 |
| | 25.10 | 31.35 | 4.42 | 3.1 | 2.6 | 3 | |
| 5DD003 | 13.91 | 24.24 | 7.30 | 3.6 | 1.2 | 1 | 12.09 |
| | 31.59 | 34.00 | 1.70 | 4.9 | 4.0 | 4 | |
| | 48.05 | 49.60 | 1.10 | 6.3 | 1.7 | 1 | |
| 5DD004 | 68.76 | 77.30 | 6.11 | 1.4 | 0.1 | 1 | 7.12 |
| 5DD005 | 54.00 | 55.60 | 1.13 | 2.3 | 0.2 | 1 | 9.83 |
| | 60.20 | 72.50 | 8.70 | 1.7 | 0.4 | 1 | |
| 5DD006 | 52.22 | 54.10 | 1.54 | 3.1 | 1.6 | 4 | 5.18 |
| | 60.90 | 65.65 | 3.64 | 1.6 | 0.2 | 2 | |
| 5DD007 | 150.48 | 153.10 | 2.01 | 2.0 | 0.1 | 1 | 2.01 |
| 5DD008 | 51.18 | 53.25 | 1.79 | 3.8 | 0.2 | 1 | 5.12 |
| 5DD009 | 50.30 | 56.38 | 4.98 | 3.5 | 0.4 | 3 | 11.88 |
| | 60.60 | 70.30 | 6.90 | 3.0 | 0.9 | 1 | |
| 5DD012 | 184.50 | 191.25 | 4.47 | 2.1 | 0.8 | 1 | 5.62 |
| 5DD013 | 186.30 | 190.20 | 2.17 | 2.2 | 1.4 | 10 | 5.01 |
| License 5 average | | | 3.77 | 2.7 | 1.0 | 2 | |

Figure 11-1
Diamond drilling rig on License 5



Figure 11-2
Borehole collars and traces on License 5, draped on QuickBird imagery. Contour interval is 20 m



Figure 11-3
Core photograph of typical oxidised and variably friable mineralized material (MZ)
intersected on License 5 from boreholes 5DD002 and 5DD003



Figure 11-4
Strip logs from 5DD001 and 5DD002, showing lithologies logged and Zn, Pb and Ag assay results

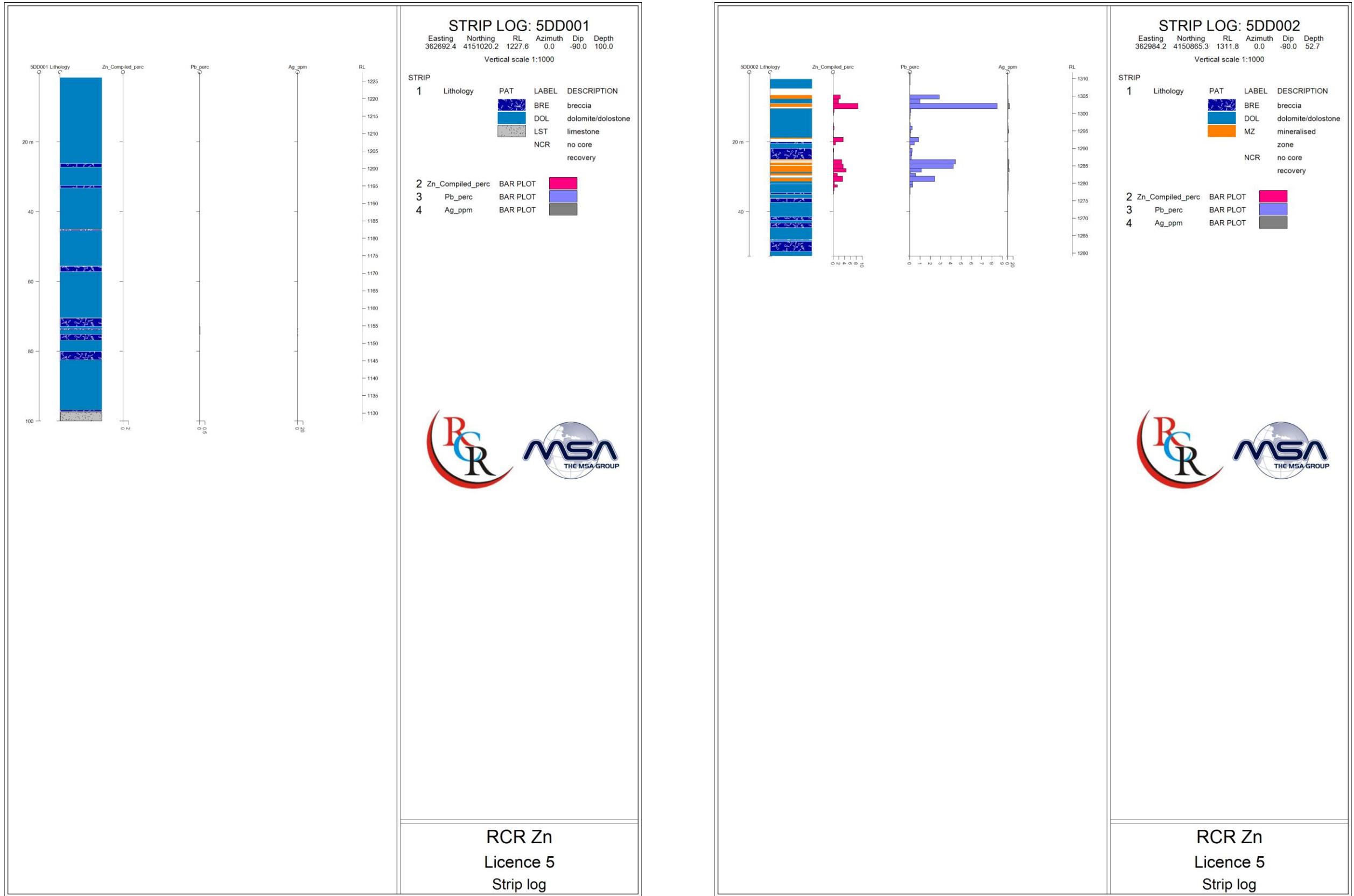


Figure 11-5
Strip logs from 5DD003 and 5DD004, showing lithologies logged and Zn, Pb and Ag assay results

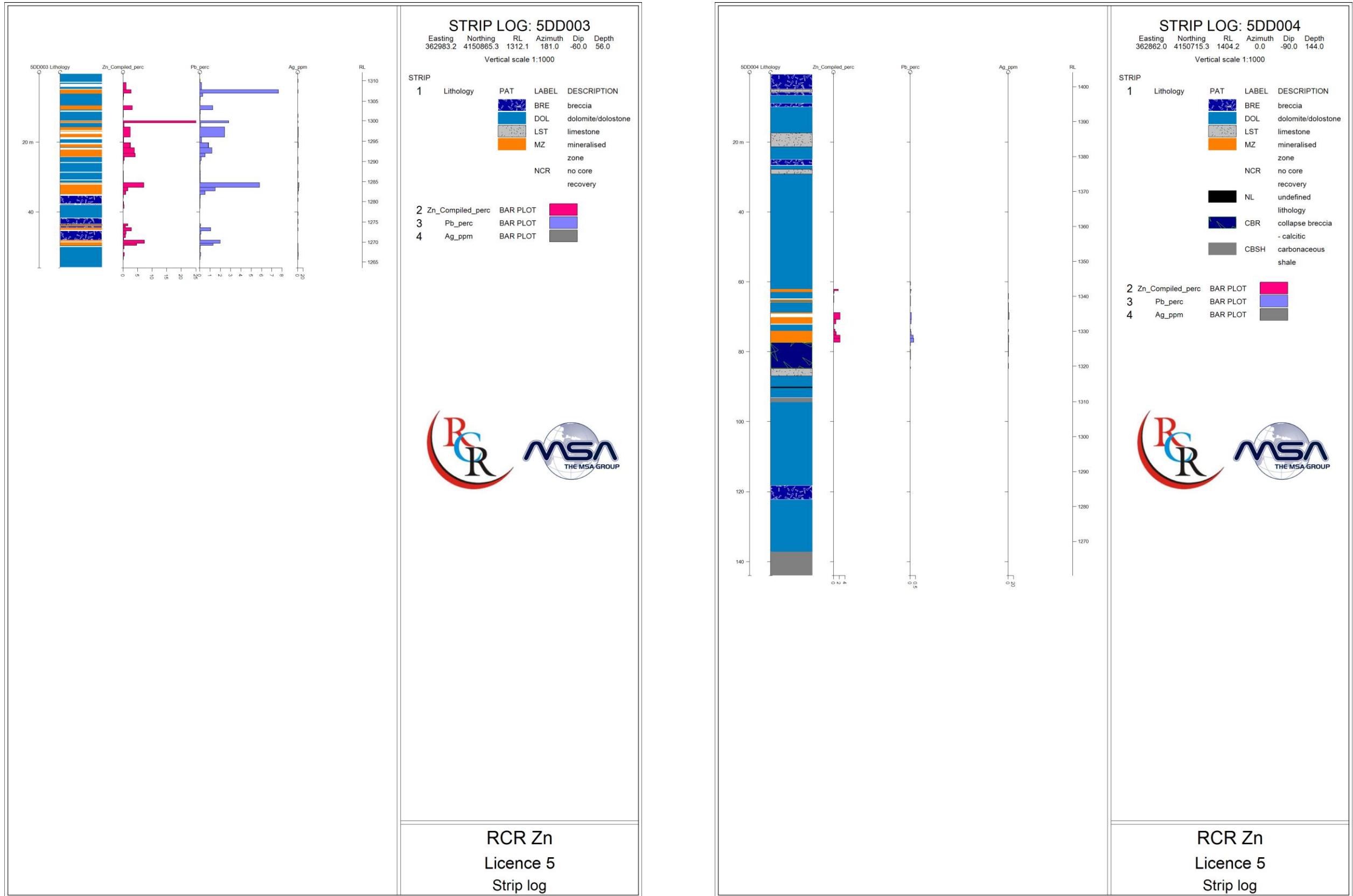


Figure 11-6
Strip logs from 5DD005 and 5DD006, showing lithologies logged and Zn, Pb and Ag assay results

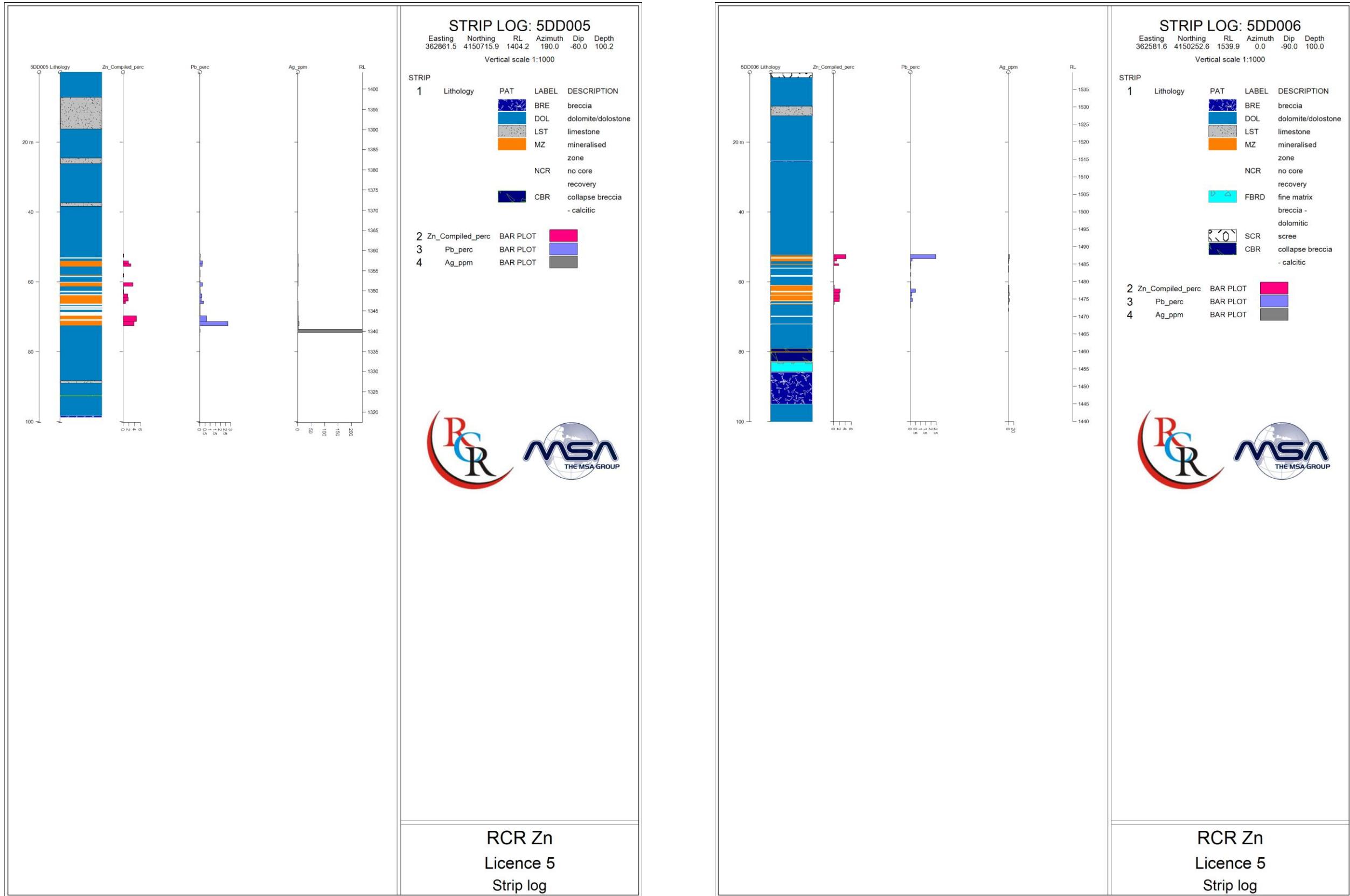


Figure 11-7
Strip logs from 5DD007 and 5DD008, showing lithologies logged and Zn, Pb and Ag assay results

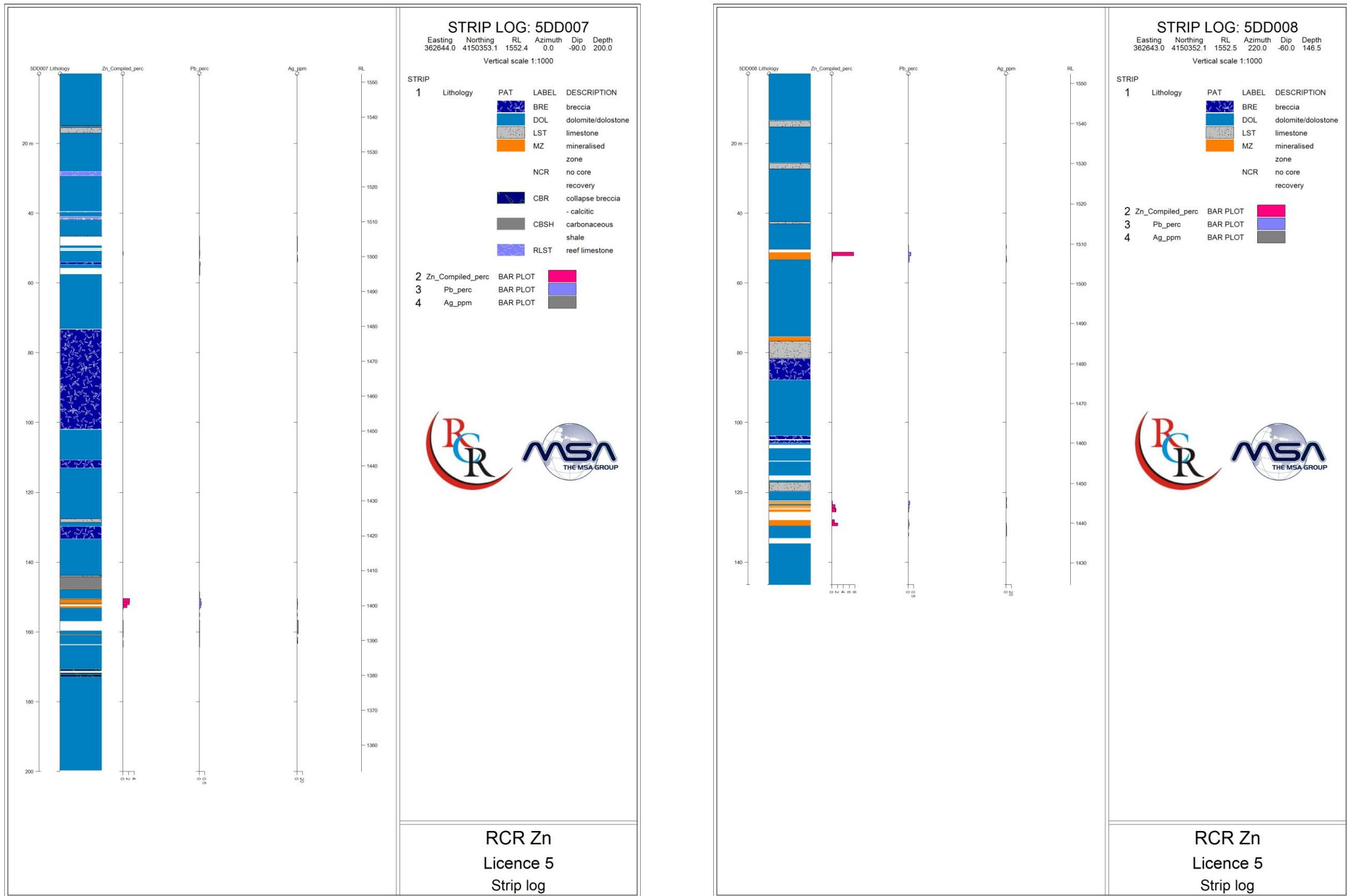


Figure 11-8
Strip logs from 5DD009 and 5DD010, showing lithologies logged and Zn, Pb and Ag assay results

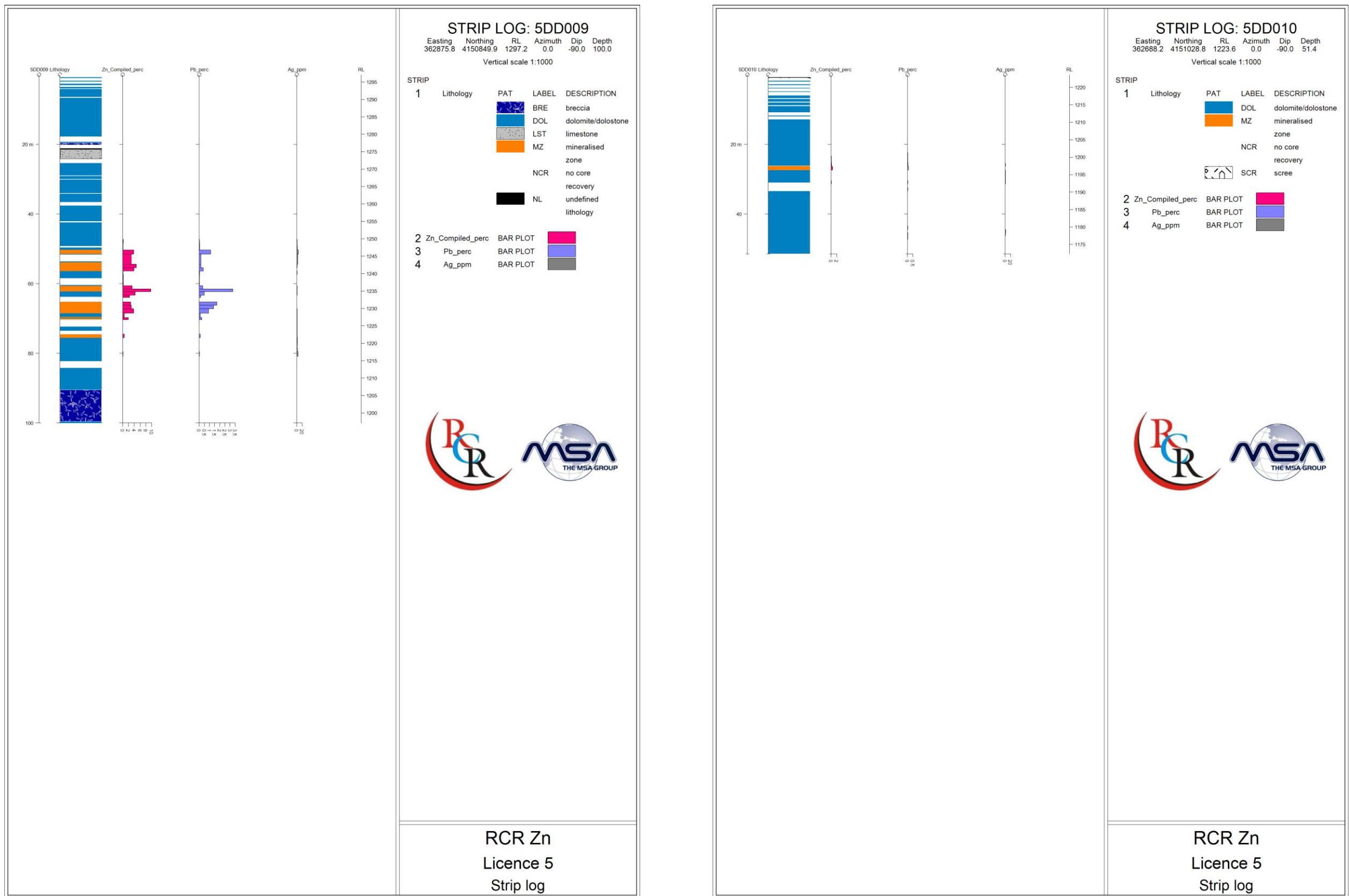


Figure 11-9
Strip logs from 5DD011 and 5DD012, showing lithologies logged and Zn, Pb and Ag assay results

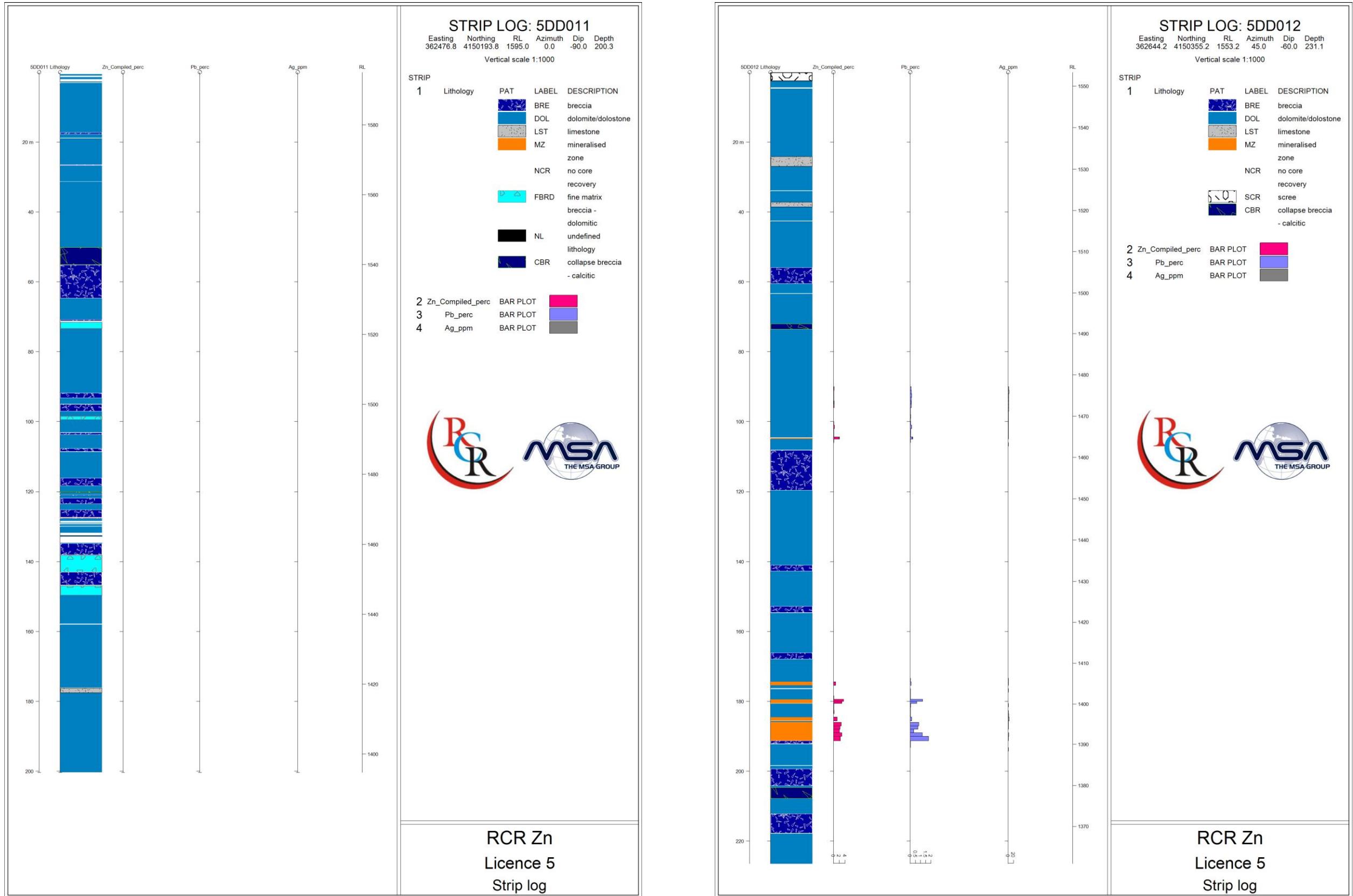


Figure 11-10
Strip logs from 5DD013 and 5DD014, showing lithologies logged and Zn, Pb and Ag assay results

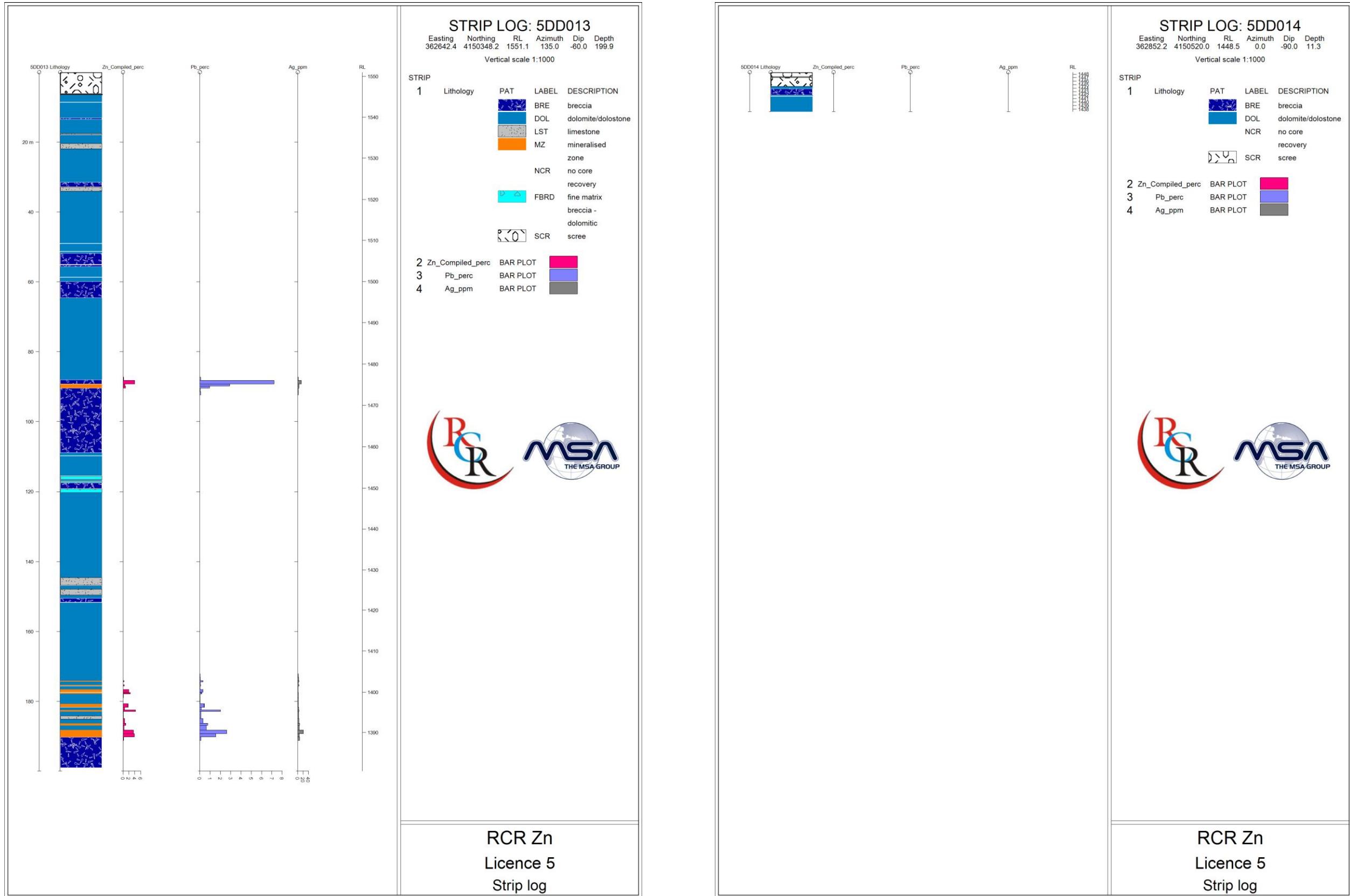
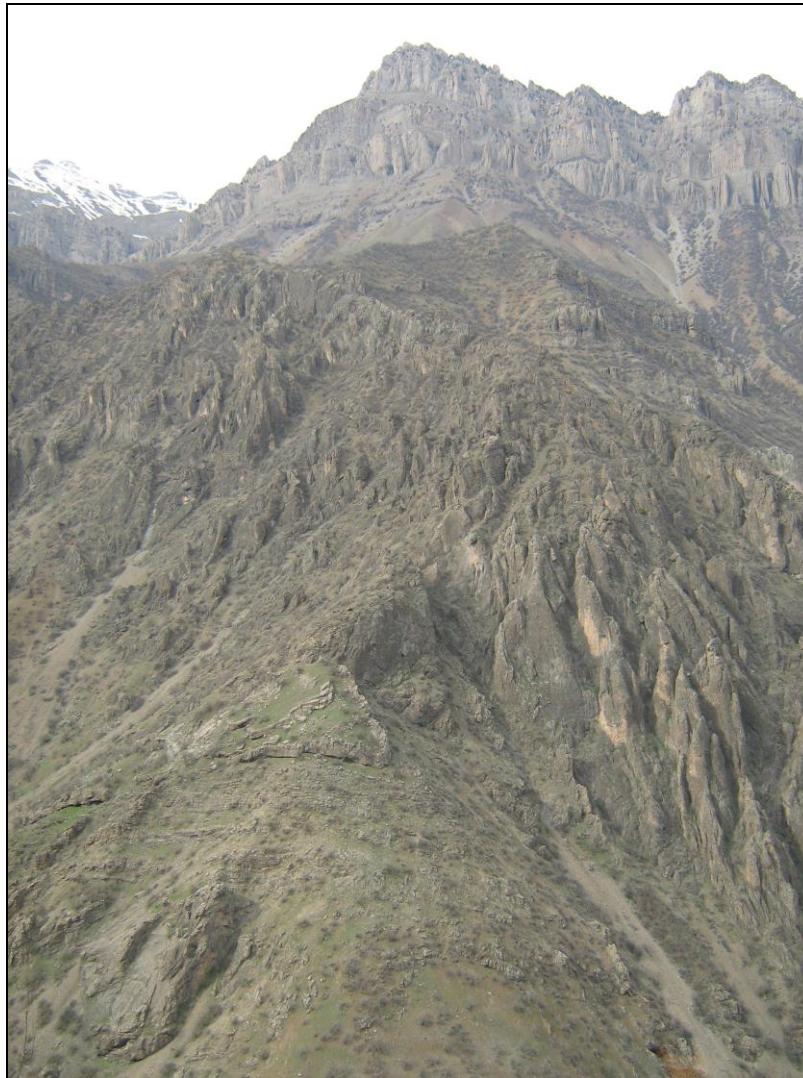


Figure 11-11

North facing view from a vantage point south of 5DD003 showing antiformal axis developed in the foreground. Small workings are present in the bottom right of the photograph



11.2 The Pentagon

Drilling on The Pentagon commenced on 1 October 2010 and was completed on 18 October 2010. A total of 425 m was drilled in 10 boreholes, including 57.10 m (uncorrected for dip) of MZ. The locations of the holes drilled in The Pentagon are shown in Figure 11-12. Seven of the ten boreholes intersected MZ. The drilling strategy at The Pentagon was heavily constrained by access and the existing mining highwall (Figure 11-13). As a result, many of the holes were collared in mineralisation. PENDD001 was inadvertently collared in the footwall of the main MZ, whereas several of the holes had to be collared in the footwall and drilled at a marginally shallower

angle than the mapped dip of the MZ in order to obtain an inverted intersection. Holes PENDD007 and PENDD008 did not intersect the MZ and are interpreted to have been collared immediately to the west of a fault zone that has displaced the MZ to the south i.e. upslope. Generally, the mineralized material intersected in the Pentagon boreholes is significantly more competent than the frequently friable material intersected on License 5. Typical examples of mineralized intersections are shown in Figure 11-14. Strip logs for holes PENDD001-PENDD008, compiled using Geosoft Target, are shown in Figure 11-14 to Figure 11-18.

The 2010 drilling campaign failed to definitively identify a discrete upper and main mineralized zone, although outcomes of the geological and resource modelling (Section 17) suggest potential for an upper mineralized zone on The Pentagon.

Significant intersections (> 1 m width, >1% Zn) are tabulated in Table 11-3. The anomalously wide intersection in PENDD003 is difficult to interpret given the limited amount of drilling that was undertaken on The Pentagon. It is, however, evident that Zn and Ag grades at the Pentagon are significantly higher than on License 5 whereas Pb grades are similar to License 5.

Table 11-3
Significant intersections (dip-corrected) from The Pentagon

| Borehole | From (m) | To (m) | True Width (dip corrected) (m) | Zn (%) | Pb (%) | Ag (ppm) | Total width stratiform mineralisation intersected (m) |
|-------------------------|----------|--------|--------------------------------------|------------|------------|-----------|--|
| PENDD002 | 12.70 | 26.50 | 3.57 | 3.9 | 0.5 | 4 | 3.57 |
| PENDD003 | 8.70 | 27.70 | 10.90 | 3.8 | 1.0 | 79 | 10.90 |
| PENDD004 | 1.17 | 3.90 | 1.37 | 9.8 | 0.6 | 19 | 2.41 |
| | 9.80 | 11.90 | 1.05 | 17.3 | 0.5 | 6 | |
| PENDD005 | 0.00 | 2.50 | 1.06 | 7.9 | 3.0 | 82 | 2.32 |
| | 8.50 | 11.50 | 1.27 | 5.8 | 0.9 | 40 | |
| PENDD006 | 11.40 | 14.10 | 1.55 | 38.8 | 1.8 | 15 | 1.55 |
| PENDD009 | 8.90 | 10.90 | 1.00 | 22.5 | 3.8 | 32 | 1.00 |
| PENDD010 | 122.50 | 127.30 | 1.24 | 17.7 | 2.6 | 18 | 3.62 |
| Pentagon average | | | 2.56 | 9.0 | 1.2 | 58 | |

Figure 11-12
Borehole collars and traces on The Pentagon, draped on Quickbird imagery. Contour interval is 20 m

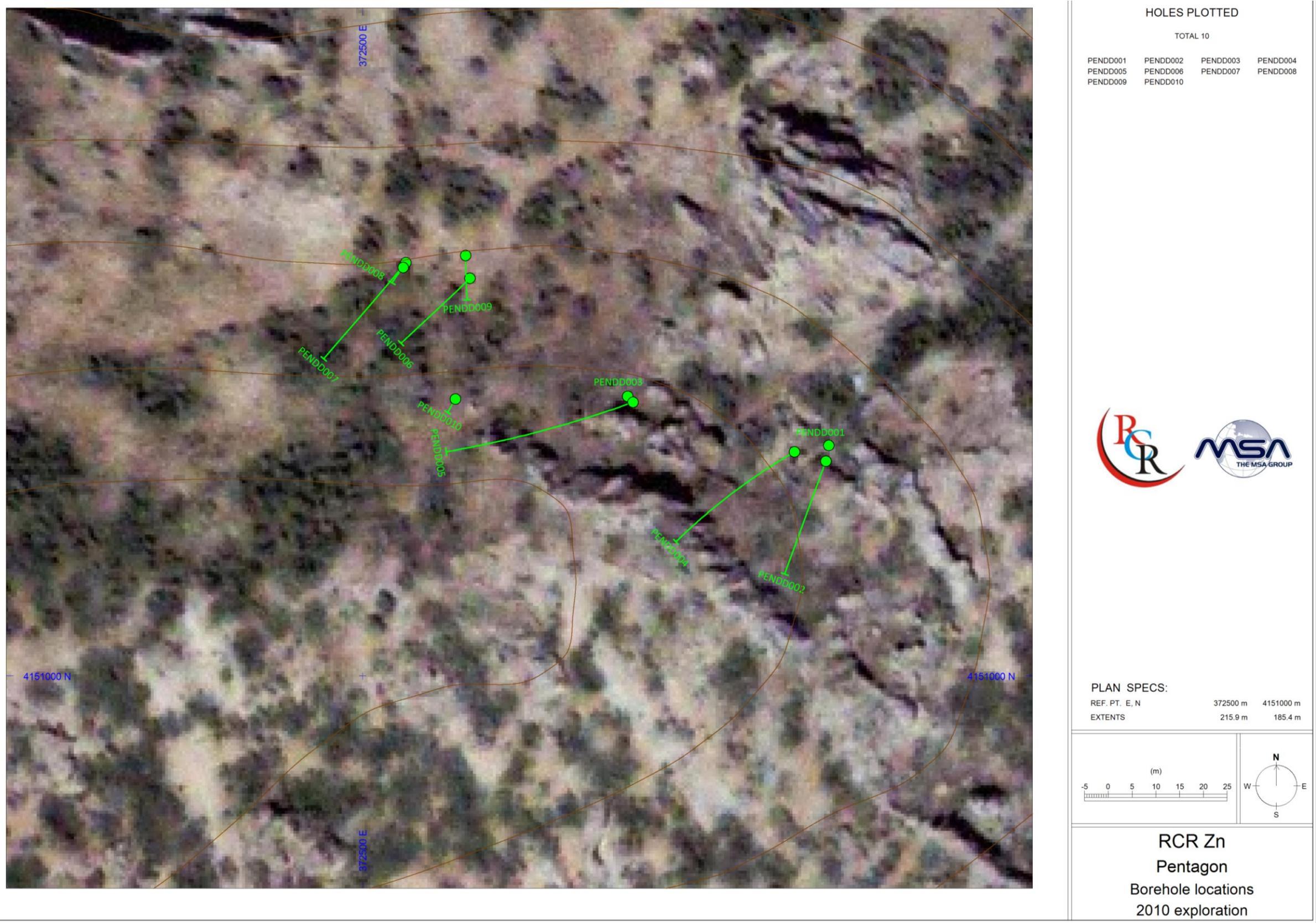


Figure 11-13

Remnant highwalls comprising hangingwall (right) and footwall (left) contact zones to the partially mined mineralized zone on The Pentagon. The zone dips steeply to the south (right)



Figure 11-14
Core photographs of typical intersections from the Pentagon (holes PENDD006 and PEND010)



Figure 11-15
Strip logs from PEND001 and PEND002, showing lithologies logged and Zn, Pb and Ag assay results

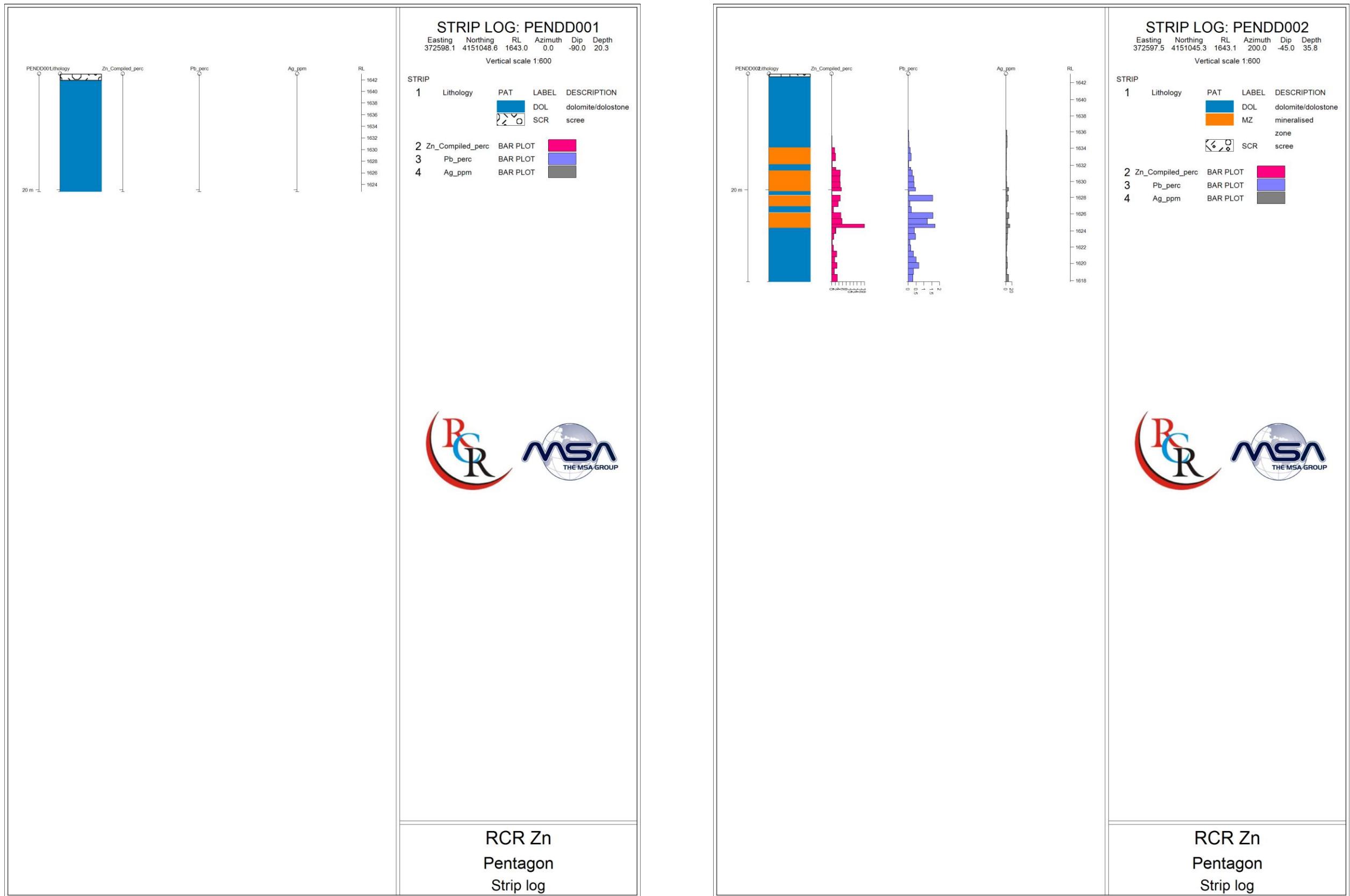


Figure 11-16
Strip logs from PEND003 and PEND004, showing lithologies logged and Zn, Pb and Ag assay results

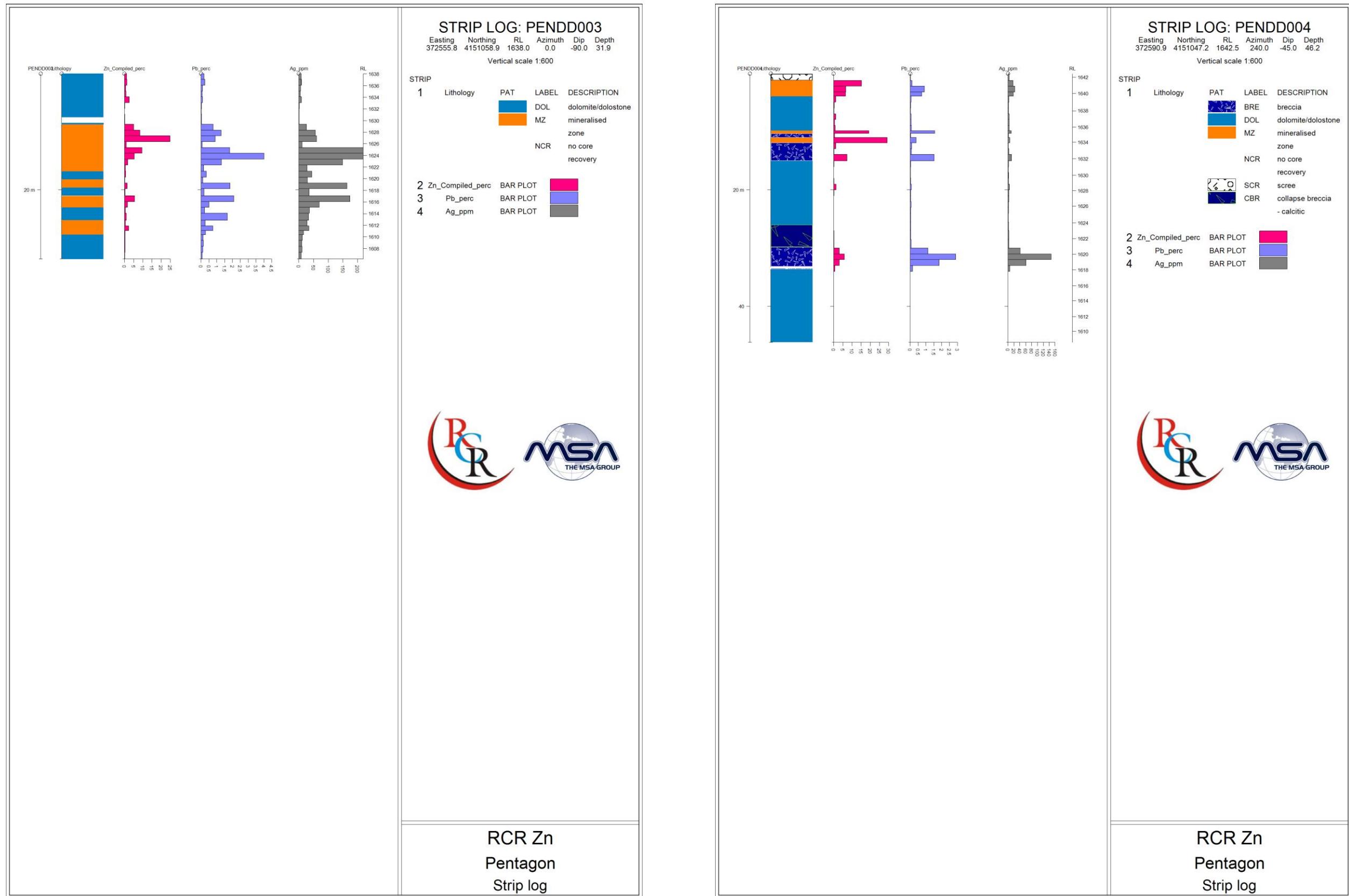


Figure 11-17
Strip logs from PEND005 and PEND006, showing lithologies logged and Zn, Pb and Ag assay results

