



SUMMARY REPORT  
2005 DIAMOND DRILLING  
PROGRAM

Karl Zeemal Target

Musselwhite Mine

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J.W.Patrick lengyel, P. Geo.

May 1st, 2007

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## SUMMARY

From January 26 2005 to March 16, 2005, a drill program totaling 2,334.0 meters of surface exploration drilling were conducted in order to test the Karl Zeemal area between Section 775 N and 1850 N located approximately 15 km (grid) southeast of Musselwhite Mine. The Karl Zeemal area is a separate fold structure from the main T-Antiform host to the main Musselwhite Mine ore bodies. It is hosted in the southern iron formation and is interpreted to be the up plunge extent of the East Bay syncline.

A total of 45 NQ diamond drill holes were completed as follow up to earlier drilling programs by Power Explorations Ltd. that had identified the Karl Zeemal Zone. The programs were designed to test the down plunge and strike extents of the previously outlined mineralization.

Gold values ranged from 22.33 g/T Au over 0.46m, 5.98 g/T Au over 6.18m to 3.70 g/T Au over 2.19m (true width) on both limbs of the synform. Unfortunately, none of the intersections had any continuity that could be modeled into a viable mineral resource.

Due to the lack of continuity and the perceived lack of size potential, it is recommended that further drilling be suspended until market conditions are conducive to the economic viability of the zone.

## INTRODUCTION

The current program is one of several ongoing and new exploration programs within an expanded exploration effort on the Musselwhite Property that includes mapping, geochemistry, trenching, airborne geophysics, surface geophysics, and 3D modeling throughout the property.

The following report summarizes the results of the drill programs completed on the Karl Zeemal area located approximately 15 km grid southeast of Musselwhite Mine.

N. Morissette ( a division of Boart Longyear) of Haileybury, Ontario was contracted to perform the drilling.

## TERMS OF REFERENCE

The current report is one of seven reports being prepared for Musselwhite Mine as a consulting service provided by Patrick Lengyel, Michael Thompson, and Caitlin Jeffs. Patrick Lengyel has provided consulting services to Musselwhite Mine since 2001, including Acting Exploration Coordinator 2002-2003. Michael Thompson and Caitlin Jeffs were employed in the Geology Department at Musselwhite Mine from 2003-2006 and their responsibilities included participation in several of the reported projects currently being submitted.

## **DISCLAIMER**

The current report was generated by obtaining cost and digital geological data from the mine. Caitlin Jeffs and Michael Thompson reviewed the raw data. Caitlin Jeffs generated all plan and section maps and some appendices. Michael Thompson reviewed QA/QC and drill data and generated the bulk of the appendices and report. Patrick Lengyel tabulated the cost data and reviewed all maps, sections, reports, and appendices. While the authors are confident that the underlying work conforms to industry standards based on our collective on-site experience and review of the raw data, and the sourced data has been reviewed in detail to confirm data integrity, none were present on a continuous basis through the duration of all programs.

## **PROPERTY DESCRIPTION**

The Musselwhite Mine property consists of 308 unpatented and 346 leased claims covering an area of approximately 17,912 hectares.

The property is recorded in the Patricia Mining Division with beneficial interest held by Goldcorp Canada Ltd. (68%) and Kinross (32%).

## LOCATION AND ACCESS

The Musselwhite Property is located in the Patricia Mining District in northwestern Ontario; NTS 53B/9 - latitude 52° 36' 50" N and longitude 90° 21' 43" W

The property is situated approximately 76 km southeast of the First Nation community of Round Lake (Weagamow), 103 km north of the town of Pickle Lake, and 430 km northwest of Thunder Bay (Figure 1).

Access to the property is provided by chartered air service and an all-weather road that extends north from the town of Pickle Lake (Figure 2).

## LEASED MINING CLAIMS AND PARCEL NUMBERS

The 2005 Karl Zeemal drilling program was completed on the following claims within the Musselwhite Property:

Table 1: Karl Zeemal Claims

Claim	Lease	Hectares	Units
1199739			16
1199740			16

NOTE: The parcel registers (surveyed claims) are in Appendix I.



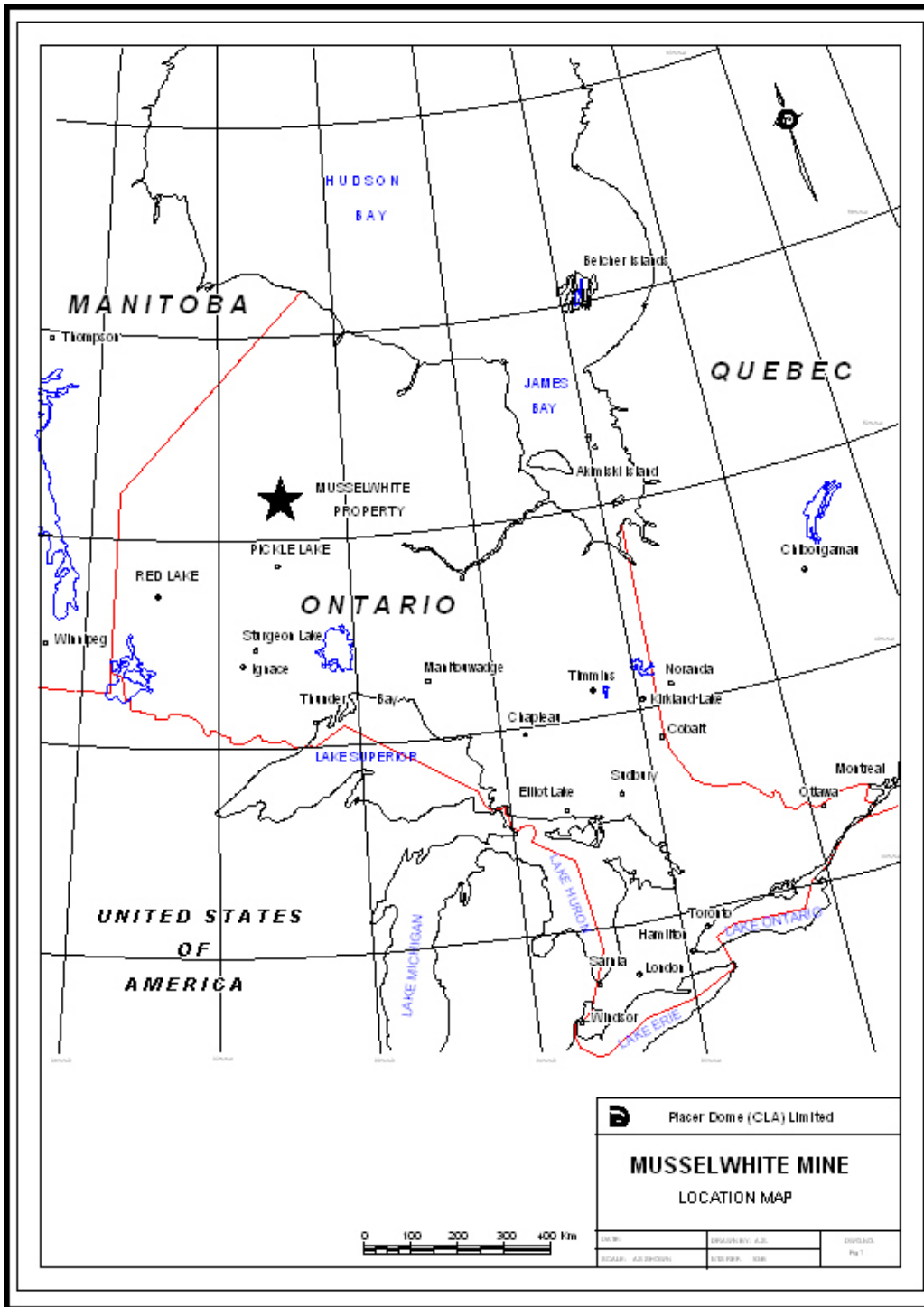


Figure 1 – Regional Location Map

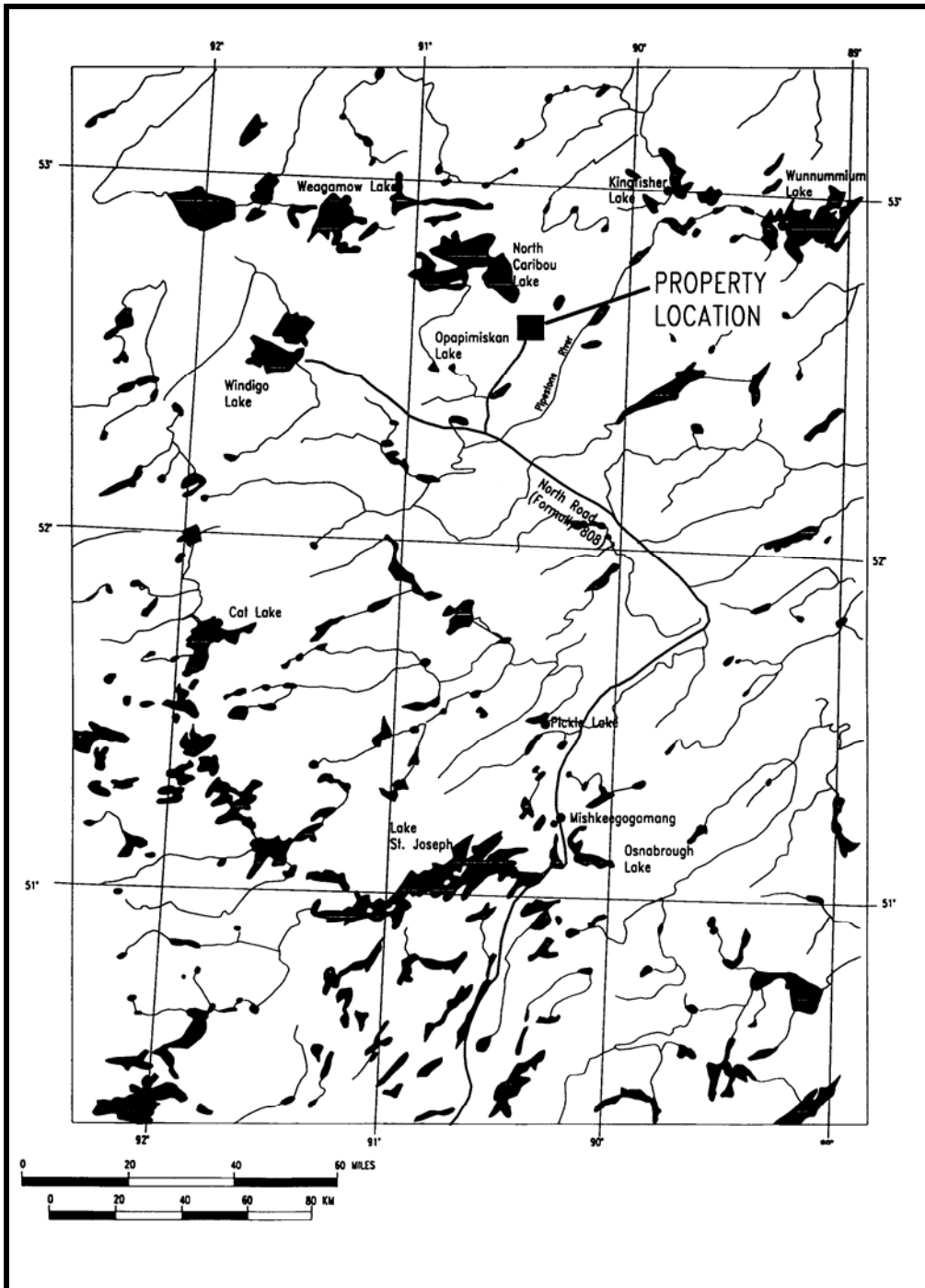


Figure 2 - General Location Map

## PROPERTY GEOLOGY

The Musselwhite Property is within the Weagamow/North Caribou Lake Greenstone Belt of the Sachigo Subprovince of the Archean Superior Province. Supracrustal rocks have been regionally metamorphosed to amphibolite grade. At least two major deformational events have occurred.

Stratabound gold mineralization at Musselwhite occurs primarily within folded silicate/oxide iron formation in a dominantly volcanic sequence. Grunerite-garnet-amphibole-chert and grunerite-magnetite-chert iron formations are the most common host rocks to mineralized zones.

Quartz and pyrrhotite accompany economic gold mineralization. An intense network of anastomosing quartz floods/veinlets characterizes mineralized zones. Pyrrhotite occurs as discontinuous stringers, wisps and blebs peripheral to quartz floods, in late fractures in quartz, and as interstitial blebs in grunerite-garnet bands. Pyrrhotite varies from 2-30% quartz floods vary from 5-30%. Pyrrhotite was observed to increase in zones of increased quartz floods.

Two main iron formations occur on the property. The Northern Iron Formation has been the main focus of previous exploration and is the dominant host for mineralization including all of the known deposits. However, recent identification of mineralization within the sub parallel Southern Iron Formation indicates further potential for the discovery of additional mineralization.

Four deposits have been identified in the East Bay Synform; these are the T Antiform, PQ, West and Esker Deposits. An additional deposit, the West Anticline

Deposit, has been identified to the west of the East Bay Synform. The T Antiform is the largest and most significant deposit.

## CURRENT PROGRAM

### Program Details

From January 26, 2005 to March 16, 2005, a 2334.0 meter surface exploration drilling program was completed on the Karl Zeemal area located approximately 15 km (grid) southeast of Musselwhite Mine between Section 775N and 1850N. A total of 45 diamond drill holes were completed. A total of 1139 samples were taken of which 1025 were of drill core, 33 STD900, 24 STD999 and 56 grab blanks.

Project planning, supervision and report writing were facilitated in house by Musselwhite staff. A list of drill holes is provided in Appendix II. A 1:1000 scale plan map and accompanying 1:250 scale cross-sections are included in Appendices III and IV respectively. Diamond drill logs are included in Appendix V.

The assay laboratory at the Musselwhite mine site provided analytical services, with some outsourcing of assays to ALS Chemex in Thunder Bay, Ontario. A list of all samples and assay certificates are included in Appendix VI and a summary of the Musselwhite Mine and ALS Chemex assay and quality control procedures are included in Appendix VII.

The Musselwhite QAQC program inserts alternating one of two prepared standards and a granite blank every ten samples. Results are summarized in Appendix VIII. No significant problems or systematic errors were encountered.

In this report, all assay data is reported in grams of gold per metric Tonne (g/T), all distances are in metres and all azimuths are related to the mine grid (mine grid north

= 317.951 degrees astronomic north). A conversion table from UTM NAD 83 to Musselwhite Mine grid is included in Appendix IX.

### Program Targeting

The Karl Zeemal zone was first discovered by Power Exploration in the 1980's and minimum drilling and incomplete data necessitated a renewed exploration effort in the area.

Recent 3D modeling of historic drilling accompanied by reconnaissance mapping in the led to a revision in the model and renewed interest in the exploration potential of the area. The Karl Zeemal area is interpreted to be a reoccurrence of the Southern Iron Formation that is folded into a synform by the Esker fold axis. This fold structure lies to the east of the reoccurrence of the East Bay Syncline. The fold is double plunging forming a canoe shape. The synform extends to a maximum depth of approximately 50 meters but is typically less.

The Karl Zeemal drilling was designed to test the strike and depth extents of the zone with the goal of outlining an open pittable resource. The most northern holes were designed to test the geological model, specifically the up plunge extent of the Karl Zeemal synform.

## **SIGNIFICANT RESULTS**

The program intersected several zones of significant gold mineralization from zones typically between 10 and 50 meters from surface on both limbs of the synform with grades ranging from 22.33 g/T Au over 0.46m, 5.98 g/T Au over 6.18m to 3.70 g/T Au over 2.19m (true width).

Significant intersections are summarized in Appendix X. An in-house resource was calculated and the economic viability of the deposit is under consideration.

## **CONCLUSIONS AND RECOMMENDATIONS**

No further drilling is recommended pending a thorough review of the economic viability of the current deposit.



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## STATEMENT OF QUALIFICATIONS

I, Michael J. Thompson, do hereby certify:

I am a resident of 354 Pearl Street, Thunder Bay, Ontario, Canada P7B 1G1.

I am a graduate of the University of Toronto with an Honours B. Sc. in Geology (1997).

I have been employed full-time as a geologist with industry since 1997.

I am currently in the application process to become a Professional Geoscientist with the Association of Professional Geoscientists of Ontario (APGO Application #6388).

I am also a member in good standing with the Prospectors and Developers Association of Canada and the Society of Economic Geologists.

I am currently retained as a private consultant by Goldcorp Canada Ltd. to carry out occasional project work at the Musselwhite Mine in Northwestern Ontario.

Michael J. Thompson

Date: May 1<sup>st</sup>, 2007





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## STATEMENT OF QUALIFICATIONS

I, J.W. Patrick Lengyel, do hereby certify:

I am a resident of 90 Nicollet Avenue, Winnipeg, Manitoba, Canada R2M 4T9.

I am a graduate of University of Manitoba with a B. Sc. Degree in geology (1988).

I have been employed full-time as a geologist with industry since 1987.

I am a Professional Geoscientist registered with the following professional associations and institutions:

Association of Professional Geoscientists of Ontario (APGO - #420)

Association of Professional Engineers and Geoscientists of Manitoba (APEGM - #20259)

Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS - #11384).

Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories & Nunavut (NAPEGG #L1788).

I am also a member in good standing with the Prospectors and Developers Association of Canada and the Geological Association of Canada.

I am currently retained as a private consultant by Goldcorp Canada Ltd. to carry out occasional project work at the Musselwhite Mine in Northwestern Ontario.

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J.W. Patrick Lengyel, P. Geo.

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Date: May 1<sup>st</sup>, 2007

# **Appendix I**

## Claim List

<b>Claim Number</b>	<b>Lease Number</b>	<b>Area (ha)</b>	<b>Units</b>
1199739			16
1199740			16

## **Appendix II**

### Diamond Drilling Holes List

HoleID	Claim1	Claim1%	Claim2	Claim2%	Claim3	Claim3%	Claim4	Claim4%	East_MG	North_MG	R.L	StartDate	EndDate	East_UTMNAD83	North_UTMNAD83	Number of Samples	Lab	Dip	Azimuth	Depth_m
05-KAZ-001	1199740		N/A		N/A		N/A		11304.26	777.65	5319.33	30-Jan-05	30-Jan-05	686342.83	5827750.25	23	Chemex	-50	246	56
05-KAZ-002	1199740		N/A		N/A		N/A		11283.18	823.31	5319.25	30-Jan-05	30-Jan-05	686295.90	5827768.32	31	Chemex	-50	246	187
05-KAZ-003	1199740		N/A		N/A		N/A		11291.46	851.43	5317.78	01-Feb-05	02-Feb-05	686282.26	5827794.26	23	Chemex	-50	246	52
05-KAZ-005	1199740		N/A		N/A		N/A		11277.00	902.00	5317.80	01-Feb-05	02-Feb-05	686236.66	5827820.47	27	Internal	-50	246	49
05-KAZ-007	1199740		N/A		N/A		N/A		11256.67	946.60	5317.79	03-Feb-05	04-Feb-05	686191.01	5827838.31	22	Internal	-50	246	50
05-KAZ-009	1199739		N/A		N/A		N/A		11234.93	993.40	5317.67	04-Feb-05	05-Feb-05	686142.81	5827856.74	25	Internal	-50	246	50
05-KAZ-011	1199739		N/A		N/A		N/A		11229.42	1042.97	5318.40	05-Feb-05	06-Feb-05	686104.33	5827888.47	12	Internal	-50	246	52
05-KAZ-013	1199739		N/A		N/A		N/A		11215.38	1094.15	5316.83	06-Feb-05	07-Feb-05	686058.61	5827915.40	18	Internal	-50	246	52
05-KAZ-015	1199739		N/A		N/A		N/A		11195.04	1137.57	5318.48	05-Feb-05	06-Feb-05	686013.78	5827932.39	22	Internal	-50	246	50
05-KAZ-017	1199739		N/A		N/A		N/A		11182.10	1188.98	5318.53	07-Feb-05	08-Feb-05	685968.68	5827960.26	14	Internal	-45	246	50
05-KAZ-019	1199739		N/A		N/A		N/A		11171.23	1238.41	5318.13	08-Feb-05	09-Feb-05	685926.45	5827988.15	23	Internal	-50	246	52
05-KAZ-021	1199739		N/A		N/A		N/A		11147.67	1286.86	5318.94	10-Feb-05	10-Feb-05	685875.80	5828006.50	27	Internal	-45	246	52
05-KAZ-023	1199739		N/A		N/A		N/A		11128.14	1361.23	5315.43	10-Feb-05	11-Feb-05	685809.99	5828046.25	18	Internal	-50	246	50
05-KAZ-024	1199739		N/A		N/A		N/A		11127.16	1414.25	5314.21	24-Feb-05	24-Feb-05	685772.36	5828083.60	8	Internal	-50	246	52
05-KAZ-025	1199739		N/A		N/A		N/A		11104.66	1458.86	5314.19	10-Feb-05	10-Feb-05	685725.14	5828099.94	12	Internal	-50	246	52
05-KAZ-026	1199739		N/A		N/A		N/A		11093.90	1508.72	5314.39	11-Feb-05	11-Feb-05	685682.69	5828128.21	27	Internal	-45	246	52
05-KAZ-027	1199739		N/A		N/A		N/A		11070.00	1551.00	5314.19	26-Jan-05	28-Jan-05	685636.10	5828141.90	100	Internal	-50	246	160
05-KAZ-028	1199739		N/A		N/A		N/A		11055.94	1602.07	5315.85	12-Feb-05	12-Feb-05	685590.44	5828168.74	18	Internal	-45	246	52
05-KAZ-029	1199739		N/A		N/A		N/A		11041.22	1652.35	5316.39	13-Feb-05	13-Feb-05	685544.86	5828194.56	16	Internal	-45	246	52
05-KAZ-030	1199739		N/A		N/A		N/A		11016.81	1689.20	5318.54	10-Mar-05	10-Mar-05	685501.68	5828204.00	22	Internal	-45	246	52
05-KAZ-031	1199739		N/A		N/A		N/A		11001.51	1742.65	5318.43	14-Feb-05	14-Feb-05	685453.47	5828231.68	16	Internal	-45	246	52
05-KAZ-033	1199739		N/A		N/A		N/A		10966.91	1835.98	5318.38	14-Feb-05	14-Feb-05	685363.64	5828274.54	18	Internal	-45	246	52
05-KAZ-041	1199740		N/A		N/A		N/A		11291.78	826.65	5318.55	02-Feb-05	02-Feb-05	686299.75	5827776.71	38	Chemex	-45	246	42
05-KAZ-042	1199740		N/A		N/A		N/A		11293.38	773.27	5320.68	24-Feb-05	24-Feb-05	686338.08	5827739.53	0	No Assays	-50	246	31
05-KAZ-043	1199740		N/A		N/A		N/A		11278.73	846.65	5319.30	24-Feb-05	24-Feb-05	686276.45	5827781.97	19	Internal	-50	246	31
05-KAZ-044	1199740		N/A		N/A		N/A		11263.88	898.83	5318.31	24-Feb-05	25-Feb-05	686229.46	5827809.06	22	Internal	-50	246	40
05-KAZ-045	1199740		N/A		N/A		N/A		11247.34	942.83	5318.74	22-Feb-05	22-Feb-05	686186.94	5827829.10	38	Internal	-50	246	40
05-KAZ-046	1199739		N/A		N/A		N/A		11226.09	990.01	5318.95	25-Feb-05	25-Feb-05	686138.83	5827848.15	26	Internal	-50	246	37
05-KAZ-047	1199739		N/A		N/A		N/A		11217.68	1038.75	5319.36	24-Feb-05	24-Feb-05	686098.85	5827877.26	21	Internal	-50	246	37
05-KAZ-048	1199739		N/A		N/A		N/A		11200.82	1088.16	5317.22	23-Feb-05	23-Feb-05	686052.34	5827900.96	18	Internal	-50	246	37
05-KAZ-049	1199739		N/A		N/A		N/A		11184.52	1133.67	5318.92	23-Feb-05	23-Feb-05	686008.95	5827922.26	19	Internal	-50	246	37
05-KAZ-050	1199739		N/A		N/A		N/A		11171.46	1184.71	5319.05	19-Feb-05	19-Feb-05	685964.02	5827949.78	28	Internal	-50	246	40
05-KAZ-051	1199739		N/A		N/A		N/A		11160.56	1233.93	5318.74	19-Feb-05	19-Feb-05	685921.92	5827977.50	25	Internal	-50	246	46
05-KAZ-052	1199739		N/A		N/A		N/A		11138.38	1283.03	5319.46	17-Feb-05	17-Feb-05	685871.81	5827997.28	17	Internal	-45	246	37
05-KAZ-053	1199739		N/A		N/A		N/A		11153.88	1289.22	5318.49	17-Feb-05	17-Feb-05	685878.62	5828012.51	20	Internal	-45	246	46
05-KAZ-054	1199739		N/A		N/A		N/A		11119.98	1357.79	5317.13	17-Feb-05	17-Feb-05	685806.53	5828038.10	23	Internal	-50	246	37
05-KAZ-055	1199739		N/A		N/A		N/A		11151.17	1230.27	5319.64	23-Feb-05	23-Feb-05	685917.73	5827968.33	26	Internal	-45	246	40
05-KAZ-056	1199739		N/A		N/A		N/A		11094.54	1454.77	5315.80	24-Feb-05	24-Feb-05	685720.73	5828089.95	25	Internal	-50	246	40
05-KAZ-057	1199739		N/A		N/A		N/A		11083.36	1504.33	5315.28	24-Feb-05	25-Feb-05	685678.19	5828117.72	30	Internal	-45	246	40
05-KAZ-058	1199739		N/A		N/A		N/A		11116.71	1410.21	5315.07	14-Mar-05	14-Mar-05	685767.67	5828073.43	0	No Assays	-50	246	35
05-KAZ-059	1199739		N/A		N/A		N/A		11104.92	1405.40	5316.23	16-Mar-05	16-Mar-05	685762.57	5828061.76	30	Internal	-50	246	52
05-KAZ-060	1199739		N/A		N/A		N/A		11041.70	1596.57	5316.89	11-Mar-05	11-Mar-05	685584.06	5828154.88	26	Internal	-45	246	52
05-KAZ-061	1199739		N/A		N/A		N/A		10975.14	1732.07	5320.09	11-Mar-05	11-Mar-05	685441.93	5828205.73	21	Internal	-45	246	52
05-KAZ-062	1199739		N/A		N/A		N/A		10953.15	1830.46	5319.31	13-Mar-05	14-Mar-05	685357.62	5828261.00	19	Internal	-45	246	55
05-KAZ-063	1199739		N/A		N/A		N/A		10965.72	1782.25	5319.42	14-Mar-05	14-Mar-05	685400.21	5828235.16	12	Internal	-45	246	52

Total metres 2334

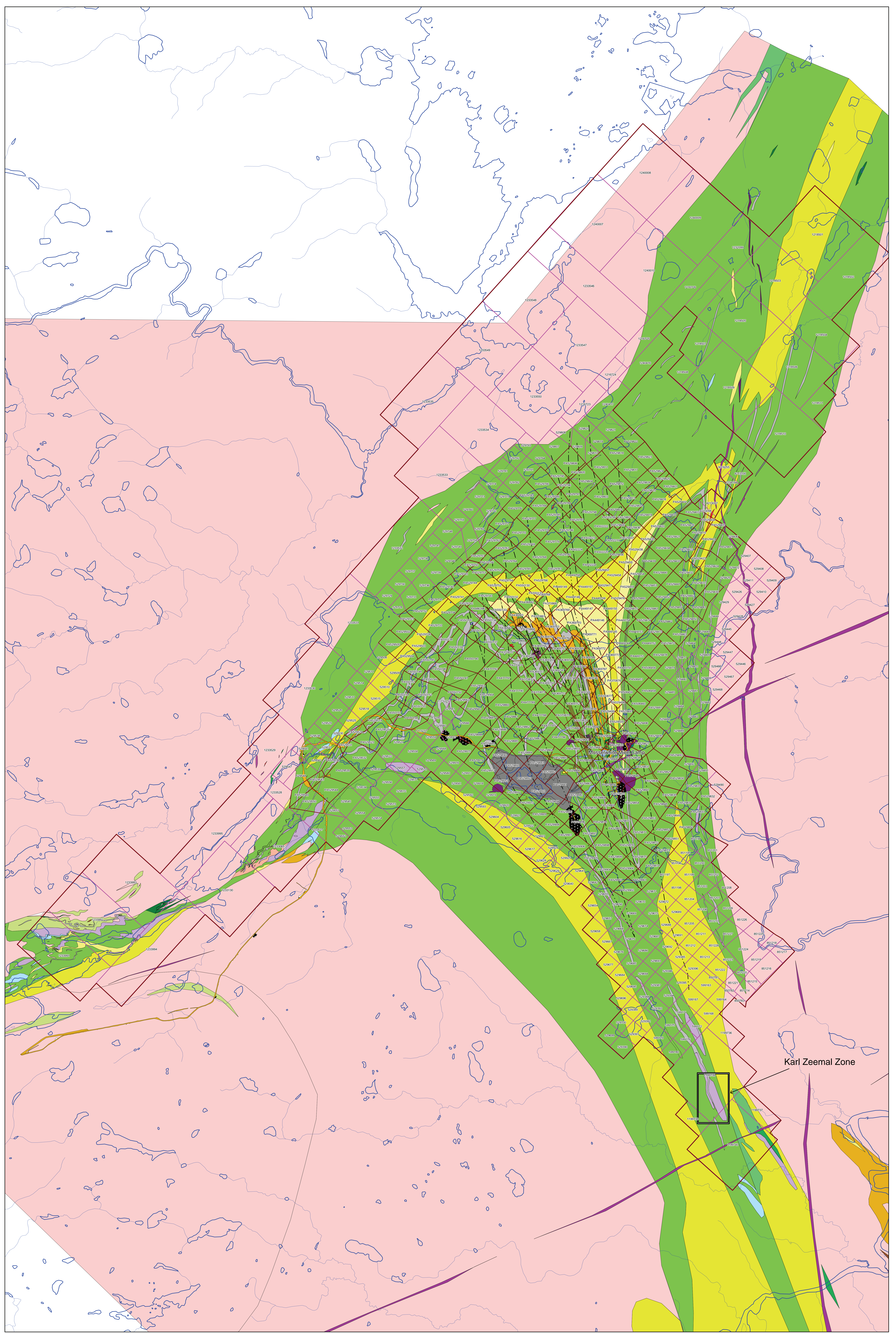
## **Appendix III**

Diamond Drilling Plan Map



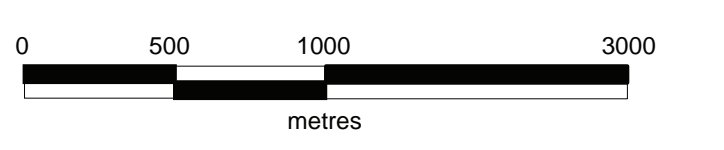
# Legend

- Phanerozoic**
- Quaternary**
- OB Overburden
  - OB Glacial, glaciofluvial, and lacustrine deposits
- Precambrian**
- Late Precambrian**
- 10a Mafic Intrusives
- Early Precambrian**
- 9 Intermediate to Felsic Intrusives
    - 9a Granite pegmatite
    - 8 Intermediate to Felsic Intrusives
      - 8 Unsubdivided
      - 8a Diorite
      - 8b Quartz diorite
      - 8c Trondhjemite
      - 8d Tonalite
      - 8e Granodiorite
      - 8f Granite pegmatite
      - 8h Biotite trondhjemite
      - 8i Granite
      - 8k Quartz monzonite
      - 8m Granitic granite
      - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
      - 8p Mylonitized granitoid rocks
      - 8q Biotite-muscovite fibrous trondhjemite/venite
      - 8r Biotite-tonalite gneiss
      - 8s Hornblende-biotite tonalite gneiss
      - 8u Garnet-muscovite tourmaline granite
  - 7 Mafic Intrusives
    - 7a Gabbro (Cl = 35-90)
    - 7b Leucogabbro (Cl = 10-35)
    - 7c Plagioclase-phyric gabbro
    - 7d Mafic dyke sills, small intrusions not related to mafic volcanic rocks
    - 7f Peridotite
    - 7h Ultramafic rocks and altered equivalents of probable intrusive origin
    - 7j Amphibolite
    - 7k Anorthositic gabbro
    - 7l Gabbro-anorthosite and anorthosite
  - 6 Clastic Sediments
    - 6 Unsubdivided
    - 6a Clay-supported conglomerate
    - 6b Matrix-supported conglomerate
    - 6c Organic conglomerate
    - 6d Polymictic conglomerate
    - 6e Boulder (>256 mm) conglomerate
    - 6f Cobble (64 to 256 mm) conglomerate
    - 6g Pebble (4 to 64 mm) conglomerate
    - 6h Gravel (2 to 4 mm) conglomerate
    - 6k Waste
    - 6m Arsenite
    - 6n Mudstone
    - 6p Felsipathic waste
    - 6r Felsipathic arenite
    - 6s Quartz arenite
    - 6u Amphibole-bearing mudstone/sandstone (conglomerate)
    - 6v Biotite-bearing mudstone/sandstone
    - 6w Garnet-bearing mudstone/sandstone
    - 6x Chlorite-bearing mudstone/sandstone conglomerate
    - 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
    - 6z Ultramafic rock interbedded with metasediments
    - 6aa Amphibole-bearing metasediments
    - 6aj Garnet-rich layers associated with metapelite and/or banded iron formation
  - 4 Chemical Sediments
    - 4a Chert-grunite
    - 4b Chert-magnetite iron formation
    - 4c Carbonaceous chert iron formation
    - 4d Carbonate magnetite
    - 4e Garnet-iron formation
    - 4f Garnet-biotite schist
    - 4g Sphalerite iron formation
    - 4h Graphitic iron formation
    - 4i Garnet-amphibole-grunite iron formation
    - 4j Chert
    - 4k Chert with pyrite and pyrrhotite
    - 4l Banded iron formation tectonic breccia
  - 3 Intermediate to Felsic Volcanics
    - 3a Intermediate flow
    - 3b Intermediate pyroclastic breccia, tuff breccia
    - 3c Intermediate tuff, lapilli-tuff
    - 3d Felsic flow
    - 3e Felsic pyroclastic breccia, tuff breccia
    - 3f Felsic tuff, lapilli tuff
    - 3g Subvolcanic rock, unsubdivided
    - 3h Subvolcanic quartz-plagioclase porphyry
    - 3i Subvolcanic quartz porphyry
    - 3j Subvolcanic plagioclase porphyry
    - 3k Felsic volcanoclastic rocks
    - 3m Intermediate dykes, sills, small intrusions
  - 2 Mafic Volcanics
    - 2 Unsubdivided
    - 2a Massive, fine to medium-grained flow
    - 2b Amygdaloidal flow
    - 2c Pillow flow, pillow breccia, hyaloclastite
    - 2d Flow breccia
    - 2e Pyroclastic breccia, tuff breccia
    - 2f Tuff, lapilli-tuff
    - 2g Medium to coarse-grained flow centres
    - 2h Dikes, sills, small intrusions
    - 2i Chlorite-actinolite schist of probable volcanic origin
    - 2j Volcanic flow
    - 2k Amphibolite
    - 2l Metavolcanics containing diopside-plagioclase epidote tourmaline garnet pods and/or layers
    - 2m Hornblende-plagioclase schist characterized by mm to cm scale zoning
    - 2n Hornblende-polyphyric
    - 2o Biotite-bearing metavolcanics
    - 2p Garnet-bearing metavolcanics
  - 1 Ultramafic Volcanics
    - 1 Unsubdivided
    - 1a Massive flow
    - 1b Spherule-reamed flow
    - 1c Olivine (polytuff) textured flow
    - 1d Talc-carbonate-magnetite/serpentine/schist of probable volcanic origin
    - 1e Flow top breccia
    - 1f Pillow flow
    - 1g Variolitic flow



Karl Zeemal Zone

Musselwhite Mine Grid North  
42° 57' East of True North



Projection: Musselwhite Mine Grid

	<b>goldcorp</b> CANADA LTD.
	<b>Project Location Map</b>
Author: M. Thompson	<b>2005 Drilling Program</b> Karl Zeemal Zone Musselwhite Mine
Date: 31/03/2007	NTS: 538/09
Scale: 1:250 000	