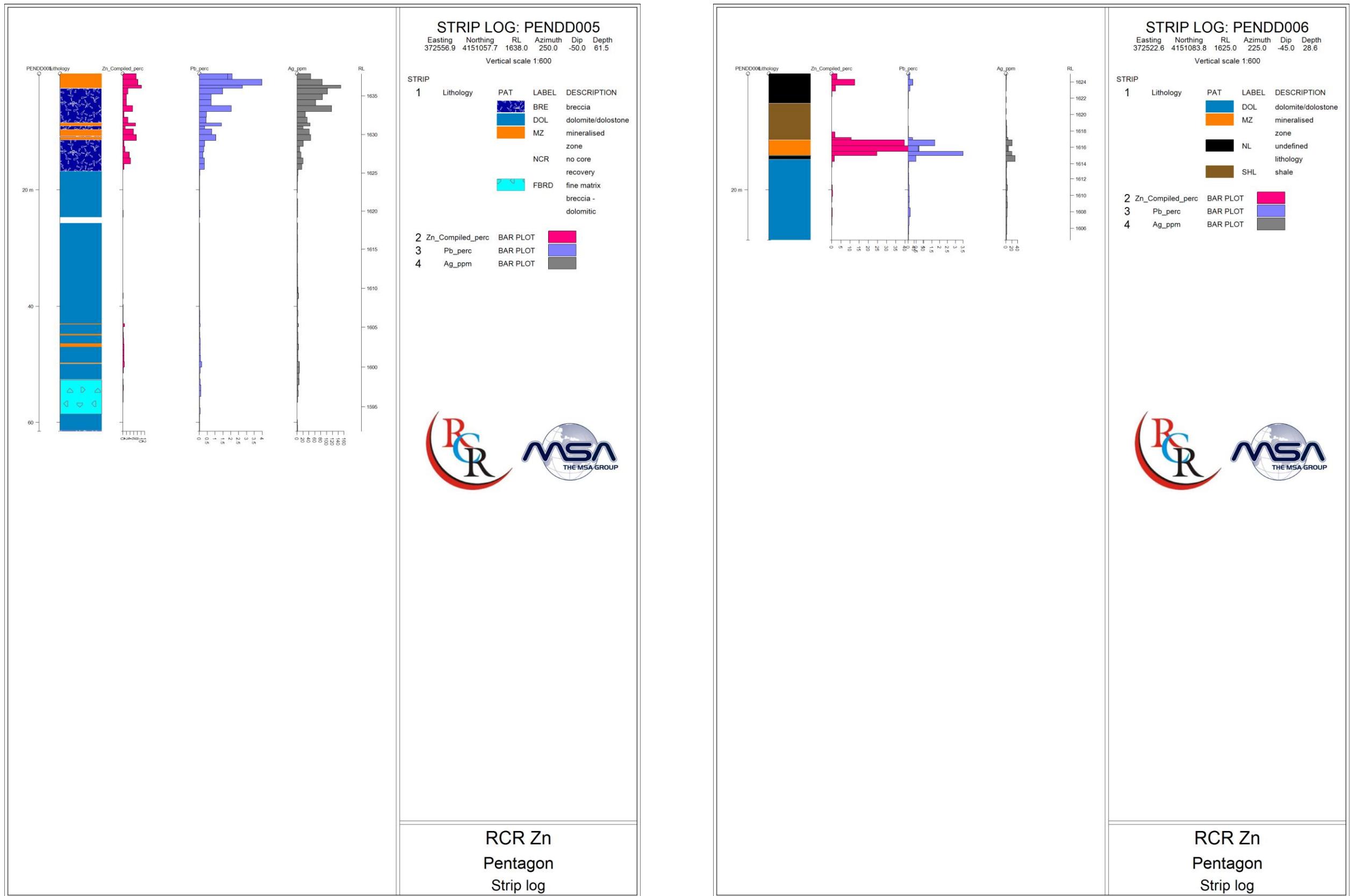
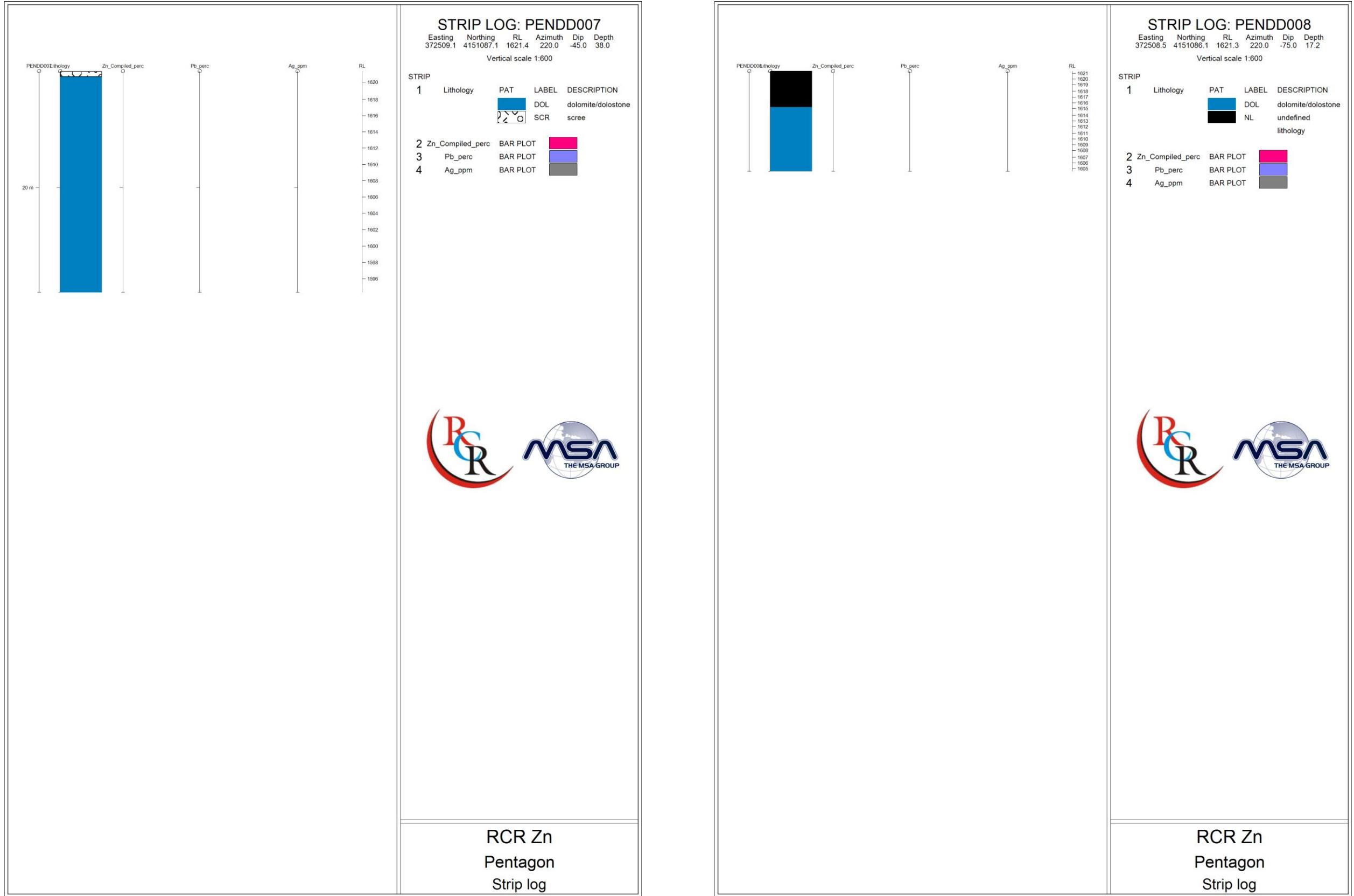


Figure 11-18
Strip logs from PEND007 and PEND008, showing lithologies logged and Zn, Pb and Ag assay results



12 SAMPLING METHOD AND APPROACH

Five groups of sample subtypes have been collected during exploration of the HZP and are discussed separately below:

- Grab samples from mining stockpiles and mineralized outcrops for metallurgical testwork.
- Grab samples collected during the mapping program
- Channel samples collected during trenching. These were collected according to the MSA SOP's and are considered representative and have been used in the resource estimation exercise with the exception of a channel-sampled roadcut that was oriented subparallel to strike (5RC001) in which it was not possible to ascertain the true thickness of mineralized intersections.
- Drill core samples from the diamond drilling program that were collected for grade determination by assay techniques outlined in Section 13. These were collected according to the MSA SOP and involved collection of half-core samples (after splitting with a diamond saw) over the mineralized intervals at a nominal sample width of 1 m.
- Drill core samples from the diamond drilling program that were collected for mineralogical analysis at the Natural History Museum in the United Kingdom

12.1 Stockpile samples

A total of 6 stockpile samples have been collected by RCR from roadside stockpiles from mining activities adjacent to RCR's licenses or from artisanal operations on RCR licenses. These samples are not considered representative of mineralisation on the HZP as they have undoubtedly been subjected to crude pre-concentration by the operators.

12.2 Mapping grab samples

A total of 94 outcrop grab samples have been collected during the course of mapping on the HZP. Grab samples typically comprise visibly mineralized material and, wherever possible, samples of 1-2 kg mass were collected and placed in sample bags with a duplicate ticket book number that is cross-correlated in the MSA database with the outcrop locality number. Although the samples are not representative of the bulk grade of the mineralized zone, high grade grab samples were used in conjunction with structural data to site trenches for representative channel sample collection. Grab samples were analysed with the InnovX handheld XRF prior to laboratory dispatch to rapidly obtain indicative grade results.

12.3 Channel samples

A total of 233 routine channel samples totalling 220.58 m (uncorrected for dip) were collected from the excavated trenches on License 5 and submitted for analysis. Friable samples were split using a riffle splitter such that a representative subsample was retained on site and field duplicates could be prepared. Of the 233 collected samples, 102 of the samples were from the main or upper mineralized zone, for a total uncorrected width of 94.37 m. The remaining samples comprised dolomitic and brecciated units from the hangingwall and footwall and, in several instances, middling units between mineralized layers.

12.4 Drill core samples

A total of 562 routine drill core samples for a total width (uncorrected for dip) of 538.44 m were collected from borehole cores from License 5 and The Pentagon. Competent drill core was split using a diamond saw and half-core samples bagged and tagged using duplicate ticket books. Incompetent sample material was split using a rigid plastic sheet to approximately half the sample interval in the coretray, with one half collected and bagged for laboratory submission and the balance retained in the core tray. Field duplicates were created by splitting the half-core submitted to the laboratory into two quarter cores. Of the 562 routine samples submitted to the laboratory, 147 of these were logged as mineralized zone with the balance comprising mineralized brecciated units in the footwall or hangingwall and middling units between mineralized horizons.

The HZP drill core is securely stored in a core shack facility just outside Hakkari. The PVC core trays are stored in racks within a lockable shed (Figure 12-1).

Figure 12-1
Core storage facility located immediately outside Hakkari



12.5 Mineralogical samples

A suite of samples spanning various grades and compositions was selected for mineralogical analysis under instruction from staff at The Natural History Museum in the United Kingdom. These samples are tabulated in Table 12-1.

Table 12-1
Sample types and numbers submitted for mineralogical analysis

| Intersection types | | |
|--------------------|------------------------------------|-----------|
| 1 | Low grade oxide (<5%) | 5 |
| 2 | Oxide 5-12% Zn | 6 |
| 3 | Oxide 18-25% Zn | 5 |
| 4 | V high grade 25-48% Zn | 5 |
| 5 | Fe-rich (43-58% Fe) | 5 |
| 6 | Mineralized dolomites and breccias | 5 |
| | <i>Total</i> | 31 |

Results of the mineralogical study are expected to be available in April 2011.

13 SAMPLE PREPARATION, ANALYSES AND SECURITY

13.1 Sample Preparation, Analyses and Security

All samples were submitted to ALS Chemex in Izmir for preparation which comprised crushing to 70% <2 mm and pulverising of 1 000 g to 85% passing 75 µm , prior to being dispatched to Vancouver for assay by method ME-OG62 (4-acid digest with ICP-AES finish) for Ag, Bi, Cd, Fe, Mg, Mn, Mo, Pb, S and Zn. Overlimit (>30% Zn) assay results were flagged and these sample pulps reanalysed using method ME-OG62h (a dilution technique). Cu and Cr were included in earlier assay requests but results returned values at or below the respective detection limits and these elements were removed from the analytical suite.

Density determinations were carried out on all samples in the field using the Archimedes principle. The dry mass of a sample (in air) is ratioed against its mass when immersed in water to determine its density relative to water (which has a density of 1 g/cm³). For friable samples, the sample was wrapped in clingfilm prior to immersion in order to ensure sample integrity although it was noted that this method resulted in incomplete sample immersion due to trapped air bubbles and therefore likely under-reports sample density. MSA recommend that field-based determinations of density should be carried out using a volume-replacement technique on in-situ mineralized material. This would involve extraction and weighing of a known volume of material in order to determine bulk density.

13.2 Quality Assurance and Quality Control

Appropriate quality assurance and quality control (QAQC) monitoring is a critical aspect of the sampling and assaying process in any exploration program. Monitoring the quality of laboratory analyses is fundamental to ensuring the highest degree of confidence in the analytical data and providing the necessary confidence to make informed decisions when interpreting all the available information. *Quality assurance* may be defined as information collected to demonstrate that the data used further in the project are valid. *Quality control* (QC) comprises procedures designed to maintain a desired level of quality in the assay database. Effectively applied, QC leads to identification and corrections of errors or changes in procedures that improve overall data quality. Appropriate documentation of QC measures and regular scrutiny of quality control data are important as a safeguard for project data and form the basis for the quality assurance program implemented during exploration.

In order to ensure quality standards are met and maintained, planning and implementation of a range of external quality control measures is required. Such measures are essential for minimising uncertainty and improving the integrity of the assay database and are aimed to provide:

- An integrity check on the reliability of the data,

- Quantification of accuracy and precision,
- Confidence in the sample and assay database,
- The necessary documentation to support database validation.

Sampling procedures were implemented according to the MSA SOP for the Hakkari project and were subsequently revised by RCR to align with operational requirements. Key elements of the laboratory SOP are:

- Fixed sample batch sizes of 40 samples
- Each batch to commence with a blank and include a minimum of one standard (certified reference material (CRM)) and one field duplicate

Field duplicates were created by splitting of channel and drill core samples. In the initial stages of the program, however, RCR requested duplicate analysis of a submitted sample (i.e. open duplicates). In the latter stages of the program, this methodology was changed with RCR submitting blind field duplicates sequentially into the sampling stream. In addition, ALS Chemex's internal QAQC results were supplied with each set of assay results and included blanks, standards and reanalysis of pulps.

Matrix-matched (oxide) CRMs used during the exploration program were sourced from African Mineral Standards (AMIS) in South Africa and Geostats in Australia. These are listed below in Table 13-1.

| |
|---|
| Table 13-1 |
| AMIS and Geostats CRM's used during the 2010 exploration program |

| CRM | Description | Certified %Zn | %Pb |
|-----------|---------------------------------|---------------|------------------|
| AMIS0144 | zinc oxide ore ex Skorpion Mine | 17.36 | 0.00 |
| AMIS0145 | zinc oxide ore ex Skorpion Mine | 12.59 | 0.00 |
| AMIS0152 | zinc oxide ore ex Skorpion Mine | 5.88 | 0.00 |
| GBM306-12 | Cu-Pb-Zn caprock | 2.05 | 2.68 (certified) |
| GBM396-10 | Supergene ore ex Murchison | 1.06 | 0.10 (certified) |
| GBM903-12 | Zn concentrate | 48.95 | 1.10 (certified) |

In addition, a commercially prepared (AMIS108) silica powder was used as the project blank material.

Assay results were monitored on a batch-by-batch basis using the following criteria defined in the RCR laboratory protocol:

- Failure of a standard or blank i.e. a CRM, constitutes a failure of an entire batch
- Failure criteria are defined as more than two standard deviations from the certified values for standards and assay values greater than 0.05% (Pb and Zn) for blanks

A summary of the CRM's inserted into the sampling stream is given in Table 13-2.

Table 13-2
Summary of QAQC samples inserted into the HZP sample batches by RCR

| | Routine samples | Total CRM | Total samples | Blanks | | Standards | | Duplicates | |
|-----------|-----------------|-----------|---------------|--------|------|-----------|------|------------|------|
| Drillcore | 562 | 71 | 633 | 23 | 3.6% | 17 | 2.7% | 31 | 4.9% |
| Channel | 233 | 38 | 271 | 13 | 4.8% | 13 | 4.8% | 12 | 4.4% |
| Total | 795 | 109 | 904 | 36 | 4.0% | 30 | 3.3% | 43 | 4.8% |

13.2.1 RCR QAQC performance

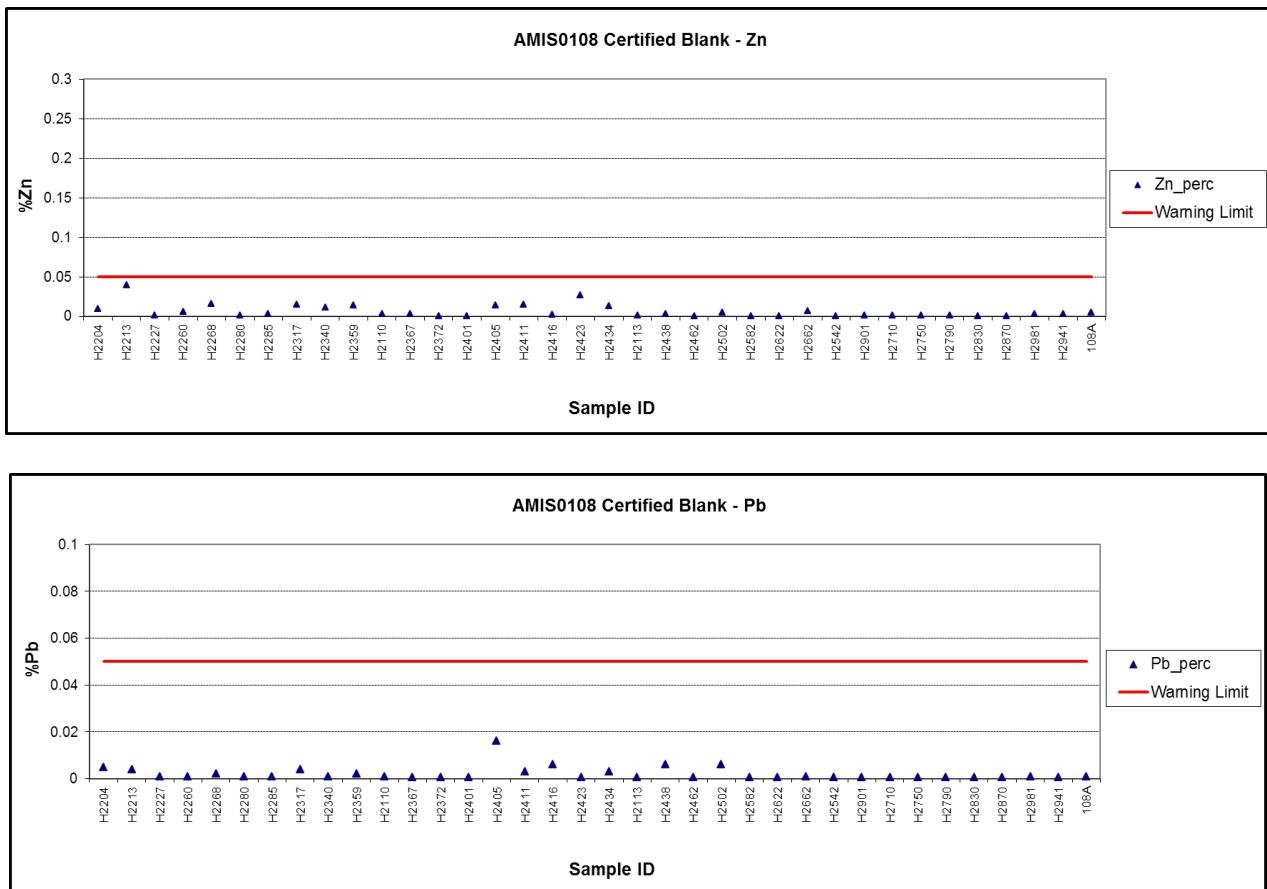
13.2.1.1 Blanks

Of the 36 blanks inserted into the sampling stream, all except three returned values within the 0.05% Zn warning limit. All of the blanks returned Pb values within the warning limits. In terms of the RCR protocol, the three batches comprising the failed blanks were re-assayed in their entirety. Sample H2416 returned 0.16% Zn and immediately followed sample H2415 which returned 25% Zn, clearly indicating contamination in the assay process. Samples H2438 and H2508 returned values of 0.066% Zn and 0.242% Zn. Both of these blanks were inserted at the beginning of their respective batches and suggest improper flushing of analytical equipment between batches.

The three batches (IZ10118550, IZ10160763, IZ10165908) were re-assayed in their entirety and all three blanks returned values within the warning limit. The re-assay results were retained in the final database and failed batch values overwritten with the re-assay data. Similarly good blank performance was noted for Ag. MSA considers the performance of the blanks to be acceptable.

Final control charts for blank samples are shown in Figure 13-1.

Figure 13-1
Performance of RCR-inserted blanks for Zn and Pb



13.2.1.2 Standards

A total of 30 standards were inserted into the Hakkari sampling stream. With the exception of two high-grade standards, all returned values within two standard deviations relative to their certified values. The two standard samples that did not return values within two standard deviations are both GBM 903-12, the high grade Zn concentrate with a certified value of 48.95% Zn. Both of these samples were reported as >30% Zn (i.e. overlimit samples) but were not re-assayed using the dilution technique for overlimit samples that was employed in the balance of the assay program. Both of these samples were from Batch IZ1016666 that exclusively comprised samples from the road cut (5RC001) and was not included in the resource model. The AMIS standards contain very low levels for Pb and are not certified for Pb. As a result, only GBM standards were used to monitor accuracy of Pb assay results. Similarly, only AMIS145 and GBM 396-10 are certified for Ag and in all instances the standards reported within the accepted deviation from the certified value. The performance of the CRMs was monitored using control charts (Figures 13-2 to 13-5).

MSA does not consider the failure to reassay the two overlimit standards to be a material issue and is of the opinion that the accuracy of the assay data is acceptable, both for Pb and Zn.

Figure 13-2
Performance of RCR-inserted AMIS standards relative to Zn% certified value

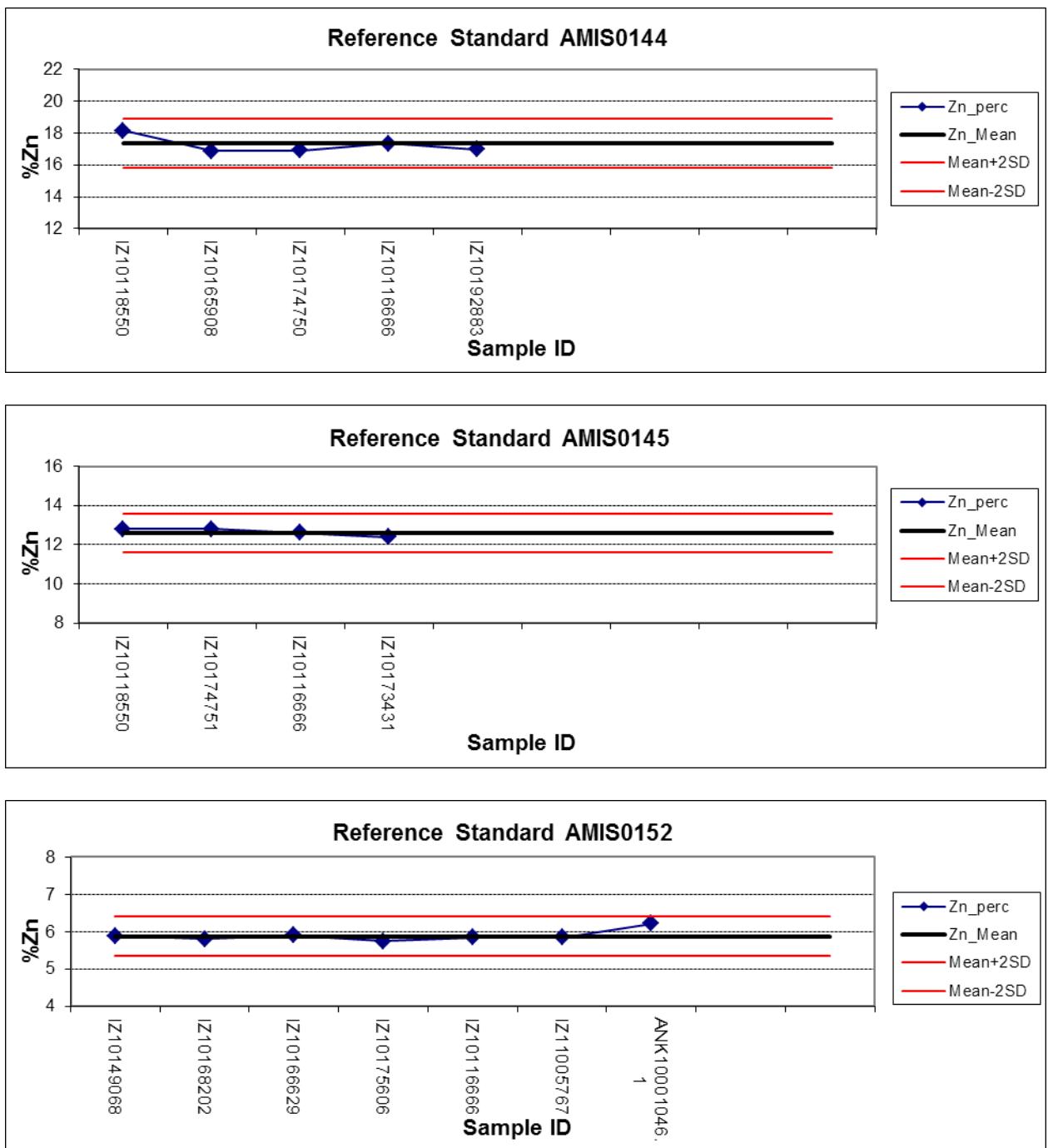


Figure 13-3

Performance of RCR-inserted GBM standards relative to Zn% certified value. Note the two 30% values (detection limit) for GBM 903-12 as discussed in text.

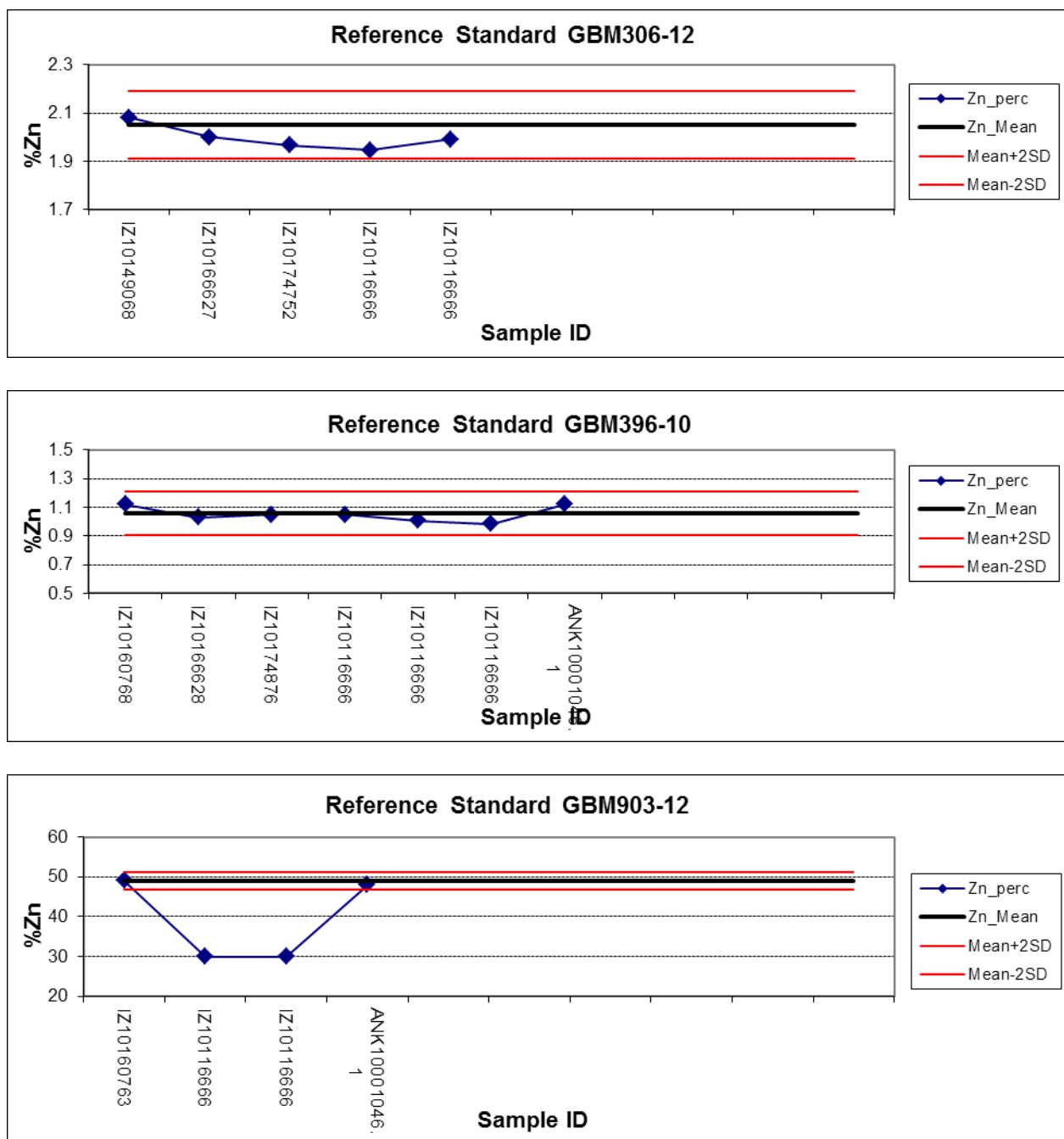


Figure 13-4
Performance of RCR-inserted GBM standards relative to Pb% certified value.

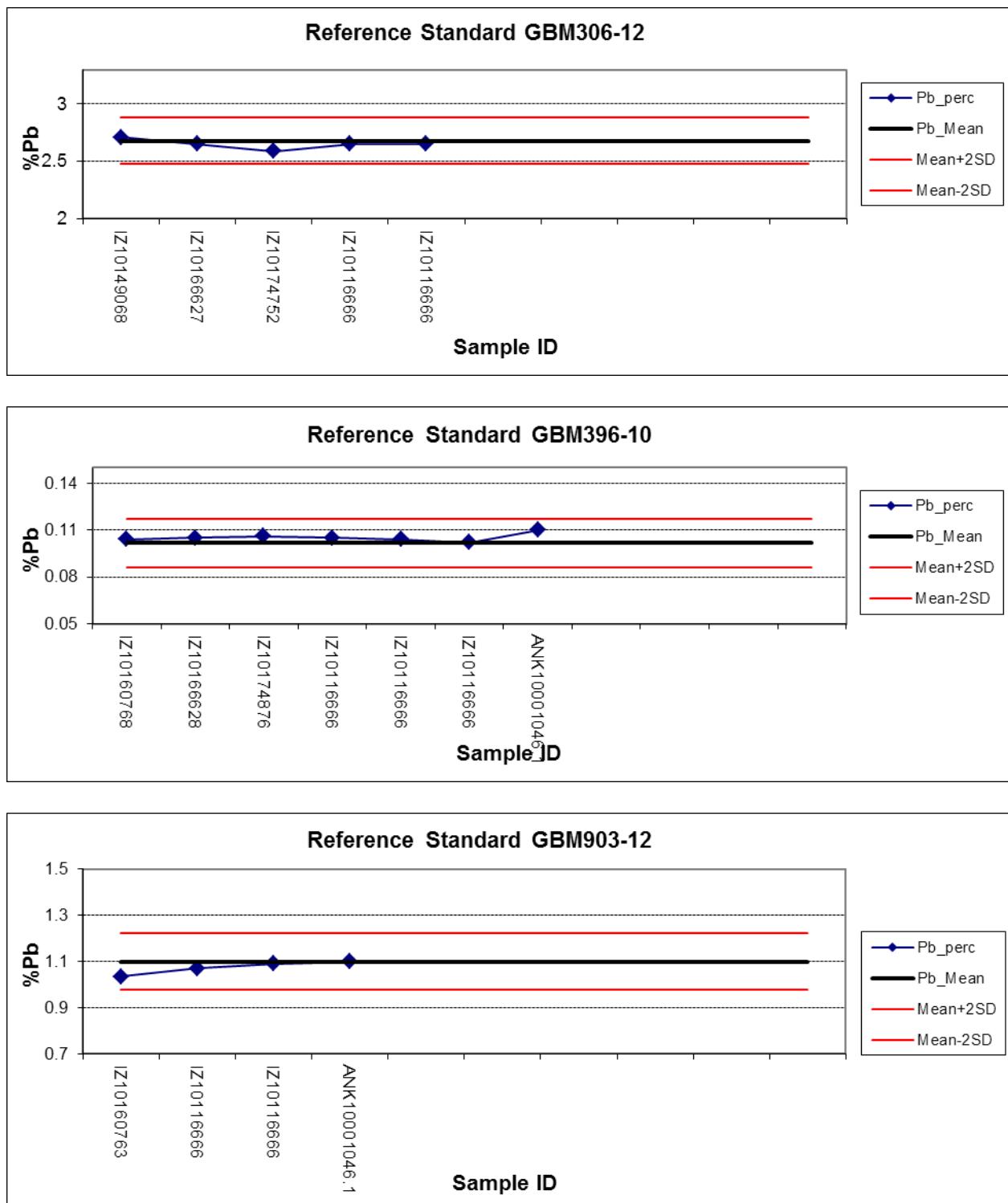
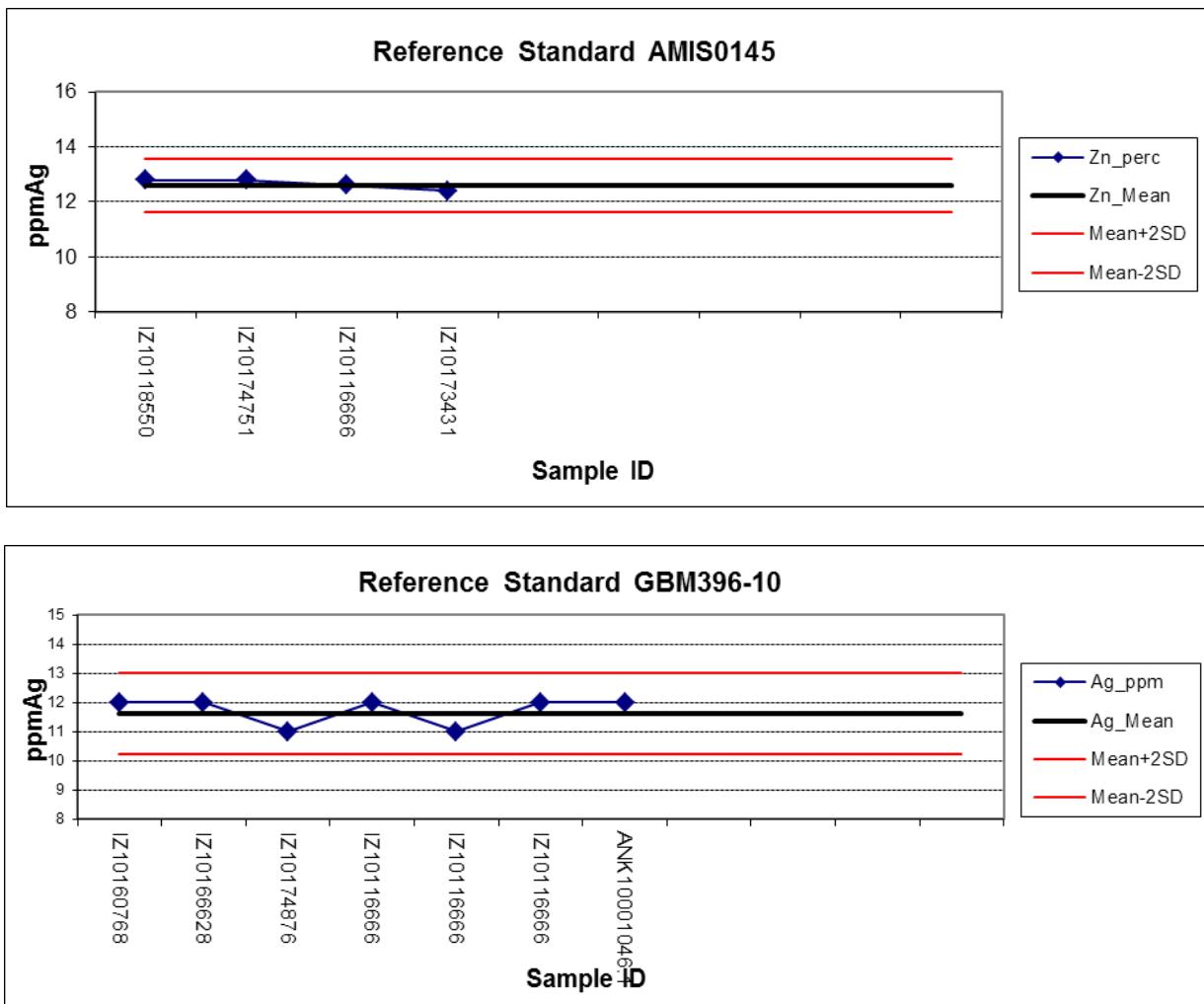


Figure 13-5
Performance of RCR-inserted standards relative to Ag (ppm) certified value.



13.2.1.3 Duplicates

A total of 43 field duplicates were inserted by RCR into the sampling stream, comprising a combination of open (pulp) duplicates and field duplicates. Duplicates performed well with a correlation coefficient of 0.998 for Zn, 0.994 for Pb and 0.993 for Ag (Figures 13-6 and 13-7). Scatter is evident towards the lower detection limit (well below economic grades), particularly for Ag, in line with the precision of the assay method, but the relative-difference (RD plots) further confirm the good performance of the duplicates and assign sufficient confidence to the precision of the assay data

Figure 13-6
Performance of RCR-inserted duplicates for Zn, Pb and Ag

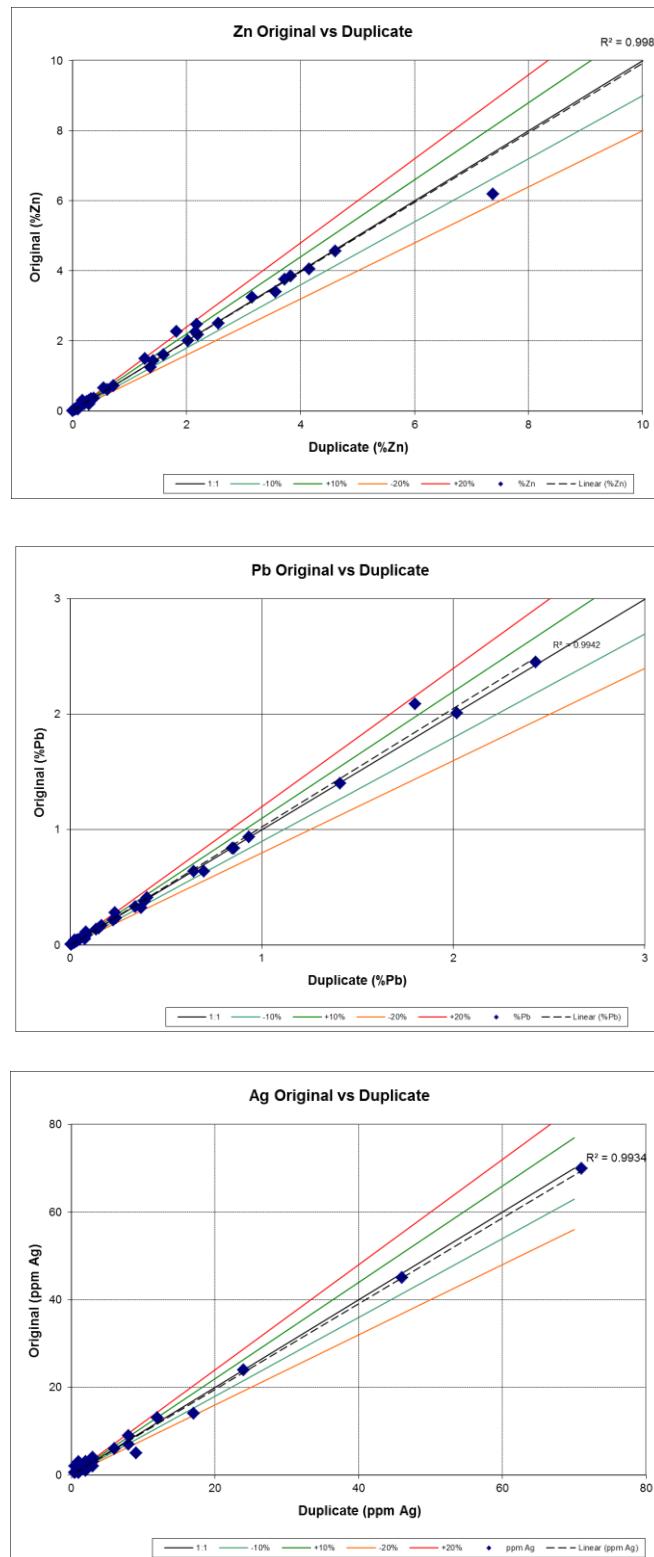
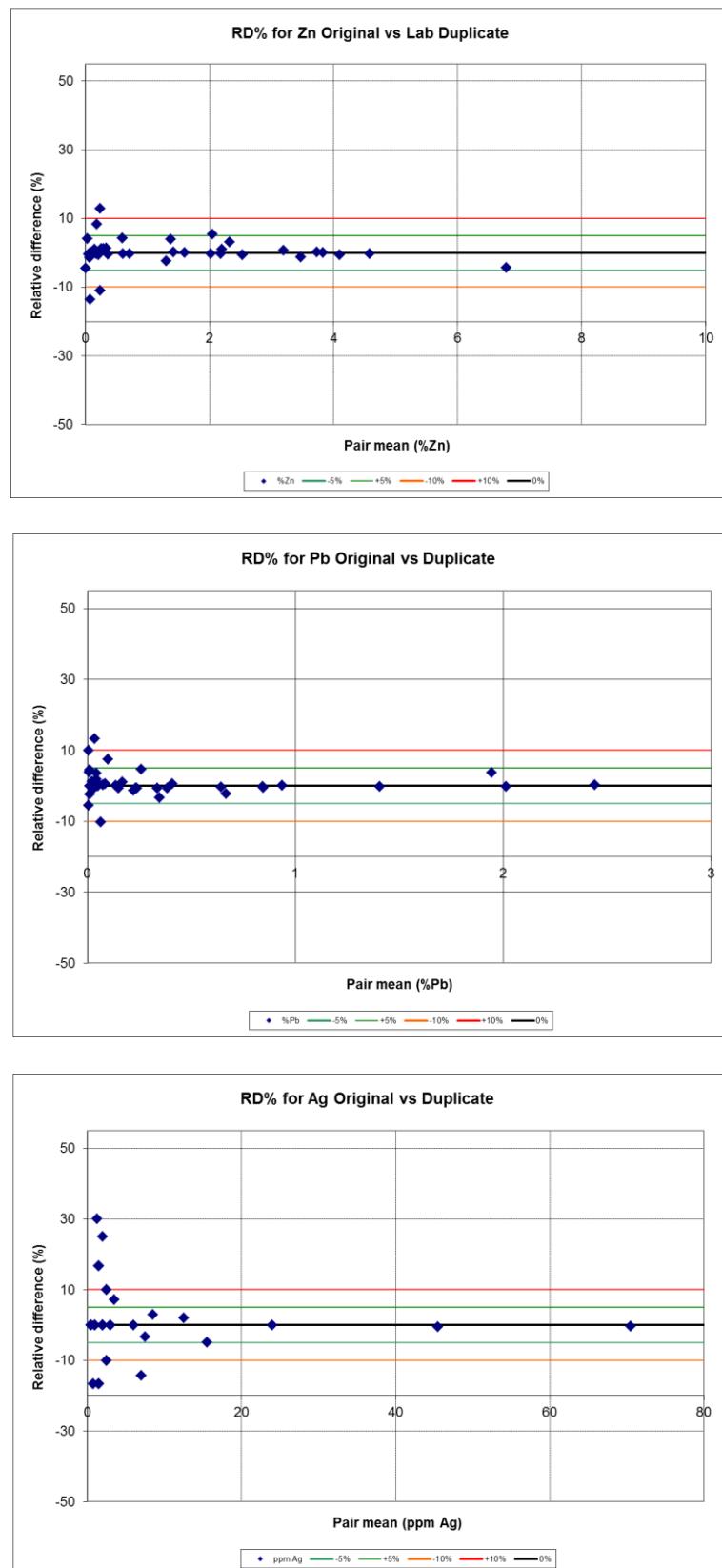


Figure 13-7
RD plots of RCR-inserted duplicates for Zn, Pb and Ag



13.2.2 Laboratory QAQC performance

As part of their internal QAQC procedures, ALS Chemex monitored their results with the insertion of their own standards, blanks and duplicates. Control charts showing the results of laboratory blanks and CRMs are illustrated in Figures 13-8 to 13-13. All of the laboratory QAQC measures are considered appropriate and MSA considers the data to be accurate and precise.

Figure 13-8
Performance of laboratory-inserted blanks for Zn and Pb

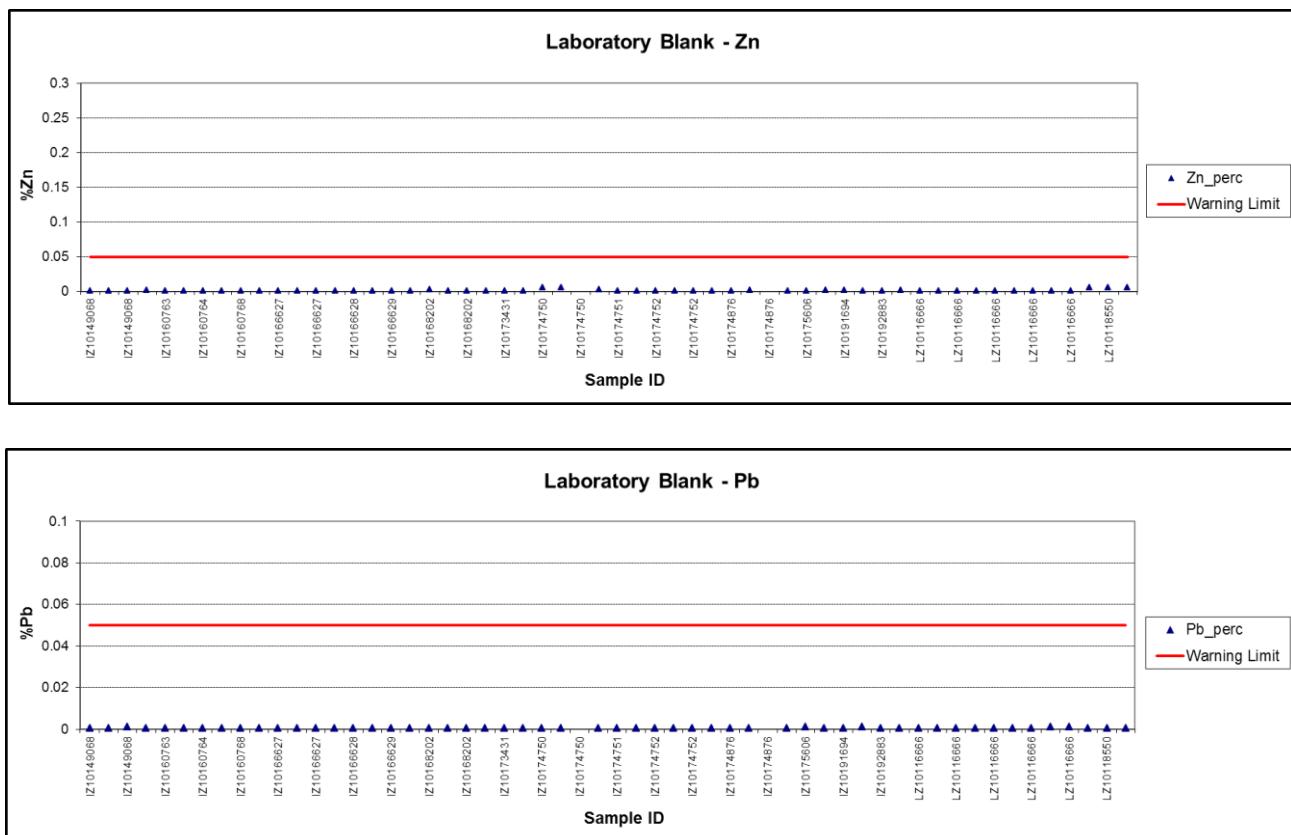


Figure 13-9
Performance of laboratory-inserted blanks for Zn

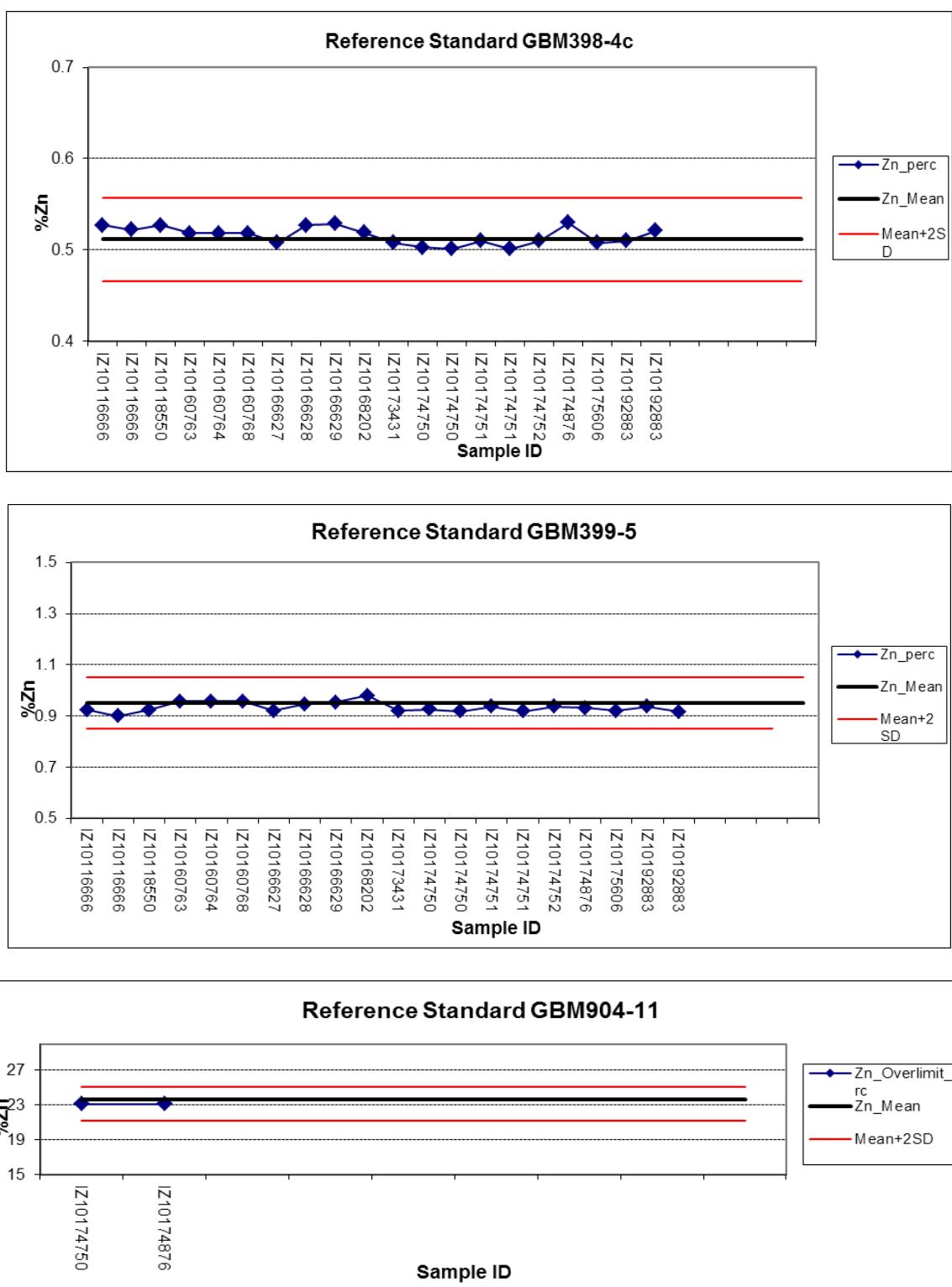


Figure 13-10
Performance of laboratory-inserted blanks for Zn

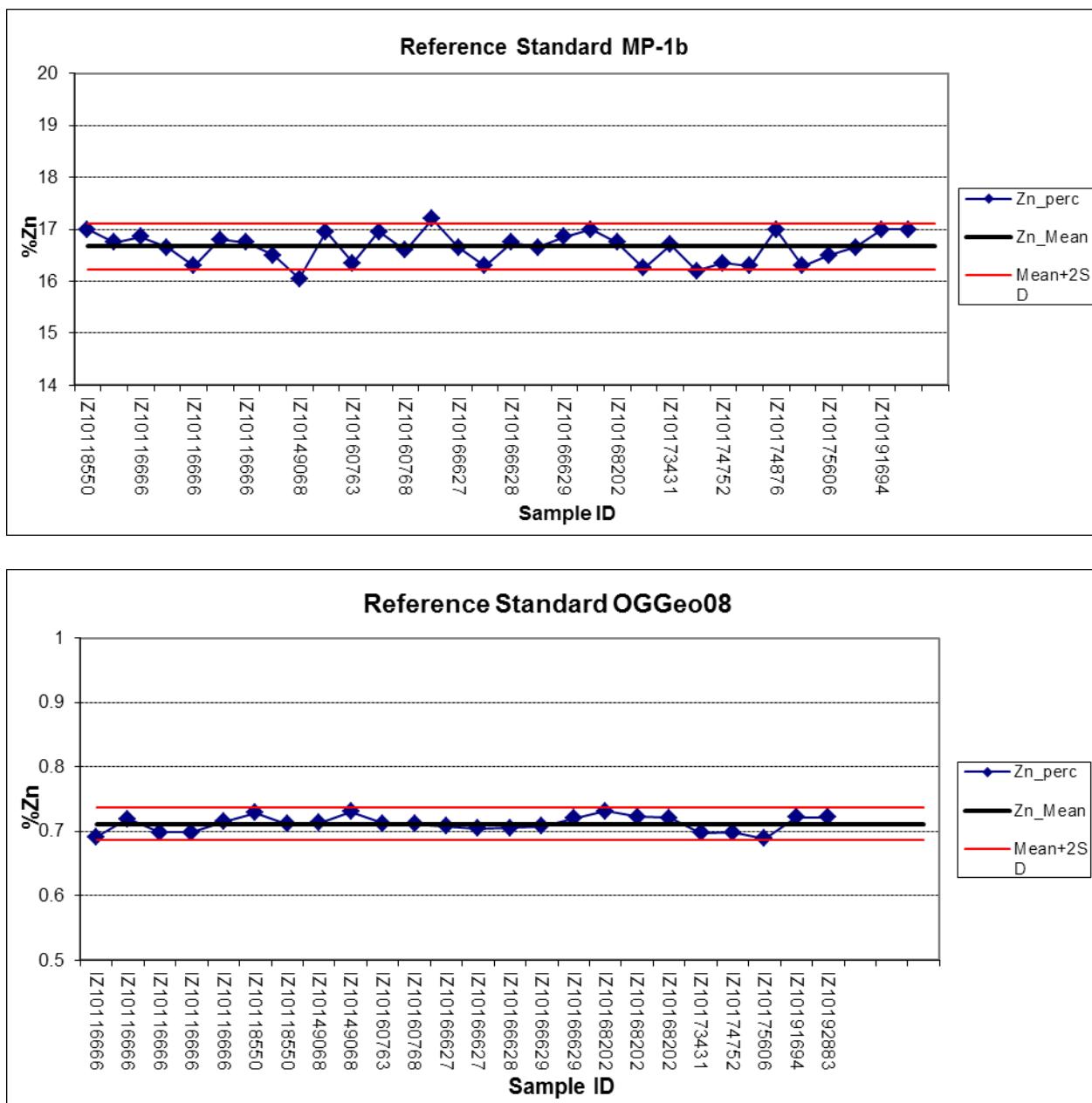




Figure 13-11
Performance of laboratory-inserted blanks for Pb

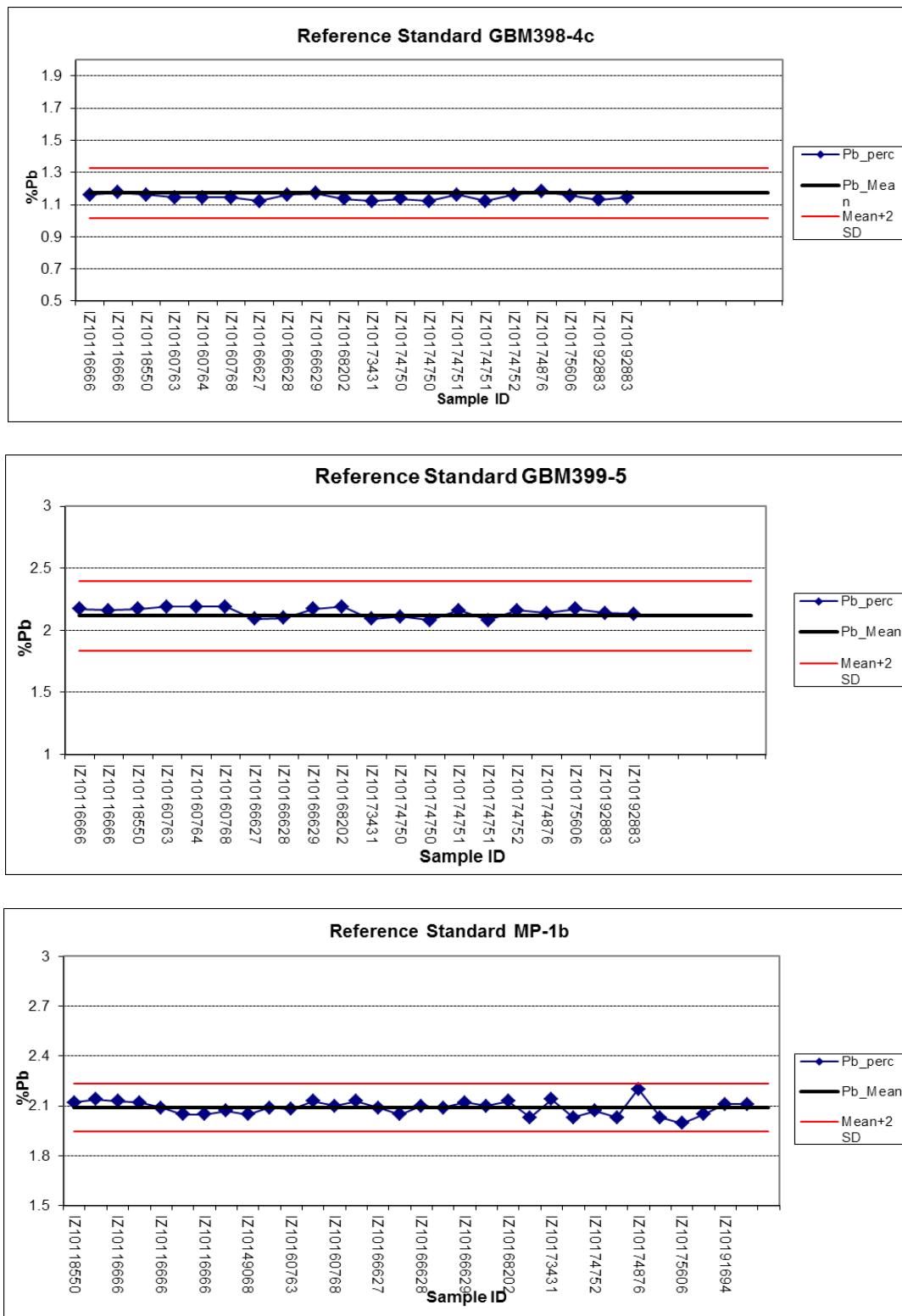


Figure 13-12
Performance of laboratory-inserted blanks for Ag

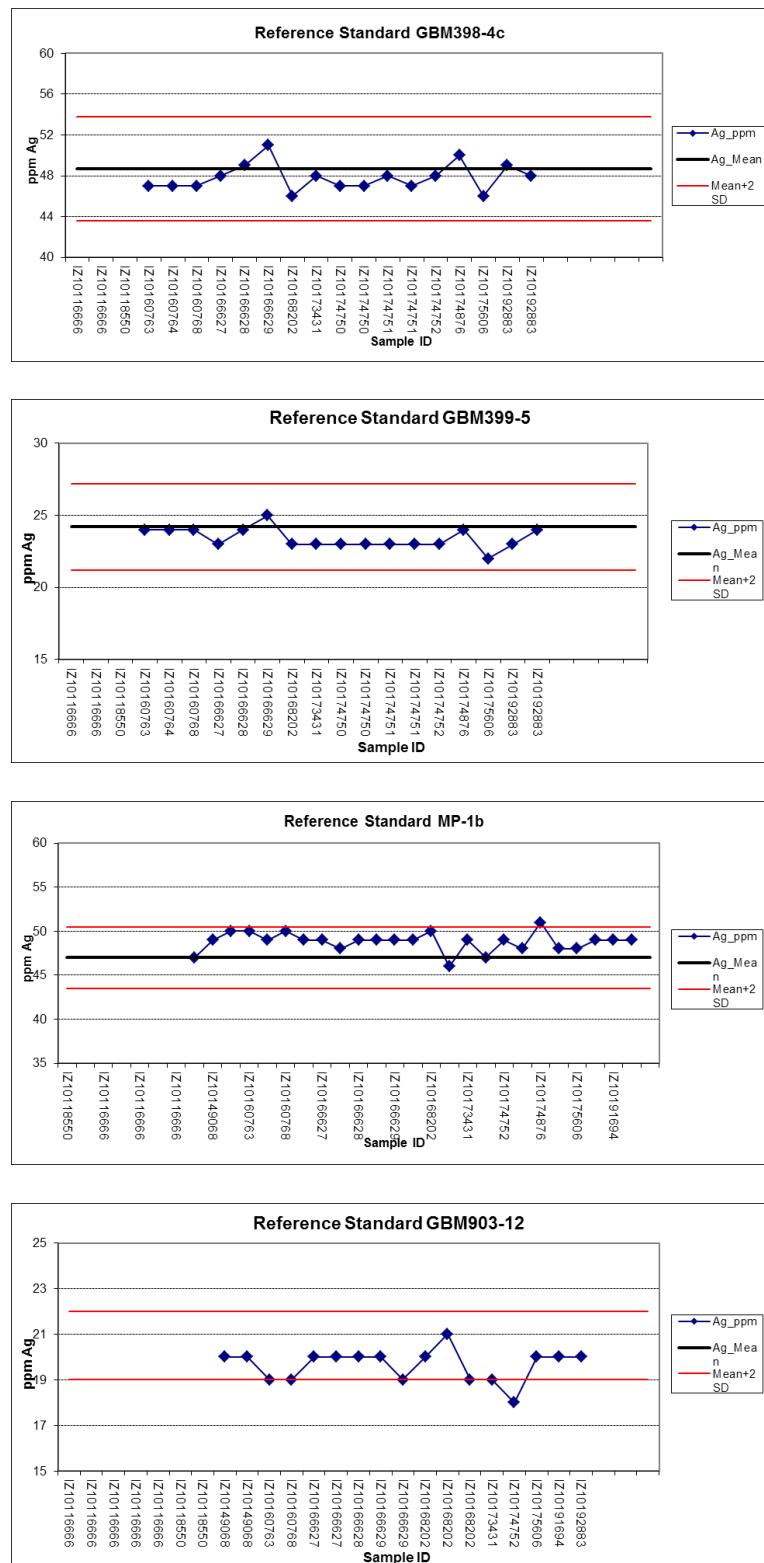
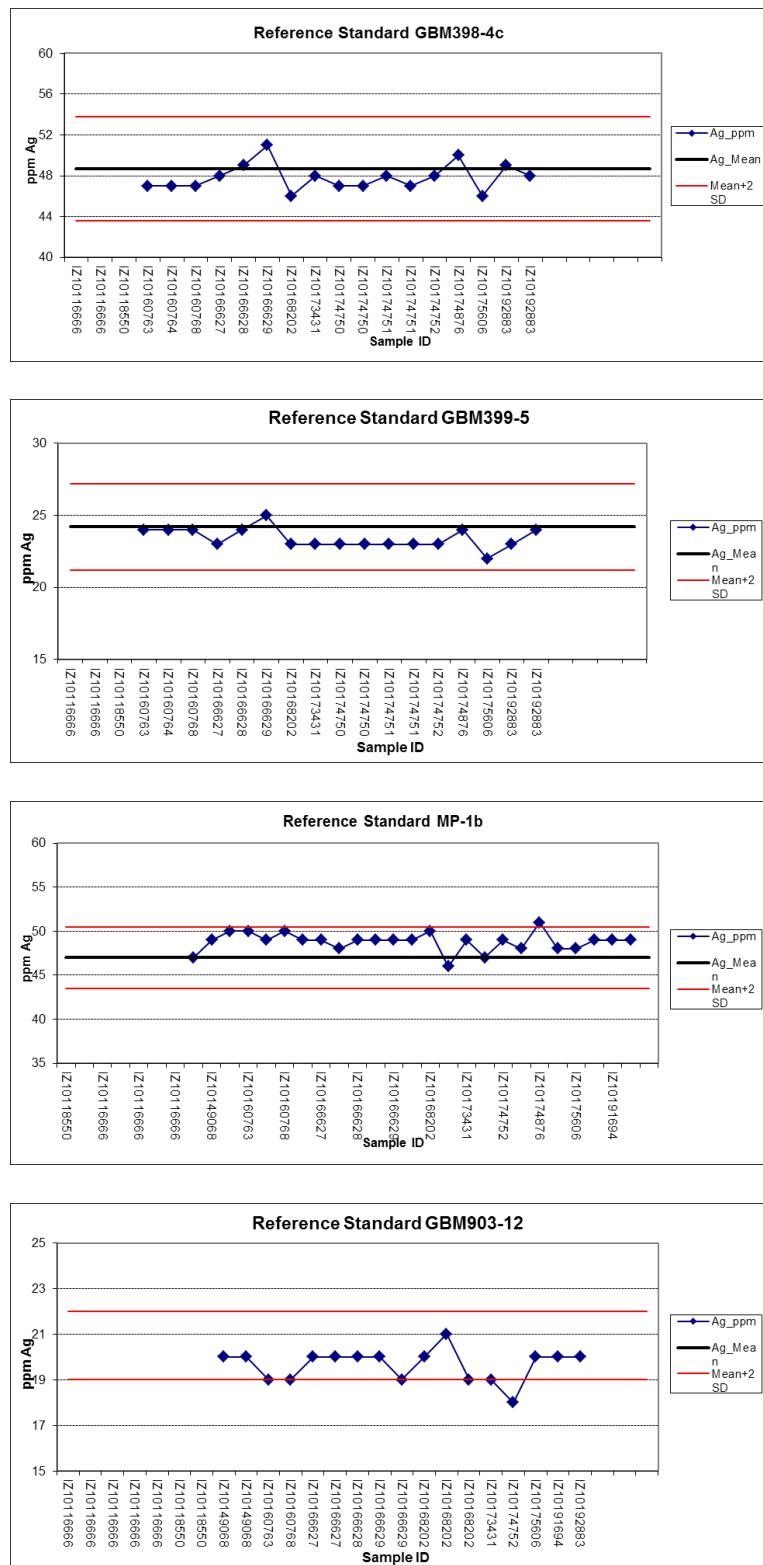


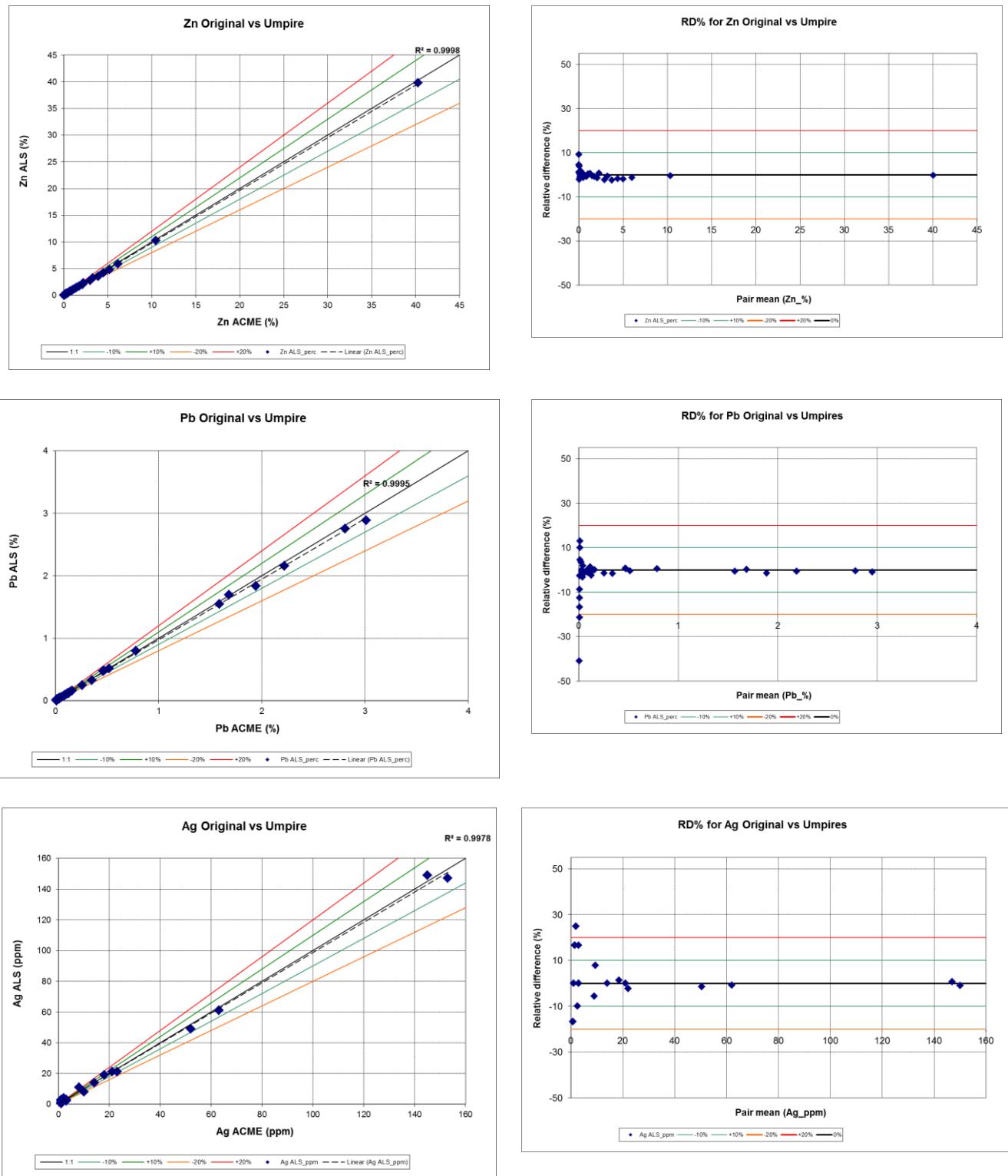
Figure 13-13
Performance of laboratory-inserted blanks for Ag



13.2.3 Umpire laboratory

A selection of approximately 5% (36 samples) of all routine samples was submitted to ACME laboratory in Ankara for umpire analysis. The umpire list was selected at random across the grade range reported by ALS Chemex. Samples were analysed using the same ICP-AES methodology as employed by ALS Chemex and an extremely strong correlation is noted between the original (ALS) and umpire (ACME) results (Figure 13-4). Ag assays show some scatter close to the detection limit (as evidenced in the RD plot) but this is not considered a material failure given the extremely low values in question (RD's greater than 15% are only noted for original Ag assays < 4 ppm). MSA considers that the umpire results demonstrate the integrity and validity of the original assay dataset. Three standards and one blank were inserted with the umpire batch and reported within the prescribed limits applied to the ALS Chemex dataset.

Figure 13-14
Original (ALS Chemex) vs Umpire (ACME) results for Zn, Pb and Ag



14 DATA VERIFICATION

In accordance with National Instrument 43-101, the QP (Mike Robertson) visited the Hakkari properties from 26 July to 7 August 2009, 16 to 30 March 2010, 20 to 27 June 2010, 13 to 18 August 2010, and together with Mike Hall (mineral resources QP) between 4 and 8 December 2010. The purpose of these site visits was to inspect the license areas comprising the HZP project and establish the geological setting of the project and of the zinc mineralization, visit adjacent small-scale mining areas, observe the extent of exploration work conducted by RCR and to verify the compliance of the exploration program with the project SOP's.

During the site visits, the QP was accompanied by various RCR and MSA personnel, including Brendan Clarke, co-author of this report. Sampling, trenching and drilling activities were observed and found to be compliant with the MSA SOP's and with the requirements of NI 43-101.

MSA is responsible for the management of data generated during RCR's exploration activities at the HZP. As such, a Microsoft Access relational database was established, comprising the following data tables:

- Mapping, including grab sample assay results and outcrop data from pre-2010 activities on the HZP
- Borehole collar header table
- Borehole lithological log
- Borehole structural log
- Core recovery and geotechnical (rock quality designation, RQD) log
- Borehole sampling log
- Trench header table
- Trench lithology and structure log
- Trench sample (channel) log
- Borehole sample assay results
- Borehole field duplicate assay results
- Borehole CRM assay results
- Trench sample assay results
- Trench field duplicate assay results
- Trench CRM assay results
- Core photography table
- Downhole survey table
- InnovX handheld XRF results for borehole core

- InnovX handheld XRF results for trench samples
- Specific gravity results table
- Mineralogical sampling table

The field-based geological team provided weekly data updates to the MSA data manager in Johannesburg via email in the form of dropdown-validated locked Excel spreadsheets. Data from these updates was subject to a rigorous QAQC protocol prior to importation into the database.

Mike Robertson (project QP, MSA) and Brendan Clarke (MSA) directly received all assay certificates from ALS Chemex. These data were subject to QAQC procedures prior to acceptance into the database, as document in Section 13.2.

In addition to the regular visits made during the 2010 exploration season, RCR have made provision for regular visits by the project QP in 2011. Additionally, MSA have a permanent staff presence on site and all MSA geological staff are professionally accredited with the South African Council of Natural and Scientific Professions (SACNASP).

15 ADJACENT PROPERTIES

Informal small-scale mechanised mining of zinc ore has taken place in the Hakkari district over the last 5 to 10 years. This mining has been conducted with excavators and dump trucks from a number of mining sites, with stockpiling of ore at various sites along the main road to Hakkari. Historical mining, as evidenced by archaeological finds, dates back to Roman and Babylonian times and was focused on mining of lead which typically occurs towards the top of the zinc mineralized zones. Roman mining galleries have been observed at several localities in the Hakkari area.

Of importance to RCR are a number of small-scale mining sites between licenses 5 and 8 and licenses 8 and 10 (Figure 15-1). These represent mainly open cut workings with some exploratory shallow underground development, both of which have exploited high grade zinc mineralization. The workings are regarded as "informal" as they are not based on a modern exploration program, Mineral Resource/Reserve base, or mine plan and have not been professionally surveyed to accurately record tonnages mined. Tonnages and grades are as reported to MSA by the operators and have not been independently verified. However, in MSA's opinion, these workings give an indication of potential orebody dimensions and grades that may be expected in the RCR license areas.

Five mining sites were visited by MSA in the area between licenses 5 and 8 and three in the hexagonal area between licenses 8 and 10, as indicated in Figure 15-1 and in the photographs in Figure 15-2.

The area between licenses 5 and 8 is held by Meskan Ölmez Madencilik and Ekin Madencilik. At localities 1 to 3 in Figure 15-1, up to 3 prominent non-sulphide zinc mineralized units are recognized, which dip to the north-northeast at approximately 20°. The upper two layers vary in thickness from 0.2 to 1 m with an overall grade of approximately 30% Zn, with the lowermost layer 7 to 13 m in thickness at an overall reported grade of approximately 35% Zn. The latter zone is reportedly underlain by a variable 2 m thick zinc sulphide layer; however this was not observed by MSA as the open cut has been partially in-filled. Fine-grained sulphide mineralization was however observed on a stockpile near the Meskan Ölmez Madencilik offices. A number of other sub-parallel thin discontinuous non-sulphide zinc layers are developed within and overlying this sequence. Some 60 000 tonnes of ROM zinc ore at an average grade of 35% Zn are reported to have produced from the Meskan Ölmez Madencilik license in 2009.

Mining sites 4 and 5 in Figure 15-1 have exploited a steeply dipping to overturned 4 to 5 m thick non-sulphide zinc zone which strikes west-northwest. A steeply dipping mineralized zone is being exploited at sites 6, 7 and 8 within the hexagonal area between RCR licenses 8 and 10. Mining site 8 is owned by the Seyitoğlu family.

The deposits being worked in the district are mined intermittently and have to date produced 'lumpy' ore, which is sometimes hand-sorted (Schaffalitzky, 2009). This

material has been sold to metal traders, a well-developed business in Turkey. The Seyitoğlu family run of mine ore is crushed and transported by truck to the port at Mersin, some 900 km from Hakkari, at a cost of \$185/tonne.

The following conclusions are drawn based on observations made at these workings:

- Non-sulphide zinc mineralization can be traced for substantial distances along strike.
- Potential for sulphide and mixed oxide-sulphide mineralization exists.
- Mineralized zones vary in thickness along strike, at a prospect scale.
- The degree of oxidation of mineralization varies considerably, as does the iron content, often over short distances along strike and across the mineralized zone at individual localities. Variations in zinc, lead and iron contents over short ranges should be expected.
- These observations have implications for trench and drillhole spacing in defining a mineral resource base. Due to the inherent variabilities, it is anticipated that a close drillhole spacing and data density will be required for delineating Indicated and Measured Resources.
- The presence of multiple mineralized layers on RCR licenses 5 and 8 will need to be validated by mapping, trenching and drilling. Drillholes will need to be long enough to intersect multiple mineralized horizons.

Figure 15-1
Informal small-scale mining sites adjacent to RCR licenses 5, 8 and 10

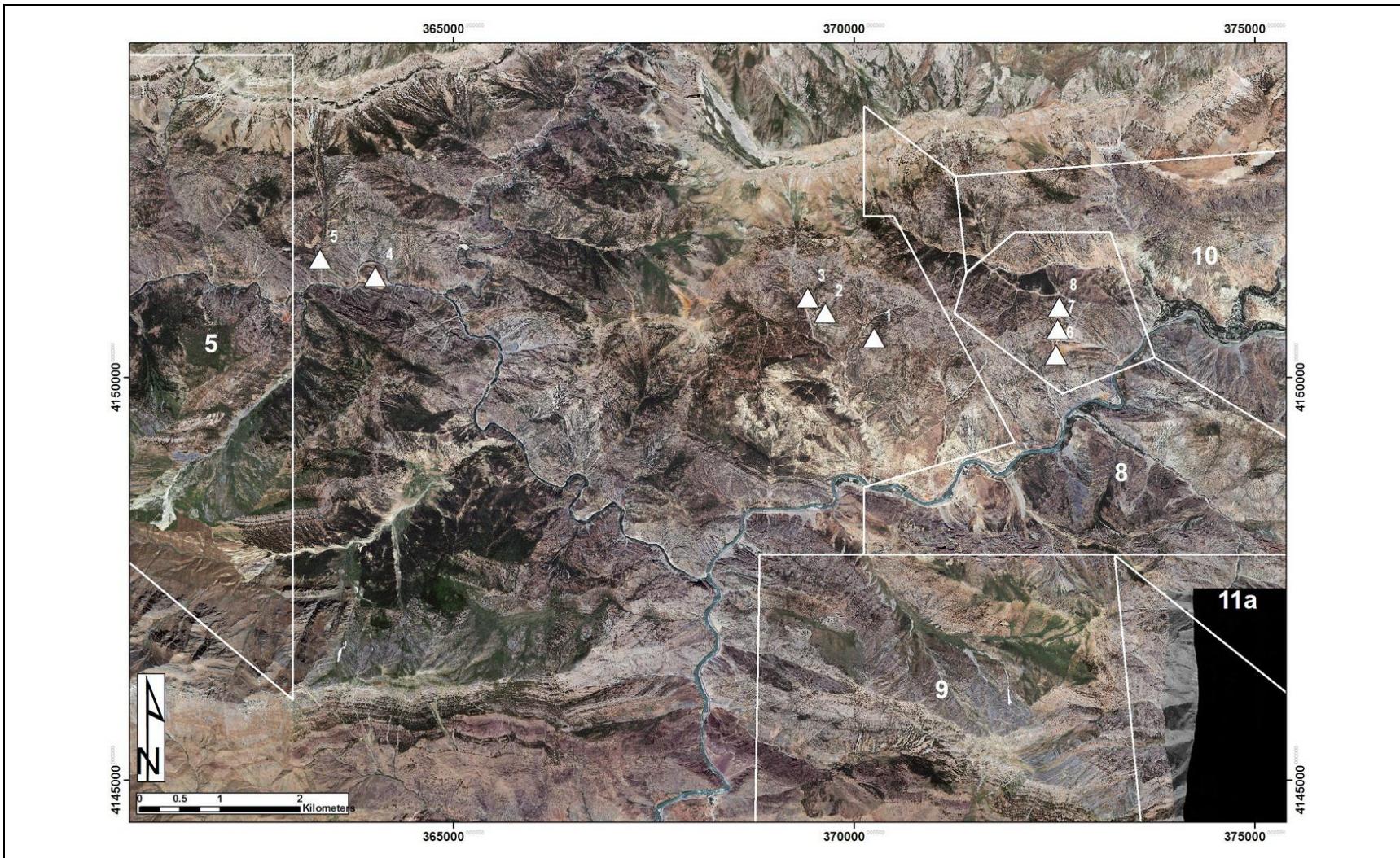


Figure 15-2
Informal mining sites proximal to the RCR licenses (labelled 1-7 in Figure 15-1)

| | |
|---|--|
|  |  |
| A. Open cut workings at locality 6 in Figure 15-1 | B. Close up of workings in A showing old Roman mining galleries |
|  |  |
| C. 4-5 m thick mineralized zone at locality 5. 5000 tonnes of zinc ore at an average grade of 25%Zn, 5%Pb and 15%Fe were reportedly mined from here. | D. 4-6 m thick zone exploited at locality 4, along strike from locality 5. |

| | |
|---|---|
|  |  |
| <p>E. Three mineralized layers which steepen into a possible karst structure, locality 2, Meskan Ölmez Madencilik license.</p> | <p>F. Shallow underground workings developed by Meskan Ölmez Madencilik since November 2009, locality 3</p> |
|  |  |
| <p>G. Waste dump adjacent to workings at locality 3, Meskan Ölmez Madencilik license.</p> | <p>H. Underground workings developed on a 3m thick mineralized layer at locality 2. Note thinly developed zinc mineralization above a hangingwall breccia.</p> |

16 MINERAL PROCESSING AND METALLURGICAL TESTING

In late 2009, bench scale metallurgical test work was conducted on three 10 kg stockpile samples collected by RCR. These stockpiles represent material mined from the vicinity of the RCR license areas and the results therefore provide an *indication* of the likely metallurgical characteristics and parameters that can be expected in the processing of future RCR ROM material. Subsequent to this, in 2010, the use of proprietary mobile gravity concentrators was investigated and revealed sustainable upgrading of feed material by up to 300%. Neither the author nor MSA is qualified to comment extensively on the metallurgical testwork carried out to date.

16.1 Bench-scale metallurgical testwork

The test work was undertaken in South Africa under the direction of M.A. Plaskitt, a professional metallurgist, by Tangmere R&D in Uvongo, with chemical analyses by Set Point Laboratories in Johannesburg and mineralogical investigations by SGS Laboratories in Johannesburg. Check analyses were done by UIS Laboratories in Pretoria and by Mintek in Johannesburg. The results are reported in Plaskitt (2010), and an independent review of the results reported on in Meyer (2010). The findings of the test work are reported on below.

The samples comprise extensively oxidised material with the dominant zinc mineral being smithsonite (31% to 55% of sample material) and substantial amounts of hemimorphite also present (12% to 35% of sample material). Neither of these minerals is difficult to process hydrometallurgically. Approximately 6% sphalerite is present in two of the three samples, with lead present as cerrusite (5% to 6% of sample material). The ore samples ranged in grade from 25.9% to 42.9% Zn and 4.7% to 8.0% Pb. The gangue consists of iron oxide minerals, calcite, barite and quartz. The iron content varied from 3.8% to 18.8% and comprises essentially goethite and siderite weathered to limonite. Chemical analyses were conducted by XRF and ICP (OES/MS?) methods.

Smithsonite, hemi-morphite and cerrusite are relatively coarse grained and liberate between 220 and 380 µm. The goethite/limonite liberates at around 120 µm and the remaining gangue at about 200 µm.

The iron minerals showed no response to magnetic separation attempts. Oxide flotation was rejected due to the high grade of the samples, inherent inefficiencies in oxide flotation as well as likely cost. Further, the minerals liberate at too fine a size for efficient gravity separation. Cyclones and spirals were deemed to have some potential as pre-concentrators and future work on these options was recommended.

The results of calcining test work conducted on the samples are reported as not too useful. In the latter regard it may be more productive to fume the material in Waelz kilns.

Direct acid leaching produced the following results:

- As the feed ore is fairly soft it leaches very easily in weak sulphuric acid (10 to 15%); zinc dissolution was in excess of 90% within one hour under ambient conditions. Optimisation of these leaching conditions as well as some heating should push these dissolutions into the mid-nineties. Very pleasing is the ready dissolution of hemimorphite without any silica gelling indications. Sphalerite will, however, not leach under such conditions.
- Caustic soda leach conducted on the ores gave very poor dissolution results (30%).
- The “weak” acid solution (15-20% sulphuric acid) is the favoured option as less iron will be dissolved than if stronger acid solutions are used. This fits well with the spent electrolyte, usually, obtained in zinc electrowinning operations.
- Leaching performed satisfactorily at ambient conditions; the stringent winter temperatures in Hakkari should, however, be taken into account. Steam should be made available to the leach and the purification plants.
- The study calculated the acid consumption to be about 30kg per tonne of ore treated. Lower ore grades could influence this estimate significantly.
- Although no filtration problems were experienced it will be prudent to conduct the necessary settling and filtration tests in future test work especially when higher silica containing ores are leached.
- Purification test work is not complete but should pose no serious problems. The technology is standard practise in the zinc electrowinning industry. It is important to oxidise the iron to the ferric state prior to neutralization. The ferric iron can then be removed in a variety of ways. Iron removal will assist in removing deleterious elements from the prospective electrolyte. It will, however, be necessary to check the purified solution for Cu, Co, Ni, Cd, Ge, As and Sb as these elements can seriously influence the plating of zinc. If detected these elements can be readily removed by cementation with zinc dust. Ion exchange is also a possibility for total solution purification but would have to be extensively tested especially for iron fouling of the resin. Whichever option is selected, good quality electrolyte is a prerequisite for optimum electrowinning performance.
- Impurities such as Ca, Cd, Co, Mn, Ge and As are all very low and will be removed during zinc sulphate solutions purification by ion-exchange and /or precipitation techniques. Iron (Fe) will be precipitated and filtered off by PH control which is a well-known practice.
- In addition to iron precipitation, the silica/silicate content as well as the calcium/magnesium sulphate ($\pm 60\%$) and barium sulphate ($\pm 3,0\%$) can be

separately precipitated and by-products barium (Ba) and lead (Pb) further extracted.

- The environmental situation regarding the storage of acidic leach residues in Turkey is not known and needs to be clarified.

The advantages of direct acid leaching include:

- No or possibly little pre-concentration is required for this high grade feed material.
- Proven technology can be used throughout the design.
- The capacity of the plant can easily be up-scaled to treat far larger tonnages.

The risks associated with direct acid leaching include:

- Ore variability due to increased gangue material. This could result in higher acid consumption in the leach and create potential filtration issues. Stringent grade control measures will be required on the mining side. Ore blending in the plant should also be part of the design.

16.2 Gravity concentration

RCR has undertaken significant testing of a wide range of HZP type ores at accredited mineral processing facilities and laboratories in South Africa, along with secondary verification testing with a Mobile Concentrator Machine designer and manufacturer, who is specifically specialised in the field of Gravity concentration of oxide ores utilizing a number of mineral processing machines in a unique composite configuration.

Tests executed during 2011 have confirmed that the gravity concentration methodology is sustainable and as such RCR has ordered its first Concentrator Unit for 20tph feed (90 000 tonnes per annum), based on the design configuration supplied by Mike Plaskitt, RCR's metallurgical consultant. The deployment of the first unit is expected in April/May 2011 with a second unit planned for deployment in August/September 2011.

Testing has proven that a sustainable upgrade ratio of the feed between 1.5 and 3.1 times is possible dependent on the head feed grade, utilizing a constant configuration composite gravity concentrator. Significantly, the upgrade ratio favours the lower grade ores. The original reports are included in **Appendix 5**.

Concentrator specifications are summarised below:

- Feed characteristics of:
 - Zn ore/ROM (-150mm), plant feed (-80mm), crushed ore (-12.5mm), with a moisture content of 2 to 8%.