# Legend

## Phanerozoic

- Quaternary**
- OB Overturden
  - OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- M Mafic Intrusives
- 10a Diabase

### Early Precambrian

- 9 Intermediate to Felsic Intrusives
- 9a Granite pegmatite
- 8 Intermediate to Felsic Intrusives

- 8 Unsubdivided
- 8a Diorite
- 8b Quartz diorite
- 8c Trondhjemite
- 8d Tonalite
- 8e Granodiorite
- 8f Granitic pegmatite
- 8h Biotite trondhjemite
- 8i Granite
- 8k Quartz monzonite
- 8m Granitic granite
- 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parenthesis)
- 8p Mylonitized gneiss rocks
- 8q Biotite-muscovite fluorite trondhjemite/sericite
- 8r Biotite-tonalite gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite tourmaline granite

### Mafic Intrusives

- 7a Gabbro (CI = 35-90)
- 7b Leucogabbro (CI = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7i Peridotite
- 7h Ultramafic rocks and altered equivalents of probable intrusive origin
- 7j Amphibolite
- 7k Anorthositic gabbro
- 7l Gabbroic anorthosite and anorthosite

### Clastic Sediments

- 6 Unsubdivided
- 6a Class-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymictic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granite (2 to 4 mm) conglomerate
- 6k Wacke
- 6m Arenite
- 6n Mudstone
- 6p Feldspathic wacke
- 6r Feldspathic arenite
- 6s Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone /conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6a Andalusite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

### Chemical Sediments

- 4a Chert-grunerite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4h Sulfide iron formation
- 4i Graphitic iron formation
- 4ea Garnet-amphibole-grunerite iron formation
- 4ch Chert
- 4cnp Chert with pyrite and pyrrhotite
- 4tb Banded iron formation tectonic breccia

### Intermediate to Felsic Volcanics

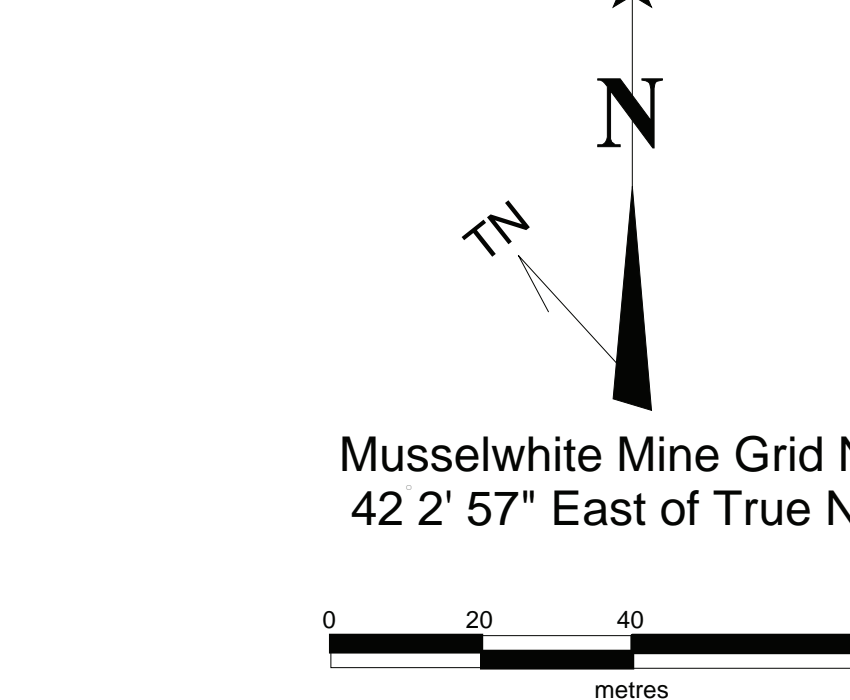
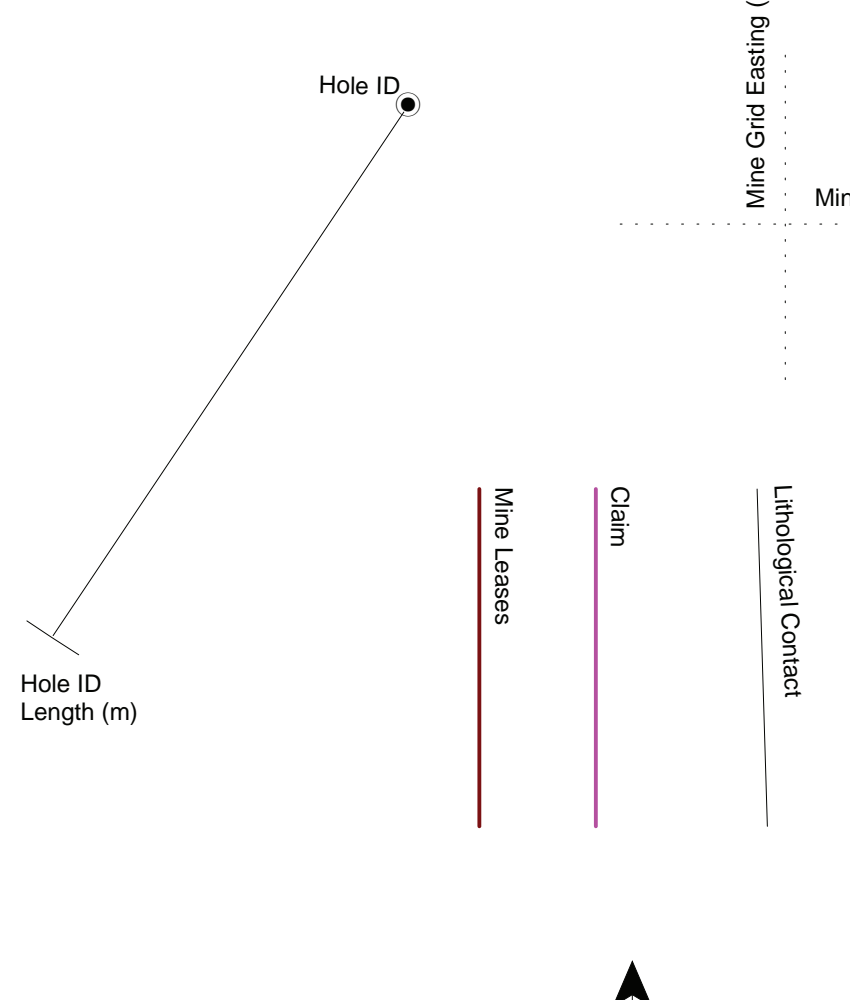
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rocks
- 3p Intermediate dikes, sills, small intrusions

### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2d Pillow flow, pillow breccia, hyaloclastite
- 2e Flow breccia
- 2g Pyroclastic breccia, tuff-breccia
- 2h Tuff, lapilli-tuff
- 2j Medium- to coarse-grained flow centres
- 2k Dikes, sills, small intrusions
- 2m Chlorite-actinolite schist of probable volcanic origin
- 2n Variscite flow
- 2p Amphibolite
- 2q Metavolcanics containing epidote-plagioclase -epidote tourmaline garnet pods and/or layers
- 2r Hornblende-plagioclase schist characterized by mm to cm scale layering
- 2s Hornblende-porphyrroblastic
- 2t Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinifex-textured flow
- 1c Oliphant (polysuturite)-textured flow
- 1d Talc-carbonate+magnetite+stremolite+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1h Variscite flow



Musselwhite Mine Grid North  
42° 2' 57" East of True North

Projection: Musselwhite Mine Grid

<p>Geology &amp; DDH Locations</p>	
Author: M. Thompson	<h2>2005 Drilling Program Karl Zeemal Musselwhite Mine</h2>
Date: 31/03/2007	
NTS 53B/09	
Scale 1:1000	



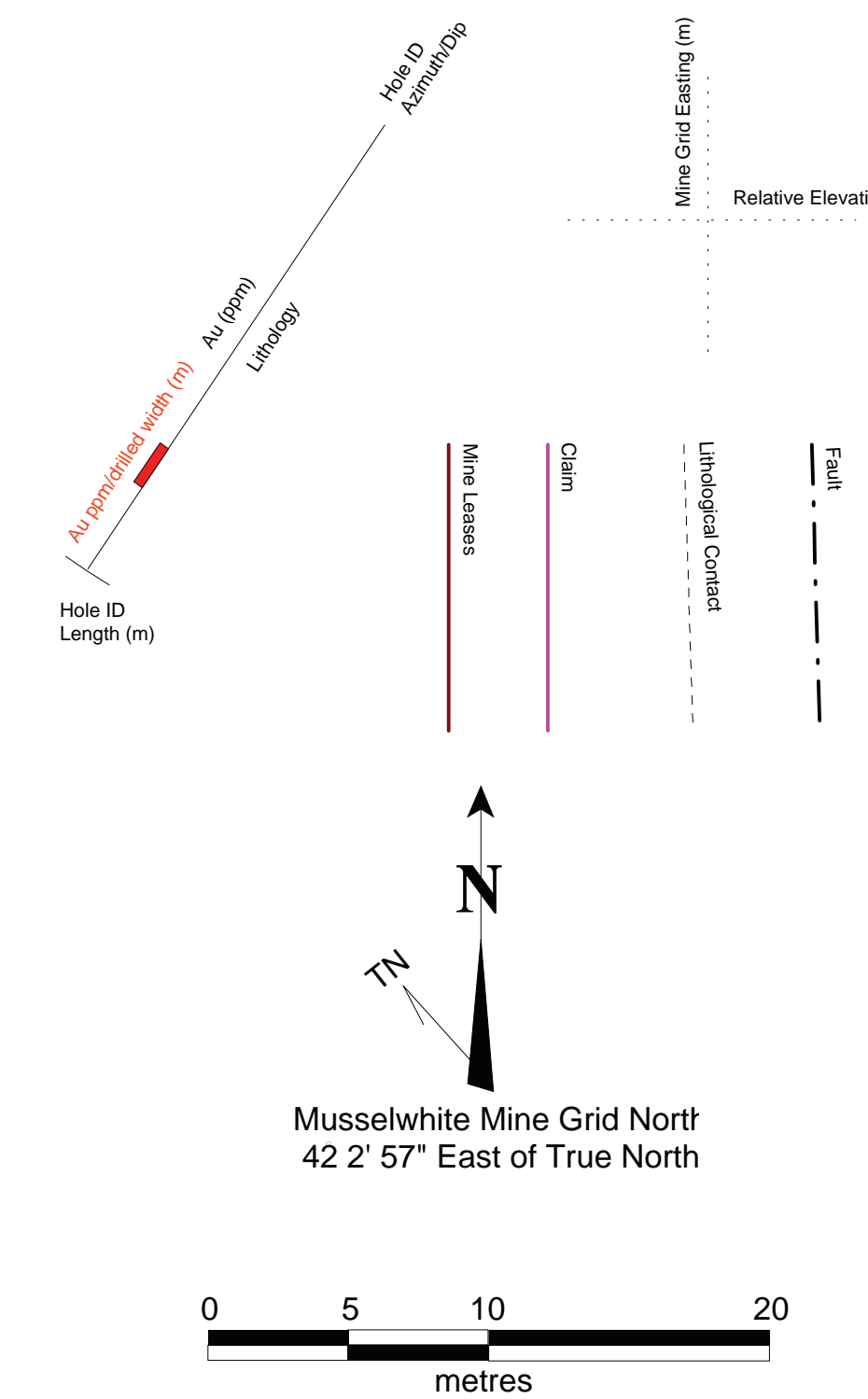


## **Appendix IV**

Diamond Drilling Sections

# Legend

- Phanerozoic**
- Quaternary**
- Q8 Overburden
  - Q8 Glacial, glacioluvial, and lacustrine deposits
- Precambrian**
- Late Precambrian**
- 10 Mafic Intrusives
  - 10a Diabase
- Early Precambrian**
- 9 Intermediate to Felsic Intrusives
  - 9a Granite pegmatite
  - 8 Intermediate to Felsic Intrusives
  - 8a Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granitic pegmatite
  - 8g Biotite schist
  - 8h Granite
  - 8i Quartz monzonite
  - 8m Gneissic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
  - 8p Mylonitized granitoid rocks
  - 8q Biotite-muscovite - feldite-tourmaline/kyanite
  - 8r Biotite-sillimanite gneiss
  - 8s Hornblende-schist tonalite gneiss
  - 8u Garnet-muscovite - tourmaline granite
- 7 Mafic Intrusives
  - 7a Gabbro (C = 35-60)
  - 7b Leucogabbro (C = 10-35)
  - 7c Plagioclase-phyric gabbros
  - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
  - 7e Peridotite
  - 7f Ultramafic rocks and altered equivalents of probable intrusive origin
  - 7g Amphibolite
  - 7h Anorthositic gabbro
  - 7i Gabbrone-anorthositic and anorthositic
- 6 Clastic Sediments
  - 6a Unsubdivided
  - 6b Clay-supported conglomerate
  - 6c Matrix-supported conglomerate
  - 6d Organic conglomerate
  - 6e Polymictic conglomerate
  - 6f Boulder (>250 mm) conglomerate
  - 6g Cobble (64 to 250 mm) conglomerate
  - 6h Pebble (4 to 64 mm) conglomerate
  - 6i Gravel (2 to 4 mm) conglomerate
  - 6k Waste
  - 6m Arenite
  - 6n Mudstone
  - 6p Felsipathic wacke
  - 6r Felsipathic arenite
  - 6s Quartz arenite
  - 6u Amphibole-bearing mudstone/sandstone conglomerate
  - 6v Biotite-bearing mudstone/sandstone
  - 6w Garnet-bearing mudstone/sandstone
  - 6x Chlorite-bearing mudstone/sandstone conglomerate
  - 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
  - 6z Ultramafic rock interbedded with metasediments
  - 6aa Archaean-bearing metasediments
  - 6ab Garnet-rich layers associated with metapelites and/or banded iron formation
- 4 Chemical Sediments**
- 4a Chert-gneunite
  - 4b Chert-magnetite iron formation
  - 4c Carbonate chert-magnetite iron formation
  - 4d Carbonate magnetite
  - 4e Garnet-amphibole iron formation
  - 4f Garnet-biotite schist
  - 4h Sulfide iron formation
  - 4i Graphitic iron formation
  - 4ea Garnet-amphibole-gneunite iron formation
  - 4eb Chert
  - 4chp Chert with pyrite and pyrrhotite
  - 4cb Banded iron formation tectonic breccia
- 3 Intermediate to Felsic Volcanics**
- 3a Intermediate flow
  - 3b Intermediate pyroclastic breccia, tuff breccia
  - 3c Intermediate tuff, lapilli tuff
  - 3d Felsic flow
  - 3e Felsic pyroclastic breccia, tuff breccia
  - 3f Felsic tuff, lapilli tuff
  - 3g Subvolcanic rocks, unsubdivided
  - 3h Subvolcanic quartz-plagioclase porphyry
  - 3i Subvolcanic quartz porphyry
  - 3k Subvolcanic plagioclase porphyry
  - 3m Felsic volcaniclastic rocks
  - 3p Intermediate dikes, sills, small intrusions
- 2 Mafic Volcanics**
- 2 Unsubdivided
  - 2a Massive fine to medium-grained flow
  - 2b Amygdaloidal flow
  - 2c Pillow flow, pillow breccia, hyaloclastite
  - 2d Flow breccia
  - 2e Pyroclastic breccia, tuff breccia
  - 2f Tuff, lapilli tuff
  - 2g Medium to coarse-grained flow centres
  - 2h Dikes, sills, small intrusions
  - 2i Chlorite-actinolite schist of probable volcanic origin
  - 2j Varolitic flow
  - 2p Amphibolite
  - 2q Metavolcanics containing diopside-plagioclase - epidote tourmaline garnet pods and/or layers
  - 2r Hornblende-plagioclase schist characterized by mm to cm scale syringing
  - 2s Hornblende-porphyrification
  - 2t Biotite-bearing metavolcanics
  - 2u Garnet-bearing metavolcanics
- 1 Ultramafic Volcanics**
- 1 Unsubdivided
  - 1a Massive flow
  - 1b Spinifex textured flow
  - 1c Olivine (poikiloblast) textured flow
  - 1d Talc-carbonate+magnetite+trondhjemite+serpentine schist of probable volcanic origin
  - 1e Flow top breccia
  - 1f Pillow flow
  - 1h Varolitic flow



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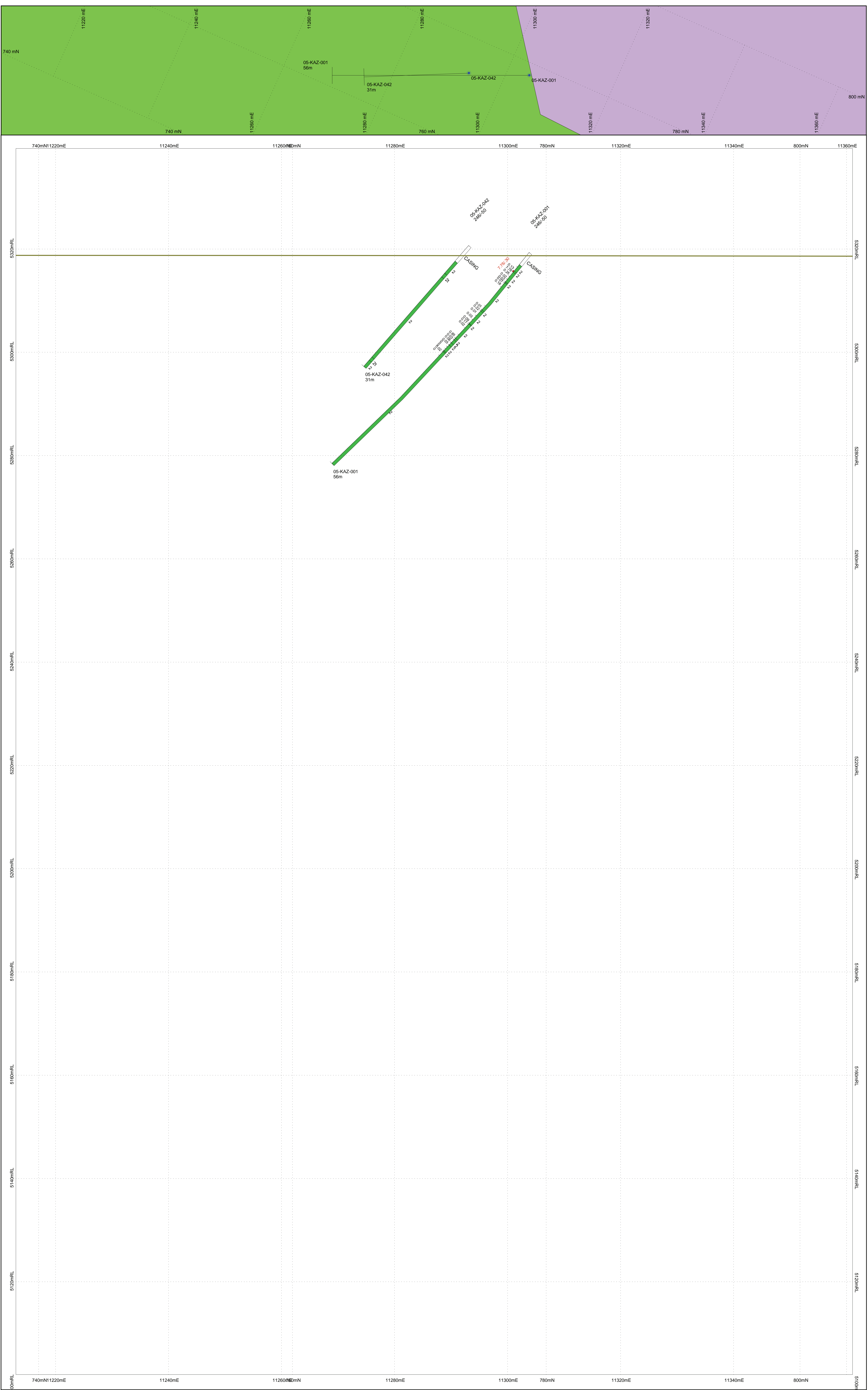
Author: M. Thompson