- The aim was of the portable plant is to treat 20 dry tons/hr of 7.5% Zn Feed ore to a total concentrate of at least 3X Zn grade (therefore a minimum 22.5% Zn) in the size range -12.5mm.
- Zn recovery must be at least 75%, i.e. 20tph feed at 7.5% Zn can yield at least 5tph concentrate grading 22.5% Zn, on a dry basis.
- The coarse crushed material size is -12.5 mm + 1.50 mm and fine material size is -1.5 mm. The plant must be designed to treat -12.5mm to + 1.50mm feed in a suitable dense medium cyclone operating at an automatically controlled density of 2.80 to 3.00. The fine fraction of the feed must be treated on suitably designed gravity spirals, and with a feed capacity of 8tph of -1.5mm material.
- Water consumption of the unit should be a maximum of 22m³/hr for a dry feed rate of 20tph ore. Raw water will be supplied by from boreholes, and therefore the plant must be designed to consume as little water possible through water recirculation, zero spillages, and curtailment of evaporation and pond seepage.
- Maximum power demand of the plant should not exceed 160kw even though the emergency diesel generator supplied is 200kVA/200kw. A 380V, 3-phase 4 core cable & copper earth system is proposed. The supply cable shall run above ground, along with the necessary switchgear, safeguard, meter and lightning protection.
- Diesel consumption of the 200kW emergency generator should be kept to a maximum of 40 litres/hr, given the high diesel price in Turkey in excess of US \$2/litre.
- The plant shall be designed for continuous operation and for operational ease since it will be operated in remote areas of Turkey by personnel of medium skill.
- At a feed of 20tph at Tufenbeyli, a 5tph concentrate grading 22.5% Zn is required therefore three-fold Zn upgrading. Therefore, running hours of at least 4,500hr/per year are achievable.
- Two product sizes are expected, -12.5 + 1.5mm (coarse) and -1.5mm (fine). Product will probably be collected in 30kg bags for ease of handling, and shall contain a maximum of 15% moisture in the fines product.
- Ferro-Silicon (FeSi) consumption/losses on the plant should be 1,0kg/t of product maximum.
- ROM material will be from 250mm downwards and an additional jaw crusher needs to be supplied alongside the portable plant to crush feed down to -80mm. Spilt and oversize feed between this crusher and the plant must be recycled and neatly stockpiled for recycling.
- Dust generated during crushing and screening operations should be lightly water sprayed to suppress excessive dust.

- Water supply will be at a premium and will probably come from boreholes, hence the plant must be designed for minimum water consumption of about 15 to 20m³/hr maximum.
- Concentrate (product) will probably be bagged in 30kg bags but might require sun-drying alongside the unit to reduce its moisture content.
- With a 20tph ore feed, ±10tph of coarse tailings (-12.5 + 0.5mm) containing appreciable water (±21m³/hr) can be generated. These coarse tailings will require dewatering to ±4tph water (H₂O) maximum and ± 14m³/hr H₂O recycled for process use. Fine tailings of 5,0tph are expected (-0.5mm) containing ± 2.5m³/hr H₂O, which will be lost in the tails slurry. Mixed with the coarse tailings will be ± 5kg of fine FeSi losses per 10tph of tailings.
- Electrical equipment (relays/contactors/switches, etc) must be selected for easy and compatible replacement with switchgear/electronics available in Turkey.
- Instrumentation should be simple and robust and easy to repair & service in Turkey. Pumps, screens, pipes, valves must be easily replaceable with equivalents in Turkey excepting perhaps for the Ni-hard pump casings for pumping abrasive gravels. Conveyors must be standardised so that they can be easily maintained in Turkey, and should be designed for zero spillage. Details and specifications of these are to be given in the technical manual so that they can be manufactured in Turkey as spares. The technical manual will specify and describe all other equipment, its maintenance and safety precautions. The manual should contain, in the same manual or separately, the detailed operating procedure of the plant including required
- The entire unit shall be painted or coated where necessary as per sound engineering practice in order to inhibit rusting/ corrosion for 5 years of operation.
- Turkey experiences both winter and summer rains and an adjustable roof is required over the critical areas of the unit. Since the unit is to be operated on a 24hr-day basis, suitable lights are to be supplied to ensure sound operation. For 3 to 4 months of the year, sub-zero temperatures are experienced in Turkey. Maximum summer temperatures can reach 40°C, although average summer temperatures are ± 25°C.

17 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

A NI 43-101 compliant Mineral Resource estimate was undertaken for the License 5 area drilled during the 2010 exploration program. Geological and grade models were constructed incorporating known geological and structural controls on the mineralization as derived from the exploration results. In addition a non-code compliant Mineral Resource estimate was undertaken for the Pentagon License.

17.1 QAQC and Internal Database Verification

A full account of QAQC and data verification procedures are discussed in preceding sections of this report. Only finalised, verified data was included in the resource estimation exercise. A final database audit was undertaken and data exported on 11th February 2011 this providing the input into the geological modelling and grade estimation routines. The input data for the resource estimation exercise consisted of diamond drillholes (DD) with collar, downhole survey, lithology, sampling and assay data. Trench data were also included and treated as horizontal or shallow plunging drillholes. The database also included density data determined on-site, using the Archimedes principle (wet and dry weighing method) on half-core samples. Geological mapping data including strike and dip information was also utilised for the geological modelling exercise.

17.2 Resource Estimates

The Mineral Resource estimation exercise was based on wireframe envelopes representing the mineralisation in each license generated from drillhole and trench data extracted from the database compiled by MSA.

Datamine Studio 3[®] software was used for the three-dimensional geological modelling of the mineralized zones in both license areas. The mineralisation envelopes were defined to encompass drillhole and trench intercepts of $\geq 0.5\%$ Zn. Mineralisation was truncated at surface at the mapped outcrop traces and extrapolated to a maximum of 210 m down-dip in License 5 and to 105 m below surface in the Pentagon license.

Datamine Studio 3[®] was also used for the resource estimation. Snowden Supervisor[®] software was used for the geostatistics and univariate statistical analysis.

17.2.1 Geological Interpretation and Modelling

17.2.1.1 License 5

MSA was provided with digitised topographic contours for License 5. Drillhole collars were merged with these contours to produce a combined topographic wireframe surface for modelling. Mapped outcrop traces of both mineralized zones were draped

onto this surface. Trenches, oriented according to their surveyed azimuth, were also draped onto the topographic surface.

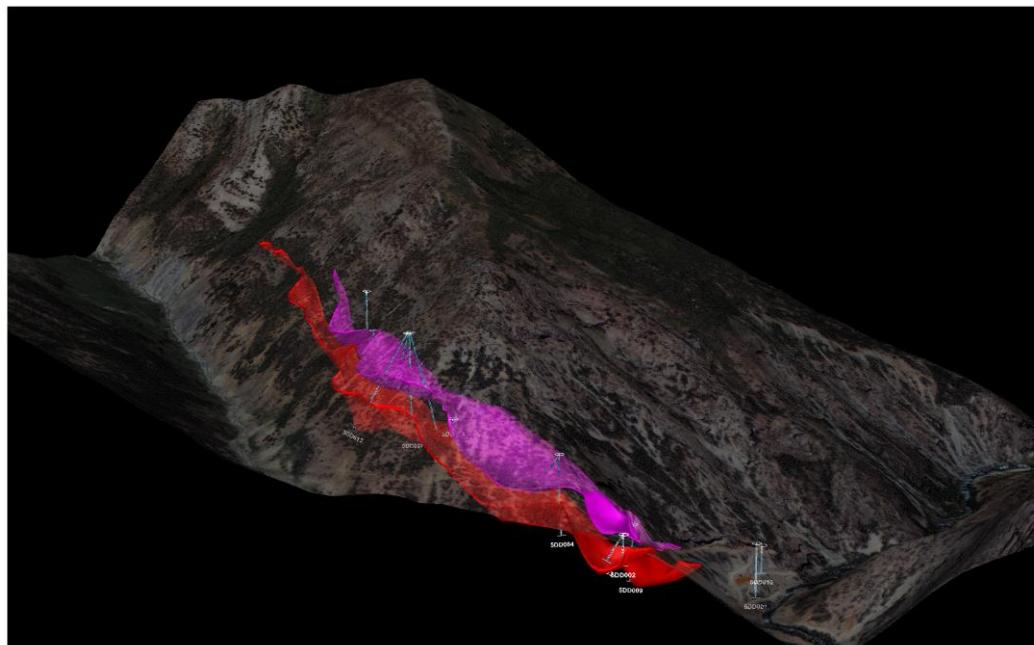
The mapped outcrops were reinterpreted using a constant stratigraphic separation of the two mineralized zones.

Contact surfaces were constructed for the wireframes along west-east sections along grid northings, starting first where the trenches and drillholes were in alignment. This was first for the basal contact of the Lower mineralized zone, where the apparent dip was extrapolated to other sections, at 40m intervals along strike. These sectional interpretations were copied up to the upper contact of the Lower mineralized zone at $\geq 0.5\%$ Zn.

These interpretations were copied upwards to the Upper mineralized zone and modified to fit the drilling data. The general thickness variations as seen in the Lower mineralisation were mirrored in the Upper mineralized zone.

Due to the wide data spread it was not considered important to invoke faulting at this stage. Based on field observations, it was concluded that open folding is the dominant structural feature at Hakkari (Figure 17-1). In addition, no intrusive rocks are known from the license area. No other geological features were incorporated into the geological model.

Figure 17-1
Oblique SW-facing view of the License 5 Upper and Lower mineralized zones
wireframes. No vertical exaggeration.



No geological losses have been modelled. It is believed that the effect of geological discontinuities will be better addressed following additional drilling and possible trial mining.

17.2.1.2 **Pentagon License**

No topographic surface was available or provided for the Pentagon License as the planned surveying activities were curtailed due to inclement weather and associated access issues. A rough ground surface wireframe was created from the drillhole collar coordinates, expanded outwards by 50 m from the collar positions.

The modelled mineralisation (Lower mineralized zone) at the Pentagon project consists of a single steeply ($>80^\circ$) south westerly-dipping zone, intersected by eight drillholes. The model was extended along-strike for half the average drillhole spacing from the last drillhole positions.

There has been some depletion of the mineralized zone by mining since the surveying of the Pentagon drillholes, which makes the accuracy of the collar doubtful. It has been assumed that a 5 m thickness of the mineralized zone has been extracted by mining since the drillholes were completed.

There are two isolated 1-2 m thick intersections of what may be an Upper mineralized zone (as at License 5), but these were not modelled due to their lack of defined continuity along-strike.

17.2.2 **Block Model Creation**

The mineralized zone wireframes were used to generate 3D block models for both licenses and for each mineralized zone in License 5 in Datamine Studio 3®.

The origin for the block models for License 5 is 362,000mE, 4,149,500mN and 1000m AMSL. The block size used was 50 m (easting) x 50 m (northing) and a nominal 1 m for the Z height. Splitting of the blocks was used in the east-west and north-south directions, creating sub-blocks with a minimum size of 6.25 m (easting) by 6.25 m (northing), to enable close block fitting to the zone wireframes. Exact vertical fitting to the wireframes was enforced.

The origin for the block model for Pentagon is 372,400mE, 4,150,950mN and 1500m AMSL. The block size used was 10 m (easting) x 10 m (northing) and 1 m for the Z height. Splitting of the blocks was used in the east-west and north-south directions, creating sub-blocks with a minimum size of 1.25 m (easting) by 1.25 m (northing), to enable close block fitting to the zone wireframe. Exact vertical fitting to the wireframes was also enforced at the pentagon.

Volume checks on the wireframes and block models returned the values in Table 17-1. The volume of each mineralized zone wireframe corresponds closely with the respective block model.

Table 17-1
Mineralized Zone Solid Volumes versus Block Model Volumes

| Mineralized zone | Zone solid volume (m ³) | Block model volume (m ³) | Difference (zone-model) (%) |
|------------------|-------------------------------------|--------------------------------------|-----------------------------|
| License 5 Lower | 1 058 596 | 1 059 275 | -0.06 |
| License 5 Upper | 256 977 | 253 328 | 1.42 |
| Pentagon Main | 89 232 | 89 233 | 0.00 |

17.2.3 Exploratory Data Analysis and Compositing

The License 5 area is covered by surface drillhole data with a drilling density ranging from 60 m x 80 m to 120 m x 120 m spacing. This has had an effect on the grade estimation exercise resulting in areas of low confidence in grade estimation. There are only 25 samples in the License 5 Upper mineralized zone envelope.

Compositing of the drilling data was not undertaken for either license. The dominant sample length is 1 m in the drillhole and trench sample database. Exploratory data analysis (EDA) per elemental constituent was undertaken on samples weighted by length.

The raw samples acted as the input data for the initial data analysis study. Statistics of the input data for selected elements are tabulated below per mineralized zone for license 5 (Figure 17-2 and Figure 17-3).

Figure 17-2
Zn Distribution in License 5 Lower Mineralisation

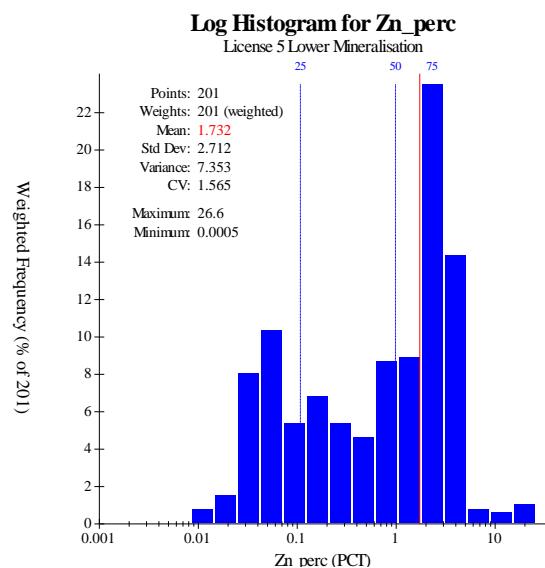
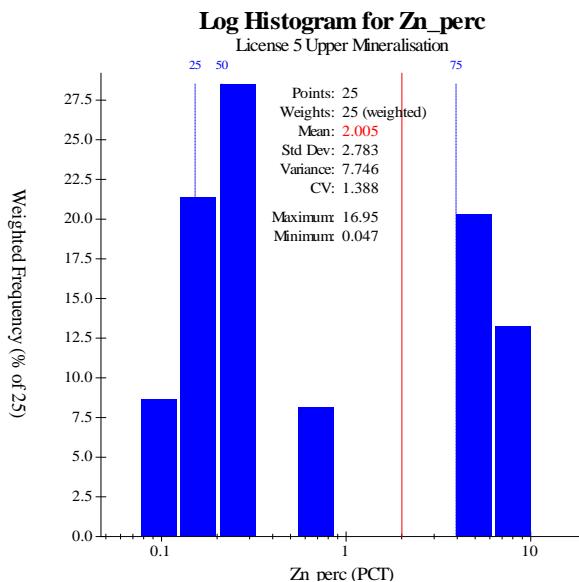


Figure 17-3
Zn Distribution in License 5 Lower Upper Mineralisation



The elemental populations for License 5 and the Pentagon are summarised in Table 17-2 to Table 17-4.

Table 17-2
License 5 Drillhole Statistics: Lower Mineralized Zone

| Unit | Number of samples | Mean | Std deviation | CV |
|---------|-------------------|--------|---------------|-------|
| Zn % | 190 | 1.732 | 2.712 | 1.565 |
| Pb % | 201 | 0.586 | 1.405 | 1.974 |
| Ag ppm | 181 | 2.034 | 4.384 | 2.155 |
| Cu % | 201 | 0.093 | 0.336 | 3.61 |
| Fe % | 201 | 21.536 | 21.223 | 0.985 |
| Density | 176 | 1.835 | 0.599 | 0.327 |

**Table 17-3
License 5 Drillhole Statistics: Upper Mineralized Zone**

| Unit | Number of samples | Mean | Std deviation | CV |
|---------|-------------------|-------|---------------|-------|
| Zn % | 25 | 2.005 | 2.783 | 1.388 |
| Pb % | 25 | 1.508 | 2.949 | 1.956 |
| Ag ppm | 24 | 2.35 | 3.144 | 1.338 |
| Cu % | 25 | 0.011 | 0.061 | 5.634 |
| Fe % | 25 | 9.769 | 16.825 | 1.722 |
| Density | 19 | 2.345 | 0.562 | 0.24 |

**Table 17-4
Pentagon License – Lower Mineralized Zone, 5m Below Surface**

| Unit | Number of samples | Mean | Std deviation | CV |
|---------|-------------------|--------|---------------|-------|
| Zn % | 92 | 6.576 | 10.86 | 1.651 |
| Pb % | 97 | 0.293 | 0.352 | 1.204 |
| Ag ppm | 82 | 16.215 | 21.928 | 1.352 |
| Cu % | 97 | 0.536 | 1.69 | 3.152 |
| Fe % | 97 | 8.083 | 12.052 | 1.491 |
| Density | 97 | 2.059 | 0.692 | 0.336 |

17.2.4 Variography

Variography was undertaken on each separate mineralized zone. There are 201 samples within the Lower Mineralized zone, but only 25 in the Upper mineralized zone. The spatial arrangement of the samples in both zones is dominantly along-strike, with only a small across-strike component. As such, no reliable variographic modelling was achieved.

No variography was attempted on the Pentagon License due to the limited strike length and down-dip dimensions of the explored area. There are 97 samples in the mineralized envelope at the Pentagon License.

17.2.5 Estimation Parameters and Grade Estimation

Due to the overall limited across-strike data spread in both mineralized zones, as well as the limited data contained within the Upper mineralized zone, grade estimation was undertaken using inverse-distance squared on 3-D block models for each of the mineralized zones. For the Pentagon, due to the limited strike length and down-dip

dimensions of the initially-explored area, grade estimation was also undertaken using inversed distance squared.

A minimum of 3 and a maximum of 10 samples were utilised for an estimate. A maximum of five samples were used from individual drillholes. A multiplier of up to 12 was used for the search radii in order to populate all blocks with sample data, which would, in the absence of other data limitations, restrict the classification to the Inferred Resource status for the distal blocks.

Parent cell estimation at License 5 (25 m blocks) was applied to the sub-cells (down to a minimum of 6.25 m blocks).

17.2.6 Validation, Bias and Block Model Grade Distributions

The sparse drilling data in all areas led to the smearing of available grades within the mineralized zones, in order to populate all blocks. It was also noted that there had been smoothing of grade distribution data during the estimation process.

It is considered that the block estimates for the Lower mineralized zone at License 5 are appropriate at the current level of resource estimation confidence (Table 17-5).

Table 17-5
Comparison of Drillhole Composite and Estimated Block Means

| Zone | Drillholes Zn% | Block Estimate Zn% | Drillhole versus Block Models % |
|----------------------|----------------|--------------------|---------------------------------|
| License 5 Lower zone | 1.732 | 1.729 | 0.35 |
| License 5 Upper zone | 2.005 | 1.936 | 3.44 |
| Pentagon | 6.576 | 10.52 | -59.9 |

For the Pentagon License, a considerable amount of low grade material had been removed from the block model by eliminating the mining depletion. Higher and more uniform Zn grades at depth have had a significant influence on the sparser data closer to surface during the grade estimation routine. As a result, the block model average grade is unduly elevated.

17.2.7 Resource Classification

On License 5, due to sparse data and the absence of variographic continuity, the Mineral Resource is limited to the Inferred category.

On the Pentagon License, due to a lack of a reliable topographic surface, low confidence in the correlation between drillholes as well as a lack of collar surveys, the

Mineral Resource is therefore classified in the Inferred category, but is considered non-code compliant.

17.2.8 Resource Reporting

NI 43-101-compliant Inferred Mineral Resources were declared for the two mineralized zones at License 5. The resources are reported at various cut offs (Table 17-6 to Table 17-7). These include resources in each grade cut off category yielding greater than 10,000 tonnes. Combined resources for License 5 for the Lower and Upper mineralized zones are also shown in Table 17-8.

Grade-tonnage curves are presented in Figure 17-14 to Figure 17-16 to (License 5) and Figure 17-17 (Pentagon).

**Table 17-6
In-Situ Inferred Mineral Resources for License 5 Lower Mineralisation**

| Cut Off Zn% | Tonnes (000's) | Zn % | Pb % | Ag g/t | Cu % | Fe % | DENSITY (g/cm3) |
|-------------|----------------|-------|------|--------|-------|-------|-----------------|
| 0.50 | 1937.3 | 1.79 | 0.34 | 1.63 | 0.001 | 22.91 | 1.92 |
| 1.00 | 1492.7 | 2.06 | 0.4 | 1.83 | 0.001 | 24.86 | 1.89 |
| 1.50 | 714.8 | 2.95 | 0.52 | 2.34 | 0.001 | 27.52 | 1.85 |
| 2.00 | 445.6 | 3.67 | 0.57 | 2.82 | 0.001 | 25.79 | 1.93 |
| 2.50 | 276 | 4.57 | 0.64 | 3.32 | 0.001 | 22.58 | 2.08 |
| 3.00 | 113.5 | 7.32 | 0.78 | 4.87 | 0.001 | 17.03 | 2.09 |
| 3.50 | 94.9 | 8.12 | 0.81 | 4.69 | 0.001 | 16.35 | 2.13 |
| 4.00 | 80.4 | 8.93 | 0.81 | 4.7 | 0.001 | 15.68 | 2.16 |
| 4.50 | 77.5 | 9.11 | 0.81 | 4.64 | 0.001 | 15.44 | 2.16 |
| 5.00 | 72.9 | 9.38 | 0.83 | 4.5 | 0.001 | 15.7 | 2.16 |
| 5.50 | 65.5 | 9.84 | 0.87 | 4.48 | 0.001 | 16.37 | 2.16 |
| 6.00 | 56.2 | 10.52 | 0.92 | 4.23 | 0.001 | 17.21 | 2.15 |
| 6.50 | 51.5 | 10.91 | 0.94 | 4.47 | 0.001 | 17.05 | 2.16 |
| 7.00 | 47.8 | 11.23 | 0.96 | 4.64 | 0.001 | 16.82 | 2.17 |
| 7.50 | 44.3 | 11.56 | 0.98 | 4.77 | 0.001 | 16.92 | 2.18 |
| 8.00 | 40.4 | 11.93 | 1.01 | 4.98 | 0.001 | 17.2 | 2.18 |
| 8.50 | 38.3 | 12.13 | 1.03 | 5.02 | 0.001 | 17.45 | 2.18 |
| 9.00 | 35.5 | 12.41 | 1.05 | 4.98 | 0.001 | 17.74 | 2.17 |
| 9.50 | 32.2 | 12.73 | 1.07 | 4.89 | 0.001 | 18.05 | 2.17 |
| 10.00 | 28.5 | 13.12 | 1.1 | 4.75 | 0.001 | 18.41 | 2.16 |
| 10.50 | 25 | 13.53 | 1.12 | 4.56 | 0.001 | 18.74 | 2.16 |
| 11.00 | 19.6 | 14.3 | 1.18 | 4.07 | 0.001 | 19.32 | 2.14 |
| 11.50 | 18.4 | 14.5 | 1.19 | 3.99 | 0.001 | 19.49 | 2.12 |
| 12.00 | 17.2 | 14.71 | 1.2 | 3.83 | 0.001 | 19.62 | 2.11 |
| 12.50 | 16.5 | 14.81 | 1.21 | 3.76 | 0.001 | 19.69 | 2.11 |
| 13.00 | 16 | 14.87 | 1.21 | 3.7 | 0.001 | 19.73 | 2.11 |
| 13.50 | 13 | 15.25 | 1.23 | 3.36 | 0.001 | 19.94 | 2.08 |

| | | | | | | | |
|-------|------|-------|------|------|-------|-------|------|
| 14.00 | 11.7 | 15.42 | 1.24 | 3.22 | 0.001 | 20.04 | 2.07 |
|-------|------|-------|------|------|-------|-------|------|

| Table 17-7 In-Situ Inferred Mineral Resources for License 5 Upper Mineralisation | | | | | | | |
|---|----------------|-------|------|--------|-------|-------|-----------------|
| Cut Off Zn% | Tonnes (000's) | Zn % | Pb % | Ag g/t | Cu % | Fe % | DENSITY (g/cm3) |
| 0.50 | 474.8 | 2.45 | 1.38 | 1.83 | 0.007 | 9.76 | 2.42 |
| 1.00 | 336.9 | 3.18 | 1.59 | 1.4 | 0.009 | 12.57 | 2.41 |
| 1.50 | 284.3 | 3.55 | 1.74 | 1.26 | 0.011 | 13.89 | 2.42 |
| 2.00 | 263.4 | 3.68 | 1.77 | 1.23 | 0.011 | 14.14 | 2.42 |
| 2.50 | 218.3 | 3.98 | 1.79 | 1.14 | 0.012 | 14.44 | 2.43 |
| 3.00 | 167.8 | 4.34 | 1.79 | 1.08 | 0.014 | 14.59 | 2.43 |
| 3.50 | 122.4 | 4.78 | 1.64 | 1.01 | 0.016 | 13.95 | 2.43 |
| 4.00 | 48.7 | 6.47 | 0.08 | 0.76 | 0.025 | 5.45 | 2.48 |
| 4.50 | 40.3 | 6.92 | 0.09 | 0.76 | 0.027 | 5.61 | 2.47 |
| 5.00 | 31.1 | 7.56 | 0.11 | 0.77 | 0.03 | 5.75 | 2.46 |
| 5.50 | 25.9 | 8.03 | 0.12 | 0.77 | 0.032 | 5.77 | 2.46 |
| 6.00 | 20.9 | 8.59 | 0.03 | 0.78 | 0.034 | 5.08 | 2.46 |
| 6.50 | 18.3 | 8.91 | 0.03 | 0.8 | 0.036 | 4.88 | 2.47 |
| 7.00 | 15.7 | 9.29 | 0.03 | 0.81 | 0.038 | 4.69 | 2.47 |
| 7.50 | 12.7 | 9.76 | 0.03 | 0.82 | 0.04 | 4.51 | 2.47 |
| 8.00 | 10.6 | 10.16 | 0.03 | 0.84 | 0.042 | 4.3 | 2.48 |

| Table 17-8 In-Situ Inferred Mineral Resources for the combined License 5 mineralisation | | | | | | | |
|--|----------------|-------|------|--------|-------|-------|-----------------|
| Cut Off Zn% | Tonnes (000's) | Zn % | Pb % | Ag g/t | Cu % | Fe % | DENSITY (g/cm3) |
| 0.50 | 2412.1 | 1.92 | 0.54 | 1.67 | 0.002 | 20.32 | 2.02 |
| 1.00 | 1829.6 | 2.27 | 0.62 | 1.75 | 0.003 | 22.59 | 1.99 |
| 1.50 | 999.1 | 3.12 | 0.87 | 2.03 | 0.004 | 23.64 | 2.02 |
| 2.00 | 709.1 | 3.67 | 1.02 | 2.23 | 0.005 | 21.46 | 2.11 |
| 2.50 | 494.4 | 4.31 | 1.15 | 2.36 | 0.006 | 18.99 | 2.23 |
| 3.00 | 281.3 | 5.54 | 1.38 | 2.61 | 0.009 | 15.58 | 2.3 |
| 3.50 | 217.3 | 6.24 | 1.28 | 2.62 | 0.009 | 15 | 2.3 |
| 4.00 | 129.1 | 8 | 0.54 | 3.21 | 0.01 | 11.82 | 2.28 |
| 4.50 | 117.8 | 8.36 | 0.57 | 3.31 | 0.01 | 12.07 | 2.27 |
| 5.00 | 104 | 8.84 | 0.62 | 3.38 | 0.01 | 12.73 | 2.25 |
| 5.50 | 91.4 | 9.33 | 0.66 | 3.43 | 0.01 | 13.36 | 2.24 |
| 6.00 | 77.1 | 9.99 | 0.68 | 3.3 | 0.01 | 13.92 | 2.24 |
| 6.50 | 69.8 | 10.39 | 0.71 | 3.51 | 0.01 | 13.86 | 2.24 |
| 7.00 | 63.5 | 10.75 | 0.73 | 3.69 | 0.01 | 13.82 | 2.25 |
| 7.50 | 57 | 11.15 | 0.77 | 3.89 | 0.01 | 14.14 | 2.25 |

| | | | | | | | |
|--------------|------|-------|------|------|-------|-------|------|
| 8.00 | 51 | 11.56 | 0.81 | 4.12 | 0.01 | 14.52 | 2.24 |
| 8.50 | 46.3 | 11.89 | 0.85 | 4.3 | 0.009 | 15.12 | 2.23 |
| 9.00 | 41.4 | 12.27 | 0.9 | 4.39 | 0.008 | 15.71 | 2.22 |
| 9.50 | 37.1 | 12.62 | 0.93 | 4.36 | 0.008 | 16.13 | 2.21 |
| 10.00 | 33 | 12.98 | 0.95 | 4.22 | 0.008 | 16.37 | 2.21 |
| 10.50 | 29 | 13.35 | 0.97 | 4.05 | 0.008 | 16.62 | 2.2 |
| 11.00 | 23.1 | 14.04 | 1 | 3.59 | 0.009 | 16.93 | 2.19 |
| 11.50 | 21.4 | 14.26 | 1.02 | 3.56 | 0.008 | 17.24 | 2.17 |
| 12.00 | 19.7 | 14.49 | 1.05 | 3.46 | 0.008 | 17.57 | 2.16 |
| 12.50 | 18.3 | 14.66 | 1.09 | 3.48 | 0.006 | 18.09 | 2.15 |
| 13.00 | 17.1 | 14.79 | 1.13 | 3.52 | 0.005 | 18.65 | 2.13 |
| 13.50 | 13.6 | 15.18 | 1.18 | 3.25 | 0.004 | 19.19 | 2.1 |
| 14.00 | 11.7 | 15.42 | 1.24 | 3.22 | 0.001 | 20.04 | 2.07 |

| Table 17-9 Non-Compliant In-Situ Inferred Mineral Resources for the Pentagon License | | | | | | | |
|---|----------------|-------|------|--------|-------|-------|-----------------|
| Cut Off Zn% | Tonnes (000's) | Zn % | Pb % | Ag g/t | Cu % | Fe % | DENSITY (g/cm3) |
| 0.50 | 198.2 | 10.53 | 1.11 | 14.73 | 0.001 | 8.43 | 2.37 |
| 1.00 | 197.5 | 10.56 | 1.11 | 14.75 | 0.001 | 8.45 | 2.37 |
| 1.50 | 196.6 | 10.61 | 1.12 | 14.79 | 0.001 | 8.48 | 2.37 |
| 2.00 | 167.4 | 12.13 | 1.25 | 16.27 | 0.001 | 9.65 | 2.36 |
| 2.50 | 157.6 | 12.75 | 1.31 | 16.85 | 0.001 | 10.12 | 2.36 |
| 3.00 | 154 | 12.98 | 1.33 | 17.03 | 0.001 | 10.2 | 2.37 |
| 3.50 | 150.8 | 13.19 | 1.35 | 17.18 | 0.001 | 10.27 | 2.37 |
| 4.00 | 142.9 | 13.71 | 1.39 | 17.48 | 0.001 | 10.34 | 2.37 |
| 4.50 | 137.6 | 14.08 | 1.42 | 17.57 | 0.001 | 10.4 | 2.38 |
| 5.00 | 133.9 | 14.34 | 1.44 | 17.63 | 0.001 | 10.43 | 2.38 |
| 5.50 | 131.2 | 14.52 | 1.46 | 17.66 | 0.001 | 10.48 | 2.38 |
| 6.00 | 125.9 | 14.89 | 1.49 | 17.52 | 0.001 | 10.61 | 2.38 |
| 6.50 | 123.4 | 15.06 | 1.51 | 17.42 | 0.001 | 10.68 | 2.39 |
| 7.00 | 121.4 | 15.2 | 1.53 | 17.48 | 0.001 | 10.76 | 2.39 |
| 7.50 | 119 | 15.36 | 1.55 | 17.51 | 0.001 | 10.83 | 2.39 |
| 8.00 | 118 | 15.43 | 1.55 | 17.49 | 0.001 | 10.88 | 2.39 |
| 8.50 | 116.2 | 15.54 | 1.56 | 17.49 | 0.001 | 10.99 | 2.38 |
| 9.00 | 116.2 | 15.54 | 1.56 | 17.49 | 0.001 | 10.99 | 2.38 |
| 9.50 | 115.3 | 15.59 | 1.57 | 17.52 | 0.001 | 11.03 | 2.38 |
| 10.00 | 114 | 15.65 | 1.57 | 17.51 | 0.001 | 11.05 | 2.38 |
| 10.50 | 112.5 | 15.73 | 1.58 | 17.57 | 0.001 | 11.08 | 2.38 |
| 11.00 | 111.3 | 15.78 | 1.58 | 17.6 | 0.001 | 11.06 | 2.39 |
| 11.50 | 110.1 | 15.83 | 1.57 | 17.62 | 0.001 | 11.03 | 2.39 |
| 12.00 | 108 | 15.91 | 1.57 | 17.61 | 0.001 | 10.99 | 2.39 |
| 12.50 | 103.2 | 16.07 | 1.58 | 17.62 | 0.001 | 11.1 | 2.39 |

| | | | | | | | |
|--------------|------|-------|------|-------|-------|-------|------|
| 13.00 | 97.9 | 16.26 | 1.6 | 17.64 | 0.001 | 11.28 | 2.39 |
| 13.50 | 94.4 | 16.37 | 1.6 | 17.61 | 0.001 | 11.3 | 2.39 |
| 14.00 | 89.6 | 16.5 | 1.61 | 17.57 | 0.001 | 11.41 | 2.39 |
| 14.50 | 86.5 | 16.58 | 1.6 | 17.56 | 0.001 | 11.35 | 2.4 |
| 15.00 | 82.2 | 16.68 | 1.61 | 17.55 | 0.001 | 11.41 | 2.4 |
| 15.50 | 75.5 | 16.81 | 1.65 | 17.64 | 0.001 | 11.81 | 2.39 |
| 16.00 | 54.2 | 17.2 | 1.95 | 17.98 | 0.001 | 14.86 | 2.28 |
| 16.50 | 33.9 | 17.86 | 2.55 | 18.64 | 0.002 | 21.07 | 2.05 |
| 17.00 | 32.9 | 17.89 | 2.56 | 18.72 | 0.002 | 21.15 | 2.05 |
| 17.50 | 21.7 | 18.16 | 2.6 | 19.25 | 0.002 | 21.32 | 2.07 |

Figure 17-14
Grade Tonnage Curve: License 5 Lower Mineralisation

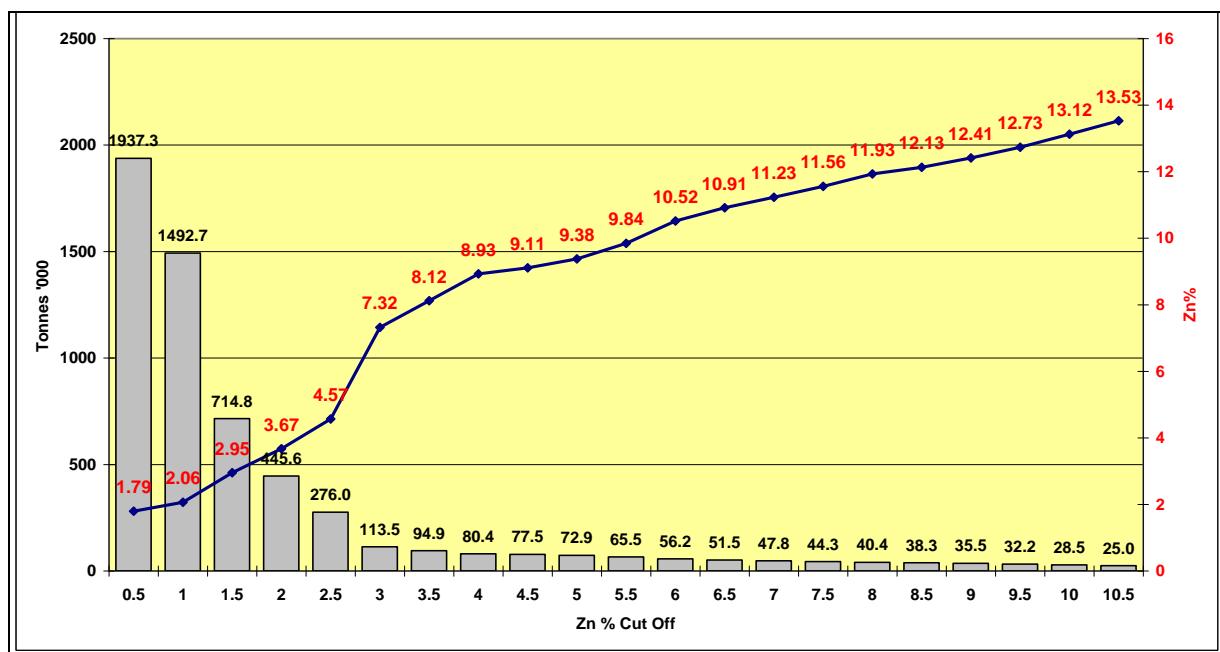


Figure 17-15
Grade Tonnage Curve: License 5 Upper Mineralisation

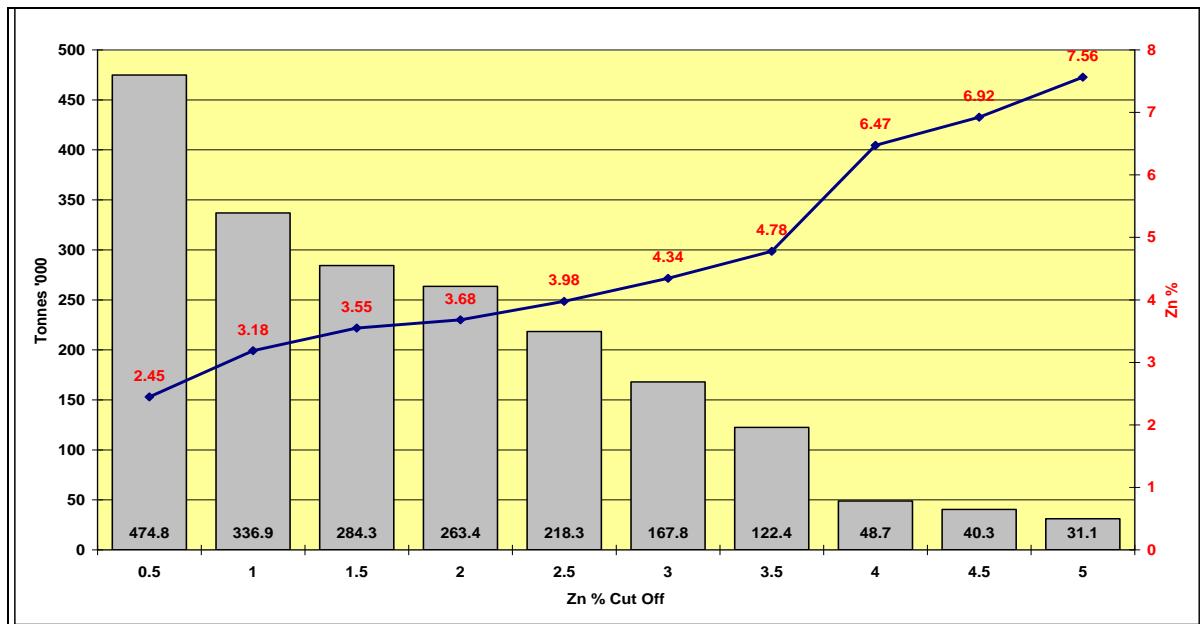


Figure 17-16
Grade Tonnage Curve: License 5 Combined Mineralisation

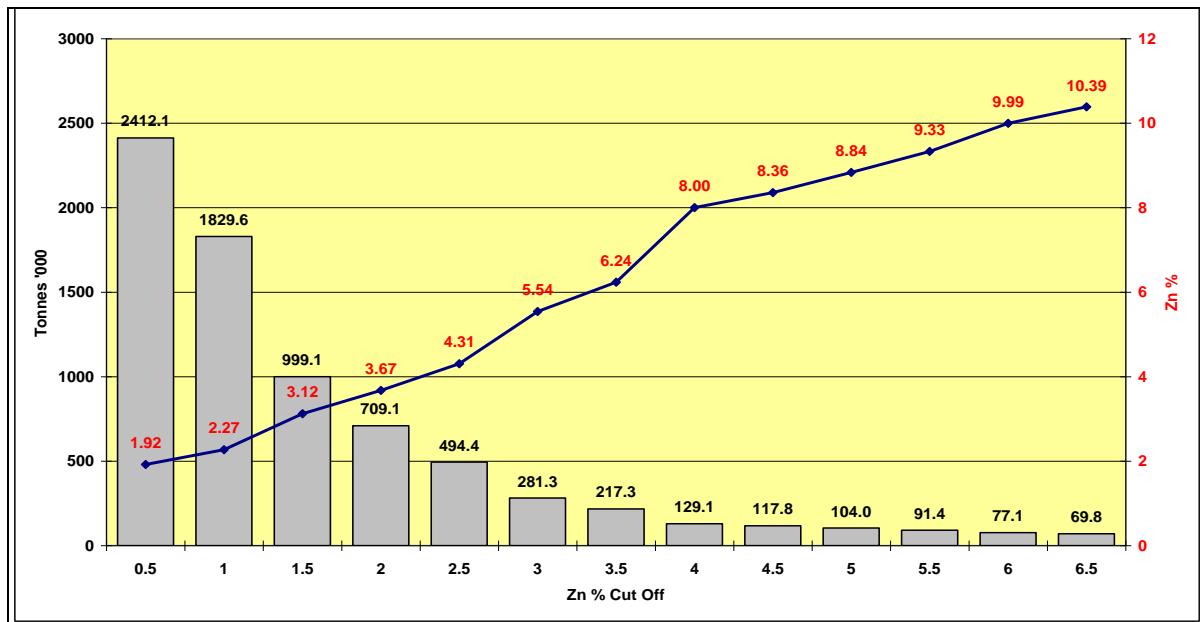


Figure 17-17
Non-compliant Grade Tonnage Curve: Pentagon

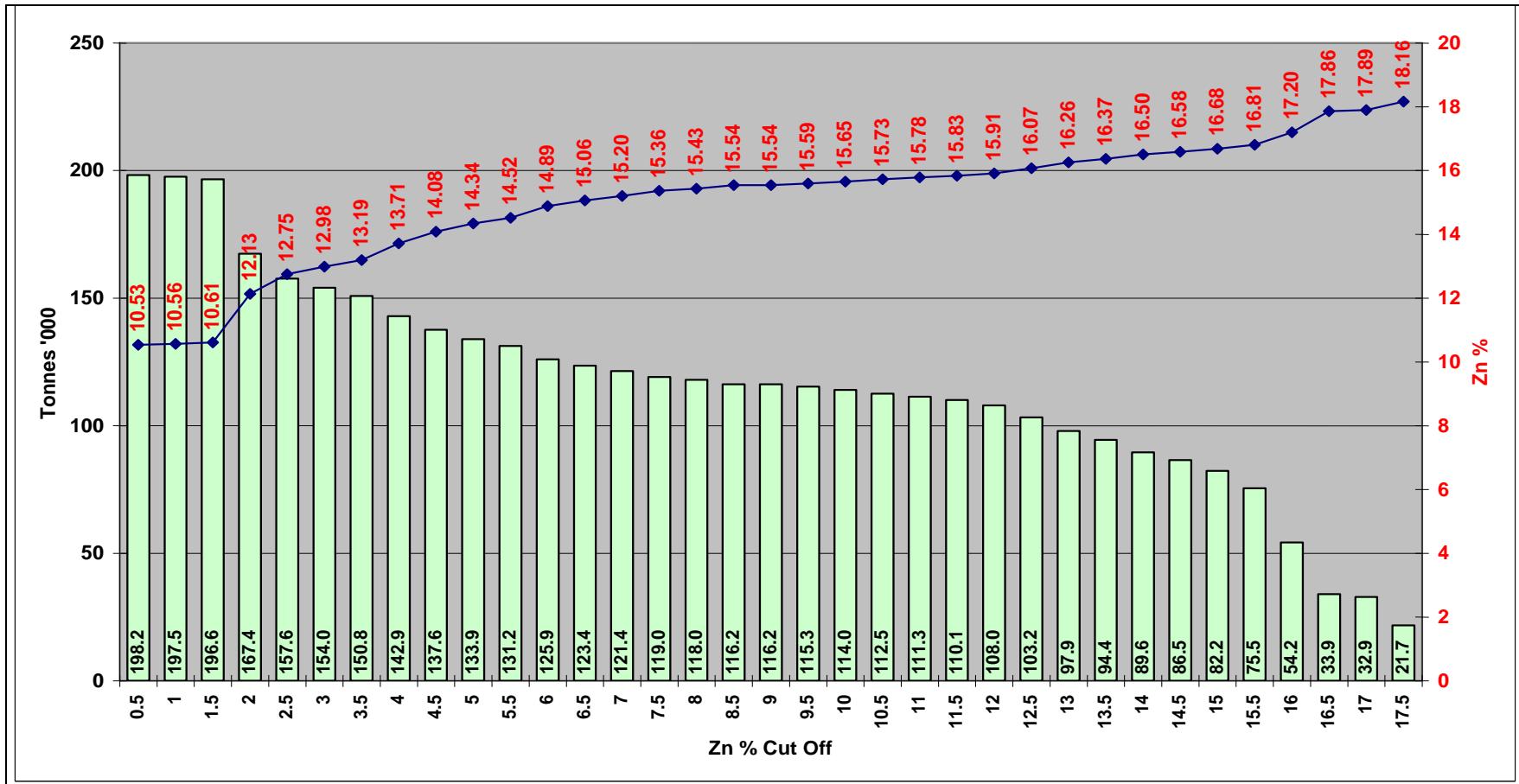


Figure 17-18 and Figure 17-19 show the vertically-composited block models for the Lower and Upper mineralized zone at License 5.

Figure 17-18
Plan View of License 5 Zn % in the Lower Mineralisation Block Model

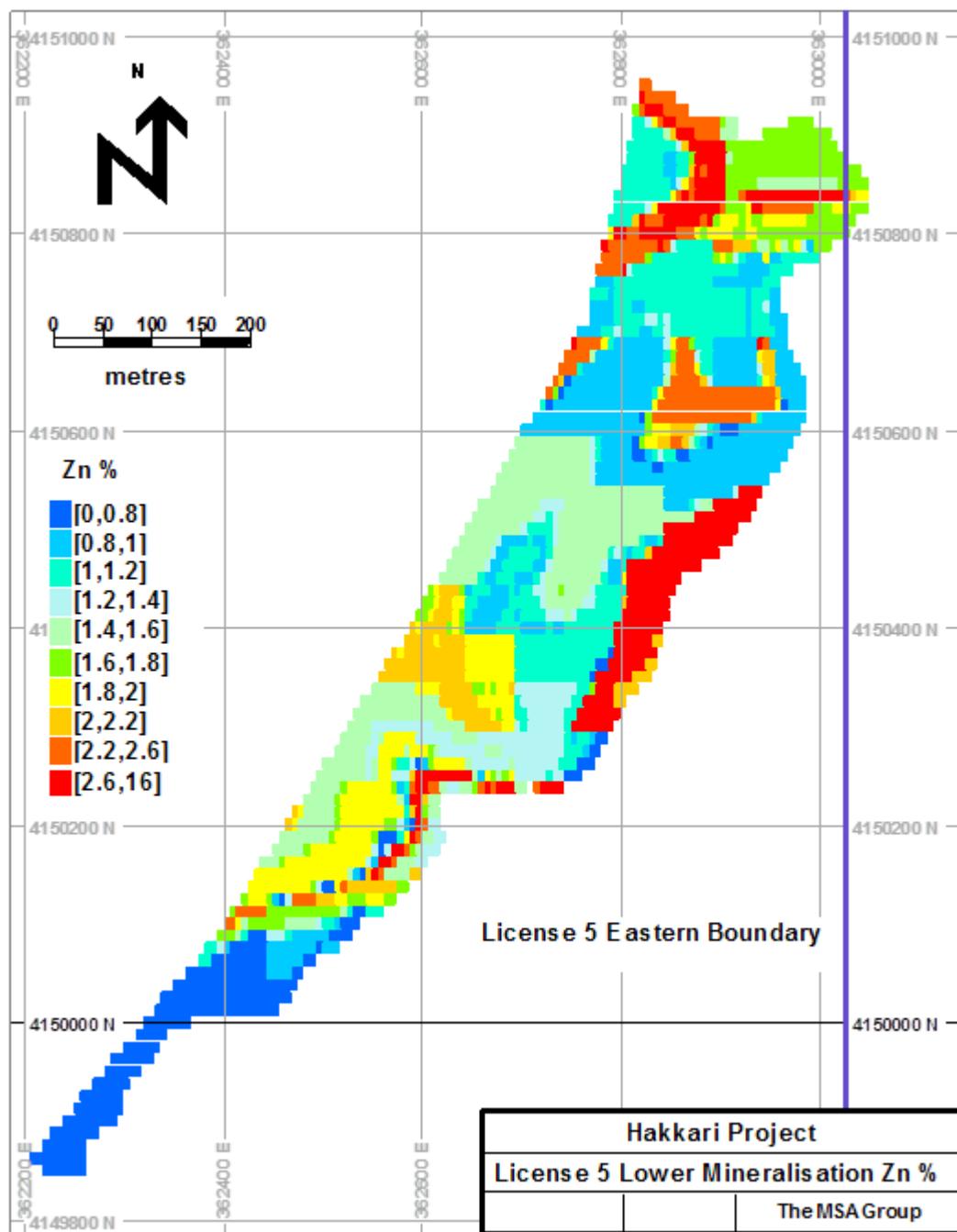
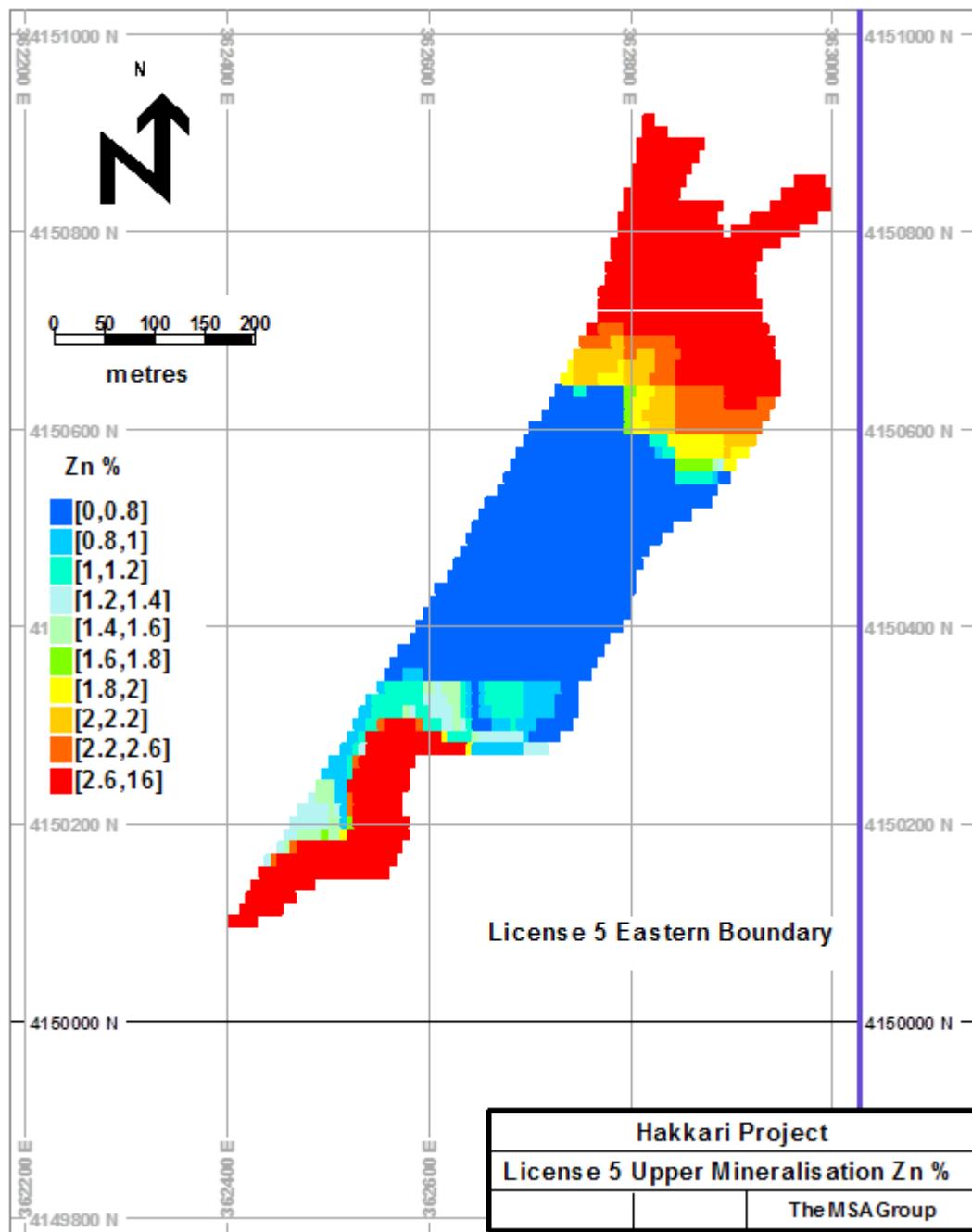


Figure 17-19
Plan View of License 5 Zn % in the Upper Mineralisation Block Model



18 OTHER RELEVANT DATA AND INFORMATION

RCR plan to undertake initial mining within the HZP via a number of small open pits (estimated at 5), pending the results of ongoing exploration and mineral resource development. This is likely to account for only a relatively small proportion of the ultimate resource base on the HZP. Alternatives for cost effective transfer of ROM material from the open pits to the road elevation of the valley will be addressed in a pre-feasibility/bankable feasibility study (PFS/BFS). The open pit stripping ratio cut off is estimated to be approximately 10 to 1. The bulk of the material will in future be mined via suitable underground mining methods based on the dip, orebody thickness, and other factors.

Given the rugged terrain and mineralization outcropping at higher elevations, access to defined orebodies will probably be via numerous adits from suitable positions. Both the hanging-wall and footwall to mineralization on the licenses comprise very competent strata which should result in favourable mining conditions. However, the orebody itself appears to be weathered and incompetent and this will be factored into the mine planning. Observed thicknesses of zinc-lead mineralization are in the order of 2 m. However, based on information obtained from surrounding small-scale mines, the orebody width could increase to 10 m in some areas. This will positively impact on the cost of mining. In shallow dipping areas the ore can be mined via mechanical bord and pillar type mining or extraction with alternative support options (including possible cemented fill). Steeply dipping mineralized zones i.e. +55 degrees could be mined via various mining methods relatively easily. The most appropriate mining method options will be identified during the PFS/BFS.

Over and above the zinc-lead potential of the HZP, a copper-bearing vein system is developed immediately north of license 7 and is reported to extend onto license 7. Exploration potential other than zinc plays therefore exists on the HZP, and should be investigated through systematic exploration.

19 INTERPRETATION AND CONCLUSIONS

The non-sulphide zinc-lead deposits and occurrences within the Hakkari project area are considered to represent supergene weathered derivatives of primary Mississippi Valley Type (MVT) zinc-lead sulphide deposits. These deposits and occurrences extend intermittently over an east-west strike distance of approximately 60 km, and are hosted within a platform carbonate sequence preserved on the northern margin of the Arabian Platform within a fold and thrust belt known as the Border Folds.

In comparison, a series of carbonate-hosted mixed oxide-sulphide zinc-lead deposits are known from the 1 600 km long Zagros fold and thrust belt located in adjacent Iran. The Zagros belt represents the lateral extension of the Border Folds terrane in south-eastern Turkey. The most notable deposit within the Zagros belt is the high grade oxide-sulphide Angouran operation. The existence of this zinc-lead belt represents further evidence for the potential to define a number of potentially significant and economic oxide and mixed oxide-sulphide zinc-lead deposits in south-eastern and southern Turkey.

Although stratabound on a regional scale, deposit-scale mineralization in the Hakkari area is localized by geological features such as reef complexes, breccias, paleokarsts, depositional margins near carbonate-shale contacts, and faults. Within these settings, mineralization ranges from zones of massive replacement, to open space filling of breccias and fractures, to disseminated clusters that occupy primary pore space. Mineralization occurs as both stratabound and cross-cutting highly irregular zones with consequent complex geometries. High grade smithsonite, hemimorphite and hydrozincite dominant zones can be distinguished from more iron-rich and variably leached lower grade zones. The iron content varies significantly both within the district and on a deposit scale, ranging from iron-poor zinc gossans, to low-Fe high-Zn smithsonite dominant zones to leached and high-Fe gossanous zones. Results of the 2010 drilling program show conclusively that mineralisation occurs in multiple mineralized zones over greater widths than initially anticipated and confirms field-based observations of several mineralized horizons. These multiple mineralized horizons are considered primary and, as such, extend the prospective portion of the stratigraphic sequence.

Recent small-scale mining has focussed on high-grade mineralization, as was confirmed by an SGS inspection in December 2007 of 3 stockpiles comprising 12 400 tonnes at grades between 20-27% Zn and 4.5-7.3% Pb. According to RCR and the Seyitoğlu family, at least 400 000 tonnes of non-sulphide zinc ore at an approximate average grade of 25% Zn and 4% Pb has been mined from the area between Licenses 5 and 8, 9, 10 over the past 5 years, and sold in an un-beneficiated state. Of this tonnage, approximately 85 000 tonnes was mined from five small operations in 2009 (Schaffalitzky, 2009).

Although the region is known for small-scale mining, there has to date been little to no modern systematic exploration on a larger scale aimed at defining code-compliant

Mineral Resources and Reserves. Minor investigations, including drilling of two holes, was undertaken by Teck Cominco, however no records are currently available. The maiden resource estimation for License 5 therefore represents the first code-compliant resource estimation for the district. The stated resource of 2.4 Mt (0.5% Zn cutoff) at 1.92% Zn and 0.54% Pb is considered significant given that the 2010 exploration program was not completed due to severe weather conditions and that the area tested by the program was known at the onset of activities to be of comparatively low grade but was prioritised due to ease of access for drill-rig mobilisation. Significant strike lengths of potentially higher grade material have been delineated from mapping and grab sampling activities on License 5 and will be prioritised for drill testing during the 2011 exploration season.

Despite the limitations of the non-compliant estimation on the Pentagon, the non-compliant estimate of 198 kt (0.5% Zn cutoff) at 10.53% Zn, 1.11% Pb and 14.73 g/t Ag demonstrates the existence of significant high-grade mineralisation on RCR's licenses with grades comparable with globally significant MVT deposits and with known zinc oxide deposits in the region. Further work will be required to upgrade the tonnage of these resources. Metallurgical studies carried out by RCR indicate the viability of gravitationally upgrading 7.5% Zn ROM to > 22% Zn.

Furthermore, significant, shallow-dipping down-dip extension of the Pentagon mineralisation is interpreted to extend southwards towards License 8 and is apparently contiguous with mineralisation currently being mined by another operator (Isme Olmez) to the west. Owing to the distribution of high grade zones within an overall east-west striking mineralized unit, future formal mining operations by RCR may take the form of multiple variably sized operations with a mobile concentration plant.

The various licenses in which RCR has an interest contain numerous zinc-lead opportunities, and represent a sizeable land position covering approximately 15 000 ha. The tested parts (License 5 and The Pentagon) of RCR's mineral rights holdings constitute significantly less than 1% of their total holdings and the potential for delineating additional compliant resources is considered significant.

20 RECOMMENDATIONS

Further exploration activities on the HZP should focus on achieving RCR's corporate objectives at Hakkari which aim to prove in excess of 10 Mt of zinc oxide ore at a Zn equivalent grade of 15%. Furthermore, RCR aim to have in excess of 30% of their resources classified in the Indicated category.

In order to attain these objectives it is recommended that the resource definition programs embarked upon in 2010 are continued on both License 5 and The Pentagon. MSA considers it optimal for these programs to run concurrently and specific recommendations are documented below.

20.1 License 5

The planned drilling program not completed in 2010 should be completed, with the aim of upgrading a part of the declared Inferred Resource to Indicated status. It is considered that this can be achieved with approximately 500-800 m of drilling which will allow for better resolution of grade continuity. Furthermore, anomalous IP responses identified during the IP survey remain unresolved and should be drill tested in order to determine the source of these responses and the potential for sulphide-hosted mineralisation at depth below the current defined oxide-hosted resource.

The two steeply dipping mineralized zones (in the northeast and west of License 5) should be mapped out fully to constrain their extent and be subjected to a systematic trench and channel sampling exercise. The most significant consideration to advancing the exploration program in these areas is the development of safe access tracks in extremely mountainous terrain that will be required for drill rig mobilisation. Road development is considered a priority activity. These steeply dipping zones have returned amongst the highest grab sample grade values to date and their systematic exploration should be prioritised.

20.2 The Pentagon

Geological mapping strongly suggests the southward flattening of the mineralized horizon towards License 8. As such, the south facing slope from the current mining highwall southwards to the Zap River valley approximates a dip slope with significant potential for comparatively shallow (<100 m) continuation of mineralisation. Sampling results to date suggest significantly higher grades on The Pentagon compared to License 5 and this program should be fast-tracked. The topographic survey of the mining area should be completed in order to upgrade the Pentagon resource estimation to a code-compliant estimation. Drilling on the dip slope should allow for rapid delineation of a code-compliant resource at confidence levels greater than inferred resource status.

20.3 Other licenses

RCR has 11 exploration licenses which require extension during the 2011 season. MSA recommends that reconnaissance mapping be undertaken on these Licenses using the outcomes of the remote sensing exercise to guide mapping activities. Furthermore, trenching should be undertaken on mapped mineralisation. Amendments to the Turkish Minerals Act require the declaration of an inferred resource as part of the extension and MSA recommends the deployment of a reverse circulation (RC) rig to these licenses to rapidly assess potential after trenching activities.

20.4 General recommendations

- The RCR laboratory protocol must be revised to accommodate larger, variably sized batches. This would allow for the inclusion of additional CRM's within each batch allowing for better QAQC monitoring and potentially negating the need for the rejection and re-assay of an entire batch on the basis of a single failed CRM sample.
- The value added by geophysical survey techniques should be assessed as a priority. To date, these IP surveys have failed to show significant correlation with mineralisation intersected in boreholes, most likely due to the oxide- and carbonate-hosted nature of the mineralisation. Furthermore, sphalerite, the most likely sulphide to be present is not known to be well-resolved by IP work. While the recommendations made regarding testing deeper IP targets on License 5 stand, should this drill testing prove unsuccessful it is recommended that the IP program be discontinued.
- A preliminary financial modelling exercise should be applied to the data to determine to what mining depths (and stripping ratios) the potential revenues support economic extraction, as well as indicate the likelihood of additional drilling adding value to each of the license areas tested during 2010.
- The use of zinc-scouts, sourced from the local community and equipped with GPS units and cameras is strongly recommended. Reconnaissance-scale scouting and sampling of areas where access is a challenge will optimise more detailed mapping and sampling programs that are aimed at defining drill targets.
- All drillhole sitings are preceded by detailed geological mapping, structural interpretation and trenching
- Multiple drill-rigs are deployed to the HZP in order to fast-track progress
- All core-drilling should be oriented in order to allow for better structural resolution in an extremely structurally disturbed area
- Further structural work should be carried out to confirm structural controls on mineralisation and then use this as a predictive tool for further exploration to

identify extensions to the mineralized horizons. Preliminary observations on License 5 suggest that wider and higher-grade mineralisation is present along fold hinges and that this attenuates on the limbs.

- RCR must implement a suitable methodology for bulk density determination. MSA recommends an in-situ volume replacement method is used on exposed mineralized outcrops in the field.
- RCR need to take cognisance of the effect that the construction of hydropower dams in the lower reaches of the Zap river valley will have on potential mine waste disposal locations.
- Prioritisation of activities on License 26, which has good infrastructure, is located close to Hakkari and has been actively mined in the past

The recommended work program and budget is in line with the RCR exploration budget for 2011 on the HZP.

20.4.1 Work program: License 5

- Testing deep IP anomalies by drilling
- Reconnaissance mapping and sampling of the entire license area by zinc scouts
- Detailed follow-up mapping of prioritised areas (most likely including the two steeply dipping zones identified in 2010) and systematic trenching and sampling of mineralized zones to establish drill targets
- Development of road access to each of the planned borehole collars
- Drilling of fans from each collar position to maximise the number of intersections that are derived from a single drill pad, minimising road development and allowing for enhanced structural resolution of the mineralisation
- Completion of the 2010 infill drilling program on License 5 that was not completed due to inclement weather and associated access problems
- Updating and upgrading of the License 5 resource statement

20.4.2 Work program: The Pentagon

- High-resolution topographic survey to allow conversion of non-compliant resource statement to a compliant, inferred resource statement
- IP surveys if the method proves applicable
- Detailed follow-up mapping of prioritised areas and systematic sampling (trenching) of mineralized zones to establish drill targets
- Development of road access to each of the planned borehole collars

- Drilling of fans from each collar position to maximise the number of intersections that are derived from a single drill pad, minimising road development and allowing for enhanced structural resolution of the mineralisation
- Extension of the currently defined (non-compliant) resource area both downdip and along strike
- Updating and upgrading of the License 5 resource statement with a view to fast-tracking commencement of mining activities

20.4.3 Work program: License 26

- Reconnaissance mapping and sampling of the entire license area by zinc scouts
- Detailed follow-up mapping of prioritised areas and systematic sampling (trenching) of mineralized zones to establish drill targets
- IP surveys if justified by the outcomes of testing on License 5
- Development of road access to each of the planned borehole collars
- Drilling of fans from each collar position to maximise the number of intersections that are derived from a single drill pad, minimising road development and allowing for enhanced structural resolution of the mineralisation
- Issuance of a maiden, code-compliant resource

20.4.4 Other licenses

RCR have 11 exploration licenses which are due for renewal/extension within the forthcoming exploration season. MSA recommends that a combination of reconnaissance mapping and sampling, detailed mapping and sampling, geophysics and RC drilling be undertaken on each of these licenses during the forthcoming exploration season in order for:

- Apply for the required extensions or;
- Relinquish licenses with limited potential.

Table 20-1
Proposed workplans and budgets for the 2011 exploration season

| License | Quantum of work | Cost |
|--------------------------------------|---|--------------------|
| License 5 | | |
| Scouting, mapping and sampling | 4 weeks | \$20 000 |
| Trench and channel sampling | 2 weeks | \$20 000 |
| Geophysics | 21 line km of IP | \$37 000 |
| Road construction | ~ 3.5 km | \$290 000 |
| Drilling and assay | 3500 m in 6 months | \$413 000 |
| Field running costs | vehicle maintenance, fuel, subsistence, freight | \$15 000 |
| Updated resource estimation | | \$18 000 |
| | TOTAL | \$813 000 |
| The Pentagon | | |
| Completion of topographic survey | 3 days | \$2 500 |
| Scouting, mapping and sampling | 2 weeks | \$10 000 |
| Trench and channel sampling | 2 weeks | \$20 000 |
| Geophysics | 10 line km | \$18 000 |
| Road construction | ~ 1.5 km | \$48 000 |
| Drilling and assay | 3300 m in 6 months | \$372 000 |
| Field running costs | | \$8 000 |
| Updated resource estimation | | \$18 000 |
| | TOTAL | \$494 000 |
| License 26 | | |
| Scouting, mapping and sampling | 3 weeks | \$10 000 |
| Trench and channel sampling | 2 weeks | \$10 000 |
| Geophysics | 5 line km | \$9 000 |
| Road construction | minor development required | \$18 000 |
| Drilling and assay | 1000 m in 3 months | \$123 000 |
| Field running costs | | \$4 000 |
| Maiden resource estimation | | \$20 000 |
| | TOTAL | \$194 000 |
| Licenses for renewal | | |
| Scouting, mapping and sampling | 2-3 months | \$60 000 |
| Trench and channel sampling | 2 months | \$80 000 |
| Geophysics | Estimate 35 line km | \$60 000 |
| Road construction | 40-50 km | \$1 600 000 |
| Drilling (RC) and assay | up to 500 m per License | \$750 000 |
| Field running costs | | \$130 000 |
| Resource estimation (where possible) | | \$50 000 |
| | TOTAL | \$2 730 000 |
| | GRAND TOTAL EXPLORATION BUDGET 2011 | \$4 231 000 |

21 REFERENCES

- Boni, M. and Large, D.E.** 2003. Nonsulfide zinc mineralization in Europe: An overview. *Economic Geology*, **98**, 715-729.
- Ceyhan, N.** 2003. Lead Isotope Geochemistry of Pb-Zn deposits from Eastern Taurides, Turkey. Unpub. MSc Dissertation. Graduate School of Natural and Applied Sciences of the Middle East Technical University, Ankara Turkey
- Grodner, M.** 2009. Preliminary Evaluation of the Geology and Mineral Resources of the Hakkari Zinc Project. Internal report for Red Crescent Resources Holding A.Ş., dated 14 October 2009. 32p.
- Günay, Y. and Şenel, M.** 2002. 1:500 000 Geological Map sheet Cizre
- Heyl, A.V. and Bozion, C.N.** 1962. Oxidised zinc deposits of the States, Part 1. General Geology: *U.S. Geological Survey Bulletin* 52p.
- Hitzman, M.W., Reynolds, N.A., Sangster, D.F., Allen, C.R. and Carman, C.E.** 2003. Classification, Genesis, and Exploration Guides for Nonsulfide Zinc Deposits. *Economic Geology*, **98**, 685-714.
- Meyer, E.H.O** (2010). The Hakkari Zinc Deposit – A Review.
- Paradis, S., Hannigan, P. and Dewing K.** 2007. Mississippi Valley-Type Lead-Zinc Deposits.
- Plaskitt, M.A. and Thom M.J.** (2010). Report on Zinc Deposit and Manganese Deposit (Report No 1) for Red Crescent Resources Holding A.Ş.
- Schaffalitzky, C.** 2009. Review of RCR Holdings zinc projects in south-east Turkey. Memorandum report for Red Crescent Resources Holding A.Ş., dated 8 December 2009. 14p.
- SRK Danışmanlık ve Mühendislik A.Ş.** (2010). Review of Environmentally Sensitive and Protected Areas, Şırnak-Hakkari Prospects. Report prepared to RCR ve Seyitoğlu Madencilik İthalat İhracat Tic. Ve San. A.Ş., dated August 2010.
- Venter, M. and Robertson, M.** (2009). Desktop, Remote Sensing and Field Validation Study for Red Crescent Resources A.Ş.
- Yigit, O.** 2009. Mineral Deposits of Turkey in Relation to Tethyan Metallogeny: Implications for Future Mineral Exploration. *Economic Geology*, **104**, 19-51.

22 DATE AND SIGNATURE PAGE

This report titled "NI43-101 Technical Report on the Hakkari Zinc Project" with an effective date of April 13, 2011; prepared by The MSA Group on behalf of Red Crescent Resources dated April 13, 2011, was prepared and signed by the following author:



Dated at Johannesburg, South Africa
April 13, 2011

Mike Robertson
MSc; PrSciNat; MSAIMM
Principal Consultant
The MSA Group



APPENDIX 1:

Glossary and Definitions of Terms Used

| | |
|--------------------------------------|--|
| Alpine Himalyan Orogenic Belt (AHOB) | The major Mesozoic to Cenozoic orogenic belt stretching from Spain in the West to Southeast Asia in the East |
| Alteration | Changes in the mineralogical composition of a rock as a result of physical or chemical processes such as weathering or penetration by hydrothermal fluids |
| Anastomose/ing | (of bedding) Changes in strike direction imparting a wavy appearance to mapped units in plan view |
| Anatolides | A domain of the AHOB bounded in the north by the Pontides and in the south by the Taurides |
| Antiform | A fold structure which is convex upwards |
| Arabian Platform | The northern extent of the Arabian-Nubian shield, comprising predominantly platform (shallow marine) carbonates |
| Artisanal | Exploited at a local level, generally by manual labour |
| ASTER | ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) is one of five remote sensory devices on board the Terra satellite launched into Earth orbit by NASA in 1999. The instrument has been collecting surficial data since February 2000, and provides high-resolution images of the Earth in 15 bands. ASTER data are used primarily in geology to map alteration patterns and elevation. |
| Beneficiation | The process by which material is upgraded to achieve higher concentrations |
| BFS | Bankable Feasibility Study: a comprehensive financial assessment of a planned mining operation, carried out to levels required to obtain financing for the operation |
| Bitlis thrust | A major thrust structure that juxtaposes the Taurides in the north and the Border Folds region in the south |
| Border Fold region | The deformed northern margin of the Arabian Platform |
| Bass | A zinc-copper ± tin alloy |
| Breccia | A rock composed of angular rock fragments cemented within a fine-grained matrix |
| Ca | Calcium |
| Cu | Copper |
| Cakmak Avukatlik (Cakmak) | A legal firm in Ankara, Turkey |
| Clamine | French for non-sulphide zinc ore |
| Chalcopyrite | A bronze coloured copper iron sulphide mineral (CuFeS_2) |
| Chert | A silica-rich, fine-grained, cryptocrystalline sedimentary rock |
| Clastic | Composed of mineral grains or fragments derived from pre-existing rock and transported from their place of origin |
| Conjugate | (of geological structures) In which both sets of structures show the same strike but opposite dip. |
| Cretaceous | The geological period dating 145.5 ± 4 to 65.5 ± 0.3 million years ago. The end of the Cretaceous marks the end of the Mesozoic era and the commencement of the Cenozoic era |
| Cryptocrystalline | Cryptocrystalline is a rock texture which is so finely crystalline, being made up of such minute crystals, that its crystalline nature is only vaguely revealed even at microscopic scales |
| Dextral | Inclined or shifted to the right |
| Diachronous | (refers to a sedimentary rock formation) In which apparently similar material varies in age from place to place |
| Dolomitic | Comprising the mineral dolomite, which is a magnesium-calcium carbonate |
| Epithermal | (refers to deposits) That form in the near-surface environment, from hydrothermal systems typically within 1.5 km of the Earth's surface |
| Facies | A distinctive rock unit that forms under certain conditions of sedimentation, reflecting a particular process or environment. |
| Fault | A planar rock fracture which shows evidence of relative movement |
| Fe | Iron |
| Fissile | (refers to rocks) That split readily into thin sheets |
| Fold | When originally flat and planar surfaces, such as sedimentary strata, are bent or curved as a result of plastic (ductile) deformation |

| | |
|-------------------------------|---|
| Footwall | The rockmass underlying a mineralized horizon |
| Franklinite | A Zn, Fe and Mn oxide with variable proportions of Zn, Fe and Mn: $(\text{Zn}, \text{Fe}, \text{Mn})(\text{Fe}, \text{Mn})_2\text{O}_4$ |
| Galena | Lead-sulphide (PbS) |
| Galman | Polish for non-sulphide zinc ore |
| Galmei | German for non-sulphide zinc ore |
| GDEM | Global Digital Elevation Model, derived from ASTER imagery |
| GIS | Geographic Information System (a computer-based system for managing and displaying geographical data) |
| Goethite | An iron-bearing hydroxide mineral, typical of soil and low temperature environments: $\text{FeO}(\text{OH})$ |
| Gossan | Intensely oxidized, weathered or decomposed rock, usually the upper and exposed part of an ore deposit or mineral vein. |
| Hangingwall | The rockmass underlying a mineralized horizon |
| Hematite | A deep red or steel grey iron oxide (Fe_2O_3) |
| Hemimorphite | A hydrous zinc-silicate with the formula $\text{Zn}_4\text{Si}_2\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$ |
| Hiatus/es | A period of non-deposition within a sedimentary sequence/s |
| Hydrothermal | Relating to or caused by a hot watery fluid |
| Hydrozincite | A zinc-carbonate-hydroxide compound with the formula $\text{Zn}_5(\text{CO}_3)_2(\text{OH})_6$ |
| Hypogene | The original (primary) sulphide mineralisation |
| HZP | Hakkari Zinc Project |
| ICP-AES | Inductively coupled plasma atomic emission spectroscopy (ICP-AES), also referred to as inductively coupled plasma optical emission spectrometry (ICP-OES), is an analytical technique used for the detection of trace metals |
| JERS | Japanese Earth Resources satellite, used to map topography and structure of the Earth's surface |
| Joint | A fracture in a rock across which there has been no apparent movement |
| Jurassic | The period in geological time spanning 208 to 146 million years ago |
| Karst | Dissolution of carbonate bedrock by circulating waters (meteoric and ground) to create cavities and irregularities in the bedrock |
| Lapis calaminarius | Latin for non-sulphide zinc ore |
| Massive | (refers to rocks) without internal structure or layers and homogeneous in composition |
| Mesozoic | A period of geological history dating from about 225 to 65 million years ago |
| Mineralization | The process by which minerals are introduced into a rock resulting in the formation a mineral deposit |
| Mississippi Valley Type (MVT) | Carbonate-hosted lead-zinc deposits, named after the Mississippi River Valley where many such deposits are found |
| Mt | Million tonnes |
| Neritic | As in neritic zone, also called the Coastal Ocean and Sublittoral zone, is the part of the ocean extending from the low tide mark to the edge of the continental shelf, with a relatively shallow depth extending to about 200 meters |
| Orogenic | Relating to the formation of structures such as folds and thrusts during a period of mountain-building |
| Oxidation | The process of combining with oxygen ions. A mineral that is exposed to air may undergo oxidation as a form of chemical weathering. |
| Oxide | A mineral comprising oxygen and additional, usually metallic, element/s |
| Paleogene | The geological period that began 65.5 ± 0.3 and ended 23.03 ± 0.05 million years ago and comprises the first part of the Cenozoic Era |
| Paleokarst | Ancient karst phenomena that existed at the time of mineralisation or deposition (see <i>karst</i> above) |
| Paleotopography | Topography that existed at the time of sedimentation/mineralisation |
| Pb | Lead |
| PFS | Prefeasibility study: investigation of several scenarios to investigate the potential financial return of a planned mine |

| | |
|-------------------------------|--|
| Platform carbonates | A carbonate deposit that was formed through the accumulation of calcareous material through the skeletons of animals or through microbial organisms that induce carbonate precipitation through their metabolism |
| Pontides | The northernmost orogenic domain of the AHOB |
| Porphyry | (as in porphyry systems) are potential (usually copper) orebodies which are associated with porphyritic intrusive rocks and the fluids that accompany them during the transition and cooling from magma to rock. Circulating surface water or underground fluids may interact with the plutonic fluids. Successive envelopes of hydrothermal alteration typically enclose a core of ore minerals disseminated in often stockwork-forming hairline fractures and veins. |
| Precambrian-Cambrian boundary | The major geological boundary indicating the appearance of the first complex life-forms on Earth (dated to approximately 542 million years before present) |
| QAQC | Quality Assurance, Quality Control |
| RCRZ | Red Crescent Resources Zinc, formally known as RCR Seyitoğlu Cinko Madencilik A.S |
| ROM | Run-of-mine i.e. the unbeneficiated ore extracted from a mine |
| Sauconite | a zinc-bearing clay mineral belonging to the smectite group |
| Sedimentary | (refers to sedimentary rock) - a type of rock that is formed by sedimentation of material at the Earth's surface and within bodies of water. Sedimentation is the collective name for processes that cause mineral and/or organic particles (detritus) to settle and accumulate or minerals to precipitate from a solution. |
| Shear | Deformation resulting from stresses that cause surfaces to slide against each other parallel to their plane of contact |
| Smithsonite | Zinc carbonate: ZnCO_3 |
| Sphalerite | Zinc sulphide: ZnS |
| Stratiform | (referring to a deposit) a deposit that occurs within a specific geological horizon i.e. is stratigraphically controlled |
| Stratigraphy | The layering of successive rock units due to sedimentary or volcanic processes |
| Subduction | The process that takes place at convergent boundaries by which one tectonic plate moves under another tectonic plate, sinking into the Earth's crust, as the plates converge |
| Sulphide | A mineral containing sulphur with a metal or semi-metal, e.g. pyrite |
| Supergene | The alteration (and frequent enrichment) of a mineral deposit due to the infiltration of meteoric waters and associated oxidation and chemical weathering |
| Synform | A fold structure which is concave upwards |
| Syngenetic | Mineralisation occurred simultaneously to the rock-forming process |
| Taurides | A domain of the AHOB, bounded to the north by the Anatolides and to the south by the Border folds region |
| Tectonic | Relating to forces involved in or features resulting from deformation on a large scale |
| Tethyan | The orogenic belt formed when the Cimmerian Plate was subducting under eastern Laurasia, around 200 million years ago, in the Early Jurassic. The Tethyan Trench extended at its greatest during Late Cretaceous to Paleocene, from what is now Greece to the Western Pacific Ocean. |
| Thrust/ed | A shallow-dipping reverse fault, where the hangingwall is transported over the footwall due to compressional tectonic forces |
| Transcurrent | (fault) a steeply dipping fault characterised by horizontal displacement only |
| Triassic | The geologic period that extended from about 250 to 200 million years ago and was the first period of the Mesozoic Era |
| Vein | A filled fracture in a rock, resulting from the precipitation of quartz or carbonate minerals from a fluid |
| Vergence | Structural asymmetry that indicates the direction of thrusting |
| Willemite | A zinc silicate with the formula Zn_2SiO_4 |
| XRF | X-ray fluorescence, a technique widely used for elemental determinations |
| Zagros fold and thrust belt | A major Mesozoic to Cenozoic orogenic belt extending from Turkey in the West to the UAE in the East |
| Zinc zap | An indicator solution that is sprayed on a rock as a qualitative colorimetric test for zinc concentration |
| Zn | Zinc |



APPENDIX 2:
Certificates of Qualified Persons



CERTIFICATE of QUALIFIED PERSON

I, Michael James Robertson, PrSciNat; MSAIMM do hereby certify that:

1. I am Principal Consulting Geologist of:

The MSA Group
20B Rothesay Avenue,
Craighall Park,
Johannesburg,
2196.

2. This certificate applies to the Technical Report titled "NI 43-101 Technical Report on the Hakkari Zinc Project" dated 13th Day of April, 2011 (the "Technical Report"),
3. I graduated with a degree in BSc Eng (Mining Geology) from the University of the Witwatersrand in 1985. In addition, I obtained an MSc in Structural Geology from the University of the Witwatersrand in 1989.
4. I am a member of the South African Institute of Mining and Metallurgy, the Geological Society of South Africa, the Society of Economic Geologists and a Professional Natural Scientist (PrSciNat) registered with the South African Council for Natural Scientific Professions.
5. I have worked as a geologist for a total of 22 years since my graduation from university.
6. I visited the Hakkari Zinc Project property between 26 July - 7 August 2009, 16 - 30 March 2010, 20 - 27 June 2010, 13-18 August 2010, and 4 - 8 December 2010.
7. I am responsible for the preparation of all sections (apart from sections relating to Mineral Resources and Metallurgy) of the Technical Report
8. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
9. 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.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. To the best of my knowledge, information and belief and as at the date hereof, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. 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.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 13th Day of April, 2011.

A handwritten signature in black ink, appearing to read "Michael J Robertson".

Michael J Robertson

CERTIFICATE of QUALIFIED PERSON

I, Michael Robert Hall, PrSciNat; MAusIMM do hereby certify that:

1. I am Consulting Geologist – Mineral Resources of:

The MSA Group
20B Rothesay Avenue,
Craighall Park,
Johannesburg,
2196.

2. This certificate applies to the Technical Report titled "NI 43-101 Technical Report on the Hakkari Zinc Project" dated 13th Day of April, 2011 (the "Technical Report"),
3. I graduated with a BSc (honours) degree in Mining Geology from the University of Leicester, United Kingdom in 1980. In addition, I have obtained a MBA degree in 2003, from the Business School of the University of the Witwatersrand, South Africa. I am a member in good standing of the Australasian Institute of Mining and Metallurgy and of the Geological Society of South Africa. I am a Qualified Person for the purposes of the Instrument.
4. I am a member of the Australian Institute of Mining and Metallurgy, the Geological Society of South Africa and.
5. I have worked as a geologist for a total of 30 years since my graduation from university.
6. I visited the Hakkari Zinc Project property between 4 - 8 December 2010.
7. I am responsible for the preparation of the Mineral Resources section of the Technical Report
8. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
9. 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.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. To the best of my knowledge, information and belief and as at the date hereof, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. 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.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 13th Day of April, 2011.



Michael R Hall



APPENDIX 3:

Independent Legal Opinion on RCR rights and title to HZP Tenements

LEGAL DUE DILIGENCE REPORT
PREPARED FOR
RCR SEYITOGLU
IN RELATION TO THE
MINING LICENSES OF HASAN UCAR, ISMET OLMEZ
& GIYASSETTIN SEYITOGLU

CAKMAK AVUKATLIK BUROSU

GLOSSARY OF TERMS AND DEFINITIONS USED¹

| | |
|-------------------------------------|---|
| Amendment | Law No. 5995 amending the Mining Law published in the Official Gazette No. 27621 dated 24 June 2010. |
| A.S. | Joint Stock Company. |
| Company or RCR Seyitoglu | RCR ve Seyitoglu Madencilik İthalat İhracat Ticaret ve Sanayi Anonim Şirketi |
| Council of Ministers | Council of Ministers of the Republic of Turkey. |
| Forestry General Directorate | Forestry General Directorate of the Ministry of Environment of Turkey. |
| Licenses | Mining operation licenses with nos. 6797, 4312 and with access no. 60061. |
| Ltd. Şti. | Limited Şirket (<i>Limited Liability Company</i>). |
| MENR | Ministry of Energy and Natural Resources |
| Mining Department | General Directorate of Mining Affairs. |
| Mining Law | Mining Law No. 3213 published in the Official Gazette No. 18785 dated 15 June 1985. |
| Mining Legislation | Mining Law and Mining Regulation. |
| Mining Regulation | Mining Law Implementation Regulation published in the Official Gazette No. 27751 dated 6 November 2010. |
| Report | This legal due diligence report. |
| State | The Republic of Turkey. |
| TCC | Turkish Commercial Code published in the Official Gazette No. 9353 dated 9 July 1956. |
| TL | Lawful currency of the Republic of Turkey. |
| Treasury | Turkish Undersecretariat of Treasury |
| Turkish Constitution | The Constitution of the Republic of Turkey dated 1982. |

¹ Definitions used throughout the Report are stated in this section whereas definitions only used in one section are set out in the relevant section.

TABLE OF CONTENTS

| | | |
|--|--|-----------|
| I. | <i>INTRODUCTION</i> | 1 |
| II. | <i>MINING LICENSES</i> | 2 |
| 1. | General | 2 |
| 2. | Legislation | 2 |
| 3. | Mining Licenses | 2 |
| a. | License Holders | 2 |
| b. | License Types | 2 |
| 4. | Temporary Suspension of the Mining Operations | 7 |
| 5. | Merging of License Areas | 8 |
| 6. | Transfer of Licenses | 8 |
| 7. | Royalty Agreements | 9 |
| 8. | Termination, Abandonment of Licenses | 9 |
| 9. | Exclusivity of Turkish Courts | 10 |
| III. | <i>ANALYSIS OF THE LICENSES</i> | 11 |
| <i>List of the Reviewed Documents Provided by RCR Seyitoglu</i> | | 13 |

I. INTRODUCTION

This Report contains the results of the legal review conducted by Cakmak Avukatlik Burosu in connection with the status of the Licenses. It is not a legal opinion and does not contain specific legal advice on the matters covered.

This Report is addressed to RCR Seyitoglu and may not be relied on by any other person. No responsibility, liability or duty of care is or will be accepted by Cakmak Avukatlik Burosu to any other party.

The legal review has been undertaken on the following basis:

- a. We have reviewed, and accordingly this Report is based only on, the documents which are provided by the governmental authorities and are available to public.
- b. We have relied upon information provided by third parties, including various departments, in response to searches made, or caused to be made, and enquiries by us and have relied upon that information, including the results of searches, being accurate, current and complete as at the date of its receipt by us.
- c. References in the Section III are taken from details shown on the searches we have obtained from the Mining Department.
- d. We have not undertaken independent surveys for the lands subject to the Licenses to verify the accuracy of the status of the lands and permits. We have not reviewed those matters which are normally the subject of investigation by environmental consultants, insurance specialists, immovable asset specialists, engineering, structural or soil specialists, any operational or technical matters.

We report only as to the laws of Turkey and express no opinion and accept no responsibility as to the law of any other jurisdiction or in respect of any documents, agreements or arrangements that may be subject to, or may be construed in accordance with, any such law.

II. MINING LICENSES

1. General

Pursuant to the relevant provisions of the Turkish Constitution and the Mining Legislation, “mines” are subject to the exclusive ownership and disposition of the State and are not considered part of the land where they are located. Under the Mining Legislation, State delegates its right to explore and operate the mines to individuals or legal entities for specific periods by issuing licenses subject to payment of a royalty to the State.

2. Legislation

Mining regime is mainly governed by the Mining Law and the Mining Regulation.

The Amendment to the Mining Law was published in the Official Gazette on 24 June 2010 to regulate the details of the permitting process in the law and to amend the other provisions of the Mining Law.

For the purposes of this Report, references to Mining Law shall cover Mining Law as by the Amendment, however references will also be made to the relevant provisions of the Mining Law before the Amendment since the Licenses have been obtained prior to the Amendment.

3. Mining Licenses

a. License Holders

Article 6 of the Mining Law clearly sets forth that the mining rights may only be given to either Turkish citizens or legal entities established under Turkish laws. Accordingly, only Turkish citizens, who are entitled to use their civil rights, and the companies established under Turkish laws specifically for mining purposes are entitled to hold mining rights.

Under Turkish Law, foreign persons and companies domiciled abroad may establish a company in Turkey. Companies that are established in Turkey with foreign capital are deemed Turkish companies subject to the provisions of the TCC. Therefore, they are entitled to hold mining rights.

b. License Types

The Mining Law divides minerals into six groups and separately details the licensing procedures for each group of minerals. The groups can be summarized as follows:

- i) sand and gravel [Group I(a)] and clay tile, cement tile or marl [Group I(b)];
- ii) grounded forms of stones such as calcite, limestone, granite [Group II (a)] and block stones or decorative stones such as marble, granite, travertine [Group II (b)];
- iii) salts in solution form that can be obtained from sea, lake and spring waters [Group III];
- iv) energy, metal and industrial minerals (including metals such as gold, silver, copper, brass...etc.) [Group IV];
- v) precious metals and gem stones [Group V]; and
- vi) radioactive minerals and other radioactive substances [Group VI].

The Mining Department is the authorized body to determine and announce the group of a mine, which is not listed in the Mining Legislation. The Mining Law provides for “certificate” to be issued only to the fifth group of minerals and “license” to be issued to the other remaining groups.

(i) Exploration License/Certificate. The first step for the companies willing to engage in mining activities in Turkey would be to apply for an exploration license or certificate, as the case may be. The right of priority is essential in applications, which is determined in accordance with the date of application. The exploration license is granted to the mine right holder by the Mining Department in accordance with the area limitations stated in the Mining Legislation (for example, the license area of Group IV minerals may not exceed 2000 hectares). The exploration license is a certificate granting an authority for exploration of a mineral within the determined area.

The exploration license has three-stages, as follows:

- 1) “**Pre-exploration period**” is the first year after the issuance of the exploration license.
- 2) “**General exploration period**” is the period of two years for Group IV mines and one year for other groups starting from the expiration of the pre-exploration period.
- 3) “**Detailed Exploration Period**” (for Group IV and VI mines only) is the period of four years starting from the expiration of the general exploration period.