Date: 31/03/2007

NTS: S3B/09

Scale: 1:250

**2005 Drilling Program**  
**Karl Zeemal Zone**  
**Musselwhite Mine**





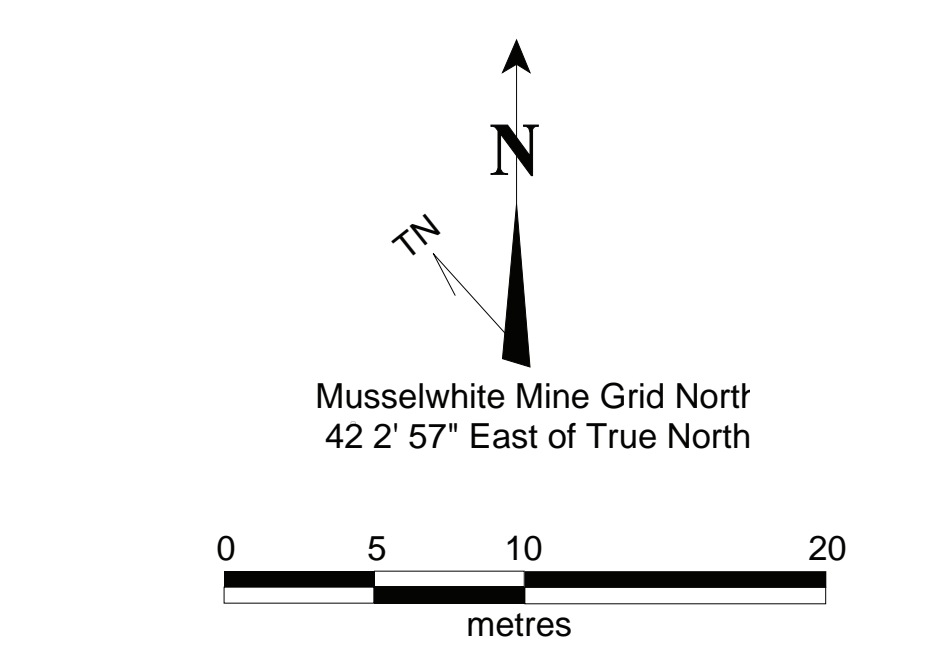
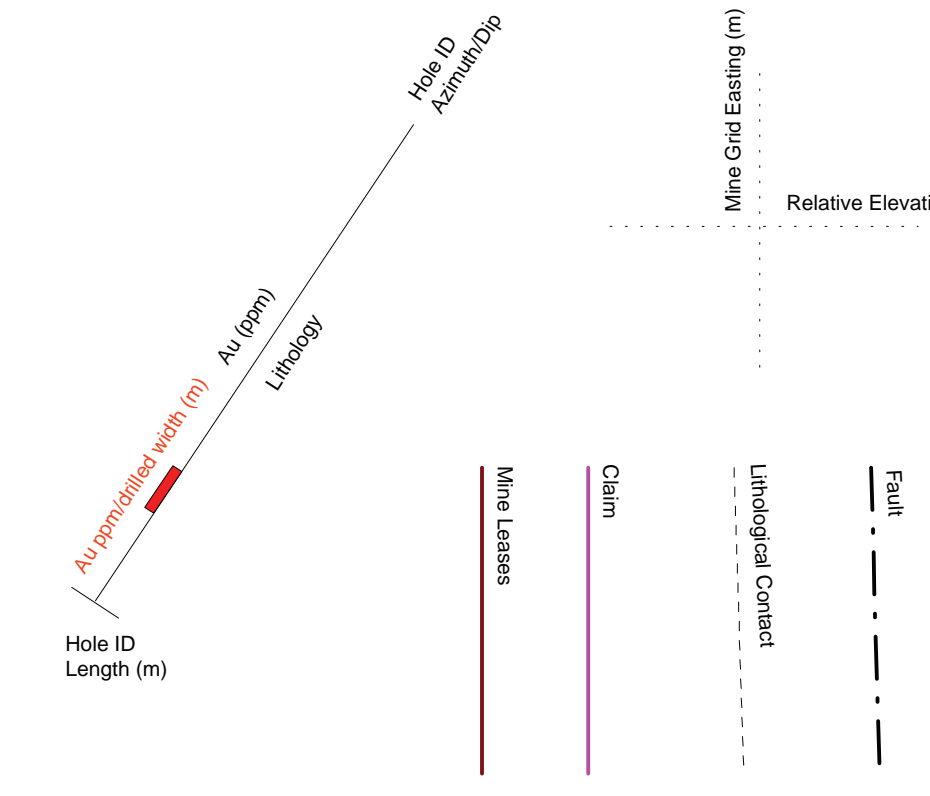
# Legend

## Phanerozoic

- Quaternary
  - OB Overburden
  - OB Glacial, glacioluvial, and lacustrine deposits

## Precambrian

- Late Precambrian
  - 10 Mafic intrusives
  - 10a Dabaso
- Early Precambrian
  - 9 Intermediate to Felsic Intrusives
    - 9a Granite pegmatite
  - 8 Intermediate to Felsic Intrusives
    - 8 Unsubdivided
    - 8a Diorite
    - 8b Quartz diorite
    - 8c Trondhjemite
    - 8d Tonalite
    - 8e Granodiorite
    - 8f Granite pegmatite
    - 8h Biotite trondhjemite
    - 8i Granite
    - 8j Quartz monzonite
    - 8m Gneissic granite
    - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parenthesis)
    - 8p Mylonitic granitic rocks
    - 8q Biotite-muscovite fluorite trondhjemite/yanite
    - 8r Biotite-yanite gneiss
    - 8s Hornblende-biotite tonalite gneiss
    - 8u Garnet-muscovite tourmaline granite
  - 7 Mafic Intrusives
    - 7a Gabbrro (CI = 35-50)
    - 7b Leucogabbrro (CI = 10-35)
    - 7c Plagioclase-olivine gabbrro
    - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
    - 7e Peridotite
    - 7f Ultramafic rocks and altered equivalents of probable igneous origin
    - 7g Amphibolite
    - 7h Anorthositic gabbrro
    - 7i Gabbroic anorthositic and anorthositic
  - 6 Clastic Sediments
    - 6 Unsubdivided
    - 6a Class-supported conglomerate
    - 6b Matrix-supported conglomerate
    - 6c Oligomitic conglomerate
    - 6d Polymictic conglomerate
    - 6e Boulder (25 to 250 mm) conglomerate
    - 6f Cobble (64 to 256 mm) conglomerate
    - 6g Pebble (4 to 64 mm) conglomerate
    - 6h Granule (2 to 4 mm) conglomerate
    - 6i Wacke
    - 6m Arvanite
    - 6n Mudstone
    - 6o Feldspathic wacke
    - 6p Feldspathic arenite
    - 6q Quartz arenite
    - 6r Amphibole-bearing mudstone/sandstone conglomerate
    - 6s Biotite-bearing mudstone/sandstone
    - 6t Garnet-bearing mudstone/sandstone
    - 6u Chlorite-bearing mudstone/sandstone conglomerate
    - 6v Amphibole-biotite bearing tilted rock of probable sedimentary origin
    - 6z Ultramafic rock interbedded with metasediments
    - 6i Andalusite bearing metasediments
    - 6j Garnet-rich layers associated with metapelites and/or banded iron formation
  - 4 Chemical Sediments
    - 4a Chert-grunerite
    - 4b Chert-magnetite iron formation
    - 4c Carbonate chert-magnetite iron formation
    - 4d Carbonate magnetite
    - 4e Garnet amphibole iron formation
    - 4f Garnet-biotite schist
    - 4g Sulfidic iron formation
    - 4i Graphitic iron formation
    - 4j Garnet amphibole-grunerite iron formation
    - 4k Chert
    - 4kP Chert with pyrite and pyrrhotite
    - 4b Banded iron formation tectonic breccia
  - 3 Intermediate to Felsic Volcanics
    - 3a Intermediate flow
    - 3b Intermediate pyroclastic breccia, tuff breccia
    - 3c Intermediate tuff, lapilli-tuff
    - 3d Felsic flow
    - 3e Felsic pyroclastic breccia, tuff breccia
    - 3f Felsic tuff, lapilli tuff
    - 3g Subvolcanic rock, unsubdivided
    - 3h Subvolcanic quartz-plagioclase porphyry
    - 3i Subvolcanic quartz porphyry
    - 3k Subvolcanic plagioclase porphyry
    - 3m Felsic volcaniclastic rocks
    - 3p Intermediate dikes, sills, small intrusions
  - 2 Mafic Volcanics
    - 2 Unsubdivided
    - 2a Massive, fine to medium-grained flow
    - 2b Amygdaloidal flow
    - 2c Pillowed flow, pillow breccia, hyaloclastite
    - 2d Flow breccia
    - 2e Pyroclastic breccia, tuff breccia
    - 2f Tuff, lapilli-tuff
    - 2g Medium to coarse-grained flow centres
    - 2k Dikes, sills, small intrusions
    - 2m Chlorite-schistose schist of probable volcanic origin
    - 2n Volcanic flow
    - 2p Amphibolite
    - 2q Metavolcanics containing diopside-plagioclase ophite tourmaline garnet pods and/or layers
    - 2r Hornblende-plagioclase schist characterized by mm to cm scale zoning
    - 2s Hornblende-ophiolitic
    - 2t Biotite-bearing mafic volcanics
    - 2u Garnet-bearing mafic volcanics
  - 1 Ultramafic Volcanics
    - 1 Unsubdivided
    - 1a Massive flow
    - 1b Spineliferous flow
    - 1c Olivine (poly)suture-textured flow
    - 1d Talc-cationiferous magnetite-nematolite-serpentine schist of probable volcanic origin
    - 1e Flow top breccia
    - 1f Pillowed flow
    - 1h Volcanic flow



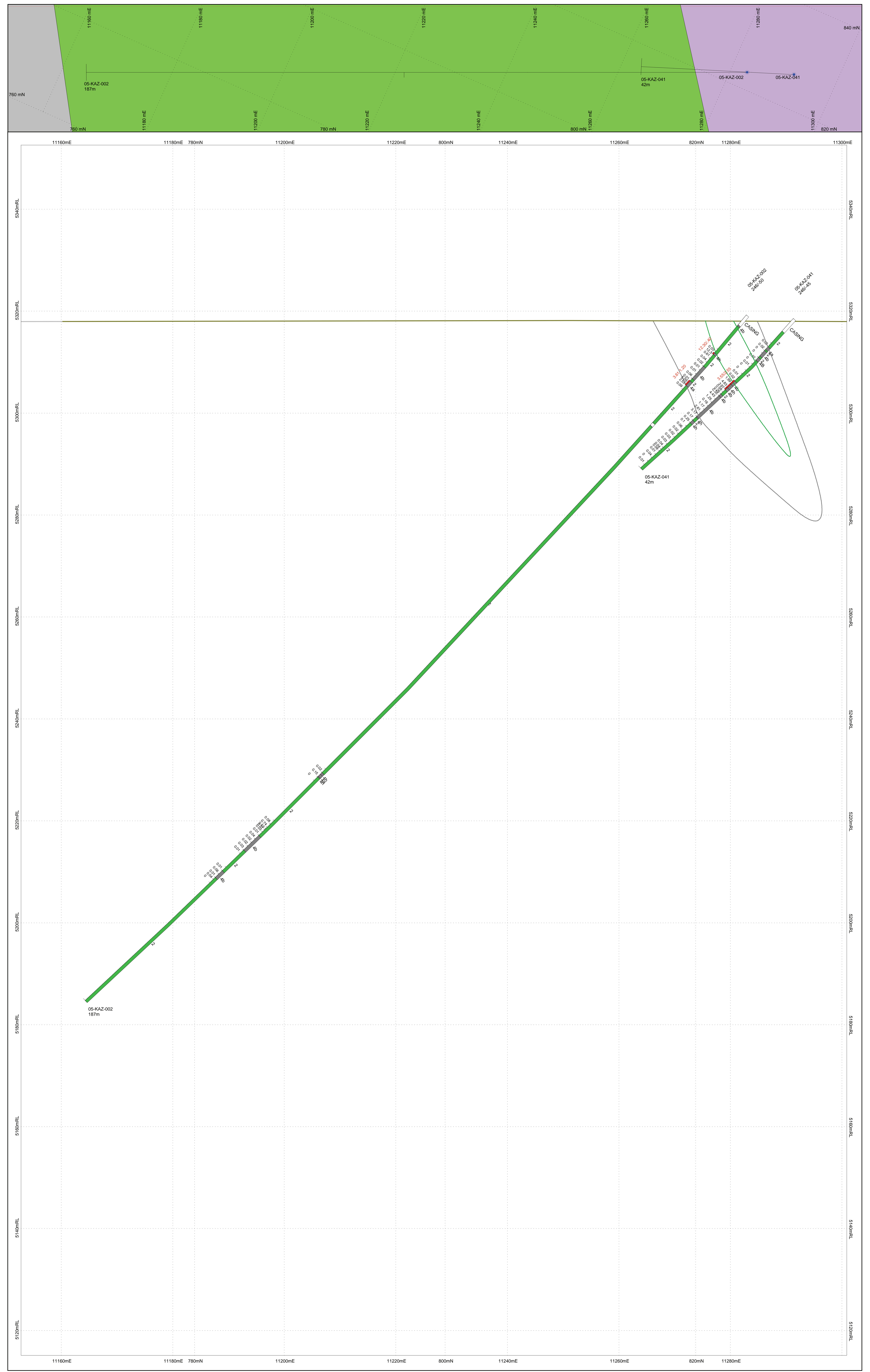
Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



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CANADA LTD.  
05-KAZ-002, 041

Author: M. Thompson  
Date: 31/03/2007  
NTS: 538/09  
Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glacioluvial, and lacustrine deposits

### Precambrian

#### Late Precambrian

##### 10 Mafic Intrusives

- 10a Diabase

#### Early Precambrian

##### 9 Intermediate to Felsic Intrusives

- 9a Granite pegmatite

##### 8 Intermediate to Felsic Intrusives

- 8 Unsubdivided
- 8a Diorite
- 8b Quartz diorite
- 8c Trondhjemite
- 8d Tonalite
- 8e Granodiorite
- 8f Granitic pegmatite
- 8h Biotite trondhjemite
- 8i Granite
- 8k Quartz monzonite
- 8m Gneissic granite
- 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
- 8p Mylonitized granitoid rocks
- 8q Biotite-muscovite - feldspar trondhjemite/tonalite
- 8r Biotite-tonalite gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite - tourmaline granite

##### 7 Mafic Intrusives

- 7a Gabbrro (CI = 35-90)
- 7b Leucogabbro (CI = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7f Peridotite
- 7g Ultramafic rocks and altered equivalents of probable intrusive origin
- 7j Amphibolite
- 7k Anorthositic gabbro
- 7l Gabbroic anorthositic and anorthositic

##### 6 Clastic Sediments

- 6 Unsubdivided
- 6a Clast-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polyimitic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Gravel (2 to 4 mm) conglomerate
- 6k Wacke
- 6n Arenite
- 6o Mudstone
- 6p Ferruginous sandstone
- 6q Felspathic arenite
- 6r Quartz arenite
- 6s Amphibole-bearing mudstone/sandstone conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Anhydrite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

##### 4 Chemical Sediments

- 4a Chert-gneissite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4h Sulfide iron formation
- 4i Graphitic iron formation
- 4ea Garnet-amphibole-grunerite iron formation
- 4eb Chert
- 4chp Chert with pyrite and pyrrhotite
- 4ib Banded iron formation tectonic breccia