The exploration licenses obtained prior to the Amendment shall be subject to the previous regime, where an exploration license is granted for three-year term and the term of the exploration license may be extended for certain mines (i.e. Group IV) for another two years. If the license holder fails to conduct sufficient exploration activities within the three-year period, the license will be terminated.

A license granted for a certain group of mine does not create any right for the mines in other groups. Thus, a separate license will be required to mine a separate group of mine within such license area. However, other groups of mines extracted as a result of the mining operations, may be extracted and produced with prior consent of the Mining Department.

The license holder shall be considered as the finder of the mines (notified to the Mining Department in its technical reports) and will be entitled to 1% of the pit-head sale if the mine shall be operated by a third party.

The operation license shall only be given to the exploration license holders. If the exploration license holder fails to apply for an operation license at the end of the license term, the exploration license shall be terminated and the security deposit shall be forfeited.

An exploration license holder is obliged to undertake certain obligations as required by the Mining Legislation. These obligations can be summarized as follows:

- a) Duties and Security Deposit: The annual duty for 2010 is TL 544.25. A security in the amount of 1% of the annual duty (which is TL 5.45 for 2010) times the hectare of such license must be deposited as a security for each license, which may not be less than TL 10,000.00. The Council of Ministers is authorized to increase or decrease this rate by

50%. In the event that the security deposit is registered as income or certain deductions are made pursuant to the Mining Law, the license holder must deposit the deficient amount within three months. If the license holder fails to deposit the deficient amount (which shall be doubled in each late payment) within the determined period, then a second period of three months will be granted. If the license holder fails to deposit such amount within the second period as well, the mining activities shall be ceased. If the license holder fails to deposit the deficient amount by the end of the subsequent six months, the license shall be terminated.

The security deposit prior to the Amendment was equal to 0.3% of the annual license fee per hectare depending on the licensing stage and the term of license which was TL 1.64 for 2010.

- b) Submission of Documents: By the end of pre-exploration period, general exploration period and by the end of each year during the detailed exploration period, a report, including information regarding the mine reserve and investment expenditures made for the exploration activities shall be submitted to the Mining Department. Failure to submit such report shall result in forfeiture of the security deposit and the cancellation of the exploration license.

The license holder may, upon approval of the Mining Department, sell 10% of the mine reserve. In such case, the license holder (like an operation license holder) must, by the end of April of each year, submit to the Mining Department all technical documents, sales information form, and activity information form relating to its operational activities of the previous year. If the license holder fails to comply with this requirement, the security deposit will be forfeited and the mining activities will be ceased until satisfaction of this obligation.

- (ii) Operation License. Before the end of the exploration license period, the license holder shall apply for an operation license. License applications made through post will not be accepted by the Mining Department. The individuals or legal entities will be entitled to an operation license by making an application. Operation license is an instrument granting the license holder the right to operate a mine under the Mining Legislation. The operation license is granted to the mining right holder by the Mining Department.

Term of an operation license for Group I (a) minerals may not be less than five years and for other groups may not be less than ten years whereas the term of an operation certificate (issued for Group V) may not be less than five years. The term of an operation license/certificate may be extended under certain conditions stated in the Mining Law. However the period of the license may not exceed sixty years starting from the date of license. The Council of Ministers is authorized to extend the term after the end of sixty years. The extension duty for 2010 is TL 1,361.65.

The license holder may continue exploration activities during the operation period. If the license holder fails to identify the mine reserves within five years (for Group IV mines) and three years (for other groups) upon issuance of the license, the license area shall be divided.

An operation license holder is obliged to undertake certain obligations as required by the Mining Legislation. These obligations can be summarized as follows:

- a) Duties and Security Deposit: This is same with the obligation of an exploration license holder summarized above. For 2010, annual duties are as follows:

| ANNUAL FEES FOR 2010 | |
|--------------------------------------|--------------|
| LICENSE | AMOUNT IN TL |
| Up to 10 years (including 10) | 3,269.40 |
| Up to 15 years (including 15) | 3,814.10 |
| Up to 40 years (including 40) | 5,499.25 |
| Up to 60 years (including 60) | 8,283.75 |
| 61-99 years (For each year) | 10,899.55 |

For 2010, the security amounts per hectare are as follows:

| SECURITY AMOUNTS PER HECTARE FOR 2010 | |
|---------------------------------------|--------------|
| LICENSE | AMOUNT IN TL |
| Up to 10 years (including 10) | 32.70 |
| Up to 15 years (including 15) | 38.15 |
| Up to 40 years (including 40) | 54.50 |
| Up to 60 years (including 60) | 82.84 |
| 61-99 years (For each year) | 109.00 |

- b) **Submission of Documents:** The operation license holder must, by the end of April of each year, submit to the Mining Department all technical documents, sales information form; and activity information form relating to its operational activities of the previous year. In the case exploration activities are carried out within the license area, the exploration data and information must be submitted to the Mining Department. If the license holder fails to comply with this requirement, the security deposit will be forfeited and the mining activities will be ceased until satisfaction of this obligation.
- c) **Royalty:** The license holder must pay a royalty to be collected over the extracted mines in the rates provided below over the pit-head sale price (*ocak bası satis tutarı*).

| Group of the Mine | | Royalty over pit-head sale price |
|-------------------|---|----------------------------------|
| 1. | Group I | 4% |
| 2. | Group II (a) | 4% |
| | Group II (b) | 2% |
| | Group II (b) if extracted ores are processed into a final product in the facilities of the license holder | 1% |
| 3. | Group III | 4% |
| 4. | Group IV (excluding gold, silver and platinum) | 2% |
| | Group IV (gold, silver and platinum) | 4% |
| | Group IV (c) if extracted ores are processed into a final product in the facilities of the license holder | 1% |
| 5. | Group V | 4% |
| 6. | Group VI | 4% |

The royalty will be levied by an addition of 30% for the mining activities conducted on the State owned lands. If the state-owned land in use has a forest status, then the royalty shall be paid directly to the Forestry General Directorate. For forest areas of more than 5 hectares, license-holders will pay the requisite forest fees but will not be obliged to pay the additional 30% royalty.

The Mining Legislation provides an advantage to the license holders of not paying 50% of the royalty if the extracted ores are processed in Turkey to provide an additional value to the Turkish economy. However, license holders of Group I mines are excluded from this advantage. The Amendment also brings a new incentive which provides that 50% of the royalty shall not be paid for the Group IV(c) mines processed into metals in Turkey. The provision however excludes gold, silver and platinum mines. Accordingly, gold may not benefit from this incentive even if it is processed into a metal in Turkey. However, in light of the above mentioned incentive which is applicable for all groups except Group I mines, gold mines qualifying for this incentive shall still benefit from this.

25% of the royalty deposited by the license holder to the Mining Department will be paid and credited to the provincial administration of the relevant city as the provincial administration's share, 25% will be provided to the Organization of Service to the Villages account for infrastructure investments and 50% will be credited to the account of the Treasury. The MENR may request the accounts of license holders to be approved by a chartered accountant in terms of state royalties.

A royalty amount of 10% of the projected production amount in the project report shall be deposited by the license holder for each year of non-production.

- d) Declaration: All written declarations on technical and financial matters and all reports issued by authorized companies under the Mining Legislation shall be deemed final and true. The license holders shall be held responsible for the accuracy of all of their declarations other than the technical matters. If a license holder fails to correct any error or causes any deficiency in declarations within two months upon being warned by the Mining Department, the security deposit shall be registered as income. If a license holder makes untrue or misleading statements (which are listed in the Mining Regulation), its security deposit will be forfeited and the security amount to be deposited again will be doubled. In the event that the license holder does not comply with such declaration obligation three times within three years, the security deposit will be forfeited and the license will be terminated. Occasions of false declaration and unjust benefit are provided under the Law, such as unpermitted production of mines, avoiding to declare production, use of expropriated land for other purposes. The technical supervisor is held responsible professionally for deficient declarations.
- e) Engineer for Record: The operation license holder must employ at least one mining engineer as a technical supervisor (*teknik nezaretcı*) for supervision of mine extraction activities. Project companies (i) employing at least 15 workers; and (ii) operating the mine with underground production method, are obliged to employ at least one permanent technical supervisor. In the event that mine production activities are carried out without supervision of an engineer, the security deposit will be forfeited and the mining activities will be ceased. Upon employment of an engineer and upon renewal of the security deposit, the mining activities may be resumed.

The documents displaying that a technical supervisor has been employed in the previous year shall be submitted to the Mining Department by April each year. Non compliance with this obligation shall result in the same consequences as false declaration, as explained above. The technical supervisor is obliged to keep records as provided under the Mining Legislation. In case of incompliance, this will be notified to the technical supervisor, and if repeated, will result in administrative fees to the license holder and will be considered as deficient declaration as explained above.

- f) **Inspection and Supervision:** The Mining Department has the authority to inspect and supervise all technical and financial aspects of the mining activities, utilization of mining rights and fulfillment of mining obligations. If, upon inspection, the Mining Department determines inaccurate or misleading declarations, the provisions of the Mining Law applicable to misleading and deficient declarations of license holders (as stated above), shall apply.
- g) **Application for Environmental Permits:** Pursuant to the Mining Regulation, the necessary permits shall be obtained in accordance with the relevant legislation for the areas on which mining activities are performed. Otherwise the security deposit will be forfeited and the production will be ceased.
- h) **Operation Permit:** For the apparent/ proven reserve areas with an exploration license, an operation permit will be granted, following the issuance of the necessary environmental permits. Operation permit can only be assigned or transferred by the transfer of the underlying operation license.

Different mines may be operated within one operation license area. Activities concerning each operation permit covered by an operation license shall be carried out separately. In other words, separate operation permits need to be obtained for different mines within the same area covered by the operation license. Operation license covers the area in which the mining activities will be conducted and gives the legal right to use the license area, whereas the operation permit gives the license holder the right to operate the mine.

The Mining Legislation does not regulate the duration of the operation permit. However in practice the duration of the operation permit is limited with the duration of the underlying operation license.

- i) **Commissioning to Operation:** The operation permit holder is obliged to commission the mine within one year upon the date of receipt of the operation permit. Failure to start operation within the one-year period or mine production of less than 10% of the annual production quantity indicated in the operation project, is subject to a penalty of 10% royalty on the projected production quantity for each year in which there is no operation. Further, licenses under which the relevant mine is not operated for more than three years within a period of five years, except for force majeure events and unexpected events, will be terminated and the license security thereof will be forfeited. In case the production made during such three years is less than 10% of the annual production quantity indicated in the operation project, then the security deposit shall also be forfeited and the license shall be terminated.

4. Temporary Suspension of the Mining Operations

Temporary suspension is a special type of force majeure under the Mining Law, and it

provides a right to the license holders to suspend mining activities due to force majeure events, without having their licenses cancelled. In cases of force majeure and unexpected events, the Mining Department is authorized to issue a decision of temporary suspension of the mining operations of the license, upon the application of the license holder. Force majeure events are described in the Mining Regulation as "*floods, fires, earthquakes, firedamp explosion, subsidence and landslide*". The events included herein are not limited in number, and other cases may also be considered as force majeure or unexpected events.

A temporary suspension shall commence on the date of the application of the license holder and may be issued for a maximum period of one year. The temporary suspension may be renewed upon the application of the license holder; there is no limit as to the number of renewals. However, operation shall commence within three months following the cease of the force majeure or unexpected event, or the end of the temporary suspension period.

Temporary suspension periods do not interfere with the period of the operation license, i.e. shall be included in the calculation of the license period. However, a temporary suspension of mining operations shall freeze other time limitations set forth under the Mining Law. For example, the Mining Law regulates that, in the event that a license is not operated for a period of three years, within five years, the security deposit shall be confiscated and the license shall be cancelled, except force majeure events and unexpected events.

5. Merging of License Areas

As per the Mining Regulation, adjacent licenses, in the same group, and at the same stage can be merged. The area resulting from the merger cannot be greater than the area boundary limit of which is determined in the Mining Law². However, should the license areas pose a unity; a merger application can be made by presenting a new operation project. Area limitation is not sought for in approved applications. The duration of the new license resulting from the merger is of the license with the shortest duration among those being merged and any restrictions and penalties incurred on separate licenses shall continue to be effective on the new license.

6. Transfer of Licenses

The mining license may be transferred to the qualified persons under Article 6 of the Mining Law only with the affirmative opinion of the Mining Department. Pursuant to Article 6 of the Mining Law, Turkish citizens and the companies established under Turkish laws for mining purposes are entitled to hold mining rights.

Neither the Mining Law nor the Mining Regulation sets forth any explanation as to what kind of legal objections that the Mining Department may raise for not approving the transfer of mining rights. In practice mining licenses may be transferred to the ones qualified under Article 6 of the Mining Law without any difficulty. The transferee becomes the holder of the mining license after the transfer of the license in question and assumes all obligations and rights granted by the Mining Legislation.

The transferee is obliged to deposit a new security for the license in question and a transfer fee equal to the amount of the annual license fee. The security deposit paid by the transferor will be returned to the transferor upon transfer.

² 2000 hectares for Group IV mine licenses.

7. Royalty Agreements

The royalty agreement is a kind of agreement which the mining license holder grants the right of operation of its mine to the operator based on its mining license for a certain period in exchange of a royalty payment. However, such agreement does not result in the legal transfer of the mining license. The royalty agreement evidences that the right of the operation of the subject matter mine has been granted to the operator for the term of the royalty agreement. The Mining Law does not require registration of the royalty agreement at the Mining Department. Accordingly, the royalty agreement shall operate to bind its parties contractually but shall not evidence third parties that the right of the operation of the subject matter mine has been granted to the operator for the term of the royalty agreement.

8. Termination, Abandonment of Licenses

An exploration or operation license may be terminated on grounds of incompliance with the obligations provided under the Mining Law, or the termination of the term of the subject mining license.

Upon termination, expiration or abandonment of an operation license, all assets will be transferred to the State; the license area will be automatically opened to new activities and the license will be tendered through public auctions.

Possible outcomes or liabilities arising out of abandoned or terminated licenses can be summarized as follows:

Financial Obligations: Financial obligations under the Mining Law include the license fees, the security deposit and the state royalty; and any other financial obligations arising from the nature of the mine, as the case may be. The unpaid financial obligations of terminated or abandoned licenses shall be fulfilled from the security deposit. If the security deposit is not sufficient for such obligations, then the Mining Department will collect the remaining financial obligation, as a debt under the Law No. 6183 from the last owner of the license.

Environmental Obligations: The license holder abandoning the license, or the holder of the terminated license, is liable to take all necessary environmental and safety measures while leaving the license area. The license holder shall take the measures and submit the necessary technical documents to the Mining Department within 6 months following the abandonment or termination. This period can be extended for an additional 3 months. In the event that the necessary measures are not taken, the measures shall be taken by the relevant Governorship, and the costs shall be reimbursed from the security deposit. In the event that the security deposit is not sufficient, the Governorship will collect the remaining financial obligation, as a debt under Law No. 6183 from the last owner of the license. Environmental obligations under the relevant legislation shall also be applicable.

Liabilities under General Principles: Under the general principles of Turkish Law, any real or legal person shall be liable to compensate damages arising out of its wrongful acts or negligence or noncompliance of statutory obligations. The general statute of limitation for torts is 1 year after the event of tort and person performing the tortious act is learned and a maximum period of 10 years starting from the date of tortious act. The general tort provisions are also applicable to the license holder, for the acts or negligence conducted during the period which the license was held.

The penalties applicable to the license holder in case of the license holder's failure to operate the mine properly or in the event license holder causes any error or deficiency in the operation of the mine, are listed in the Mining Legislation such as registering the security deposit as income and termination of the license. However, further legal remedies (i.e. filing a lawsuit against the license holder for special performance or compensation) would also be available to the relevant administration (i.e. the MENR).

9. Exclusivity of Turkish Courts

Since minerals are subject to the exclusive ownership and disposition of the State, any matter relating to granting or transfer of any kind of mining right is exclusively governed by the Mining Legislation.

Any matter including granting or transfer of a mining right and operation of mines are within the exclusive jurisdiction of Turkish courts. Since exemption to the jurisdiction of courts should be regulated clearly and not through analogy, we believe the jurisdiction of Turkish courts over the mining rights are exclusive. Nevertheless, contractual obligations of the parties not relating to mining rights may be freely determined by the parties in accordance with the principle of freedom of contract.

III. ANALYSIS OF THE LICENSES

| LICENSES OWNED BY HASAN UCAR | | | | | | | | |
|------------------------------|--------------------|----------------|--|----------------|-------------------|--|--------------------|-------------|
| License No | Type of License | Issuance Date | Expiration Date | Region | License Area (ha) | Duties | Required Documents | Restriction |
| <u>200710476</u> | Operation Group IV | 11 August 2008 | Issued for a term of 10 years and will expire on 11 August 2018. | Hakkari/Merkez | 159.58 | Duties for 2009 and 2010 have not been paid. | ✓ | None |

| LICENSES OWNED BY ISMET OLMEZ | | | | | | | | | |
|-------------------------------|------------------|----------------------|-----------------|--|-----------------|-------------------|--------|--------------------|-------------|
| License No | | Type of License | Issuance Date | Expiration Date | Region | License Area (ha) | Duties | Required Documents | Restriction |
| 1. | <u>200610909</u> | Exploration Group IV | 2 November 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 2 November 2011. | Hakkari/Cukurca | 1,120.19 | √ | √ | None |
| 2. | <u>200610908</u> | Exploration Group IV | 2 November 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 2 November 2011. | Hakkari/Cukurca | 1,012.36 | √ | √ | None |
| 3. | <u>200610912</u> | Exploration Group IV | 2 November 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 2 November 2011. | Hakkari/Cukurca | 1,570.11 | √ | √ | None |
| 4. | <u>200610911</u> | Exploration Group IV | 2 November 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 2 November 2011. | Hakkari/Cukurca | 1,659.19 | √ | √ | None |

| LICENSES OWNED BY ISMET OLMEZ | | | | | | | | | |
|-------------------------------|------------------|----------------------|-----------------|--|-----------------|-------------------|----------------------------------|--------------------|-------------|
| | License No | Type of License | Issuance Date | Expiration Date | Region | License Area (ha) | Duties | Required Documents | Restriction |
| 5. | <u>200610910</u> | Exploration Group IV | 2 November 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 2 November 2011. | Hakkari/Cukurca | 1,002.50 | √ | √ | None |
| 6. | <u>200610793</u> | Exploration Group IV | 30 October 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 30 October 2011. | Hakkari/Cukurca | 1,303.27 | Duty for 2007 has not been paid. | √ | None |

| LICENSES OWNED BY GIYASETTIN SEYITOGLU | | | | | | | | | |
|--|------------------|----------------------|------------------|---|----------------|-------------------|--------|--------------------|-------------|
| License No | | Type of License | Issuance Date | Expiration Date | Region | License Area (ha) | Duties | Required Documents | Restriction |
| 1. | <u>20066459</u> | Exploration Group IV | 29 June 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 29 June 2011. | Hakkari/Merkez | 1,596.51 | √ | √ | None |
| 2. | <u>20066460</u> | Exploration Group IV | 29 June 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 29 June 2011. | Hakkari/Merkez | 1,564.57 | √ | √ | None |
| 3. | <u>200612557</u> | Exploration Group IV | 28 December 2006 | Issued for a term of 3 years, however the company has applied for extension of two years and the license will expire on 28 December 2011. | Hakkari/Merkez | 1,005.06 | √ | √ | None |

List of the Reviewed Documents Provided by RCR Sevitoglu

1. Operation License No. 200710476, dated 11 August 2008 issued for the area of 159.58 hectares located in Hakkari, Merkez.
2. Exploration License No. 200610909, dated 2 November 2006 issued for the area of 1,120.19 hectares located in Hakkari, Cukurca.
3. Exploration License No. 200610908, dated 2 November 2006 issued for the area of 1,012.36 hectares located in Hakkari, Cukurca.
4. Exploration License No. 200610912, dated 2 November 2006 issued for the area of 1,570.11 hectares located in Hakkari, Cukurca.
5. Exploration License No. 200610911, dated 2 November 2006 issued for the area of 1,659.19 hectares located in Hakkari, Cukurca.
6. Exploration License No. 200610910, dated 2 November 2006 issued for the area of 1,002.50 hectares located in Hakkari, Cukurca.
7. Exploration License No. 200610793, dated 30 October 2006 issued for the area of 1,303.27 hectares located in Hakkari, Cukurca.
8. Exploration License No. 20066459, dated 29 June 2006 issued for the area of 1,596.51 hectares located in Hakkari, Merkez.
9. Exploration License No. 20066460, dated 29 June 2006 issued for the area of 1,564.57 hectares located in Hakkari, Merkez.
10. Exploration License No. 200612557, dated 28 December 2006 issued for the area of 1,005.06 hectares located in Hakkari, Merkez.



APPENDIX 4:

Contractual agreements for The Pentagon and Licence 26

AGREEMENT

Between

RCR VE SEYITOGLU MADENCİLİK İTHALAT İHRACAT
TİCARET VE SANAYİ ANONİM ŞİRKETİ Registration
number 272046 duly authorized and represented by
Douglas James Taylor, Executive Director and Kadri
Seyitoglu, Director hereinafter referred to as RCR/S

And

HASAN UCAR
Identification number ...48475073716
hereinafter referred to as HU

And

MEZIRGO MINING UNDERTAKING TRANS.TRA. IND. LTD.
CO's
Registration number ...1387....., duly authorized
and represented by Hasan UCAR, Murat UCAR, Necip
UCAR and Omer Çiftci, herein after referred to as MM

Collectively referred to as the "Parties"

SOZLESME

Arasında

272046 tescil numarası altında kayıtlı, tam Yetkili Müdür
Douglas James Taylor ve Yetkili Kadri Seyitoğlu
tarafından temsil edilen ve işbu noktadan sonra RCR/S
olarak anılacak olan
**RCR VE SEYITOGLU MADENCİLİK İTHALAT İHRACAT
TİCARET VE SANAYİ ANONİM ŞİRKETİ**

Ve

...48475073716. TC KİMLİK No ile kayıtlı ve işbu
noktadan sonra HU olarak anılacak olan
HASAN UCAR

Ve

...1387..... tescil numarası altında kayıtlı, Hasan UCAR,
Murat UCAR, Necip UCAR ve Ömer Çiftci tarafından
temsil edilen ve işbu noktadan sonra MM olarak anılacak
olan
**MEZIRGO MADENCİLİK TAAHHÜT SEVKİYAT TİC. SAN. LTD
ŞTİ**

Müstereken "Taraflar" olarak anılacaktır

1) Parties

HU has a Mining License number 200710476 covering 159,58 Ha between RCR/S Prospecting Licenses in the Hakkari district (Annexure 1 refers) and surrounding the Mining License held by BER GRUP MINING IND. AND TRADE CO (hereinafter referred to as BM) (Annexure 3 refers). HU has been involved in small scale mining in the past.

MM has a Lease Agreement and Deed of Consent with BM for exploration and possible future mining on an area within coordinates as presented in Annexure 2 and 4 and a map of this area as presented in Annexure 3. MM has been involved in small scale mining on its own and with other parties in the past.

MM also have a verbal Agreement with BM to explore and possibly mine the area not covered in this Agreement in the Northern part of the Mining License held by BM as indicated in the attached plan (Annexure 3 refers). It is most important that the current protocol Agreement between MM and BM be replaced with a revised Agreement between them clearly stating that MM have the right to conduct exploration and possible mining on the Northern portion of the BM ML for at least 10 years from the date of signing of this Agreement.

BM has been involved in small scale mining in the Hakkari region for a number of years.

RCR/S is a Turkish based Company with Prospecting Licenses surrounding the HU Mining License. RCR/S have the requisite experience, expertise and resources to optimally explore, evaluate and develop this area for the mutual benefit of all parties.

RCR/S and HU have agreed to cooperate and evaluate the potential of Mining License no 200710476.

1) Taraflar

HU Hakkari ilinde RCR/S'ye ait Arama Ruhsatları arasında 159,58 Hektar alanı kapsayan 200710476 numaralı bir Maden Arama Ruhsatına sahiptir (Ek 1 içerisinde işaret edilmektedir) ve geçmişte BER GRUP MADENCİLİK SAN. VE TİC. ŞTİ ne (işbu noktadan sonra BM olarak anılacaktır) ait İşletme Ruhsatının (Ek 3 de gösterilmiştir) çevresinde küçük ölçekli madencilik faaliyetinde bulunmuştur.

MM, BM ile koordinatları Ek 2, Ek 4 ve Ek 3 deki haritada gösterilen alanda maden arama ve gelecekte olası madencilik yapmak için bir Kira ve Rödövans Sözleşmesi akdetmiştir. MM geçmişte kendi başına ve diğer taraflar ile küçük ölçekli madencilik faaliyetlerinde bulunmuştur.

MM bu anlaşmanın kapsamadığı ekdeki (Ek 3) planda gösterilen BM ye ait işletme ruhsatının kuzey bölümündeki alanda arama ve belkide madencilik yapmak için BM ile sözlü bir anlaşma yapmıştır. MM ve BM arasında yürürlükte olan bu protokol anlaşmasının yeniden düzenlenecek bir anlaşımayla yenilenmesi çok önemlidir. Bu yeni anlaşma içerisinde MM nin bu yeni anlaşmanın imzalanmasını takip eden 10 yıllık sürede bu BM ye ait işletme ruhsatının kuzey bölümündeki alanda arama ve belkide madencilik yapma hakkına sahip olduğu açıkça belirtilmelidir.

BM birkaç yıldır Hakkari ilinde ufak ölçekli madencilik faaliyetlerinde bulunmaktadır.

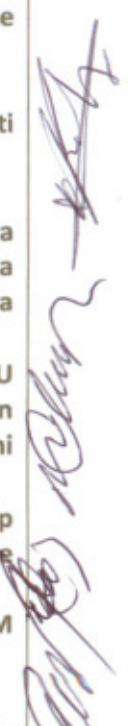
RCR/S, HU nun işletme Ruhsatını çevreleyen Maden Arama Ruhsatlarına sahip bir Türk Şirketidir. RCR/S bütün tarafların çıkarına olacak şekilde bu bölgede optimal olarak maden tetect, değerlendirme ve geliştirme açısından yeterli deneyime, uzmanlığa ve kaynaklara sahiptir.

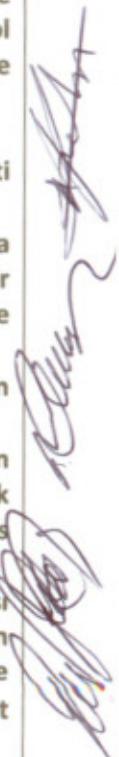
RCR/S ve HU 200710476 sayılı İşletme Ruhsatının potansiyelini değerlendirme konusunda işbirliği yapmak için mutabakata varmıştır.



| | |
|---|--|
| <p>2) RCR/S, HU and MM have agreed to cooperate and evaluate the potential of the Lease Agreement on an Exploitation /Operating License with BM for a period of 10 years on the following terms and conditions;</p> <ul style="list-style-type: none"> a) RCR/S will pay MM/HU US\$35 000 by 12 July 2010, subject to conclusion of this Agreement. b) RCR/S will source all funding to conduct Exploration and evaluate the Project and subject to a positive Bankable Feasibility Study, RCR/S will source all funding for the establishment of a mine either via rental or purchase of equipment that will be required. c) RCR/S will manage the Exploration, requisite studies, mine establishment, mine production and possibly the marketing. The parties will use their best endeavours to reach an agreement with BM on the marketing of the product when appropriate. d) Subject to a positive Exploration results, RCR/S will pay MM/HU US\$50 000 5 months after conclusion of this Agreement and a final payment of US\$ 50 000 365 days after conclusion of this Agreement, subject to RCR/S having the right to withdraw from the project at any time at its sole discretion. In the unlikely event of RCR/S deciding to exit from this project it will provide MM/HU with all information on the project including exploration results and requisite studies amongst others cancel the current Agreement and transfer HU mining license back to him at no cost. For clarity should RCR/S elect to exit say for example after 5 months it will not pay MM /HU the last US\$50 000 and RCR will not be able to claim back the US\$35 000 and US\$50 000 already paid to MM. e) Subject to clause 5b) in the Lease Agreement between MM and BM | <p>2) RCR/S, HU ve MM BM'in bir İşletme Ruhsatı üzerindeki Kira Sözleşmesinin potansiyelini 10 yıl boyunca değerlendirmek ve işbirliği yapmak için aşağıdaki şartlarda mutabakata varmıştır.</p> <ul style="list-style-type: none"> a) RCR/S, işbu Anlaşmanın akdedilmesine bağlı olarak 12 Temmuz 2010 tarihi itibarı ile MM/HU'ya 35 000 ABD Doları ödeyecektir. b) RCR/S maden arama çalışmaları ve Projenin değerlendirilmesi için gerekli bütün maddi kaynağı bulacak ve Kredilendirilebilir Fizibilite Çalışmasının olumlu sonuçlanması durumunda gerekli ekipmanın kiralanması veya satın alınması yoluyla madenin kurulması için gerekli bütün maddi kaynağı bulacaktır. c) RCR/S, maden arama işlemlerini, gerekli diğer çalışmaları, madenin kurulmasını, madende gerçekleştirilecek üretimi ve olası pazarlama çalışmalarını yönetecektir. Taraflar, uygun olduğunda ürün pazarlaması konusunda BM ile anlaşma sağlamak için ellerinden geleni yapacaktır. d) Maden Arama sonuçlarının olumlu olması şartıyla, RCR işbu Anlaşmanın akdedilmesini müteakip beş ay içerisinde MM/HU'ya 50 000 ABD Doları ödeyecektir ve işbu Anlaşmanın akdedilmesini müteakip 365 gün sonra nihai ödeme olarak 50 000 ABD Doları daha ödeyecektir ancak RCR/S tamamen kendi takdirine bağlı olarak istediği herhangi bir zamanda projeden çekilme hakkını saklı tutmaktadır. RCR/S'in pek ihtimal dahilinde olmasa da bu projeden çekilmeye karar vermesi durumunda, RCR/S diğerleri ile birlikte maden arama sonuçları ve gerekli diğer çalışmalar da dahil projelarındaki bütün bilgileri ücretsiz olarak MM/HU'ya verecektir. Böylece bu anlaşma iptal edilecek ve İşletme Ruhsatı HU ya bedelsiz geri verilecektir. Daha açık olması açısından, eğer RCR/S örneğin 5 ay sonra projeden çıkmaya karar verirse bu durumda MM/HU'ya sadece 50 000 ABD Dolarını ödemeyecektir fakat daha önce MM ye ödediği 35 000 ABD Doları ve 50 000 ABD Dolarını geri talep etmeyecektir. e) MM ile BM arasındaki kira sözleşmesinin (Ek 2) 5b maddesine bağlı olarak, RCR/S cevher |
|---|--|

| | |
|--|---|
| <p>(annexure 2 refers), RCR/S will retain 80% of the ore production and MM/HU will receive 20% of the ore production at no cost. RCR/S will have the option of marketing MM/HU share of the production at market related prices. However MM/HU, will have the option of seeking alternative offers for the sale of its share of the production, subject to RCR/S having a right of first refusal to match a bona fida cash offer from another party.</p> | <p>üretiminin % 80 oranını elinde tutarken MM/HU herhangi bir ücret ödededen cevher üretiminin % 20 oranını alacaktır. RCR/S, gerçekleştirilen üretimin MM/HU'ya ayrılan payının piyasada geçerli fiyatlar üzerinden pazarlanması dair bir opsiyona sahiptir. Ancak, RCR/S'nin diğer bir şahıs tarafından önerilen iyi niyetli nakit teklifi karşılamak açısından bir rüchan hakkına sahip olması kaydı ile MM/HU üretimin kendi payının satışı ile ilgili olarak alternatif teklifler arama opsiyonuna sahip olacaktır.</p> |
| <p>MM/HU %20 share of the ore production will be based on the weigh bridge tonnages at İsmet Ölmez stockpile area.</p> | <p>MM/HU'nun cevher üretimindeki %20 hissesi için İsmet Ölmez'in stok alanındaki kantar tonajı baz alınacaktır.</p> |
| <p>f) It is expected that the detailed Exploration program and the feasibility study could take 12 months to 24 months to complete. However, RCR/S will, subject to positive exploration results and market conditions, evaluate the possibility of fast tracking small scale mining. RCR/S will keep MM/HU informed on the progress of the Exploration/Studies on a quarterly basis. An indicative schedule for exploration and requisite studies is attached (Annexure 5 refers). Note must be taken that securing requisite Governmental approvals from department of Forestry, Mining department amongst others could result in delays out of the control of RCR/S. RCR/S undertakes to work on the project every year subject to; clause 2d), clause 5) and poor market conditions negatively impacting on the price of zinc in which case it could be to the benefit of all parties to delay possible production up until market conditions improve.</p> | <p>f) Ayrıntılı maden arama programı ve fizibilite çalışmasının tamamlanmasının 12 ay ila 18 aylık bir süre gerektireceği tahmin edilmektedir. Bununla birlikte RCR/S pozitif arama sonuçlarına ve pazar şartlarına bağlı olarak küçük çaplı madencilik faaliyetine başlamayı hızlandırmaya konusunu değerlendirecektir. RCR/S maden arama faaliyetlerinin ve diğer çalışmaların ilerleyişi hakkında MM/HU'yu üç aylık dönemlerde bilgilendirecektir. Maden arama ve diğer çalışmaların takribi planı ekde verilmiştir (Ek 5'e bakınız). Gerekli orman izinlerinin ve MİGEM ofislerinden gereken izinlerin alınması sırasında RCR/S'in kontrolü dışında olabilecek gecikmeler not edilmelidir. RCR/S madde 2d ve madde 5'e bağlı olarak projede her yıl çalışmayı taahüt etmektedir ancak kötü Pazar şartlarının Çinko fiyatını negatif etkilemesi durumunda pazar şartları iyileşene kadar olası üretimi ertelemek bütün tarafların faydasına olacaktır.</p> |
| <p>g) MM/HU will provide RCR/S with its input and support as and when required. In this regard the parties will cooperate with RCR/S in endeavouring to secure BM interest in the area when appropriate.</p> | <p>g) MM/HU gerekli olan şekilde ve gereklili olduğu durumlarda RCR/S'ye katkı ve destek sağlayacaktır. Bununla ilgili olarak taraflar uygun olduğunda BM'nin bu alandaki haklarını da almak için RCR/S ile birlikte hareket edeceklerdir.</p> |
| <p>h) RCR/S will abide by the terms and conditions of the Lease Agreement entered into between MM and BM</p> | <p>h) RCR/S MM ile BM arasında akdedilen Kira Sözleşmesinin kayıt ve şartlarına riayet edecektir.</p> |
| <p>i) RCR/S will cover costs pertaining to worker wages, premiums of social security</p> | <p>i) RCR/S işe aldığı işçilerin maaşları, sosyal güvenlik sigortalarının prim ödemeleri,</p> |

| | |
|---|--|
| <p>insurance, taxes, severance payments and accident expenses of personnel appointed by RCR/S.</p> | <p>vergiler, kıdem tazminatları ve kaza giderleri ve benzeri masrafları karşılayacaktır.</p> |
| <p>j) RCR/S will, with the full support of MM/HU and BM (when required), obtain the necessary legal permissions from the Forestry Operation Directorate, General Directorate of Mining Works, and Provincial Directorate of Environment when required.</p> | <p>j) RCR/S MM/HU ve BM'nin tam desteğiyle (gerekli olan zamanlarda) Orman İşletme Müdürlüğü, Maden İşleri Genel Müdürlüğü ve İl Çevre Müdürlüğünden gerekli olan yasal izinleri alacaktır.</p> |
| <p>k) RCR/S will make the payment of the States right to be paid in accordance with the provisions of the Agreement signed with BM and shall not make shipment without getting the official freight receipt.</p> | <p>k) RCR/S BM ile akdedilen sözleşmenin hükümleri doğrultusunda ödenecek olan Devlet hakkına ilişkin ödemeyi gerçekleştirecektir ve resmi navlun makbuzunu almadan sevkıyat gerçekleştirmeyecektir.</p> |
| <p>l) RCR/S will not be responsible for possible past environmental damages/liabilities but will ensure strict adherence to Environmental legislation and Environmental Impact Assessments in possible future operations that could occur. Should any damages be caused to the Dag Alti village due to negligent mining activities by RCR/S, it will pay Mezirgo the costs incurred for any such damage.</p> | <p>l) RCR/S çevrede geçmişte meydana gelmiş olası zararlardan/ yükümlülüklerden dolayı sorumlu olmayacağından ancak gelecekteki operasyonlar esnasında Çevre mevzuatına ve Çevre Etki Değerlendirme raporlarına kesinlikle riayet edilmesini sağlayacaktır. Madencilik aktiviteleri sırasında ihmäl sonucu Dag Alti köyünde meydana gelebilecek zararların masrafları Mezirgo'ya RCR/S tarafından ödenecektir.</p> |
| <p>m) RCR/S will place a priority on Safety. In the event of work related accidents it shall fulfil its obligations.</p> | <p>m) RCR/S Güvenlik konusuna öncelik verecektir. İş ile ilgili kazaların meydana gelmesi durumunda, yükümlülüklerini yerine getirecektir.</p> |
| <p>n) MM/HU warrants that;</p> <ul style="list-style-type: none"> • They are in good standing and not subject to any pending insolvency proceedings or otherwise in a state of insolvency. • HU will secure the transfer of Mining License no 200710476 to RCR/S when requested to do so by RCR/S • MM has the right to involve RCR/S in the project where it has a Lease Agreement with BM • HU Mining License and MM Lease Agreement with BM <ul style="list-style-type: none"> ◦ are valid and in force ◦ are not, and will in future not be, encumbered by any pledge, lien, | <p>n) MM/HU aşağıda belirtilen hususlarda garanti vermektedir;</p> <ul style="list-style-type: none"> • İyi durumdadırlar ve herhangi bir karara bağlanmamış tasfiye işlemine tabi ya da diğer şekilde bir tasfiye durumunda değildir. • RCR/S 'den talep gelmesi üzerine HU sahip olduğu 200710476 nolu Maden işletme Ruhsatının RCR/S'e devrini yapacaktır. • MM BM ile bir Kira Anlaşmasına sahip olduğu yerde RCR/S'i projeye dahil etme hakkına sahiptir • HU Maden işletme Ruhsatı ile MM'in BM ile akdettiği Kira Anlaşması; <ul style="list-style-type: none"> ◦ geçerlidir ve yürürlüktedir ◦ şu anda hiçbir şekilde rehin, haciz,  |

| | |
|--|---|
| <p>mortgage, right or charge whatsoever</p> <ul style="list-style-type: none"> ○ are not subject to any liabilities ○ All costs and other payments due in respect of the Mineral Development Licenses have been paid in full and are not in arrears ○ MM/HU have at all times complied with all conditions and obligations pertaining to the Mining License and obligations regarding its Lease Agreement with BM <p>Should there in any case be any liabilities due to MM/HU these will be deducted from the second payment of US \$ 50 000 subject at worst that this amount does not exceed US \$10 000.</p> <ul style="list-style-type: none"> • That they have a verbal Agreement with MB to explore and possibly mine on the Northern part of the mining license held by BM (i.e. north of the ridge of mountains as depicted in Annexure 3.) MM and HU will arrange to sign a revised Protocol Agreement with BM to secure this right as soon as possible but no later than the end of October 2010 and provide the original Agreement thereof to RCR/S. This will then replace the existing Protocol Agreement between MM and BM. use their respective best endeavours to secure this Agreement with BM in writing <p>o) RCR/S warrants that;</p> <ul style="list-style-type: none"> • It is in good standing and not subject to any pending insolvency proceedings or otherwise in a state of insolvency • It will perform all its obligations in terms of this Agreement • Subject to positive exploration results and a positive feasibility study, it will establish a mine on the property (ies). • RCR/S will abide by all Mining, Environmental, Forestry and any other relevant Laws in conducting its exploration and possible future mining activities | <p>ipotek, hak veya yük altında değildir ve gelecekte de olmayacağıdır</p> <ul style="list-style-type: none"> ○ Hiçbir yükümlülüğe tabi değildir ○ Maden Geliştirme Ruhsatları açısından vadesi gelmiş bütün masraflar ve diğer ödemeler tamamen ödenmiştir ve bakiye borç bulunmamaktadır ○ MM /HU sahip olduğu işletme Ruhsatına ait bütün koşullar ve yükümlülükler ve BM ile akdedilmiş Kira Sözleşmesinin yükümlülüklerine her zaman uymuştur . <p>MM/HU 'dan kaynaklanan herhangi bir borç yükümlülüğü, en kötü ihtimalle 10 000 ABD Dolarını geçmemek şartıyla bu borçlar 2.ödeme olan 50 000 ABD Dolarından düşülecektir.</p> <ul style="list-style-type: none"> • MM ve HU ekdeki (Ek 3) planda gösterilen BM ye ait işletme ruhsatının kuzey bölümündeki alanda (dağların en tepe noktasının kuzeyi) arama ve belkide madencilik yapmak için BM ile sözlu bir anlaşma yapmıştır. MM ve HU bu haklarını garantiye almak için Ekim 2010 sonundan geç olmamak kaydıyla en kısa zamanda BM ile aralarında yürürlükte olan bu protokol anlaşmasını yeniden düzenlenecek bir anlaşımeye yenileyecektir ve bu yeni anlaşmanın orijinalini RCR/S ye verecektir. Bu yeni anlaşma BM ile yazılı yapılacak, MM ile BM arasında yürürlükte olan protokol anlaşmasının yerine geçecek ve böylece onların haklarını garantiye alacaktır. o) RCR/S aşağıda belirtilen hususlarda garanti vermektedir; • İtibar sahibidir ve herhangi bir karara bağlanmamış tasfiye işlemine tabi değildir ya da diğer şekilde herhangi bir tasfiye durumunda değildir • İşbu Anlaşma açısından bütün yükümlülüklerini yerine getirecektir • Maden arama ve fizibilite çalışmalarının olumlu sonuçlanmasına bağlı olarak mülk(ler) üzerinde bir maden tesis edecektir • RCR/S maden arama ve gelecekteki olası madencilik faaliyetlerini gerçekleştirirken bütün Madencilik, Çevre, Ormancılık ve ilgili diğer bütün kanunlara riayet edecektir  |
|--|---|

| | |
|---|---|
| <p>3) Duration The duration of this Agreement is for 10 years for the MM Lease Agreement from the date of conclusion of this Agreement. The duration of the Agreement on HU Mining License will be up until the ore on the License has been depleted by mining.</p> | <p>3) Süre İşbu Anlaşmanın süresi işbu Anlaşmanın akdedilme tarihinden itibaren MM Kira Sözleşmesi için 10 yıldır. HU İşletme Ruhsatı üzerine Anlaşmanın süresi Ruhsat alanında bulunacak cevher madencilik işlemleri ile tükenene kadar devam edecektir.</p> |
| <p>4) Dispute Resolution and Legal Jurisdiction In the event of disputes occurring in future, both parties will first use their best endeavours to resolve such disputes in an amicable manner. Should this not be successful the parties will revert to Hakkari court.</p> | <p>4) Anlaşmazlıkların Çözümü ve Kanuni Yargı Yetkisi Gelecekte anlaşmazlıkların ortaya çıkması durumunda taraflar öncelikli olarak söz konusu ihtilafları dostluk çerçevesinde çözüme ulaştırmak amacıyla ellişerinden gelen çabayı sarf edecektir. Bu çabaların başarılı olmaması durumunda, taraflar ihtilafi Hakkari mahkemelerine sunacaktır.</p> |
| <p>5) Force Majeure</p> <ul style="list-style-type: none"> • In the event of any act of God ,war, warlike operation, rebellion, riot, labour action, civil war ,operation disaster or (without regard to foregoing enumeration) of any like circumstances arising or action taken beyond or outside the reasonable control of the Parties hereto preventing them or any of them from the performance of any obligation hereunder (any such event hereinafter called "force majeure") then the party affected by such force majeure shall be of its obligation hereunder during the period that such force majeure continues but only to the extent so prevented and shall not be liable for any delay or failure in the performance of any obligations hereunder or loss or damage which the party may suffer due to or resulting from the force majeure ,provided always that a written notice shall be promptly given to the other party of any such inability by the affected party. | <p>5) Mücbir Sebep</p> <ul style="list-style-type: none"> • Herhangi bir Doğal Afetin, savaşın, savaş benzeri operasyonun, isyanın, ayaklanmanın, işçi grevinin, iç savaşın, iş kazasının veya (yukarıda sayılanlara bakılmaksızın) benzeri herhangi bir durumun işbu Anlaşmanın taraflarının makul kontrolü dışında ortaya çıkması ve bu durumun söz konusu mücbir sebep devam ettiği sürece tarafların işbu sözleşme kapsamı altındaki yükümlülüklerini yerine getirmesini engellediği durumlarda (bu gibi olaylar işbu noktadan sonra "mücbir sebep" olarak anılacaktır), söz konusu mücbir sebep durumundan etkilenen taraf söz konusu mücbir sebep devam ettiği sürece işbu sözleşme altındaki yükümlülüklerinden sadece mücbir sebep tarafından engellendiği ölçüde muaf sayılacaktır ve işbu sözleşme kapsamı altındaki yükümlülüklerinin yerine getirilmesindeki gecikmelerden veya yükümlülüklerini yerine getirememekten ya da ilgili tarafın mücbir sebep nedeni ile veya mücbir sebepten dolayı maruz kalabileceği zarar ve ziyanlardan dolayı sorumlu olmayacağından. Mücbir sebepten etkilenen taraf diğer tarafa söz konusu durum ile ilgili olarak derhal bir yazılı tebliğatta bulunacaktır. |
| <ul style="list-style-type: none"> • Parties invoking force majeure shall upon termination of such force majeure give prompt written notice thereof to the other parties. <p>6) This Agreement is Confidential between the Parties.</p> | <ul style="list-style-type: none"> • Mücbir sebebe maruz kalan taraflar bahsi geçen mücbir sebep durumunun sona ermesi üzerine derhal diğer taraflara konuya ilişkin yazılı tebliğatta bulunacaktır. <p>6) İşbu Anlaşma taraflar arasında gizlidir</p> |