##### 3 Intermediate to Felsic Volcanics

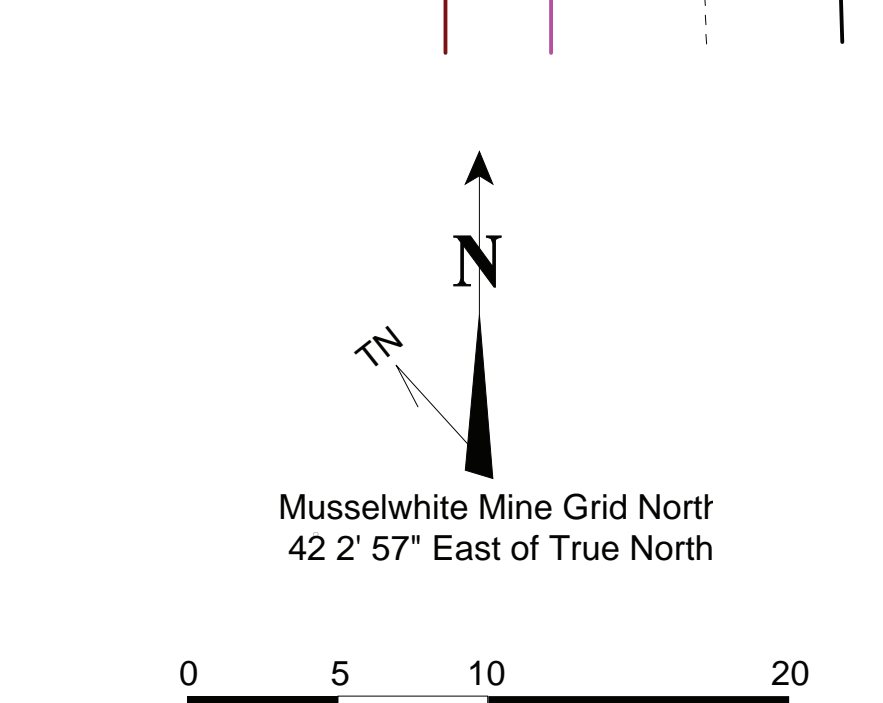
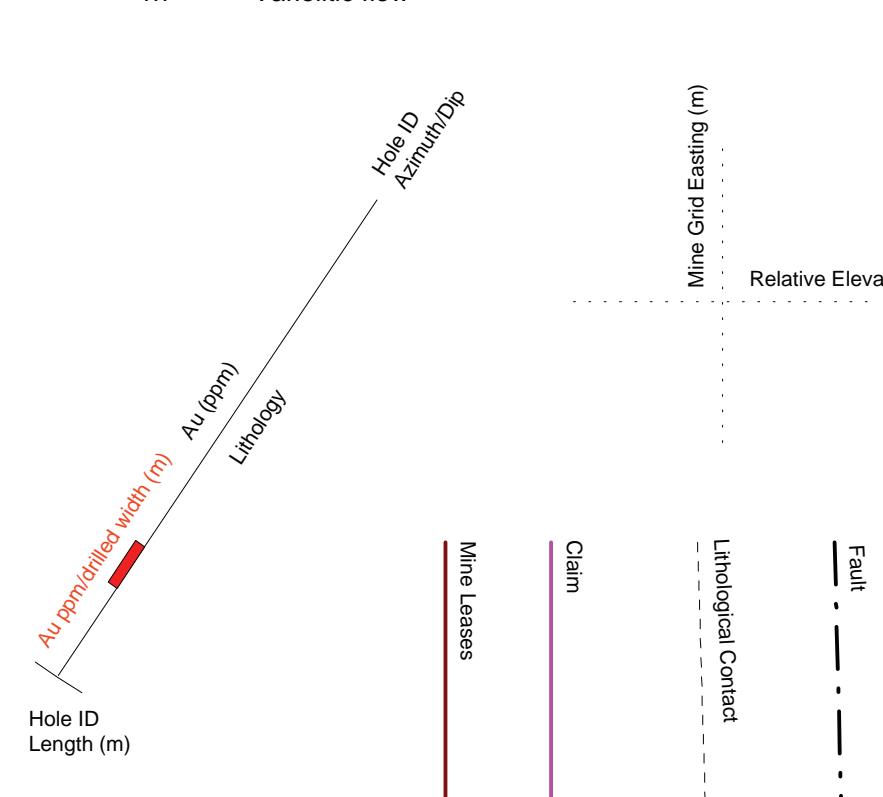
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz-porphry
- 3j Subvolcanic plagioclase porphyry
- 3k Felsic volcaniclastic rocks
- 3m Intermediate dikes, sills, small intrusions

##### 2 Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillow flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium- to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2i Chlorite-actinolite schist of probable volcanic origin
- 2j Vamitic flow
- 2k Amphibolite
- 2l Metavolcanics containing diopside-plagioclase - epidote tourmaline garnet pods and/or layers
- 2m Hornblende-plagioclase schist characterized by mm to cm scale veering
- 2n Hornblende-porphyrification
- 2o Biotite-bearing metavolcanics
- 2p Garnet-bearing metavolcanics

##### 1 Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinifex-textured flow
- 1c Olivine (populite)-textured flow
- 1d Calc-carbonate +/- magnetite +/- tremolite +/- serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillow flow
- 1h Vamitic flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest

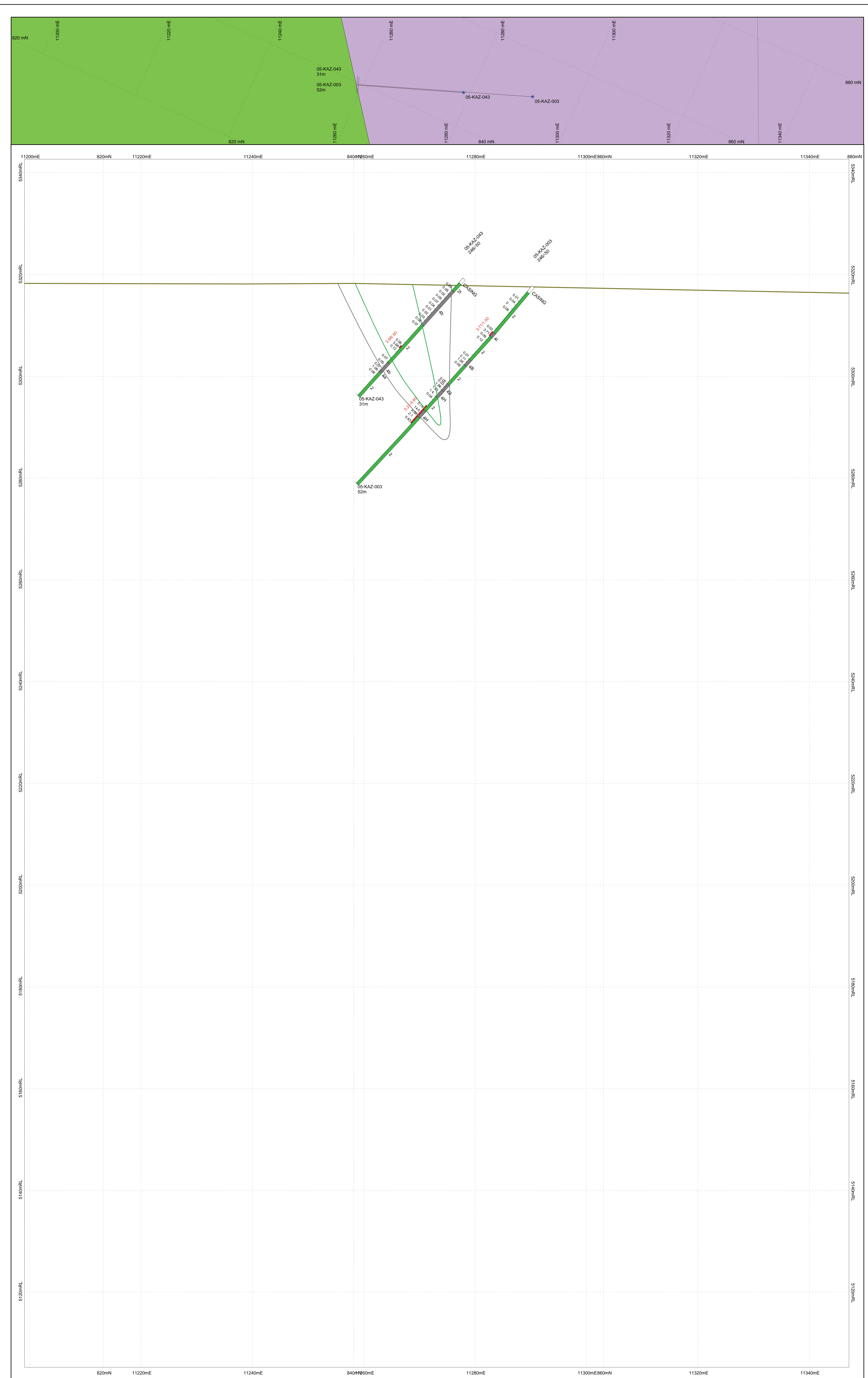
**05-KAZ-003, 043**

Author: M. Thompson

Date: 31/03/2007

NTS: 53B09

Scale: 1:250





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

#### 10 Mafic Intrusives

- 10a Diabase

### Early Precambrian

#### 9 Intermediate to Felsic Intrusives

- 9a Granite pegmatite

#### 8 Intermediate to Felsic Intrusives

- 8 Unsubdivided
- 8a Diorite
- 8b Quartz diorite
- 8c Trondhjemite
- 8d Tonalite
- 8e Granodiorite
- 8f Granitic pegmatite
- 8g Biotite trondhjemite
- 8h Granite
- 8k Quartz monzonite
- 8m Granitic granite
- 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
- 8p Mylonitized granitoid rocks
- 8q Biotite-muscovite / biotite trondhjemite/sericite
- 8r Biotite-tourmaline gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite / tourmaline granite

#### 7 Mafic Intrusives

- 7a Gabbro (CI = 35-90)
- 7b Leucogabbro (CI = 10-25)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7g Amphibolite
- 7k Anorthositic gabbro
- 7l Gabbroic anorthosite and anorthosite

#### 6 Clastic Sediments

- 6 Unsubdivided
- 6a Clast-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymitic conglomerate
- 6e Boulder (>250 mm) conglomerate
- 6f Cobble (64 to 250 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Gravel (2 to 4 mm) conglomerate
- 6k Wacke
- 6m Arenite
- 6n Mudstone
- 6p Felspathic wacke
- 6r Felspathic arenite
- 6s Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone / conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chert-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite bearing siltstone / rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Andalusite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

#### 4 Chemical Sediments

- 4a Chert-granulite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4g Subphide iron formation
- 4h Graphitic iron formation
- 4ea Garnet-amphibole granulite iron formation
- 4ch Chert with pyrite and pyrrhotite
- 4kfp Chert with pyrite and pyrrhotite
- 4b Banded iron formation tectonic breccia

#### 3 Intermediate to Felsic Volcanics

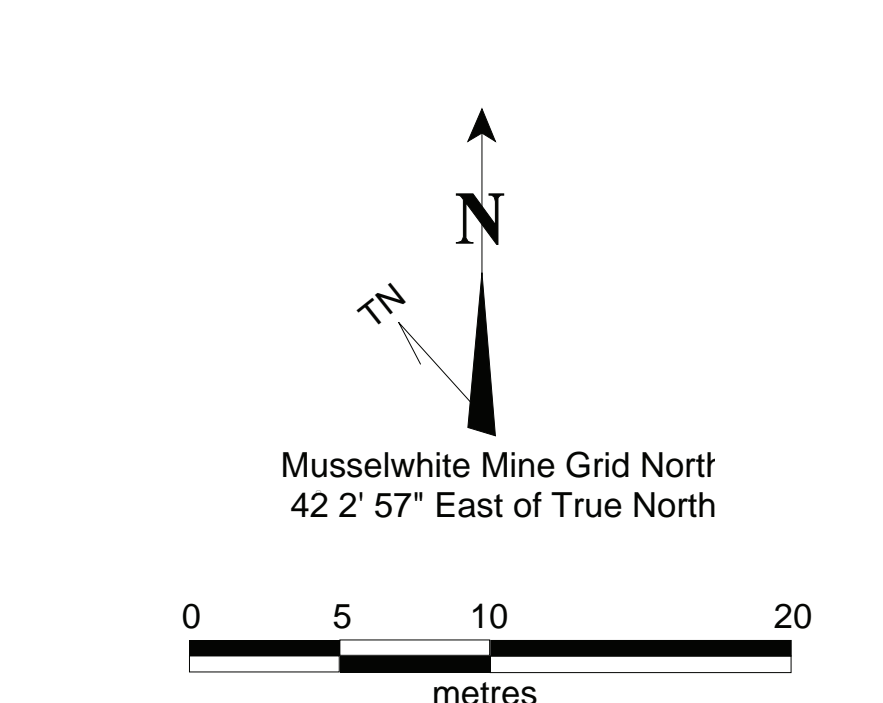
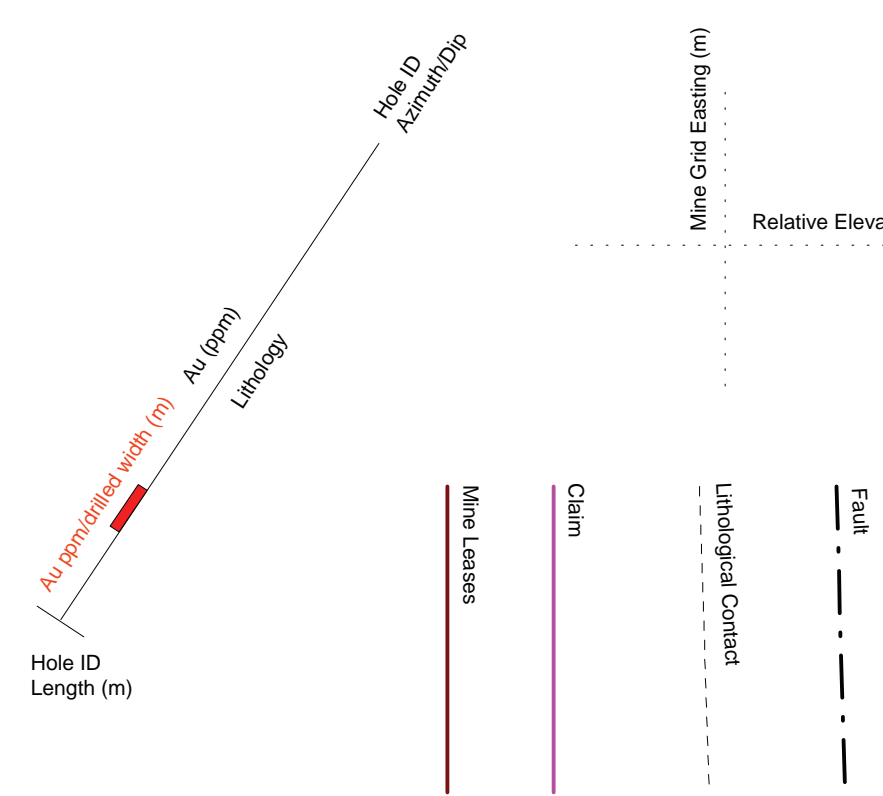
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff breccia
- 3f Felsic tuff, lapilli-tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz-porphyr
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcanoclastic rocks
- 3p Intermediate dikes, sills, small intrusions

#### 2 Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillow flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff breccia
- 2f Tuff, lapilli-tuff
- 2g Medium- to coarse-grained flow centres
- 2k Dikes, sills, small intrusions
- 2m Chert-actinolite schist of probable volcanic origin
- 2n Variolite flow
- 2o Amphibolite
- 2q Metavolcanics containing diopside-plagioclase / epidote-tourmaline garnet pods and/or layers
- 2r Hornblende-plagioclase schist characterized by mm to cm scale layering
- 2s Hornblende-porphyrystic
- 2t Biotite-bearing metavolcanics
- 2j Garnet-bearing metavolcanics

#### 1 Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Sprinkle-dusted flow
- 1c Oliphant (polytuff) textured flow
- 1d Talc-carbonate+magnetite+sericite+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillow flow
- 1h Variolite flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest

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**05-KAZ-005, 044**

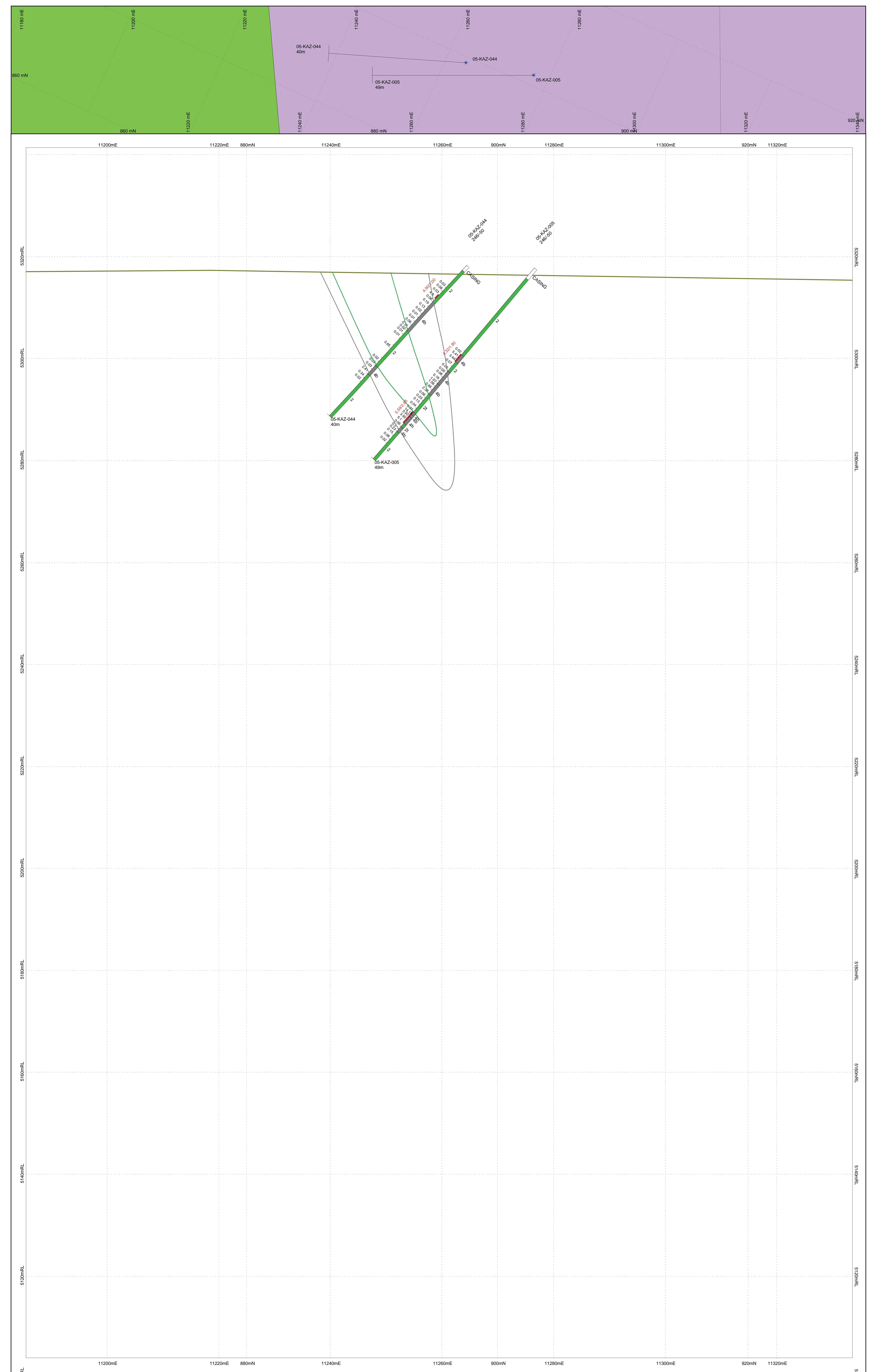
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Author: M. Thompson