- | | |
|---|--|
| <p>7) Should there be a need to conclude any additional Agreements in future relating to this Agreement, the parties will co operate and conclude such Agreements within one month of the need being identified.</p> <p>8) This Agreement is legally binding on RCR/S, HU and MM.</p> <p>9) Should either party be in breach of this Agreement the other party will be entitled cancel the Agreement subject to clause 4).</p> <p>10) Should there be a difference in interpretation between the English and Turkish versions of this Agreement the English version will prevail.</p> <p>11) RCR/S, MM and HU agree that this Agreement supersedes the previous Agreement concluded in July 2010.</p> | <p>7) Gelecekte İşbu Anlaşma ile ilgili olarak herhangi ek Anlaşmaların akdedilmesinin gerekliliği durumunda, taraflar söz konusu ihtiyacın belirlenmesini müteakip bir ay içerisinde söz konusu Anlaşmaların akdedilmesi için işbirliği yapacaktır.</p> <p>8) İşbu Anlaşma RCR/S, HU ve MM üzerinde hukuki olarak bağlayıcı etkiye sahiptir.</p> <p>9) Eger taraflardan herhangi biri bu anlaşmanın maddelerine aykırı bir davranışda bulunursa diğer taraf Madde 4'e bağlı olarak bu anlaşmayı iptal edebilir.</p> <p>10) Bu anlaşmanın İngilizce ve Türkçe çevirisinde arasında anlam ve tefsir açısından herhangi bir farklılık bulunması durumunda anlaşmanın İngilizce kısmındaki anlamı doğru kabul edilecektir.</p> <p>11) RCR/S, MM ve HU bu anlaşmanın Temmuz 2010 da aralarında imzladıkları önceki anlaşmanın yerine geçeceğini kabul ederler.</p> |
|---|--|

This is done and signed at HAKKARI on this
9TH day of JULY 2010

On behalf of RCR/S

Douglas James Charles Taylor

Kadri Seyitoglu

On behalf of MM

Hasan UCAR

Murat UCAR

Ömer ÇİFTÇİ

Necip UCAR

On behalf of HU

Hasan UCAR

İşbu anlaşma TEMMUZ Ayının DOĞUZ Gününde
2010 'de imzalanmıştır

RCR/S Adına

Douglas James Charles Taylor

Kadri Seyitoglu

MM Adına

Hasan UCAR

Murat UCAR

Ömer ÇİFTÇİ

Necip UCAR

HU adına

Hasan UCAR



T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MÄDEN İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI

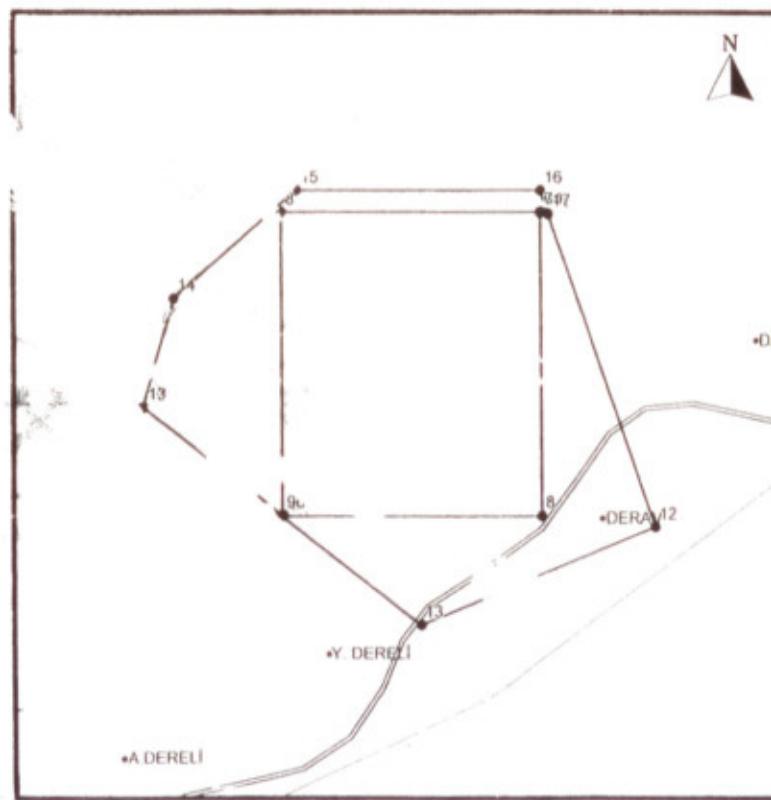


İL : HAKKARI
İLÇESİ : MERKEZ
KÖYÜ : UZUMCU
RUHSAT NUMARASI : 200710476
RUHSAT GRUBU : IV. GRUP
YÖRÜRLÜĞE GİRİŞ TARİHİ : 11.08.2008
RUHSATIN BITİM TARİHİ : 11.08.2018
ERİŞİM NUMARASI : 3144280
RUHSAT ALANI : 159,58 Hektar
RUHSAT SAHİFASI : İşletme
RUHSAT SAHİBİ : HASAN UÇAR
T.C. KİMLİK NO : 48475073716
VERGİ DAİRE VE NO : Hakkari V.D. 8840609364
ADRES : UZUMCU KÖYÜ HAKKARI

PAFTALAR : n51a1,m51d4,n51a1,m51d4

| P.No | Q.No | Y | X | P.No | S.No | Y | X | P.No | S.No | Y | X | |
|------|------|--------|---------|------|------|----|--------|---------|------|---|----|--------|
| 1 | 1 | 371932 | 4150303 | ✓ | 1 | 11 | 373244 | 4151689 | ✓ | 2 | 5 | 373205 |
| 1 | 2 | 371932 | 4150300 | ✓ | 1 | 12 | 373755 | 4150250 | ✓ | 2 | 6 | 373202 |
| 1 | 3 | 371935 | 4150300 | ✓ | 1 | 13 | 372605 | 4149800 | ✓ | 2 | 7 | 373202 |
| 1 | 4 | 371935 | 4150300 | ✓ | 1 | 14 | 371259 | 4150796 | ✓ | 2 | 8 | 371932 |
| 1 | 5 | 371937 | 4150300 | ✓ | 1 | 15 | 371259 | 4150798 | ✓ | 2 | 9 | 371932 |
| 3 | 6 | 371936 | 4150300 | ✓ | 1 | 16 | 371932 | 4150305 | ✓ | 2 | 10 | 371259 |
| 1 | 7 | 371937 | 4150300 | ✓ | 2 | 1 | 373244 | 4151689 | ✓ | 2 | 11 | 371259 |
| 1 | 8 | 373205 | 4150300 | ✓ | 2 | 2 | 373207 | 4151697 | ✓ | 2 | 12 | 371257 |
| 1 | 9 | 373205 | 4151694 | ✓ | 2 | 3 | 373205 | 4151694 | ✓ | 2 | 13 | 371255 |
| 1 | 10 | 373207 | 4151697 | ✓ | 2 | 4 | 373205 | 4151697 | ✓ | 2 | 14 | 371405 |

ENERJİ VE TABİİ KAYNAKLAR
BAKANI
Hayri ÖGÜT
Daire Başkanı



BUSINESS PROTOCOL**1-PARTIES**

This protocol herein has been concluded between BER GRUP MINING IND. AND TRADE CO. (shall be referred to as "Company" in short) and MEZIRGO MINING UNDERTAKING TRANSPORTATION INDUSTRY AND TRADE LTD.CO. (shall be referred to as "Operator" in short) HAKKARİ.

2. SUBJECT OF PROTOCOL

It is the work of carrying out the activities of exploration and mine hoisting in the private mining site with the operating license of IR 73005 and the access number of 30774984 located within the borders of Üzümcü Village of Hakkari, along the hillside dividing the two valleys (the one where the current mines exist and the one on the north east) and on the east part of the hillside with the coordinates given below:

COORDINATES TABLE

| | | |
|---|-----------|-----------|
| 1 | Y-0373038 | X-4151108 |
| 2 | Y-0373009 | X-4151107 |
| 3 | Y-0372965 | X-4151106 |
| 4 | Y-0372492 | X-4151009 |
| 5 | Y-0372543 | X-4151012 |
| 6 | Y-372596 | X-4151029 |

3. RIGHTS AND LIABILITIES OF OPERATOR

3a- The Operator shall guarantee to carry out the mining activities in the private area determined on the mining site with the operating license of IR 73005 and the access number of 30774984 within the border of given coordinates and not to violate the borders. Otherwise, the contract shall be annulled and the action of illegal mine production shall be processed.

3b- The Operator shall act and carry out all kinds of works to be performed on the authorized area in accordance with the related laws and mining regulations.

3c- The Operator shall not reflect the third party-related problems to the Company.

3d- The Operator shall cover the costs of all works to be carried on the mining site. The Company shall not have any liability for the costs such as worker wages, premiums of social security insurance, taxes, severance payments, accident expenses and all kinds of similar costs. It is obligatory to receive the guarantee from the subcontractor in sufficient amount for the works to be performed by subcontractor.

4. LEGAL WORKING PROVISIONS AND ARTICLES

4a – The Operator shall be responsible to obtain the necessary legal permissions from the Forestry Operation Directorate, General Directorate of Mining Works and Provincial Directorate of Environment, make the payments of the charges and fees to be paid to these institutions and deliver one copy of the payment receipts to the Company.

4b – The Operator shall apply to government offices such as the Social Security Institution, the Regional Directorate of Labor, the Finance Office and the Special Provincial Administration through the required legal procedures for opening work places and start its operation by getting the necessary legal permissions, deliver one copy of these permissions to the Company and the Company shall keep them in order to submit during periodical visits of the government agencies.

4c – The Operator shall be responsible for the damages and losses to occur due to the activities carried out on the field by the operator and to affect the company negatively, the accidents to occur while working and the reasons preventing the work.

4e – While working on the field, the Operator shall pay attention not to leave stones and excavation materials on the road that may prevent the work of the Company.

4f – If the Company find economically valuable ore during the exploration activities on the field, the production project shall be prepared and submitted to the approval of the Company and then the ore shall be produced. After determining the amount and analysis of produced ore, it shall be transferred with the legal consignment forms to be provided from the Company.

4g – The Operator may charge as subcontractor for some part of the work. However, the protocol to be signed with the subcontractor has to be approved by the Company.

4h – The state's right on the produced and sold ore shall be paid by the Operator. A guarantee shall be given before the ore shipment in order to meet the value in the amount of state's right.

4i – If an economically valuable ore cannot be found or a mine existence cannot be determined, the activities shall be concluded upon a delivery record to be arranged along with the signatures of the parties when the operator leave the site by making the required land arrangements. Yet, in case the Company makes the land arrangements, the costs in the amount of related expenditures shall be collected from the Operator.

5- RIGHTS AND LIABILITIES OF COMPANY

5a – The Company shall inspect and check the Works on the Site with Special Coordinates, and inform the Operator in writing to complete the deficiencies within the required time. If the determined deficiencies are not completed in time, the Company shall use the right of annulling the contract.

5b – The Company shall not have a share on the mines and ores to be extracted on the site. However, if there is an ore production at a high and marketable quality on the site, the Company, if it demands, shall have the right of purchasing on the current values.

5c – The Company shall not be responsible for the official or nonofficial negativities to occur due to the activities and works to be carried out on the site by the Operator.

5d – The Company shall give the notarized certificate of authorization to the Operator to conduct the works to be carried out on its behalf.



Se – The rights written in this contract herein shall be reserved in case the site license is transferred to a third party or company.

6 – VALIDITY PERIOD OF CONTRACT

This contract herein shall be valid for 14 years as of the date of signing. However, in case it is determined that the operator does not remedy the occurring deficiencies and discrepancies through the written warnings and demands, the Company shall use the right of annulling the contract before this date.

6- LEGAL AUTHORITY

In case of any disputes, the courts and the execution offices of Hakkari are accepted as the authorized courts and execution offices.

This contract herein has been prepared with 7 articles and in 2 copies and signed by the Parties.

PARTIES

01.08.2009

BER GRUP MINING INDUSTRY AND TRADE LIMITED COMPANY

(signature)

MEZIRGO MINING UNDERTAKING TRANSPORTATION INDUSTRY AND TRADE COMPANY

Hasan UÇAR

(signature)

Murat UÇAR

(signature)

Ömer Çiftçi

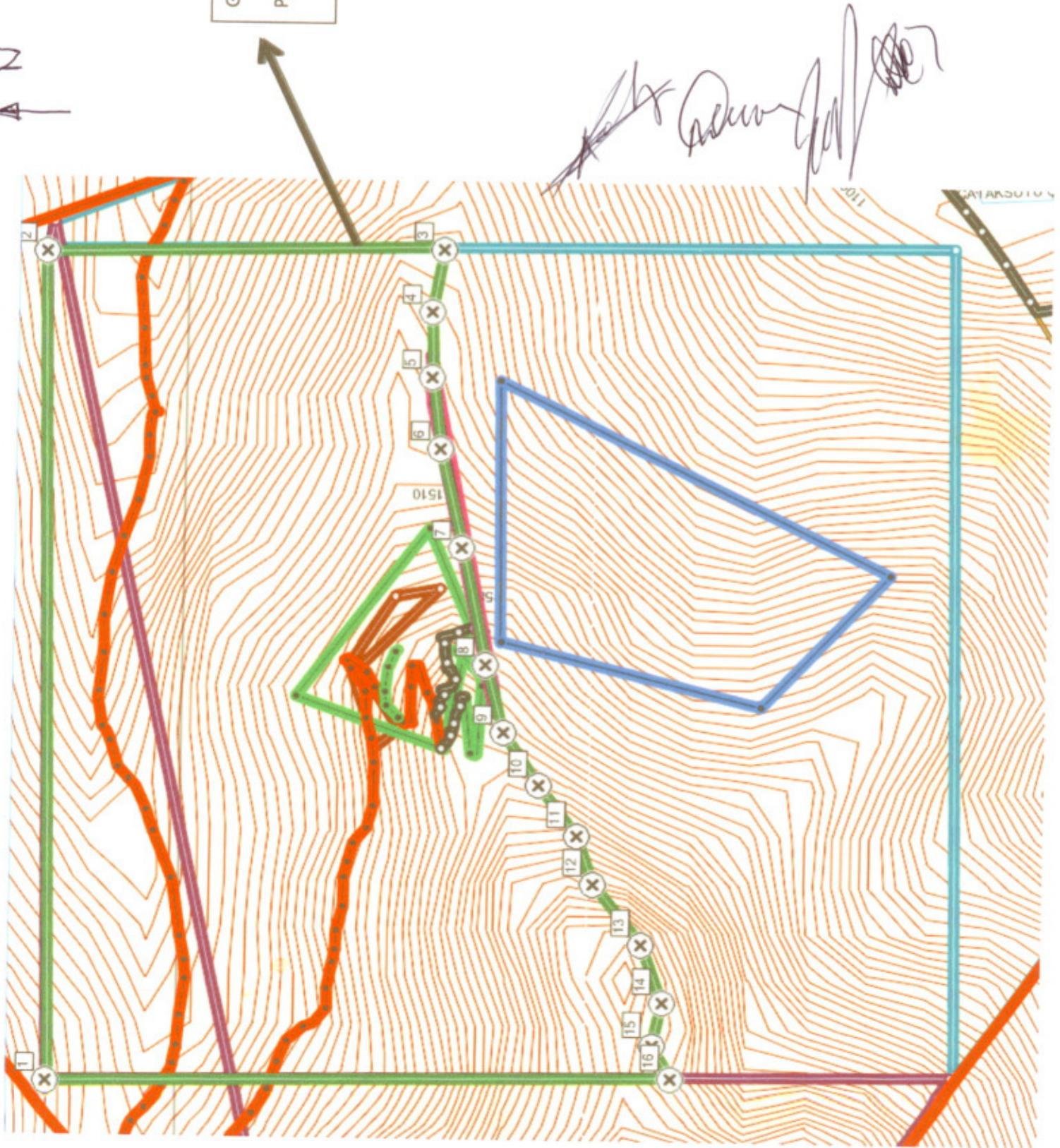
(signature)

Necip UÇAR

(signature)



N
W
E
S



36th NOTARY OF BEYOGLU
 Nazan KANDEMİR
 Atatürk Oto Sanayi N.Akbaci Tic.Mrk.
 No:88
 Maslak-İstanbul
 Tel: 0212 346 26 91-92-93

Date : March 25th, 2010
 Book Number: 15141

DEED OF CONSENT

CONSENTER COMPANY'S

NAME : BER GRUP MINING IND. AND TRADE CO.
 PLACE : ISTANBUL
 TAX OFFICE and REGISTRY NUMBER : MASLAK – 165 027 4609
 ADDRESS : BÜYÜKDERE CADDESİ NO: 237 NORAMİN İŞ MERKEZİ KAT 1 NO: 108
MASLAK- ISTANBUL

CONSENTED COMPANY'S

NAME : MEZIRGO MINING UNDERTAKING TRANSPORTATION INDUSTRY AND TRADE LTD.CO.
 ADDRESS OF LEGAL NOTICE : DAGALTI MAHALLESİ UZUMCU KOYU – HAKKARI

MEZIRGO MINING UNDERTAKING TRANS. IND. AND TRADE CO., of which commercial title and address mentioned above, has been given the consent for carrying out the activities of exploration, research and mine production in the private mining site within the borders of Üzümcü Village of Hakkari with the operating license of IR 73005 and the access number of 30774984 whose coordinates are given below:

COORDINATES TABLE

| | | |
|---|-----------|-----------|
| 1 | Y-0372438 | X-4151087 |
| 2 | Y-0372626 | X-4151048 |
| 3 | Y-0372519 | X-4151314 |
| 4 | Y-0372775 | X-4151110 |

We hereby declare that MEZIRGO MINING UNDERTAKING TRANS. IND. AND TRADE CO. has been consented to negotiate with the government offices about carrying out the activities of exploration, research and mine production in the private mining site within the borders of Üzümcü Village of Hakkari with the operating license of IR 73005 and the access number of 30774984 whose coordinates are given above, to open workplaces in the Social Security Institution, Regional Directorate of Labor and Turkish Employment Agency, to pay and withdraw the necessary guarantees, to get the certificates of easement and environmental impact assessment by applying to the Ministry of Environment and Forestry and the Provincial Directorates, to make the application for getting the license for explosive materials, to deposit the charges necessary for using the explosive materials and their accessories, to submit the undersigned petitions to the Governor's Office, Provincial Gendarmerie Command and Local Authority in order to perform the works and to receive their answers in person, and to exchange correspondences with other institution in relation with these matters.

CONSENTER : BER GRUP MINING IND. AND TRADE CO.
 BÜYÜKDERE CADDESİ NO: 237 KAT 1 NO: 108
MASLAK- ISTANBUL

Mahmut ÖZGÜL
 (ID No: 42670057168)
 (Signature) Rüya DEMİR
 (ID No: 56194480838)
 (Signature)



| INDICATIVE EXPLORATION AND FEASIBILITY STUDY SCHEDULE -ARAMA VE FİZİBİLİTE ÇALIŞMA PROGRAMI | | | | | | | |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | 3rd Q 2010 3.çeyrek 2010 | 4th Q 2010 4.çeyrek 2010 | 1st Q 2011 1.çeyrek 2011 | 2nd Q 2011 2.çeyrek 2011 | 3rd Q 2011 3.çeyrek 2011 | 4th Q 2011 4.çeyrek 2011 | 1st Q 2012 1.çeyrek 2012 |
| 1-INITIAL PHASE EXPLORATION ARAMA SAFHASI -BAŞLANGIÇ | | | | | | | |
| *HASAN UCAR TO PROVIDE GPS POSITIONS OF ALL THE OUTCROPS OF ORE ON PROJECT AREA HASAN UCARIN PROJE ALANINDAKI YÜZEYE ÇIKAN MADEN TABAKASI İÇİN GPS NOKTALARINI TEMİN ETMESİ | | | | | | | |
| *RCR/S GEOLOGISTS TO VISIT THESE POSITIONS WITH HASAN ,MAP SAME ,COLLECT SAMPLES AND HAVE THESE ANALYSES RCR/ S JEOLLOGİSTLERİN BU NOKTALARI HASAN U. İLE GEZMESİ ,HARİTALAMA ,ÖRNEK TOPLAMA VE ANALİZ ETME | | | | | | | |
| *CONDUCT GEOCHEMICAL SURVEY AT ALL RELAVANT POSITIONS ON PROJECT AREA PROJE ALANINDA GEREKEN YERLERDE İLGİLİ JEOKİMYASAL ARASTIRMALARI YAPMAK | | | | | | | |
| UPDATE GEOLOGICAL PLAN AND IDENTIFY TARGETS JEOLJİK PLANIN GÜNCELLENMESİ VE HEDEFİN BELİRLENMESİ | | | | | | | |
| 2-PHASE 2 EXPLORATION ARAMA SAFHASI-2 | | | | | | | |
| *OBTAIN FORRESTRY /OTHER PERMISSIONS TO CONSTRUCT ROAD ACCESS TO PLANNED TRENCHING AND DRILL HOLE POSITIONS. SONDAJ NOKTALARI VE KANALLARA YOL YAPIMI İÇİN ORMAN VE DIĞER İZİNLERİN ALINMASI | | | | | | | |
| *CONSTRUCT ROAD AND DEVELOP TRENCHES ,SAMPLE SAME AND SEND FOR ANALYSIS. YOL YAPIMI VE KANALLARIN GELİŞTİRİLMESİ ,ÖRNEK ALIMI VE ANALİZE GÖNDERİLMESİ | | | | | | | |
| *DRILL PLANED BORE HOLES PLANLANAN SONDAJ DELİKLERİNE SONDAJ YAPILMASI | | | | | | | |
| *DEVELOP GEOLOGICAL MODEL JEOLJİK MODELİN GELİŞTİRİLMESİ | | | | | | | |
| 3-CONDUCT PFS ÖN FİZİBİLİTE ÇALIŞMASI | | | | | | | |
| 4-CONDUCT BFS BANKACA GEÇERLİ FİZİBİLİTE ÇALIŞMASI | | | | | | | |
| 5-COMMENCE MINING MADENCİLİĞE BAŞLAMAK | | | | | | | |



T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MADEN İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI



İL : HAKKARI
İLÇESİ : MERKEZ
KÖYÜ : ÜZÜMCÜ
RUHSAT NUMARASI : 200710476
RUHSAT GRUBU : IV. GRUP
YÜRÜRLÜĞE GİRİŞ TARİHİ : 11.08.2008
RUHSATIN BİTMİ TARİHİ : 11.08.2018
ERİŞİM NUMARASI : 3144280
RUHSAT ALANI : 159.58 Hektar
RUHSAT SAHİFASI : İşletme
RUHSAT SAHİBİ : HASAN UÇAR
T.C. KİMLİK NO : 48475073716
VERGİ DAİRE VE NO : Hakkarı V.D. 8840609364
ADRES : ÜZÜMCÜ KÖYÜ HAKKARI

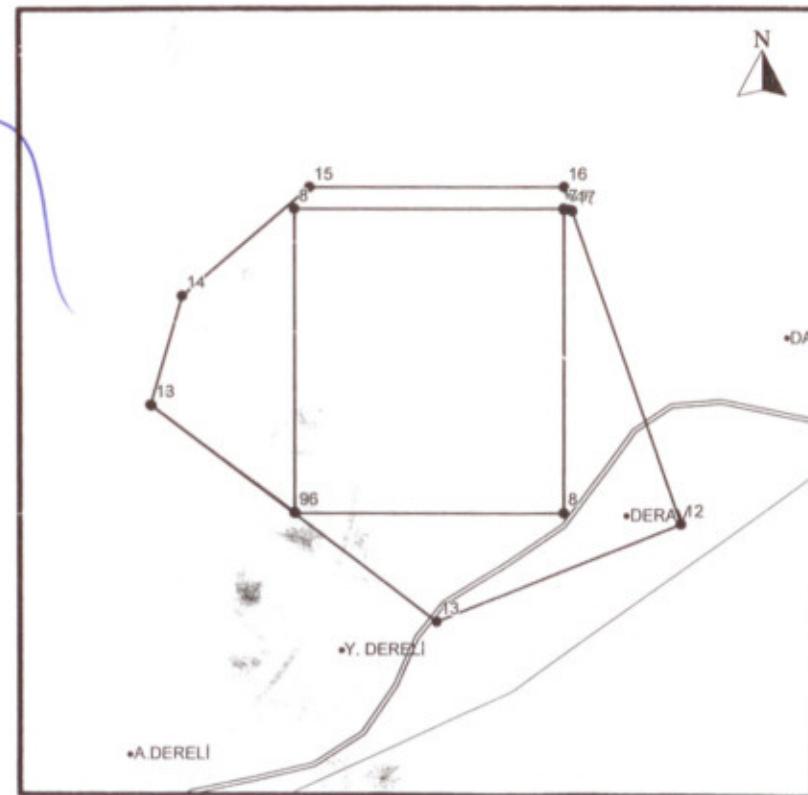
PAFTALAR : n51a1,m51d4,n51a1,m51d4

| P.No | S.No | Y | X | P.No | S.No | Y | X | P.No | S.No | Y | X |
|------|------|--------|---------|------|------|--------|---------|------|------|--------|---------|
| 1 | 1 | 371932 | 4150303 | 1 | 11 | 373244 | 4151689 | 2 | 5 | 373265 | 4151700 |
| 1 | 2 | 371932 | 4150300 | 1 | 12 | 373755 | 4150250 | 2 | 6 | 373202 | 4151700 |
| 1 | 3 | 371935 | 4150300 | 1 | 13 | 372605 | 4149800 | 2 | 7 | 373202 | 4151700 |
| 1 | 4 | 371935 | 4150300 | 1 | 14 | 371259 | 4150796 | 2 | 8 | 371932 | 4151700 |
| 1 | 5 | 371937 | 4150300 | 1 | 15 | 371259 | 4150798 | 2 | 9 | 371932 | 4150305 |
| 1 | 6 | 371936 | 4150300 | 1 | 16 | 371932 | 4150305 | 2 | 10 | 371259 | 4150798 |
| 1 | 7 | 371937 | 4150300 | 2 | 1 | 373244 | 4151689 | 2 | 11 | 371259 | 4150796 |
| 1 | 8 | 373205 | 4150300 | 2 | 2 | 373207 | 4151697 | 2 | 12 | 371257 | 4150798 |
| 1 | 9 | 373205 | 4151694 | 2 | 3 | 373205 | 4151694 | 2 | 13 | 371255 | 4150800 |
| 1 | 10 | 373207 | 4151697 | 2 | 4 | 373205 | 4151697 | 2 | 14 | 371405 | 4151300 |



25133

14 EKİM 2010



Ölçek : 1/25000

ENERJİ VE TABİİ KAYNAKLAR
BAKANLIĞI
Hayri OGÜT
Daire Başkanı

AGREEMENT

Between

RCR VE SEYİTOĞLU MADENCİLİK İTHALAT İHRACAT
TİCARET VE SANAYİ ANONİM ŞİRKETİ Registration
number 272046
duly authorized and represented by Alan Mitchell Clegg
and
Abdülkadir Seyitoğlu,
hereinafter referred to as RCR/S

And

ÇAĞLAR İNŞAAT NAKLİYAT MADENCİLİK TURİZM GIDA
SANAYİ VE TİCARET LİMİTED ŞİRKETİ registration
number69.85.....Duly authorized and
represented by Salih Çiftçi Identification
number 125.542.710.96.hereinafter referred to as CM

Collectively referred to as the "Parties"

SÖZLEŞME

Müştereken "Taraflar" olarak anılacak olan

Alan Mitchell Clegg ve Abdülkadir Seyitoğlu tarafından
tam olarak temsil edilen ve yetkilendirilmiş olan,
272046 tescil numaralı, bundan böyle RCR/S olarak
anılacak olan RCR VE SEYİTOĞLU MADENCİLİK
İTHALAT İHRACAT TİCARET VE SANAYİ ANONİM
ŞİRKETİ

ve

.....69.85.... tescil numaralı, 125.542.710.96 numaralı
Salih Çiftçi tarafından temsil edilen ve işbu noktadan
sonra CM olarak anılacak olan

ÇAĞLAR İNŞAAT NAKLİYAT MADENCİLİK TURİZM GIDA
SANAYİ VE TİCARET LİMİTED ŞİRKETİ

arasında yapılmıştır



1) Parties

CM has reached an Agreement with Ber Group Mining (BM), and has the requisite signed documents to transfer the Pentagon Mining License (ML) to CM

This Mining License (ML) has promising potential for zinc in the Hakkari region bordering PL's secured by RCR/S. The details regarding the ML are presented in Annexure 1 and the exploration requisite studies and possible future production and sale of ROM ore from this ML is referred to as the Project. Salih CIFCI and CM have been involved in small scale mining activities in the Hakkari region for the past 8 years.

RCR/S is a Turkish based Company with numerous promising zinc/lead Prospecting Licenses and a mining license in the Hakkari region to the east and west of the above mentioned ML. RCR/S has the requisite experience, expertise and resources to optimally explore, evaluate and develop this ML /Project for the mutual benefit of the parties. RCR/S is interested in evaluating the potential of the ML/Project and possibly securing the Project from CM.

2) RCR/S and CM agree to the following;

2.1) RCR/S will pay the direct costs for the transfer of the ML (Project) from BM to CM. CM will provide RCR/S with an invoice ,excluding vat,for this

RCR/S will be entitled to 82% of the saleable high grade Run of Mine (ROM) ore produced (ie ore grading +23% Zn) in the Southern part of the Pentagon ML and CM will be entitled to 18% of the saleable ROM ore (clause 2.2 refers).

CM will also be entitled to the net profit of its 18% share of the concentrated product produced by processing low grade ROM ore (8% to 20% Zn) from the Southern part of the Pentagon at the RCR/S Beneficiation Plant (clause 2.6 refers)

1) Taraflar

CM Ber Grup Madencilik ile Pentagon İşletme Ruhsatı'nın CM 'ye devri için bir anlaşmak akdetmiştir ve devir için gerekli imzalı dökümanlara sahiptir.

Bu işletme ruhsatı (İR), RCR/S'in arama ruhsatları ile komşu Hakkâri bölgesinde çinko yönünden gelecek vaat eden bir potansiyele sahiptir. İR'ye yönelik bilgiler Ek 1'de verilmektedir ve araştırma gereği çalışmalar ve bu İR ile ham cevherin (ROM) gelecekteki muhtemel üretimi ve satışı Proje olarak anılmaktadır. Salih CIFCI ve CM Hakkâri bölgesinde son 8 yıldır küçük ölçekli madencilik faaliyetleriyle ilgilenmektedirler.

RCR/S muhtelif gelecek vaat eden çinko/kurşun Arama Ruhsatlarına ve Hakkâri bölgesinde yukarıda bahsi geçen ML'nin doğu ve batısındaki bölgelere yönelik madencilik ruhsatı bulunan Türkiye'de mukim bir Şirkettir. RCR/S, tarafların karşılıklı menfaati için bu ML/Proje için optimal araştırma, değerlendirme ve geliştirme konusunda gerekli deneyim, uzmanlık ve kaynaklara sahiptir. RCR/S ML/Projenin potansiyelini değerlendirme ve CM'den Projeyi muhtemelen almakla ilgilenmektedir.

2) RCR/S ve CM, aşağıdaki hususlar üzerinde mutabakata varmışlardır;

2.1) RCR/S, İR'nin (Proje) BM'den CM'ye devri kapsamındaki direk masrafları karşılayacak ve CM bu konuda RCR/S 'ye KDV hariç fatura düzenleycektir.

RCR/S, Pentagon İR'nin güneyinde üretilen satılabilir yüksek tenörlü(+%20) zenginleştirilmemiş ham cevherin %82'sine ve CM ise madde 2.2'de belirtilen satılabilir ham cevherin %18'ine sahip olacaktır.

CM ayrıca düşük tenörlü ham cevherin (%8 ila %20) RCR/S'ye ait Zenginleştirme Tesisinde işlenmek üzere üretilen konsanitre ürünün %18'lük payının net karına sahip olacaktır. (bknz madde 2.6)



2.2) CM have entered into an Agreement with Merzigo Mining (MM) whereby MM will be entitled to mine and sell ore on the Northern part of the Pentagon ML (Annexure 2 refers). RCR/S have entered into an Agreement with MM to mine the Northern part of the Pentagon .CM hereby accepts that CM will only be entitled to 18% of the saleable ROM ore and its share of the nett profit of concentrate produced by processing ROM ore from the Southern part of the Pentagon ML and not any ore from the Northen part of the Pentagon ML as indicated in Annexure 2

2.3) RCR/S will source the funding for exploration and, pending positive exploration results, for which the expected duration to complete is 6 months from date of conclusion of this Agreement, RCR/S will source the funding to progress the Project to completion of a Feasibility Study (FS). It is planned to commence exploration drilling on the Southern part of the Pentagon within 6 months of concluding this Agreement

2.4) Pending positive Feasibility Study, at RCR/S's sole discretion, RCR/S will source the funding for an operating mine only. Production is expected to commence from the Southern part of the Pentagon within 12 months of transfer of the Pentagon ML to RCR/S

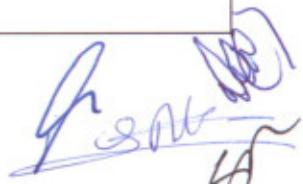
RCR/S plans to commission a Beneficiation plant to process low grade ROM ore (grading ~8% to 20% Zn, pending main business drivers as given below, from RCR/S Licenses and CM Pentagon ML, amongst others, subject to it being economic to do so. Main business drivers to determine the minimum ROM ore grade for processing includes, LME price for Zn, Mining cost and Beneficiation cost per ton of saleable concentrate produced (~ 25% to 32% Zn) and transport cost. Pending timeous approvals from requisite Government departments for approvals for mining, RCR/S plans to commission a heavy media gravity Separation Plant in the Region by the end of 2011 .

2.2) CM, Merzigo Madencilik (MM) ile anlaşma yapmış olup, işbu anlaşma kapsamında MM, Pentagon İR'nin (Ek-2) kuzey kısmında cevher çıkarma ve satma hakkına sahiptir. RCR/S ise, Pentagon'un kuzey kısmında madencilik çalışmaları için MM ile anlaşma yapmış olup. İşbu anlaşmayla CM, Pentagon İR'nin güney kısmındaki satılıklı ham cevherin %18'ine ve işlenmiş konsantrasyonun hissesi oranında net kar payına sahip olduğunu, Ek 2'de belirtilen Pentagon'un kuzey kesiminde çıkan ham cevher üzerinde hak sahibi olmadığını kabul eder.

2.3) RCR/S, maden arama çalışmaları kapsamında mali kaynak sağlayacak olup, işbu sözleşmenin imza edildiği tarihten itibaren 6 ay içinde tamamlanması beklenen arama çalışmalarında olumlu sonuç elde edilmesine kadar, proje sürecini bir Fizibilite Çalışması tamamlanana kadar finanse edecektir. Bu anlaşmanın tamamlanmasından sonra 6 ay içinde Pentagon İR'nin güneyinde sondaj çalışmalarına başlanması planlanmaktadır.

2.4) RCR/S'nin sorumlu olduğu Olumlu Fizibilite Çalışmasına kadar, RCR/S yalnızca faaliyette olan madene mali kaynak sağlayacaktır. Üretimin, Pentagon İR'nin RCR/S'ye devredilmesinden 12 ay sonra Pentagon İR'nin güneyinde başlaması beklenmektedir.

RCR/S , RCR/S Ruhsatları ve CM Pentagon işletme ruhsatındaki düşük tenörlü ham cevherin (%8-%20 tenörlü , aşağıda verilen temel faktörlere bağlı olarak) işlenmesi için bir Zenginleştirme Tesisi kurmayı planlamaktadır. İşlenecek minumun ham cevher tenörünü belirleyen temel faktörler satılıklı konsantrasyon ürün (~ 25% ila 30% Zn) elde etmek için ton başına LME çinko fiyatı , madencilik ve zenginleştirme maliyetlerini ve nakliye bedelini içerir. Madencilik faaliyetleri için resmi dairelerden alınacak izinlere bağlı olarak , RCR/S bölgede 2011 yılı sonunda Ağır Ortam Ayırtırma Tesisi kurmayı planlamaktadır.



2.5) RCR/S will pay CM US\$100k within 7 days of transfer of the Pentagon Mining License from BM to CM and will pay CM a final US\$100k six months after the date of transfer of the Pentagon ML to CM.

For the avoidance of doubt, the payments as given above are inclusive of ALL taxes and Vat. CM will provide RCR with an appropriate invoice to the total value of \$100k, including Vat, for each payment, prior to RCR/S paying same to CM

2.6) RCR will decide on the viability of processing Low grade zinc ROM (grading say between 8% and 20% Zn) ore mined from the Southern part of the Pentagon ML and this will be stockpiled seperately at the RCR/S Beneficiation Plant (say ~ 2000 tons to be batch treated). Should RCR elect to process low grade ROM mined from the Southern part of the Pentagon ML, CM will be entitled to its 18% of net profit of the concentrated product produced, subject to RCR/S having the excvlusive option of purchasing CM share of the product at a market related price (actual price received by RCR/S for sale of the concentrate product) less, a) total average mining cost per ton of product produced (on the Southern portion of the Pentagon), b) less the average beneficiation cost per ton total product produced at the RCR/S Beneficiation Plant and c) less the transport cost per ton of product to Mercin Port (other port). For clarity refer to specific examples as given in Annexure 3

RCR/S will have the option of stockpiling the concentrate product produced pending the LME price of zinc. CM will have the option of seeking buyers for its share of the concentrate product, subject to a) CM paying RCR/S the direct mining and beneficiation cost for its share of the concentrated product prior to sale or b) RCR/S will have a first right of refusal of matching a bona fida cash offer to CM by a third party less the mining and beneficiation cost and transport cost

2.5) RCR/S, Pentagon İşletme Ruhsatının BM'den CM'ye devrinden sonra 7 gün içinde CM'ye 100 000 ABD Doları ödeyecek olup, Pentagon İşletme Ruhsatının CM'ye devredildiği tarihten 6 ay sonra da 100 000 ABD Doları tutarında nihai ödeme yapacaktır.

Süpheye mahal vermemek adına, yukarıda belirtilen ödemelere TÜM vergiler ve KDV dahildir. CM, ödemeden RCR/S tarafından yapılmasıından önce, her ödeme için KDV dahil olmak üzere 100 000 ABD Doları tutarındaki faturayı RCR'ye sunacaktır.

2.6) Pentagon İR'nın güney kesiminden çıkarılan düşük tenörlü çinko ham cevherinin (%8 ila %20 oranında) işlenmesi konusunda RCR karar verecek ve cevher RCR/S Zenginleştirme Tesisinde ayrı ayrı depolanacaktır(ör/2000ton yiğinlar halinde). Eğer RCR düşük tenörlü ham cevheri işlemeyi tercih ederse , CM üretilen konsantre ürünün %18lik kar payına sahip olacaktır. Piyasa fiyatı (konsantre ürün satışında RCR/S için geçerli esas fiyat) eksi (-) a) ürün ton başına ortalama madencilik maliyeti(Pentagonun güney bölümünde) eksi (-) b) RCR/S Zenginleştirme tesisinde ton başına ortalama zenginleştirme maliyeti eksi (-) c) Mersin Limanı(diğer limanlar) nakliye bedeli olmak üzere CM'den satın alma hakkına sahip ilk firma RCR/S olacaktır. (Daha detaylı bir açıklama için EK-3'e bknz)

RCR/S LME çinko fiyatlarına bağlı olarak konsantre ürünü depolama seçeneğine sahiptir.CM konsantre ürün payını satmak için öncesinde RCR/S 'ye direk madencilik ve zenginleştirme maliyetlerini ödemek üzere alıcılarını arama seçeneğine sahiptir. RCR/S'nin diğer bir şahıs tarafından önerilen iyi niyetli nakit teklifi karşılamak açısından rüçhan hakkına sahiptir.Madencilik ,zenginleştirme ve nakliye maliyetleri düşülecektir.

| | |
|--|--|
| <p>RCR/S will inform CM of its share of the concentrate product produced, purchase price, average mining cost, beneficiation cost and transport cost (based on actual selling price, actual mining and beneficiation costs actual concentrate product (%Zn contained) produced and actual transport cost) and and payment due to CM for its share of the profit within 7 days of the sale of the product</p> | <p>RCR/S , (esas satış fiyatı,madencilik maliyeti,% Zn içeren zenginleştirme maliyeti ve nakliye bedeli baz alınarak) üretilen konsantre ürün payı,alış fiyatı,ortalama madencilik maliyeti , nakliye bedeli ve ürünün satışından sonra 7 gün içinde CM 'nin kar payı için yapılması gereken ödeme tutarı konusunda CM'yi bilgilendirecektir.</p> |
| <p>CM will provide RCR/S with an Invoice for the payment due which RCR/S will pay within 7 days of receiving the invoice .</p> | <p>CM RCR/S 'ye bu tutarda fatura düzenleyecek ve RCR/S faturayı aldıktan sonra 7 gün içinde ödeme yapacaktır.</p> |
| <p>CM's share of saleable ROM ore (+25% Zn) and concentrate product (produced via Beneficiation Plant) all direct mining and beneficiation costs, transport costs and selling price will be audited annually and any possible adjustments will be made during March every year.</p> | <p>CM'nin satılabilir ham cevher (+25 %Zn) ve konsantre ürün payı (Zenginleştirme Tesisinde işlenen),tüm direk madencilik ve zenginleştirme maliyetleri ve satış fiyatı yıllık olarak denetlenecek ve gerekli düzeltmeler her yıl Mart ayında yapılacaktır.</p> |
| <p>CM accepts that the standard formulae for determining price of ROM ore/concentrated product (grading +25% Zn) is ; LME Price x (Product grade % Zn + 7%) x Product grade. However, CM accepts that this may not always be the case</p> | <p>CM ham cevher ve konsantre ürün (+%25 tenörlü) fiyat belirlemesi için ; LME Fiyatı x (Ürün tenörü%Zn +%7) x ürün tenörü standart formülü kabul eder.Ayrıca CM her zaman bu şekilde olamayacağını da kabul eder.</p> |
| <p>2.7) CM will transfer the ML to RCR/S when requested to do so. CM will in any event provide RCR/S with the original ML once this is transferred from BM to CM for safe keeping. RCR/S will pay for the cost of transferring the ML from CM to RCR/S.</p> | <p>2.7) CM işletme Ruhsatının RCR/S'e devrini bu konuda RCR/S 'den talep gelmesi üzerine gerçekleştirecektir.CM her durumda Pentagon İR'nin BM 'den CM'ye devrinden sonra İR'in aslinı RCR/S' ye teslim edecektir. RCR/S İR'in CM'den RCR/S'ye devir masraflarını karşılayacaktır.</p> |
| <p>3) CM will be entitled to sell its 18% interest in saleable ROM ore and (~ 25% Zn) and its share in the nett Profit from concentrate product produced from low grade ROM ore at RCR/S Beneficiation Plant to any third party after 12 months from the date of conclusion of this Agreement, subject to RCR/S having a first right of refusal to match a bona fida written cash offer by the third party.</p> | <p>3) RCR/S'nin üçüncü bir tarafça yapılan iyi niyetli bir nakit teklifini karşılaştırma hakkı olmak üzere, CM işbu anlaşmanın imzalanmasından 12 ay sonra, satılabilir ham cevherin kendi payına düşen %18 lik hissesini ve RCR/S'nin Zenginleştirme Tesisinde işlenmiş düşük tenörlü ham cevherden üretilen konsantre ürünündeki kar payını üçüncü şahislara satma hakkına sahiptir.</p> |

4) CM accepts that there could be times when

RCR/S may not produce on the Southern part of the Pentagon ML for example when;
a) Additional Exploration has to be undertaken,
b) LME zinc price dropping to below say \$1600 per ton, c) Force Majeure (see clause 9)

5) RCR/S will have the right, at its sole discretion, to exit from the project at any time subject to it providing all information obtained on the Project to and transferring the ML back to CM at no cost.

Should RCR not proceed with the commissioning of a heavy media Separation Plant in the Region, CM will have the option of canceling this Agreement. Should CM decide to do so, RCR will transfer the Pentagon ML back to CM.

6) The duration of this Agreement is from the date of conclusion of the Agreement up until the ore on the ML is mined out or up until RCR/S decides to exit from the Project at its sole discretion or CM decides that RCR must exit as per clause 5)

7) RCR/S will adhere to all legal requirements to keep the ML in good standing whilst it is involved in the Project.

8) Force Majuere

In the event of any act of God ,war, warlike operation, rebellion, riot, labour action, civil war ,operation disaster or (without regard to foregoing enumeration) of any like circumstances arising or action taken beyond or outside the reasonable control of the Parties hereto preventing them or any of them from the performance of any obligation hereunder (any such event hereinafter called "force majeure") then the party affected by such force majeure shall be of its obligation hereunder during the period that such force majeure continues but only to the extent so

4) CM aşağıdaki durumlar kapsamında, RCR'S'nin Pentagon ML'nin güney kesiminde üretim yapamayacağı durumlar olabileceğini kabul eder;

- a) Ek araştırma ,
- b) LME çinko fiyatının örneğin ton başına \$1600'ün altına düşmesi,
- c) Mücbir Sebepler (bkz. madde 9)

5) RCR/S ,kendi takdirinde,projede elde edilen her türlü bilgiyi CM'ye ücretsiz olarak vermek ve işletme ruhsatını CM'ye devretmek üzere herhangi bir zamanda projeden ayrılma hukına sahiptir.

Eğer RCR bölgede Ağır Ortam Ayırtırma Tesisini kurmama kararı alırsa ,CM 'nin bu anlaşmayı iptal etme hakkı olacak ve iptal durumunda RCR/S Pentagon İR'yi CM'ye devredecektir.

6) İşbu anlaşmanın süresi ,anlaşmanın tamanlanmasıından itibaren İR'deki ceherin çıkarılmasına veya RCR/S'nin kendi takdirinde projeden ayrılmaya karar vermesine veya CM'nin madde-5 de belirtilen şekilde karar vermesine kadardır.

7) RCR/S projede yer aldığı sürece İR'yi faal durumda tutmak için tüm yasal yükümlülüklerde uyacaktır.

8)Mücbir Sebep

Herhangi bir Doğal Afetin, savaşın, savaş benzeri operasyonun, isyanın, ayaklanması, işçi grevinin, iç savaşın, iş kazasının veya (yukarıda sıralanlara bakılmaksızın) benzeri herhangi bir durumun işbu Anlaşmanın taraflarının makul kontrolü dışında ortaya çıkması ve bu durumun söz konusu mücbir sebep devam ettiği sürece tarafların işbu sözleşme kapsamı altındaki yükümlülüklerini yerine getirmesini engellediği durumlarda (bu gibi olaylar işbu noktadan sonra "mücbir sebep" olarak anılacaktır), söz konusu mücbir sebep durumundan etkilenen taraf söz konusu mücbir sebep devam ettiği sürece

prevented and shall not be liable for any delay or failure in the performance of any obligations hereunder or loss or damage which the party may suffer due to or resulting from the force majeure ,provided always that a written notice shall be promptly given to the other party of any such inability by the affected party .

İşbu sözleşme altındaki yükümlülüklerinden sadece mücbir sebep tarafından engellendiği ölçüde muaf sayılacaktır ve İşbu sözleşme kapsamı altındaki yükümlülüklerinin yerine getirilmesindeki gecikmelerden veya yükümlülüklerini yerine getirememekten ya da ilgili tarafın mücbir sebep nedeni ile veya mücbir sebepten dolayı maruz kalabileceği zarar ve ziyanlardan dolayı sorumlu olmayacağıdır. Mücbir sebepten etkilenen taraf diğer tarafa söz konusu durum ile ilgili olarak derhal bir yazılı tebliğatta bulunacaktır.

9) This Agreement is legally binding on both parties.

10) Both parties will use their respective best endeavours to resolve any dispute that may arise in future failing which the dispute will be reverted to the Ankara Court.

11) Should there be a difference in interpretation between the English and Turkish version of this Agreement the English version will prevail.

9) Bu Anlaşma, her iki taraf açısından da yasal olarak bağlayıcıdır.

10) Taraflar, gelecekte ortaya çıkabilecek anlaşmazlıkların çözümü yolunda her türlü çabayı sarf ederler; anlaşmazlığın çözülememesi durumunda konu Ankara Mahkemesine götürülür.

11) Anlaşmanın İngilizce ve Türkçe versiyonları arasında yorumda farklılık ortaya çıkması durumunda İngilizce versiyon geçerli olacaktır.



This is done and signed atANKARA..... on this
.....22nd day ofMARCH..... 2011

On behalf of RCR/S

Alan Mitchell Clegg

Abdulkadir Seyitoğlu

Witness 1)

Witness 2)

This done and signed atANKARA..... on
this22nd day ofMARCH.....

On behalf ofCM.....

M. Salih CIFCI

Witness 1)

Witness 2)

This done and signed at
on this day of

On behalf of MM

Witness 1)

Witness 2)

İşbu sözleşme Mart 2011'un 22. günü
Ankara....'de/da hazırlanmış ve imzalanmıştır.

RCR/S adına

Alan Mitchell Clegg

Abdulkadir Seyitoğlu

Tanık 1)

Tanık 2)

İşbu sözleşme Mart 2011'in 22.. günü
Ankara....'de/da hazırlanmış ve imzalanmıştır.
.....CM..... adına

M. Salih CIFCI

Tanık 1)

Tanık 2)

İşbu sözleşme 2011'in günü
.....'de/da hazırlanmış ve imzalanmıştır.

MM adına

Tanık 1)

Tanık 2)



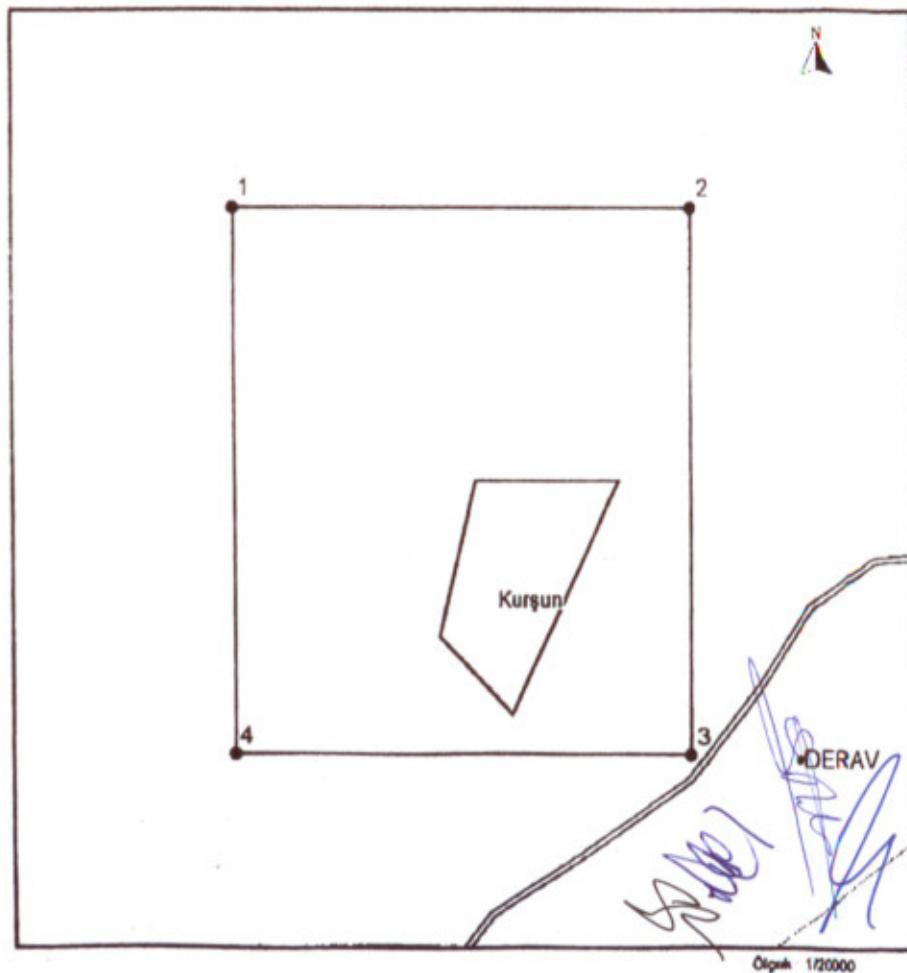
ANNEXURE I



**T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MADEN İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI**

**İL : HAKKARI
İLÇESİ : MERKEZ
KÖYÜ : ÜZÜMCÜ
RUHSAT NUMARASI : 73005
RUHSAT GRUBU : MADEN
YÜRÜRLÜĞE GİRİŞ TARİHİ : 03.10.2005
RUHSATIN BİTİM TARİHİ : 05.10.2015
ERİŞİM NUMARASI : 3074984
RUHSAT ALANI : 177.8 Hektar
RUHSAT SAİHASI : İşletme
RUHSAT SAHİBİ : BER GRUP MAD.SAN.T İC.LTD.ŞTİ.
T.C. KİMLİK NO :
VERGİ DAİRE VE NO : Sanyer V.D. 1650274609
ADRES : DARÜSSAFAKA MAH. GAZETECİLER SİTESİ YANI ATA SOK. ÇAĞDAŞ BOĞAZICI SİT. NO:2 D:4 SARİYER / İSTANBUL**

**ENERJİ VE TABİİ KAYNAKLAR
BAKANI a.
Ali İhsan İNCE
Genel Müdür Yardımcısı**



A 1.

ANNEXURE ②



**EXAMPLES FOR CALCULATING PAYMENTS DUE TO CM FOR CONCENTRATE PRODUCED VIA
BENEFICIATION PLANT (ANNEXURE 3)**

- 1) Assume process 5000 tons ROM grading 15% Zn, 3% Pb and 8% Fe. Estimated tons concentrate product produced is 2500 tons @ 30% Zn. Assume Mining cost \$50 per ton ROM and Beneficiation cost of \$10 per ton ROM. Then;
 - Mining+ Beneficiation cost per ton concentrate Product is \$120, Transport cost to Mersin Port is \$35 per ton product and Total cost per ton Product is \$155
 - Assume LME price of \$2200 then Price received is; $\$2200 \times (30 + 7)\% \times 30\% \text{ ie } \244
 - Operating Margin is \$89 per ton product
 - CM share of the product is $2500 \text{ tons} \times 18\% \text{ ie } 450 \text{ tons}$ and CM share of Profit is \$40 000
- 2) Assume process 6000 tons ROM ore grading 13% Zn, 3% Pb, 9%Fe. Estimated tons concentrate product produced is 2000 tons @ 27% Zn. Assume Mining cost \$40 per ton ROM and Beneficiation cost \$10 per ton ROM. Then;
 - Mining + Beneficiation cost per ton concentrate product is \$180, Transport cost is \$35 per ton product and Total cost per ton product is \$215
 - Assume LME price of \$2500 then Price received is \$230 per ton product
 - Operating margin is \$15 per ton product
 - CM share of the product is $2000 \times 18\% \text{ ie } 360 \text{ tons}$ and CM share of the Profit is \$5 400
- 3) Assume process 6000 tons ROM ore grading 17% Zn, 4% Pb and 9% Fe. Estimated concentrate product produced is 2500 tons @ 32% Zn. Assume Mining and Beneficiation cost of \$60 per ton ROM. Then
 - Mining + Beneficiation cost per ton product is ~ \$120 , Transport cost is \$35 per ton Product and Total cost is \$155 per ton product
 - Assume LME price of \$2000 then Price received is \$250 per ton product
 - Operating margin is \$95 per ton Product
 - CM share of the product is $2500 \times 18\% \text{ ie } 450 \text{ tons}$ and CM share of the Profit is \$42 750

A handwritten signature in blue ink, appearing to read "G. S. H. S." or a similar variation, is located in the bottom right corner of the page.

**Zenginleştirme Tesisinde Üretilen Konsantre Ürün İçin CM 'ye Yapılacak Ödemelerde Hesaplama Örnekleri
(EK-3)**

- 1) Varsayılm 5000 ton 15% Zn, 3% Pb , 8% Fe işlenecek. Tahmini elde edilecek konsantre ürün 2500 ton %30luk çinko. Ham cevher ton başına tahmini madencilik maliyeti \$50 ve zenginleştirme maliyeti \$10 . O halde;
- Konsantre ürün ton başına madencilik ve zenginleştirme maliyeti 120\$,
Mersin Limanına nakliye bedeli ton başına 35\$
Toplam maliyet ton başına 155\$
 - Varsayılm LME fiyatı 2200\$ Geçerli Fiyat şu şekilde hesaplanır : $\$2200 \times (30 + 7)\% \times 30\% = \244
 - Faaliyet Karı ton başına = \$89
 - CM'nin ürün payı ; 2500 tons x 18% = 450 tons ve CM 'nin kar payı ; \$40 000
- 2) Varsayılm 6000 ton 13% Zn, 3% Pb , 9% Fe işlenecek. Tahmini elde edilecek konsantre ürün 2500 ton %30luk çinko. Ham cevher ton başına Tahmini madencilik maliyeti \$40 ve zenginleştirme maliyeti \$10. O halde;
- Konsantre ürün ton başına Madencilik ve Zenginleştirme Maliyeti 180\$
 - Nakliye bedeli ton başına 35\$
 - Toplam maliyet ton başına 215\$
 - Varsayılm LME fiyatı \$2500 Geçerli Fiyat = \$230
 - Faaliyet Karı ton başına = \$15
 - CM'nin ürün payı ; 2000 tons x 18% = 360 ton ve CM 'nin kar payı ; \$5400
- 3) Varsayılm 6000 ton 17% Zn, 4% Pb , 9% Fe işlenecek. Tahmini elde edilecek konsantre ürün 2500 ton %32lik çinko. Ham cevher ton başına tahmini madencilik ve zenginleştirme maliyeti \$60 .O halde;
- Konsantre ürün ton başına Madencilik ve Zenginleştirme Maliyeti 120\$
 - Nakliye bedeli ton başına 35\$
 - Toplam maliyet ton başına 155\$
 - Varsayılm LME fiyatı 2000\$ Geçerli Fiyat = \$250
 - Faaliyet Karı ton başına = \$95
 - CM'nin ürün payı ; 2500 tons x 18% = 450 ton ve CM 'nin kar payı ; \$42750



T.C.
ANKARA
38. NOTERLİĞİ

ANKARA 38.
NOTERİ
NİMET İLKNUR
AYTEKİN

ÜĞUR MUMCU
CADDESİ GOP
ÇANKAYA ANKARA
Tel : 03124375743

ÖRNEKTİR
V E K A L E T N A M E

18 Mart 2011

Türkiye Cumhuriyeti hudutları dahilinde bulunan Defterdarlıklar, Mal müdürlükleri, Vergi Daireleri, Sosyal Güvenlik kurumu,(S.S.K, Bağ-Kur) Müdürlükleri ve Şubeleri, Bölge Çalışma Müdürlüğü ve Şubeleri,Ticaret ve Sanayi Odaları, Ticaret Sicil Memurlukları, Özel İdare Müdürlükleri, Esnaf ve Sanatkarlar Odası, Belediye Başkanlıkları ve ilgili birimleri ve bilumum resmi makam ve mercilerden tam yetkili olarak temsile, işlemleri takibe ve sonuçlandırmaya, her türlü izin ve ruhsatları almaya, kayıt ve tescillerini yaptmaya, gerektiğinde kayıtları sildirmeye, ilgili mercilere teftişler vermeye, ticari defterlerimi ve belgelerimi sunmaya, tahriyat öncesi veya tahriyat sonrası her türlü vergi ve cezalardan dolayı vergi itiraz, temyiz, uzlaşma ve takdir komisyonlarında, vergi mahkemelerinde beni temsile, hak ve menfaatlerimi savunmaya, uzlaşma talebinde bulunmaya, uzlaşmaya,

İlgili vergi dairelerine başvurarak fiş, fatura, ırsaliye, gider pusulası, vesair belge tasdik ve basım izinlerini almaya, matbaalarda ve Noterliklerde belge (fiş, fatura, gider pusulası, ırsaliye vesair) bastırmaya, tasdik ettirmeye, kayıt ve suretler çıkartırmaya, yazılı ve sözlü beyan ve izahatlarda bulunmaya, geri almaya, değiştirmeye, tahakkuk etmiş veya edecek olan vergi iadelerini ödenecek olan her türlü vergilerden mahsup ettirmeye, tebliğ ve tebellüğe,

Sosyal Güvenlik Kurumuna tahakkuk ettirilmiş veya ettirilecek olan prim ve cezalarına itiraza, Esnaf ve Sanatkarlar odasına kayıt ve tescil işlemlerini yaptmaya,

Maliye Bakanlığı, Defterdarlıklar, Vergi Daireleri ve Mal Müdürlüklerine verilmesi gereken beyanname ve bildirimleri elektronik ortamdan ve internetten yararlanarak verilmesi için gerekli şifre kullanıcı kodlarını almaya,

Vergi Dairelerinde yapılacak her türlü ödemelerin ve borçların izlenmesi için, elektronik ortam ve internet kullanım şifrelerimi almaya, elektronik ortamda beyannamelerin ve tahakkukların alınması ve ödenmesi için gerekli başvuruları yapmaya, bunlara ait şifre ve kullanıcı kodlarını almaya, bunları kullanmaya, düzeltme talebinde bulunmaya,

Yukarıda belirttiğim konularla ilgili olarak yapılması gereken her türlü yasal işlemleri tüm resmi makam ve merciler önünde yapmaya ve imzalamaya, aylık prim ve hizmet belgesinin Sosyal Güvenlik kurumu'na internet ortamında verilebilmesi için anılan kurum ve bu kuruma başvuruda bulunmaya, e-billdirge ve e-beyanname sözleşmesini imzalamaya, kullanıcı kodu ve kullanıcı şifresi zarfını kurumdan imza karşılığında almaya, iş yerinde çalışan sigortalılara ilişkin aylık prim ve hizmet belgesinin internet ortamında kuruma gönderilmesi ve bu konudaki diğer işlemlerin yerine getirilmesi hususunda beni temsil ve izzama, Yine vergi dairesinde kullanıcı kodu ve internet şifresi almaya, resmi kurum ve kuruluşlarda iş ve işlemleri yapmaya, ilgili vergi daireleri ile uzlaşmaya girmeye, uzlaşma talebinde bulunmaya, yazar kasa izin ve ruhsatlarını almaya, onaylattırmaya, tekel izin ve ruhsatları almaya ve onaylattırmaya, ilgili vergi dairelerine müracatla vergi kapanış işlemlerimi takip ve neticelendirmeye, T.C.sınırları dahilinden şirket adına dilediğinden dilediği bedel ve şartlarla maden sahası ruhsatları devir almaya, bedellerini ödemeye, devir alış senetlerini ve sözleşmelerini imzaya, halen şirket adına kayıtlı olan veya bundan böyle satınalmak suretiyle kayıtlı bulunacağı bilumum maden sahalarını, ve ruhsatlarını dilediğin edilediği bedelle devir etmeye, düzenlenecek devir senet ve sözleşmelerini imzaya, bedellerini tahsile, Bu hususlarda Maden İşleri DAİRE Başkanlığında ve alakalı tüm birimlerinde şirketimizi temsil etmeye, gerekli evrakları ibraz ve imzaya, harçlarını ve giderleimi ödemeye, makbuzlarını almaya, T.C.sınırları dahilindeki bilumum resmi daireler, askeri makamlar, kamu kurum ve kuruluşları ile hakiki v ehükmi şahıslar nezdindeki senetli, senetsiz tüm hak ve alacakları gerek ilgili makamlardan, saymanlıklardan veznelerinden veya havale edileceği resmi özel banka şubelerinden talep tahsil ahzu kabza almaya, sulh ve ibraya, çek kabule karşılığını

İmza Asıllandadır.



T.C.
ANKARA
38. NOTERLİĞİ

ANKARA 38.
NOTERİ
NİMET İLKNUR
AYTEKİN

UĞUR MUMCU
CADDESİ GOP
ÇANKAYA ANKARA
Tel : 03124375743

tahsile,zimmetlerini ibraya, T.C.sınırları dahilinde dilediği yerden dilediği ibedel ve şartlarla gayrimenkuller kiralamaya kira sözleşmesini imzaya,şartlarını tayin ve tesbite,dilserse feshe,ıhtarlar keşideye,gelenlere cevaplar itasına,elektrik,su,telefon,gaz,internet kablol tv,**bağlatmaya,abone olmaya,abonman sözleşmesi imzaya,açtırmaya,kapatmaya,saat ve sayaç bağlatmaya, gelmiş gelecek tüm tebliğatları kabule,imzaya,** dilediğinden dilediği bedel ve şartlarla her türlü motorlu ve motorsuz kara nakil vasıtalarını iş makinalarını kesin olarak satın almaya, satış bedellerini ödemeye, sözleşmelerini imzalamaya, tescile ilişkin geçici belgeyi imzalamaya, teslim almaya ve satışa ilişkin beyan ve taahhütte bulunmaya, her türlü vergi, harç, masraf ve primlerini ödemeye, fazla yatırılanları geri almaya, beyannamelerini imzalamaya, makbuz ve belgelerini almaya, bu şekilde sahibi bulunduğum veya ilerde sahibi bulunacağım her türlü motorlu ve motorsuz araçları her türlü motorlu ve motorsuz araçları dilediği trafik şube veya bürolarında veya ilgili mercilerde kayıt ve tescil ettmeye, araç tescil, trafik geçici yol belgelerini çıkartmaya, teslim almaya, fenni muayenelerini, tespitlerini yaptırmaya, plaka almaya, dilediği yere nakletmeye, dilediği sigorta şirketine dilediği şekil ve şartlarla her türlü sigortasını yaptırmaya, polislerini imzalamaya, bu konularda gerekli tüm işlemleri yapmaya Ticaret odalarında işleri takip etmeye kayıt ve tescil etmeye,takım ve teçhizatlar dahi almaya, vaisitaların parka çekilmesi halinde parktan çıkartmaya, tarif denetimlerinde temsile, T.C.sınırları dahilindeki tüm resmi ve özel banka şubelerine şirket adına her türlü hesaplar açtırmaya,kapatmaya,açılmış açılacak tüm hesaplardan dilediği zaman d ilediği ikadar paralar çekmeye, hesapları kontrol etmeye,talimat vermeye imzaya, internet bankacılığı dahi yapmaya,şifre ve parolayı elden almaya,banka formalitelerini ifa ve ikmale,gelmiş gelecek havale paraları tahsile almaya, ahzu kabza başkalarını tevkil teşrik ve azle mezun ve yetkili olmak üzere **Ramazan oğlu 1964 Dğ. 12554271096 T.C.Kimlik nolu MEHMET SALİH ÇİFTÇİ** vekil tayin edildi.

VEKİL EDEN

: ÇAĞLAR İNŞ.NAKL.TAAH.GIDA TURZ.MAD.SAN VE
TİC.LTD.ŞTİ.Adına KERİM YILMAZ T.C. No :
14279213504

: Bulvar cd.no. 5 HAKKARI
IMZA

İmza Aşağıdadır.

Bu Onaylama işlem (N.K.90.md.) altındaki imzanın gösterdiği, Hakkari Merkez Nüfus Müdürlüğü'nden verilmiş 3.7.2006 tarih, 3562 kayıt, N09 seri ve 831962 numaralı fotoğraflı Nüfus Cüzdanına göre Hakkari ili Hakkari Merkez İlçesi Özümçü mahallesi / köyü 21 cilt, 5 aile sıra, 23 sıra numaralarında nüfusa kayıtlı olup, baba adı Mehmet, ana adı Hanım, doğum tarihi 8.5.1963, doğum yeri Hakkari olan ve halen yukarıdaki adreste bulunduğu, okur yazar olduğunu söyleyen, 14279213504 T.C. kimlik numaralı ÇAĞLAR İNŞ.NAKL.TAAH.GIDA TURZ.MAD.SAN VE TİC.LTD.ŞTİ.Adına KERİM YILMAZ, adlı kişiye ait olduğunu ve dairede huzurumda imzalandığını onaylamış. İlk onbir yıl Mart ayının onsekizinci günü 18.03.2011

ANKARA 38. NOTERİ
NİMET İLKNUR AYTEKİN

RESMI MÜHÜR VE İMZA

Noterliğimizden 18 Mart 2011 tarih ve 7349

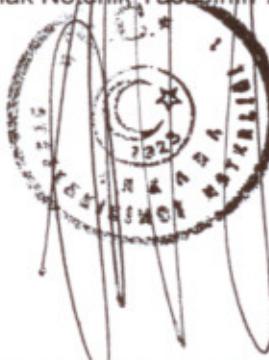
y.sayılı sirkülerle ilgilisinin yetkili olduğu

İşbu dayanak Noterlik Yasasının 79.maddesine göre eklenmiştir.

ANKARA 38. NOTERİ
NİMET İLKNUR AYTEKİN

RESMI MÜHÜR VE İMZA

İşbu örnek daire dosyasında saklı aynı



№ 07349

Türkiye Cumhuriyeti

Yev.No :(A)

18 Mart 2011

T.C.
ANKARA
38. NOTERLİĞİ

ANKARA 38.
NOTERİ
NİMET İLKUR
AYTEKİN

UĞUR MUMCU
CADDESİ GOP
ÇANKAYA ANKARA
Tel : 03124375743

İMZA SIRKÜLERİ

№ 07350

ŞİRKET ÜNVANI : ÇAĞLAR İNŞ.NAKL.TAAH.GIDA TURZ.MAD.SAN VE TİC.LTD.ŞTİ.

ŞİRKET ADRESİ : Bulvar cd.no. 5 HAKKARI

T.C.Hakkari Ticaret Sicili memurulğundan verilen 14.3.2011 tarih ve 1701 sayılı yetki belgesi gereği:

YETKİ BELGESİ

TİCARET ÜNVANI : ÇAĞLAR İNŞ.NAKL.TAAH GIDA TURZ.MAD.SAN VE
TİC.LTD.ŞTİ.

TİCARET SİCİL NO: 967

YETKİLİLER : Şirket adına şirket müdürü Kerim YILMAZ münferiden temsil ve ilzama yetkilidir.

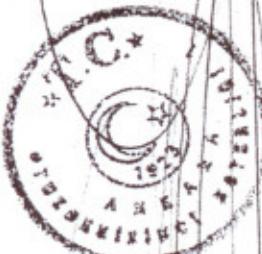
YETKİ SÜRESİ : 14.03.2011 tarihinden itibaren 20 yıl

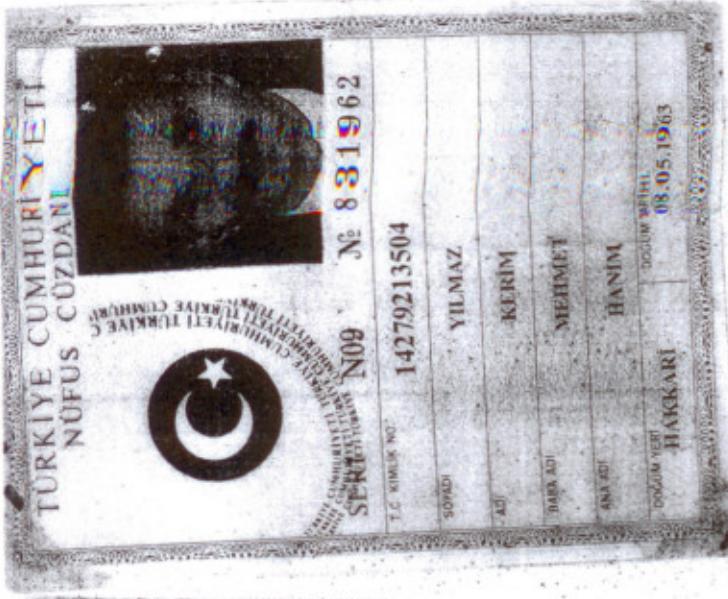
YETKISİNİN KONUSU : Resmi
Dairelerde,Mahkemelerde,Noterlerde,Bankalarda,S.S.K.Kurumlarında,Bağ-Kur Müdürlüklerinde İşlemler yapmaya Bono,Poliçe,çek tanzimine şirket adına gayrimenkul almaya ve dilediği bedellerle satmaya,şirket adına ithalat,ihracat ve sınır ticareti ile ilgili işlemleri ve ticari yapmaya vergi dairelerinde ve muhasebe müdürlüklerinde para yatırmaya ve çekmeye şirket adına ihalelere girmeye 3.sahıslar nezirinde kefalet vermeye almaya işlem yapmaya şirketi temsil ve ilzam etmeye müferiden yetkilidir.

Denilmekte olup aşağıdaki tatbik imzamı şirketin işlemlerinde kullanacağımdan tasitikni arz ederim.

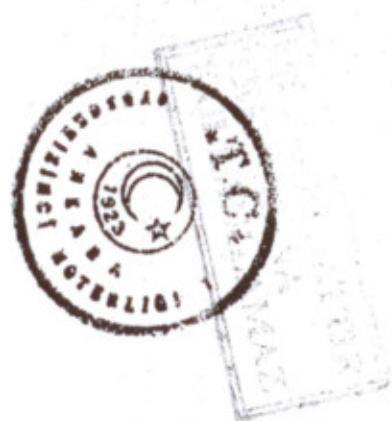
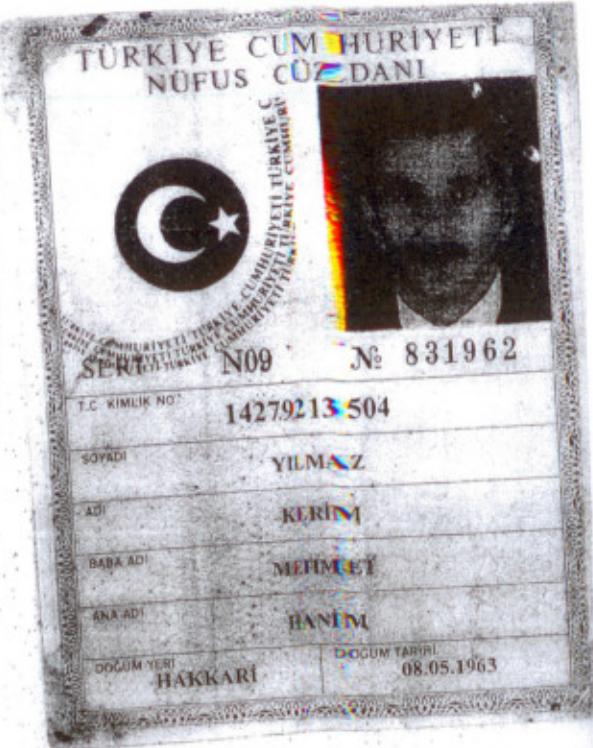
20 Yıl süre ile Şirket Müdürü Kerim YILMAZ

[Signature]





07350



0370



SALE AGREEMENT

Between

RCR VE SEYITOGLU MADENCİLİK İTHALAT İHRACAT
TİCARET VE SANAYİ ANONİM ŞİRKETİ Registration
number 272046
duly authorized and represented by Alan Mitchell Clegg
and
Abdulkadir Seyitoğlu,
hereinafter referred to as RCR/S

And

Mustafa Kurt identification number,
Abdurrahman Kaçar identification number,
Fazıl Çakır identification number and
Hüseyin Çiftçi identification number

(Hereinafter referred to as KC)

Collectively referred to as the "Parties"

SATIŞ SÖZLEŞMESİ

Müştereken "Taraflar" olarak anılacak olan

Alan Mitchell Clegg ve İş Geliştirme ve Direktör
Abdulkadir Seyitoğlu tarafından tam olarak temsil
edilen ve yetkilendirilmiş olan, 272046 tescil
numaralı, bundan böyle RCR/S olarak anılacak olan
RCR VE SEYITOGLU MADENCİLİK İTHALAT İHRACAT
TİCARET VE SANAYİ ANONİM ŞİRKETİ (RCR AND
SEYITOGLU MINING IMPORT EXPORT TRADE AND
INDUSTRY INCORPORATED COMPANY)

ve

..... kimlik numaralı Mustafa Kurt,
..... kimlik numaralı Abdurrahman Kaçar,
..... kimlik numaralı Fazıl Çakır ve
..... kimlik numaralı Hüseyin Çiftçi arasında
yapılmıştır.

(Bundan sonra KC olarak anılacaktır.)

1) Parties

KC have stated that they can arrange for the transfer of a Mining License (ML) of ~ 250ha and an Operational License (OL) within the ML currently belonging to Ber Group Mining (BM) to RCR/S at no cost. The details of the ML and OL are presented in Annexures 1 and 2. The ML borders on RCR/S PL no 11 to the East. This Mining License (ML) has promising potential for zinc with grades estimated at 10 to 15% Zn in known outcrops.

KC represent two Villages in the area. Copies of Mustafa Kurt and Abdurraman Cifci identification are attached (Annexure 3 and 4 refers)

RCR/S is a Turkish based Company with numerous promising zinc/lead Prospecting Licenses and a mining license in the Hakkari region to the east and west of the above mentioned ML. RCR/S have the requisite experience, expertise and resources to optimally explore, evaluate and develop this ML for the mutual benefit of the parties. RCR/S are interested in securing the ML/OL from BM with the support of KC

2) RCR/S and KC agree to the following;

2.1) KC will arrange for the transfer of the ML/OL from BM to RCR/S free of any lien, loan or any other encumbrances, and RCR/S will pay for the direct transfer costs. This Agreement will only come into effect once the ML/OL has been transferred to RCR/S

2.2) Once the ML/OL have been transferred to RCR/S, RCR/S will source the funding for the exploration and requisite studies on the ML/OL and should these be positive, at RCR/S sole discretion, RCR/S will commence mining within an estimated time frame of 6 months to one year

1) Taraflar

KC, şu anda Ber Group Mining (BM)'e ait olan yaklaşık 250 ha'lık Maden İşletme Ruhsatı(İR) ve Maden İşletme Ruhsatı dahilinde Maden İşletme İzninin (ii) RCR/S'ye ücretsiz olarak transferi için gerekli düzenlemeleri yapabileceğini belirtmiştir. Maden İşletme Ruhsatı ve İşletme İzninin ayrıntıları, Ek 1 ve 2'de verilmektedir. Bu Maden İşletme Ruhsatı, RCR/S 11 nolu arama ruhsatının doğu sınırlarındadır. Bu Maden İşletme Ruhsatı, bilinen katmanlarda % 10 ile 15 oranında tahmini tabakalarla çinko açısından umut vadeden bir potansiyele sahiptir.

KC, bölgede iki Köyü temsil etmektedir. Mustafa Kurt, Abdurraman Kaçar, Fazıl Çakır ve Hüseyin Çiftçi'ye ait nüfus cüzdanlarının birer nüshası ekte sunulmaktadır (Ek 3 ve 4).

RCR/S, yukarıda bahsi geçen Maden İşletme Ruhsatının doğusunda ve batısında Hakkari bölgesinde çok sayıda çinko ve kurşun arama ruhsatları ve maden çıkarma ruhsatları bulunan merkezi Türkiye'de bulunan bir şirkettir. RCR/S, bu Maden İşletme Ruhsatının tarafların karşılıklı faydasına olacak şekilde en üst düzeyde araştırmak, değerlendirmek ve geliştirmek için gerekli deneyim, uzmanlık ve kaynağa sahiptir. RCR/S, KC'nin desteği ile İR/ii'yi BM'den edinmeyele ilgilenmektedir.

2) RCR/S ve KC, aşağıdaki hususlar üzerinde mutabakata varmışlardır;

2.1) KC, İR/ii'nin BM'den RCR/S'ye herhangi bir alacak, kredi veya ücret almadan transferi için gerekli düzenlemeyi yapar ve RCR/S de doğrudan transfer maliyetlerini öder. Bu Anlaşma, İR /ii RCR/S'ye transferinden sonra yürürlüğe girer.

2.2) İR/ii'nin RCR/S'ye transfer edilmesi ardından RCR/S arama çalışmalarının ve İR/ii ile ilgili gerekli çalışmaların finansmanını sağlar ve bunların RCR/S'nin inisiyatifinde pozitif olması durumunda RCR/S, 6 ay ila 1 yıl arasında tahmini bir zaman

- 2.3) KC will be entitled to 17% of the ROM ore produced and RCR/S will have the first option to purchase KC 17% share of the ROM ore production from them at a market related price
- 2.4) The ROM ore tonnages to be sold directly or to processed at RCR/S Beneficiation Plant will be determined at RCR/S Beneficiation Plant and/or at Ismet Olmez weigh bridge
- 2.5) RCR/S will pay KC for its 17% share of the ROM ore sold directly to RCR/S or Processed at RCR/S Beneficiation Plant on a monthly basis (by the 15th of every month)
- 2.6) RCR/S will have the right, at its sole discretion, to exit from the project at any time subject to it providing all information obtained on the Project to KC and transferring the ML and OL to KC at no cost.
- 2.7) The duration of this Agreement is from the date of transfer of the ML and OL to RCR/S up until the ore on the ML is mined out or up until RCR/S decides to exit from the Project at its sole discretion
- 2.8) RCR/S will adhere to all legal requirements to keep the ML in good standing whilst it is involved in the Project
- 2.9) This Agreement is legally binding on both parties.
- 2.10) Both parties will use their respective best endeavours to resolve any dispute that may arise in future failing which the dispute will be reverted to the Ankara Court.
- 2.11) Should there be a difference in interpretation between the English and Turkish version of this Agreement the English version will prevail

- çerçevesinde maden çıkarma işlemlerini başlatır.
- 2.3) KC, üretilen ROM cevherinin % 17'i üzerinde hak sahibi olur ve RCR/S'nin ilk seçeneği, ROM cevher üretiminin KC'nin % 17'lik payının onlardan piyasa fiyatında alınması olacaktır.
- 2.4) Doğrudan satılacak veya RCR/S'nin Cevher Zenginleştirme Tesisinde işlenecek ROM cevher tonajları, RCR/S'nin Cevher Zenginleştirme Tesisinde ve/veya İsmet Ölmez kantlarında belirlenir.
- 2.5) RCR/S, doğrudan RCR/S'ye satılan veya RCR/S'nin Cevher Zenginleştirme Tesisinde işlenen ROM cevherinin kendi %17'lik payı için KC'ye aylık ödeme yapar (her ayın 15'inde)
- 2.6) RCR/S, Proje hakkında elde edilen tüm bilgileri KC'ye ücretsiz vermek ve İR ve İl'yi ücretsiz transfer etmek koşuluyla herhangi bir zamanda kendi inisiyatifinde projeden çıkma hakkına sahiptir.
- 2.7) Bu Anlaşmanın süresi, İR ve İl'in RCR/S'ye trasferi ile başlar ve İR'de belirtilen cevher çıkarılınca kadar veya RCR/S kendi inisiyatifinde Projeden çıkmaya karar verinceye kadar devam eder.
- 2.8) RCR/S, Projede yer aldığı sürece İR'nin itibarının korunması için tüm yasal şartlara uymayı kabul eder.
- 2.9) Bu Anlaşma, her iki taraf açısından da yasal olarak bağlayıcıdır.
- 2.10) Taraflar, gelecekte ortaya çıkabilecek anlaşmazlıkların çözümü yolunda her türlü çabayı sarf ederler; anlaşmazlığın çözülememesi durumunda konu Ankara Mahkemesine götürülür.
- 2.11) Anlaşmanın İngilizce ve Türkçe versiyonları arasında yorumda farklılık ortaya çıkması durumunda İngilizce versiyon geçerli olacak

This is done and signed at on
this day of 2011

On behalf of RCR/S

Alan Mitchell Clegg

Abdulkadir Seyitoğlu



Witness 1)

Witness 2)

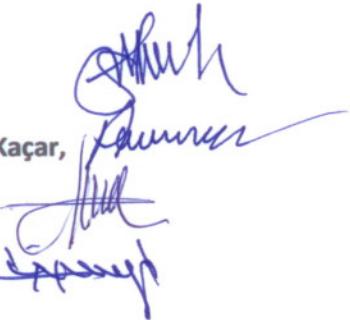
This done and signed at on
this day of

Mustafa Kurt,

Abdurrahman Kaçar,

Fazıl Çakır

Hüseyin Çiftçi



Witness 1)

Witness 2)

İşbu sözleşme 2011'in günü
.....'de/da hazırlanmış ve imzalanmıştır.

RCR/S adına

Alan Mitchell Clegg

Abdulkadir Seyitoğlu



Tanık 1)

Tanık 2)

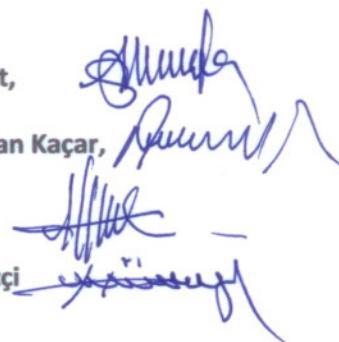
İşbu sözleşme 2011'in günü
.....'de/da hazırlanmış ve imzalanmıştır.

Mustafa Kurt,

Abdurrahman Kaçar,

Fazıl Çakır

Hüseyin Çiftçi



Tanık 1)

Tanık 2)



APPENDIX 5:
Metallurgical Test Work Reports

Reg No. 2006/081487/23
PO BOX 38390
FAERIE GLEN
0043
Tel+Fax: 012-9915156
Cell: 0826519962
E-mail: anvilsparks@vodamail.co.za
18 March 2010

Mr M Robertson
c/o Red Crescent Resources
Turkey

The Hakkari Zinc Deposit - A Review

- **Introduction**

The author was requested by Mr D J Taylor, the CEO of Red Crescent Resources (RCR) to give a review of their desk top study which has been compiled for the Hakkari zinc mineral occurrence in SE Turkey.

- **The Study**

The study was conducted on four batches of samples sent to South Africa for evaluation and test work. The assaying was done by Set-Point and UIS Laboratories; the mineralogical investigations were carried out by SGS Laboratories and the test work was done by Tangmere R&D and Mintek. Mike Plaskitt, a professional metallurgist, coordinated all the work and compiled the reports.

- **Comments**

1. Ore Quality and Variability

Ore samples varied from 16.7% to 42.95% Zn and 0.96% to 14.1% Pb. The dominant zinc mineral was smithsonite with substantial amounts of hemi-morphite present as well. Sphalerite content was minor. The lead mineral was cerrusite.

2. Gangue

The gangue consists of oxidised iron minerals, calcite, barite and quartz. The iron content varied from 0.15% to 18.8% and is essentially goethite and siderite weathered into limonite.

3. Mineral Liberation Sizes

Smithsonite, hemi-morphite and cerrusite are relatively coarse grained and liberate between 220 and 380 micron. The goethite/limonite liberates at around 120 micron and the remaining gangue at about 200 micron.

4. Treatment Options Considered

Oxide flotation was rejected due to the high ore grade, inherent inefficiencies in oxide flotation as well as likely cost. Gravity concentration techniques considered were cyclone classification, spirals and shaking tables. Of these cyclone and spirals were deemed to have some potential as pre-concentrators and future work should be carried out. One may add dense medium separation techniques to this list. There is potential in such technologies but one should not be too optimistic in this regard. On the plus side they are relative inexpensive options.

The iron minerals showed no response to magnetic separation attempts and calcining test work conducted was not very useful. In the latter regard it may be more productive to fume the material in Waelz kilns. Waelz kiln fuming was at one stage very popular in Eastern European Countries, Russia and even Japan. In these operations zinc/lead oxides, slags and tailings were successfully treated. The fume was sold to zinc refineries.

The RCR study decided that the direct leaching option, with diluted sulphuric acid, was the best option for treating the high grade Hakkari ore.

5. The Direct Acid Leach

Some detailed test work showed the following results:

- Zinc dissolution was in excess of 90% with fast kinetics even in relatively weak acid solutions. Optimisation of these leaching conditions as well as some heating should push these dissolutions into the mid nineties. Very pleasing is the ready dissolution of hemi-morphite without any silica gelling indications! Sphalerite will, however, not leach under such conditions.
- The “weak” acid solution (15-20% sulphuric acid) is the favoured option as less iron will be dissolved than if stronger acid solutions are used. This fits well with the spent electrolyte, usually, obtained in zinc electrowinning operations.
- Leaching performed satisfactorily at ambient conditions; the stringent winter temperatures in Hakkari should, however, be taken into account. Steam should be made available to the leach and the purification plants.

- The Study calculated the acid consumption to be about 30kg's per ton of ore treated. Lower ore grades could influence this estimate significantly.
- Although no filtration problems were experienced it will be prudent to conduct the necessary settling and filtration tests in future test work specially when higher silica containing ores are leached.
- It was surprising that the caustic soda leach conducted on the ores gave very poor dissolution results (30%). The caustic leach would have circumvented the iron removal problem.
- Purification test work is not complete but should pose no serious problems. The technology is standard practise in the zinc electrowinning industry. It is important to oxidise the iron to the ferric state prior to neutralization. The ferric iron can then be removed in a variety of ways. Jarosite may be RCR's best option. The iron removal will assist in removing deleterious elements from the prospective electrolyte. It will, however, be necessary to check the purified solution for Cu, Co, Ni, Cd, Ge, As and Sb as these elements can seriously influence the plating of zinc. If detected these elements can be readily removed by cementation with zinc dust.
Ion exchange is also a possibility for total solution purification but would have to be extensively tested specially for iron fouling of the resin. Whatever option is chosen good quality electrolyte is a prerequisite for decent electrowinning performance.
- The environmental situation with the storage of acidic leach residues in Turkey is not known to the author but should be clarified.

6. Advantages of the Direct Leach Option

- No or possibly little pre-concentration is required for this high grade ore.
- Proven technology can be used throughout the design.
- The capacity of the plant can easily be up-scaled to treat far larger tonnages.

7. Risks with the Direct Leach Option

- Ore variability due to increased gangue. This could result in higher acid consumption in the leach and create potential filtration issues. Ore grade control in the mining division should be considered. Ore blending in the plant should also be part of the design.

8.Piloting

- The Study conclusions are based on laboratory scale test work which will have to be verified in a pilot plant of a suitable size. This should be part of the feasibility study.

9. Capex, Opex and Financials

- The Capex and Opex for the 150000 tpa ROM case are based on likely Rand costs in South Africa and a specific plant, equipment and process point-of-view. Desk top studies of this type probably carry a 30% contingency. The Turkish equivalent costing model is not known to the author. It should be understood that the technology can easily be up-scaled from a throughput point-of-view. Usage would then be made of economies of scale and fixed costs lowered accordingly.

Any by-product revenue, at this stage of the project, should be ignored.

10. Project Options

- In evaluating this project it should be kept in mind that it may be financially advantageous to phase the project and to implement technology in stages. The following are possibilities:
 1. Mine and sell ROM ore now. Approach ISF smelters in this regard.
 2. Treat the ROM ore in a Waelz Kiln in Turkey or elsewhere and sell the zinc/lead fume to zinc refineries or Zn/Pb smelters.
 3. Produce LME grade zinc cathode and sell into the market. This would eliminate expensive melting and casting equipment.

11. Conclusions and Recommendations

- The work carried by RCR under the supervision of Mike Plaskitt is of a high standard and although some detail and refinements need attention the correct choice of the direct leach option has been made. The direct leach includes conventional solution purification and electrowinning. Melting and casting into ingots would be the preferred choice if cathode cannot be sold directly.
- The project has much appeal and potential and deserves more development. The focus should be on ore resource establishment and on ways of mining the deposit in the best possible way. Grade control is of the utmost importance to the direct leaching option.

E H O Meyer.