Date: 31/03/2007

NTS: 338/09

Scale: 1:250





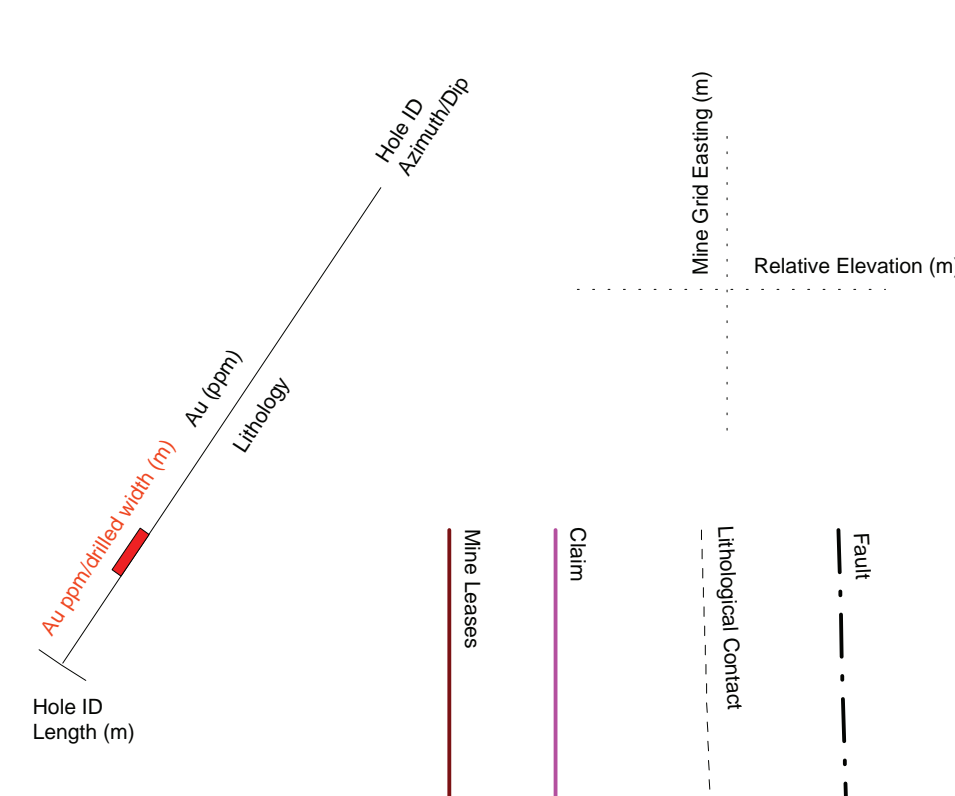
# Legend

## Phanerozoic

- Quaternary
- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

- Late Precambrian**
  - 10 Mafic Intrusives
  - 10a Dabase
- Early Precambrian**
  - 9 Intermediate to Felsic Intrusives**
    - 9a Granite pegmatite
  - 8 Intermediate to Felsic Intrusives**
    - 8 Unsubdivided
    - 8a Diorite
    - 8b Quartz diorite
    - 8c Trondhjemite
    - 8d Tonalite
    - 8e Granodiorite
    - 8f Granitic pegmatite
    - 8g Biotite trondhjemite
    - 8h Granite
    - 8k Quartz monzonite
    - 8m Onesite granite
    - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
    - 8p Mylonitized granitic rocks
    - 8q Biotite-muscovite fluorite trondhjemite/yanite
    - 8r Biotite-tonalite gneiss
    - 8s Hornblende-biotite tonalite gneiss
    - 8u Garnet-muscovite tourmaline granite
  - 7 Mafic Intrusives**
    - 7a Gabbro (CI = 35-90)
    - 7b Leucogabbro (CI = 10-35)
    - 7c Plagioclase-phyric gabbro
    - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
    - 7e Peridotite
    - 7f Ultramafic rocks and altered equivalents of probable intrusive origin
    - 7g Amphibolite
    - 7k Anorthositic gabbro
    - 7l Gabbroic anorthosite and anorthosite
  - 6 Clastic Sediments**
    - 6 Unsubdivided
    - 6a Clay-supported conglomerate
    - 6b Matrix-supported conglomerate
    - 6c Organic conglomerate
    - 6d Polymictic conglomerate
    - 6e Boulder (>256 mm) conglomerate
    - 6f Cobble (64 to 256 mm) conglomerate
    - 6g Pebble (16 to 64 mm) conglomerate
    - 6h Granule (2 to 4 mm) conglomerate
    - 6i Wacke
    - 6m Arenite
    - 6n Mudstone
    - 6p Feldspathic wacke
    - 6r Feldspathic arenite
    - 6t Quartz arenite
    - 6u Amphibole-bearing mudstone/sandstone conglomerate
    - 6v Biotite-bearing mudstone/sandstone
    - 6w Garnet-bearing mudstone/sandstone
    - 6x Chlorite-bearing mudstone/sandstone conglomerate
    - 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
    - 6z Ultramafic rock interbedded with metasediments
    - 6i Andalusite-bearing metasediments
    - 6j Garnet-rich layers associated with metapelites and/or banded iron formation
  - 4 Chemical Sediments**
    - 4a Chert-gneunite
    - 4b Chert magnetite iron formation
    - 4c Carbonate chert-magnetite iron formation
    - 4d Carbonate magnetite
    - 4e Garnet-amphibole iron formation
    - 4f Garnet-biotite schist
    - 4g Sulfide iron formation
    - 4h Graphitic iron formation
    - 4ea Garnet-amphibole-grunite iron formation
    - 4ch Chert
    - 4cb Chert with pyrite and pyrrhotite
    - 4cbp Banded iron formation tectonic breccia
  - 3 Intermediate to Felsic Volcanics**
    - 3a Intermediate flow
    - 3b Intermediate pyroclastic breccia, tuff-breccia
    - 3c Intermediate tuff, lapilli-tuff
    - 3d Felsic flow
    - 3e Felsic pyroclastic breccia, tuff-breccia
    - 3f Felsic tuff, lapilli tuff
    - 3g Subvolcanic rocks, unsubdivided
    - 3h Subvolcanic quartz-plagioclase porphyry
    - 3i Subvolcanic quartz porphyry
    - 3k Subvolcanic plagioclase porphyry
    - 3m Felsic volcanoclastic rocks
    - 3p Intermediate dikes, sills, small intrusions
  - 2 Mafic Volcanics**
    - 2 Unsubdivided
    - 2a Massive, fine to medium-grained flow
    - 2b Amygdaloidal flow
    - 2c Rippled flow, pillow breccia, hyaloclastite
    - 2d Flow breccia
    - 2e Pyroclastic breccia, tuff-breccia
    - 2f Tuff, lapilli-tuff
    - 2g Medium to coarse-grained flow centres
    - 2k Dikes, sills, small intrusions
    - 2m Chlorite-schistose schist of probable volcanic origin
    - 2n Varioleitic flow
    - 2p Amphibolite
    - 2q Metavolcanics containing diopside-plagioclase-epidote tourmaline garnet pods and/or layers
    - 2r Hornblende-plagioclase schist characterized by mm to cm scale splaying
    - 2s Hornblende-prophyroblastic
    - 2t Biotite-bearing metavolcanics
    - 2u Garnet-bearing metavolcanics
  - 1 Ultramafic Volcanics**
    - 1 Unsubdivided
    - 1a Massive flow
    - 1b Spinel-textured flow
    - 1c Oligoclase (polytuffite)-textured flow
    - 1d Talc-carbonate-magnetite-tremolite-serpentine schist of probable volcanic origin
    - 1e Flow top breccia
    - 1f Rippled flow
    - 1h Varioleitic flow



0 5 10 20 metres

Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



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05-KAZ-007, 045

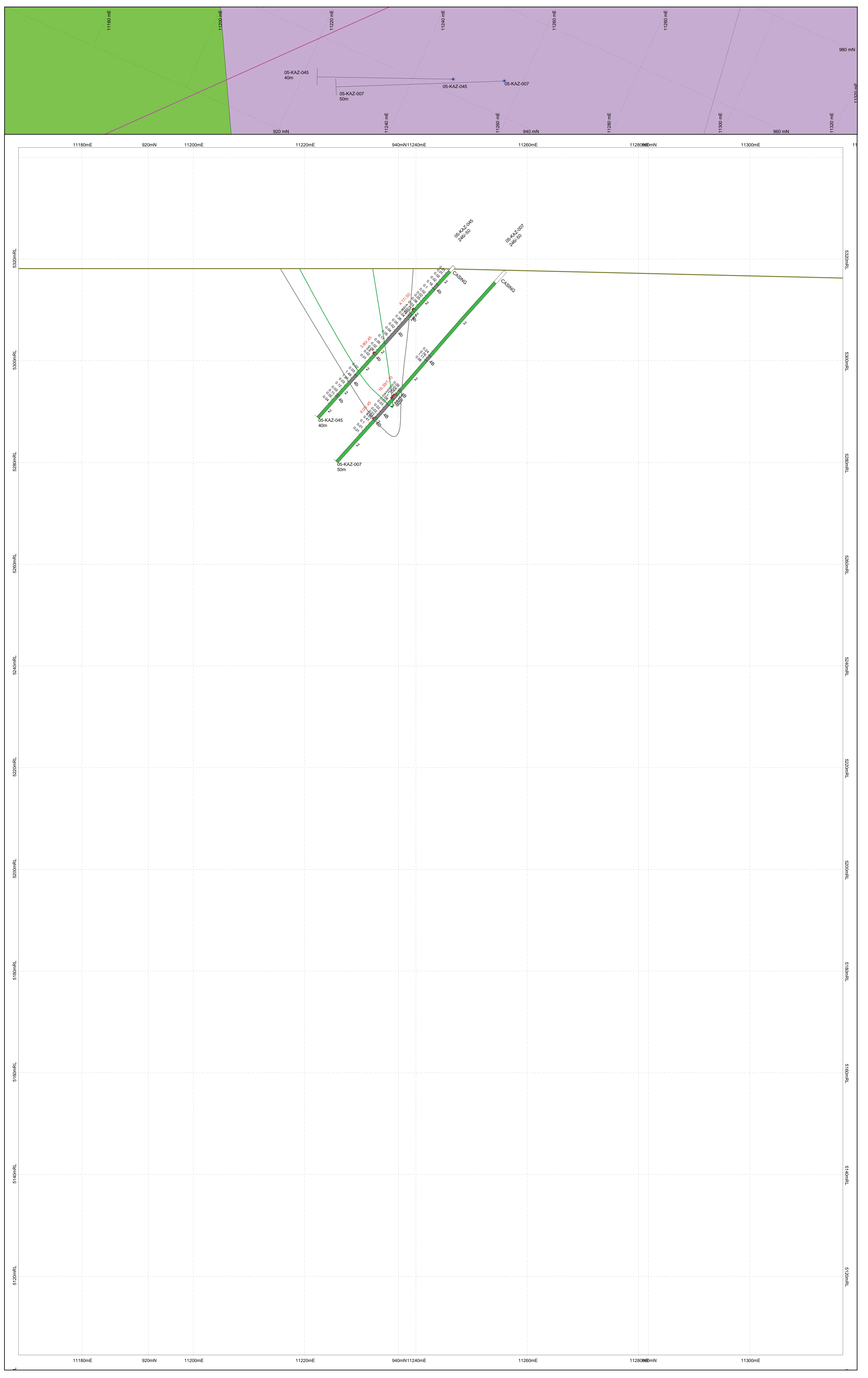
Author: M. Thompson

Date: 31/03/2007

NTS: S38/09

Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





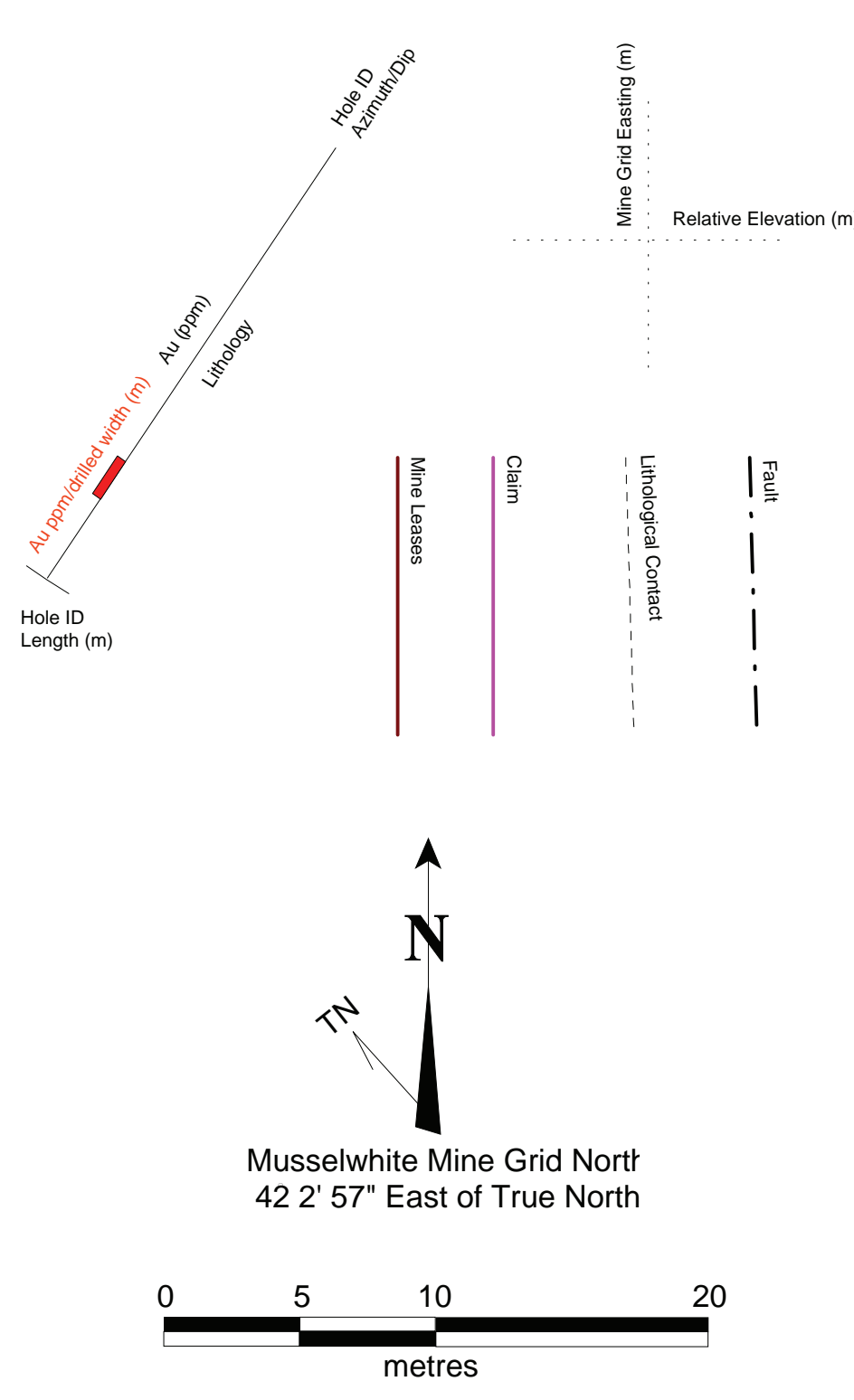
# Legend

## Phanerozoic

- Quaternary
- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

- Late Precambrian**
- 10 Mafic Intrusives
  - 10a Diabase
- Early Precambrian**
- 9 Intermediate to Felsic Intrusives
  - 9a Granite pegmatite
- 8 Intermediate to Felsic Intrusives
  - 8 Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granite pegmatite
  - 8g Biotite trondhjemite
  - 8h Granite
  - 8k Quartz monzonite
  - 8m Granitic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
  - 8p Mylonitized gneissoid rocks
  - 8q Biotite-muscovite fuchsite-trondhjemite/yanite
  - 8r Biotite-sorinite gneiss
  - 8s Hornblende-biotite tonalite gneiss
  - 8u Garnet-muscovite tourmaline granite
- 7 Mafic Intrusives
  - 7a Gabbrro (C1 = 35-50)
  - 7b Leucogabbro (C1 = 10-35)
  - 7c Plagioclase-phyric gabbro
  - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
  - 7f Peridotite
  - 7h Ultramafic rocks and altered equivalents of probable intrusive origin
  - 7j Amphibolite
  - 7k Anorthositic gabbro
  - 7l Gabbroic anorthosite and anorthosite
- 6 Clastic Sediments
  - 6 Unsubdivided
  - 6a Clast-supported conglomerate
  - 6b Matrix-supported conglomerate
  - 6c Oligomitic conglomerate
  - 6d Polyimitic conglomerate
  - 6e Boulder (>256 mm) conglomerate
  - 6f Cobble (64 to 256 mm) conglomerate
  - 6g Pebble (4 to 64 mm) conglomerate
  - 6h Gravel (2 to 4 mm) conglomerate
  - 6k Wacke
  - 6m Arenite
  - 6n Mudstone
  - 6p Feldspathic wacke
  - 6r Feldspathic arenite
  - 6s Quartz arenite
  - 6u Amphibole-bearing mudstone/sandstone (conglomerate)
  - 6v Biotite-bearing mudstone/sandstone
  - 6w Garnet-bearing mudstone/sandstone
  - 6x Chlorite-bearing mudstone/sandstone conglomerate
  - 6y Amphibole-bearing foliated rock of probable sedimentary origin
  - 6z Ultramafic rock interbedded with metasediments
  - 6i Andalusite-bearing metasediments
  - 6j Garnet-rich layers associated with metapelites and/or banded iron formation
- 4 Chemical Sediments
  - 4a Chert-grunite
  - 4b Chert-magnetite iron formation
  - 4c Carbonate chert-magnetite iron formation
  - 4d Carbonate magnetite
  - 4e Garnet-amphibole iron formation
  - 4f Garnet-schist
  - 4h Sulphide iron formation
  - 4i Graphitic iron formation
  - 4aa Garnet-amphibole-grunite iron formation
  - 4ch Chert
  - 4cnp Chert with pyrite and pyrrhotite
  - 4bp Banded iron formation tectonic breccia
- 3 Intermediate to Felsic Volcanics
  - 3a Intermediate flow
  - 3b Intermediate pyroclastic breccia, tuff breccia
  - 3c Intermediate tuff, lapilli-tuff
  - 3d Felsic flow
  - 3e Felsic pyroclastic breccia, tuff breccia
  - 3f Felsic tuff, lapilli tuff
  - 3g Subvolcanic rocks, unsubdivided
  - 3h Subvolcanic quartz-plagioclase porphyry
  - 3i Subvolcanic quartz-porphyr
  - 3k Subvolcanic plagioclase porphyry
  - 3m Felsic volcaniclastic rocks
  - 3p Intermediate dikes, sills, small intrusions
- 2 Mafic Volcanics
  - 2 Unsubdivided
  - 2a Massive, fine- to medium-grained flow
  - 2b Amphigabbro flow
  - 2c Pillowed flow, pillow breccia, hyaloclastite
  - 2d Flow breccia
  - 2e Pyroclastic breccia, tuff breccia
  - 2f Tuff, lapilli-tuff
  - 2g Medium- to coarse-grained flow centres
  - 2h Dikes, sills, small intrusions
  - 2i Chertiferous schist of probable volcanic origin
  - 2m Varzollite flow
  - 2n Amphibolite
  - 2q Metavolcanics containing deposite-plagioclase +oxide tourmaline garnet pools and/or layers
  - 2r Hornblende-plagioclase schist characterized by mm to cm scale layering
  - 2s Hornblende-porphyr/oblastic
  - 2t Biotite-bearing metavolcanics
  - 2u Garnet-bearing metavolcanics
- 1 Ultramafic Volcanics
  - 1 Unsubdivided
  - 1a Massive flow
  - 1b Spinifex-textured flow
  - 1c Diphant (polytaum) textured flow
  - 1d Talc-carbonate + (phlogopite + tremolite + serpentine) schist of probable volcanic origin
  - 1e Flow top breccia
  - 1f Pillowed flow
  - 1h Varzollite flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



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05-KAZ-009, 046

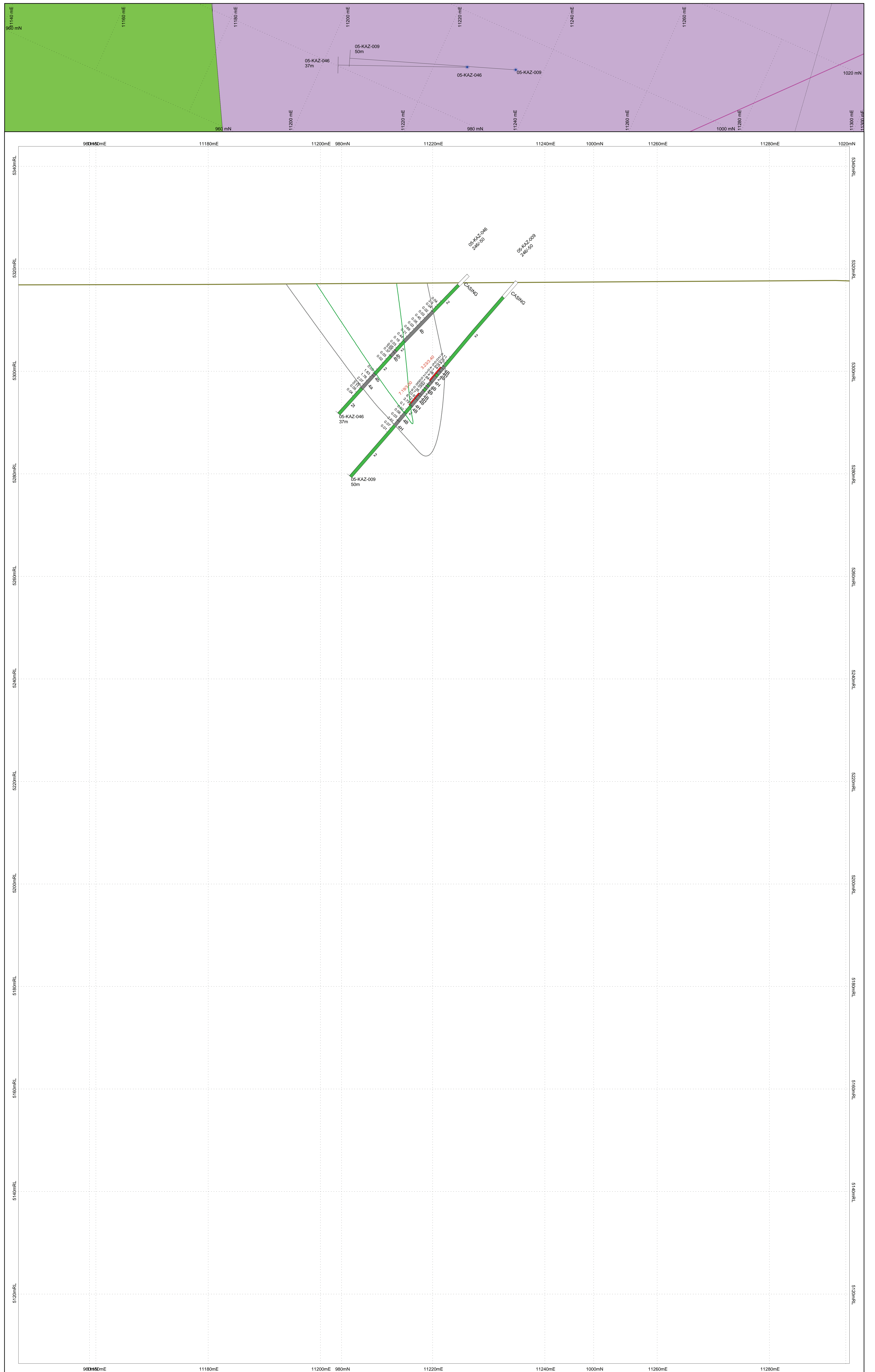
Author: M. Thompson

Date: 31/03/2007

NTS: 538/09

Scale: 1:250

**2005 Drilling Program**  
**Karl Zeemal Zone**  
**Musselwhite Mine**





# Legend

## Phanerozoic

### Quaternary

- Q6 Overburden
- Q6 Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

#### Mafic Intrusives

- 10a Diabase

### Early Precambrian

#### Intermediate to Felsic Intrusives

- 9a Granite pegmatite
- 8 Intermediate to Felsic Intrusives
  - 8 Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granitic pegmatite
  - 8h Biotite trondhjemite
  - 8i Granite
  - 8k Quartz monzonite
  - 8m Chertic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parenthesis)
  - 8p Mylonitized granitoid rocks
  - 8q Biotite-muscovite-fluorite trondhjemite/tonalite
  - 8r Biotite-sillite gneiss
  - 8s Hornblende-biotite tonalite gneiss
  - 8u Garnet-muscovite-tourmaline granite

#### Mafic Intrusives

- 7a Gabbro (C = 35-60)
- 7b Leucogabbro (C = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7g Amphibolite
- 7k Anorthositic gabbro
- 7l Gabbroic anorthositic and anorthositic

#### Clastic Sediments

- 6 Unsubdivided
- 6a Clay-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polyimitic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granule (2 to 4 mm) conglomerate
- 6k Waste
- 6m Arenite
- 6n Mudstone
- 6p Felspathic wacke
- 6r Felspathic arenite
- 6s Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite-bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Arkosite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

#### Chemical Sediments

- 4a Chert-granulite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4g Sulphide iron formation
- 4h Graphitic iron formation
- 4i Garnet-amphibole granulite iron formation
- 4j Chert
- 4kp Chert with pyrite and pyrrhotite
- 4p Banded iron formation tectonic breccia

#### Intermediate to Felsic Volcanics

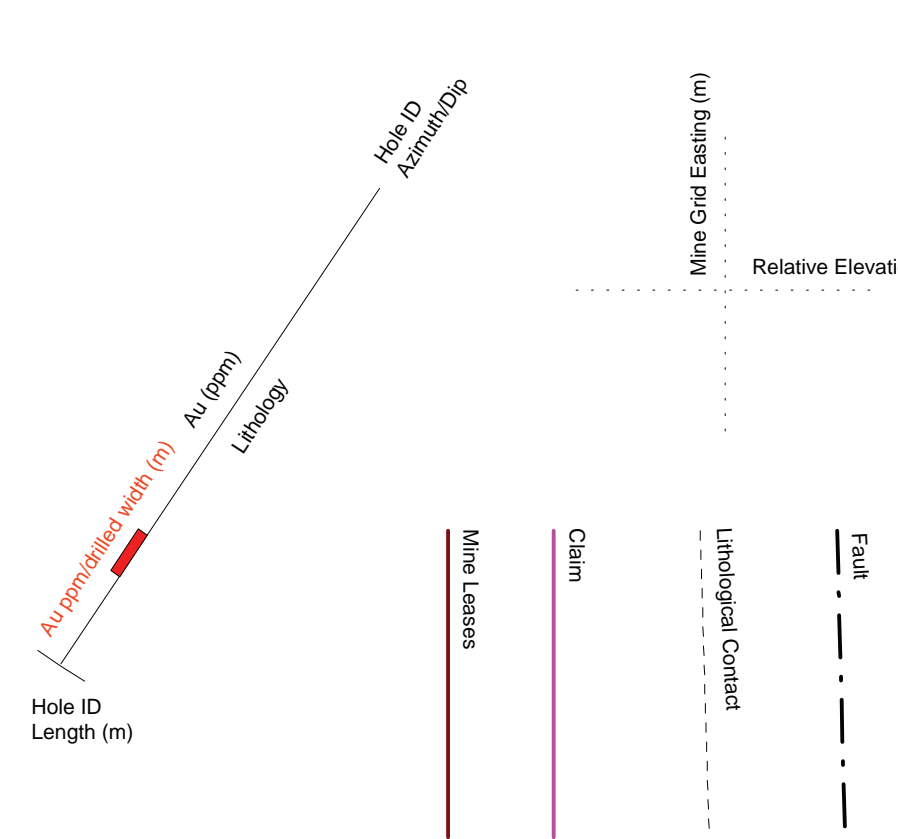
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3j Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rocks
- 3p Intermediate dikes, sills, small intrusions

#### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillowed flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium- to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2i Chlorite-schistose schist of probable volcanic origin
- 2j Varolitic flow
- 2k Amphibolite
- 2l Metavolcanics containing diopside-plagioclase + epidote-tourmaline-garnet pods and/or layers
- 2m Hornblende-plagioclase schist characterized by mm to cm scale syring
- 2n Hornblende-porphyrphyroclastic
- 2o Biotite-bearing metavolcanics
- 2p Garnet-bearing metavolcanics

#### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinelifer textured flow
- 1c Ophiang (polytuffite)-textured flow
- 1d Talc-carbonate-magnetite-tremolite + serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1h Varolitic flow



Musselwhite Mine Grid North  
42° 57' East of True North

Projection: Musselwhite Mine Grid  
Section View: Looking Northwest

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05-KAZ-011, 047

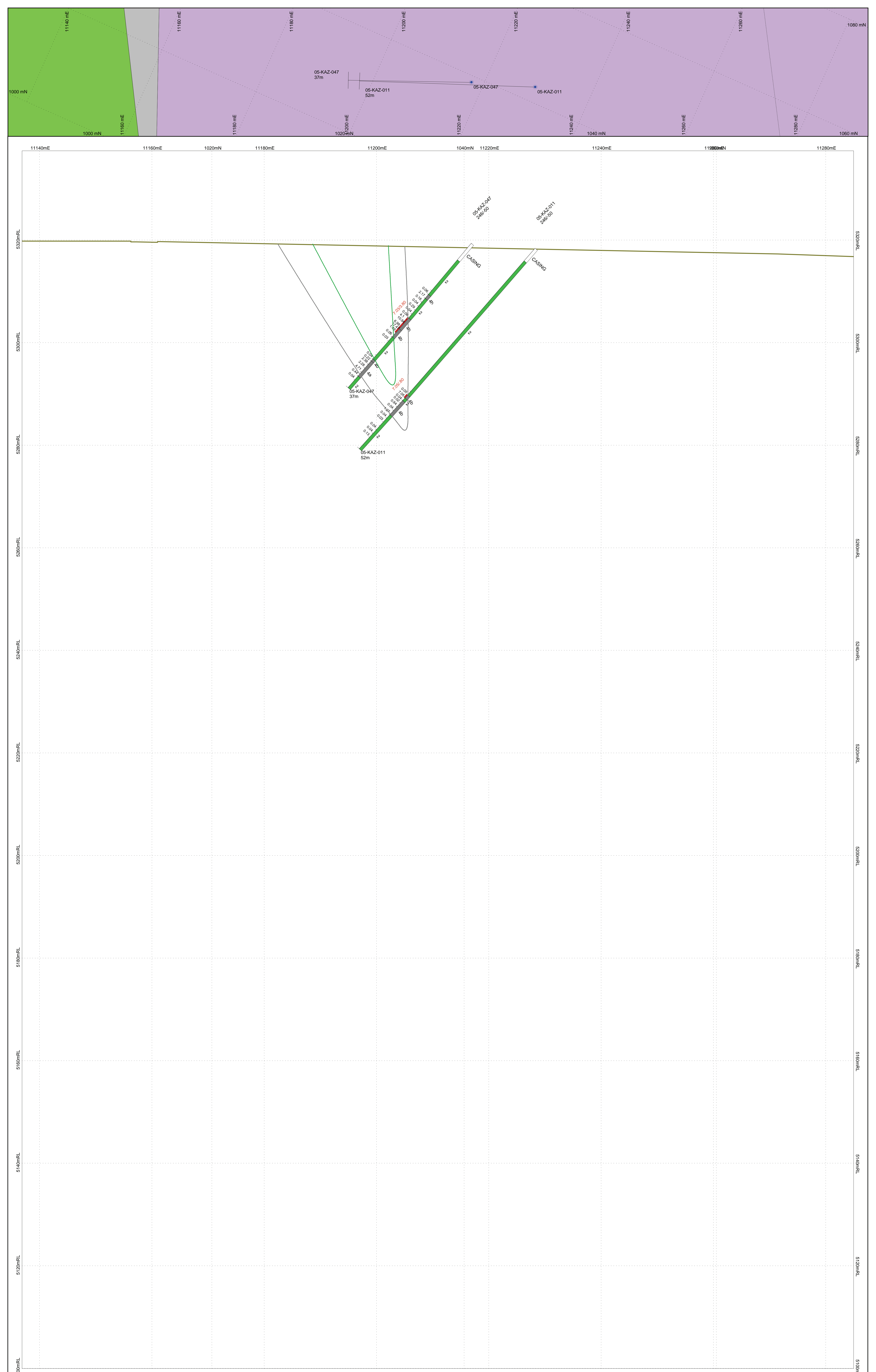
Author: M. Thompson

Date: 31/03/2007

NTS: 538/09

Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

## Phanerozoic

- Quaternary**
- OB Overburden
  - OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- 10 Mafic Intrusives
- 10a Diabase

### Early Precambrian

- 9 Intermediate to Felsic Intrusives
- 9a Granite pegmatite

### Intermediate to Felsic Intrusives

- 8 Unsubdivided
- 8a Diorite
- 8b Quartz diorite
- 8c Trondhjemite
- 8d Tonalite
- 8e Granodiorite
- 8f Granitic pegmatite
- 8h Biotite trondhjemite
- 8i Granite
- 8k Quartz monzonite
- 8m Gneissic granite
- 8n Aegirite-felsic intrusive rocks (xenolith composition indicated in parenthesis)
- 8p Mylonitic granitic rocks
- 8q Biotite-muscovite fluorite trondhjemite/sericite
- 8r Biotite-tonalite gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite tourmaline granite

### Mafic Intrusives

- 7a Gabbro (C1 = 35-90)
- 7b Leucogabbro (C1 = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7i Peridotite
- 7j Ultramafic rocks and altered equivalents of probable intrusive origin
- 7k Amphibolite
- 7l Anorthositic gabbro
- 7m Gabbroic anorthositic and anorthositic

### Clastic Sediments

- 6 Unsubdivided
- 6a Clast-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymictic conglomerate
- 6e Boulder (64 to 256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granite (2 to 4 mm) conglomerate
- 6k Waste
- 6m Aranita
- 6n Mudstone
- 6p Feldspathic wacke
- 6q Feldspathic arenite
- 6r Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Anhydrite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

### Chemical Sediments

- 4a Chert-grunerts
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4h Sulfide iron formation
- 4i Graphitic iron formation
- 4j Garnet-amphibole-grunertite iron formation
- 4k Chert
- 4kp Chert with pyrite and pyrrhotite
- 4b Banded iron formation tectonic breccia

### Intermediate to Felsic Volcanics

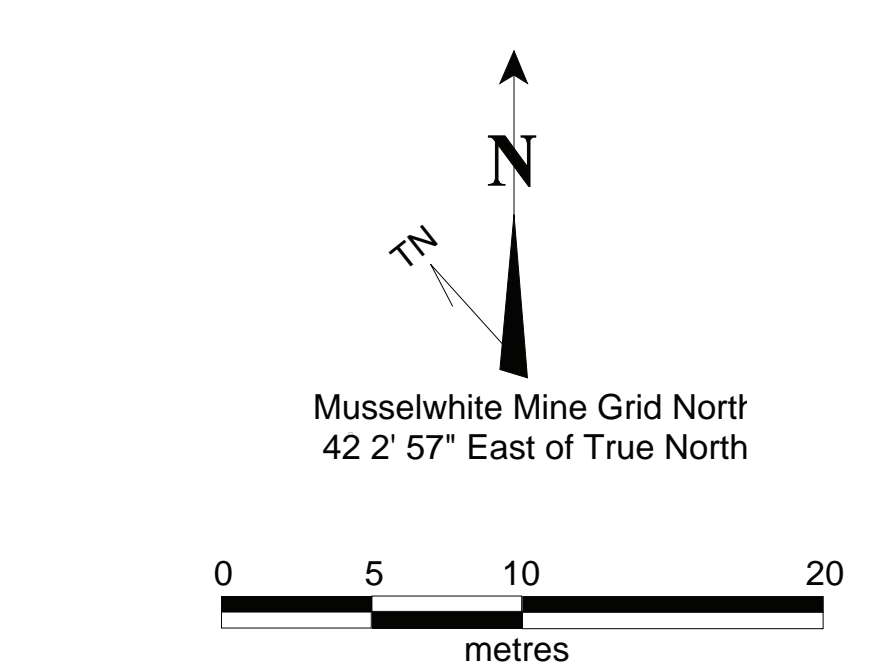
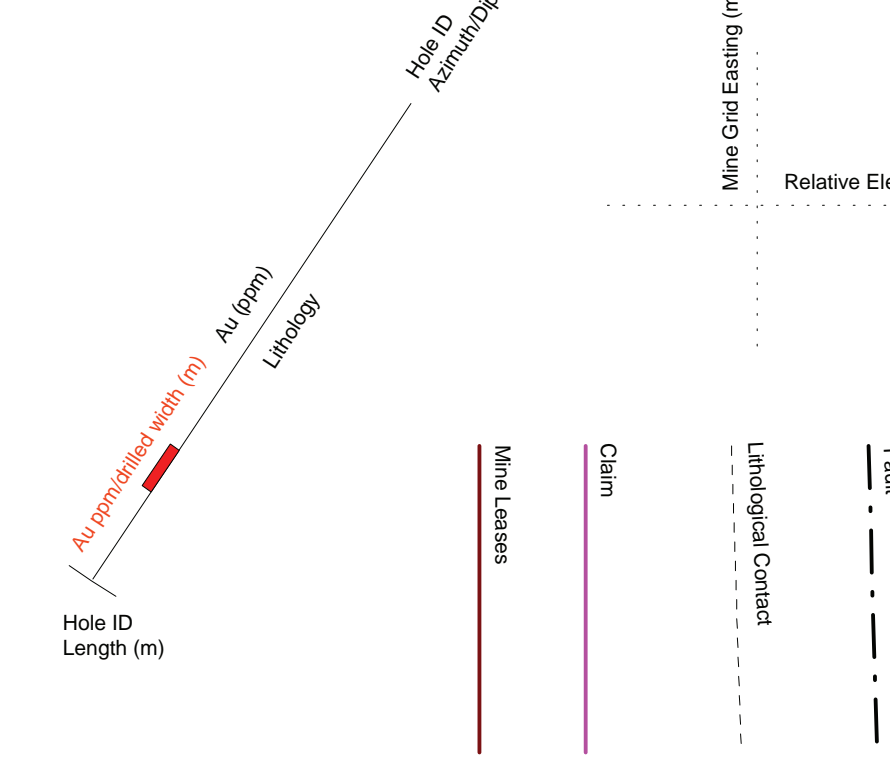
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli-tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz-porphyr
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rocks
- 3p Intermediate dikes, sills, small intrusions

### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillowed flow, pillow breccia, hyalotlastite
- 2e Flow breccia
- 2g Pyroclastic breccia, tuff-breccia
- 2h Tuff, lapilli-tuff
- 2i Medium to coarse-grained flow centres
- 2k Dikes, sills, small intrusions
- 2m Chlorite-schistose schist of probable volcanic origin
- 2n Varfolitic flow
- 2p Amphibolite
- 2q Metavolcanics containing diopside-plagioclase-epidote tourmaline garnet pods and/or layers
- 2r Hornblende-plagioclase schist characterized by mm to cm scale splaying
- 2s Hornblende porphyroblastic
- 2i Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

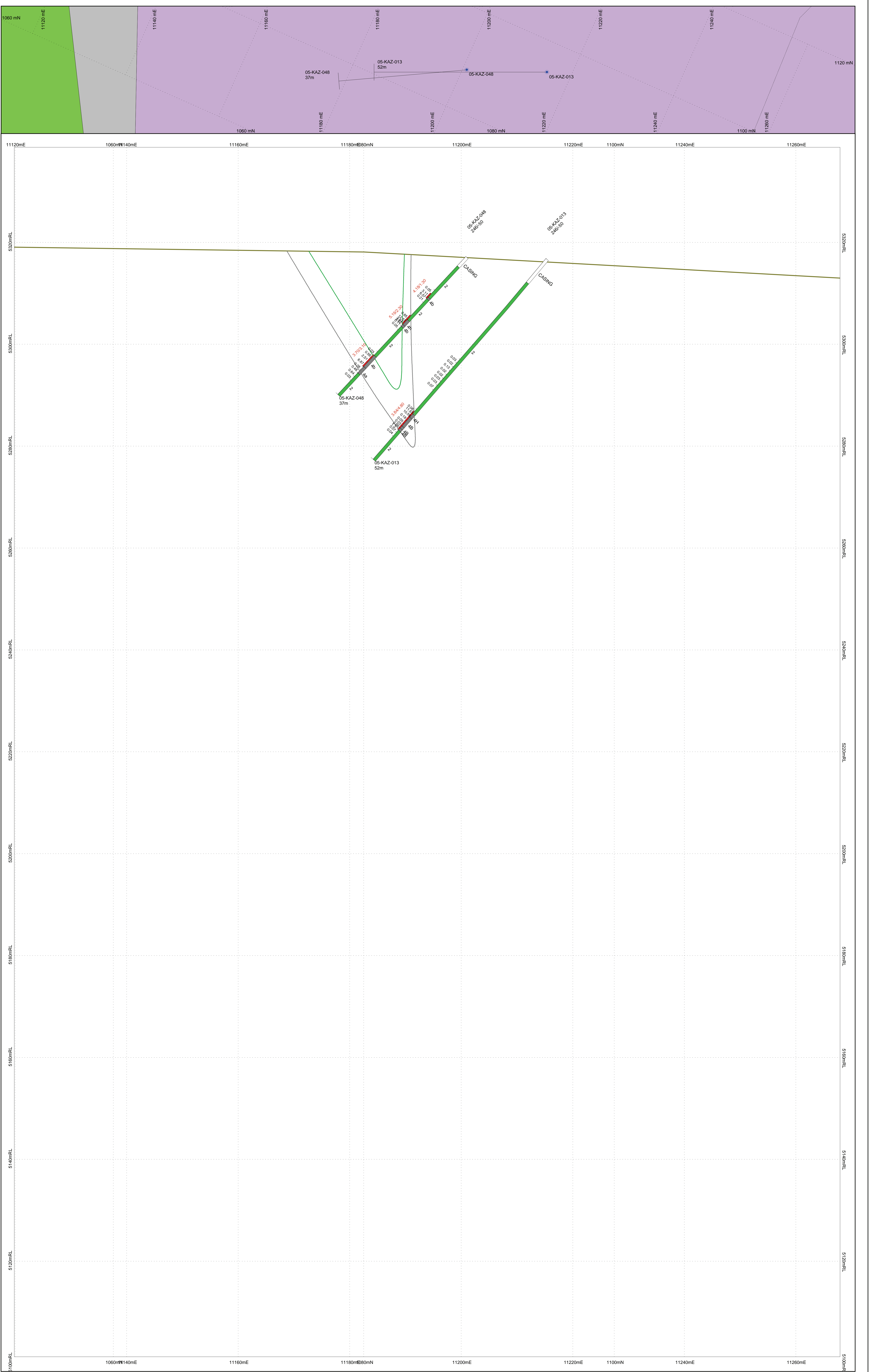
### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinelifer-textured flow
- 1c Ophiolite (polytuffite)-textured flow
- 1d Talc-carbonate-magnetite-iron-titanite/-serpentine schist of probable volcanic origin
- 1e Flow lap breccia
- 1f Pillowed flow
- 1h Varfolitic flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest

	<b>goldcorp</b> CANADA LTD. 05-KAZ-013, 048
	Author: M. Thompson Date: 31/03/2007 NTS: 538-09 Scale: 1:250





# Legend

## Phanerozoic

### Quaternary

- OB Overburden

OB Glacial, glacioluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- 10 Mafic Intrusives

- 10a Diabase

### Early Precambrian

- 9 Intermediate to Felsic Intrusives

- 9a Granite pegmatite

- 8 Intermediate to Felsic Intrusives

- 8 Unsubdivided
- 8a Diorite
- 8b Quartz diorite
- 8c Trochophenite
- 8d Tonalite
- 8e Granodiorite
- 8f Granite pegmatite
- 8g Biotite trondhjemite
- 8h Granite
- 8i Quartz monzonite
- 8m Gneissic granite
- 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parenthesis)
- 8o Mylonitized gneissic rocks
- 8q Biotite-muscovite fluorite trondhjemite/syenite
- 8r Biotite-tonalite gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite tourmaline granite

- 7 Mafic Intrusives

- 7a Gabbro (C = 35-90)
- 7b Leucogabbro (C = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable kimberlite origin
- 7g Amphibolite
- 7h Anorthositic gabbro
- 7i Gabbroic anorthosite and anorthosite

- 6 Clastic Sediments

- 6 Unsubdivided
- 6a Clast-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Digtomitic conglomerate
- 6d Polytomitic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (16 to 64 mm) conglomerate
- 6h Granule (2 to 4 mm) conglomerate
- 6i Wacke
- 6m Arenite
- 6n Mudstone
- 6o Felspathic wacke
- 6p Felspathic arenite
- 6q Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chert-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite-bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Andalusite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

- 4 Chemical Sediments

- 4a Chert-granulite
- 4b Chert-granulite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-schist
- 4g Sulphide iron formation
- 4h Strahlite iron formation
- 4ea Garnet-amphibole-granulite iron formation
- 4ch Chert
- 4cp Chert with pyrite and pyrrhotite
- 4bt Banded iron formation tectonic breccia

- 3 Intermediate to Felsic Volcanics

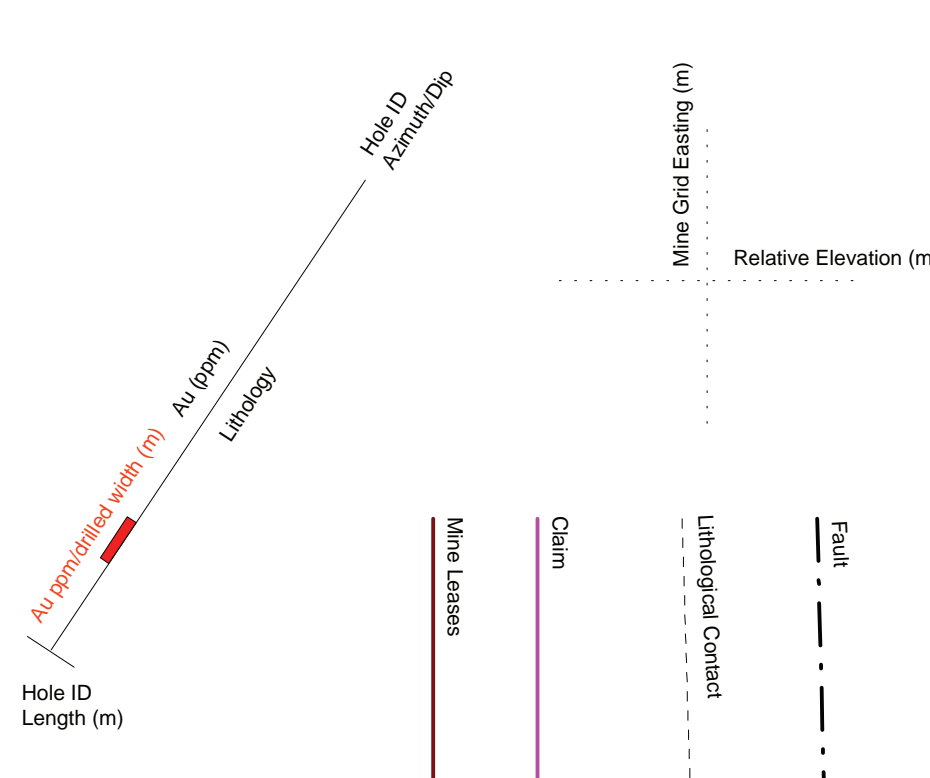
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli-tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz porphyry
- 3i Subvolcanic quartz porphyry
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rocks
- 3p Intermediate dikes, sills, small intrusions

- 2 Mafic Volcanics

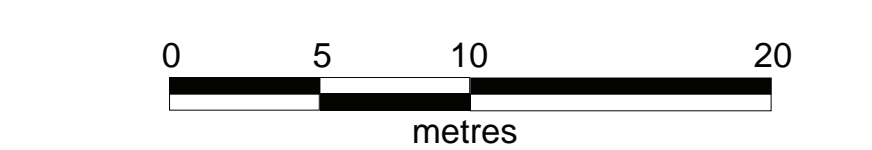
- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillowed flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium- to coarse-grained flow centres
- 2k Dikes, sills, small intrusions
- 2m Chertite-schistose schist of probable volcanic origin
- 2n Variscite flow
- 2p Amphibolite
- 2q Metavolcanics containing detrital-plagioclase xenoliths, tourmaline, garnet, poikil and/or layers
- 2r Hornblende plagioclase schist characterized by mm to cm scale layering
- 2s Hornblende porphyroblastic
- 2t Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

- 1 Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spriflex-textured flow
- 1c Oligocent polyauriferous textured flow
- 1d Talc-carbonate-+magnetite-+trondhjemite-+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1h Variscite flow



Musselwhite Mine Grid North  
42° 2' 57" East of True North



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



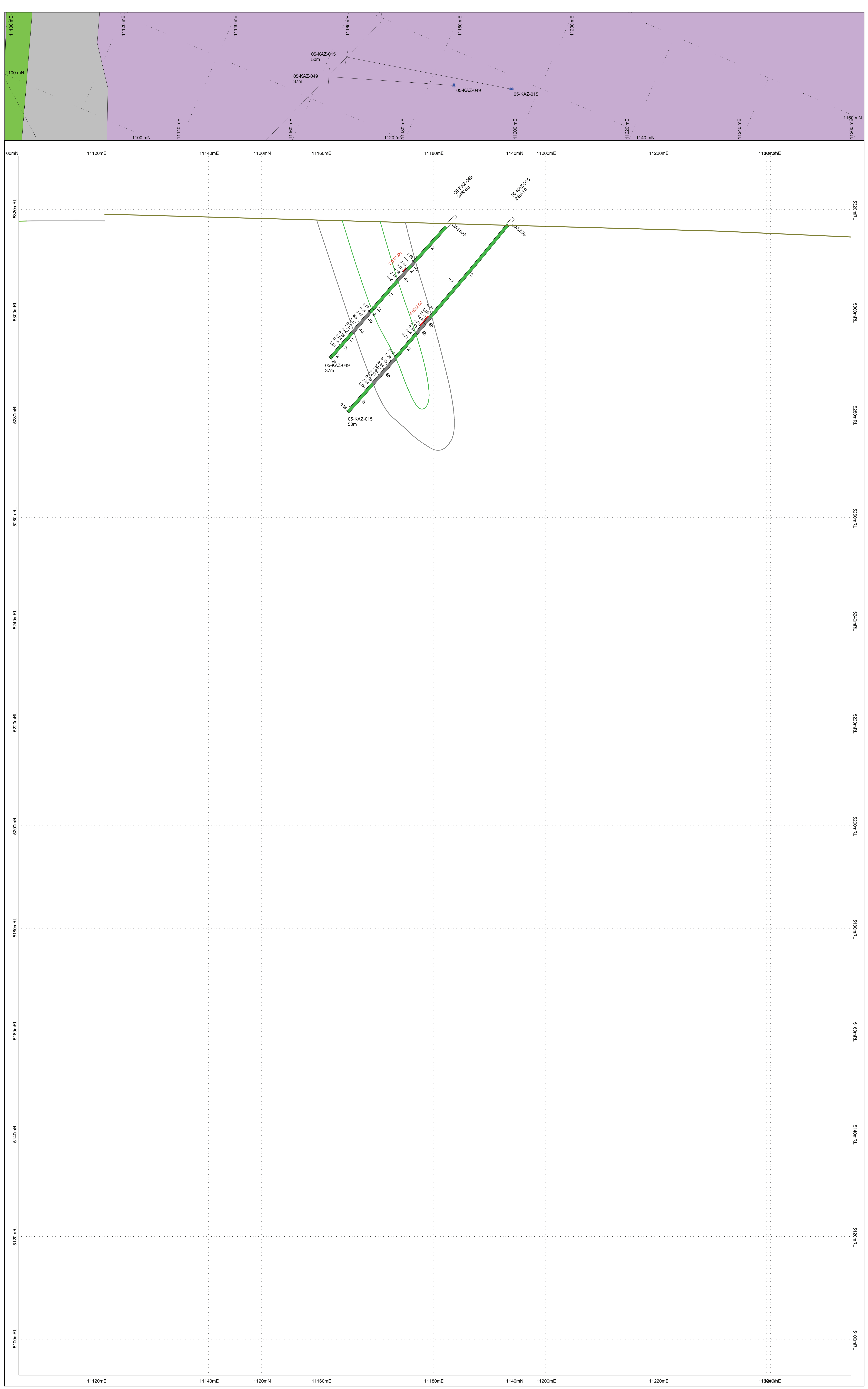
05-KAZ-015, 049

Author: M. Thompson

Date: 31/03/2007

NTS:328/09

Scale 1:250









# Legend

## Phanerozoic

### Quaternary

08 Overburden

08 Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

11 Mafic Intrusives

10a Dabase

### Early Precambrian

9 Intermediate to Felsic Intrusives

9a Granite pegmatite

8 Intermediate to Felsic Intrusives

8 Unsubdivided

8a Diorite

8b Quartz diorite

8c Trondhjemite

8d Tonalite

8e Granodiorite

8f Granite pegmatite

8g Biotite trondhjemite

8h Quartz monzonite

8m Gneissic granite

8n Xenotitic felsic intrusive rocks (xenolith composition indicated in parentheses)

8p Mylonitic granitoid rocks

8q Biotite-muscovite fluorite trondhjemite/syenite

8r Biotite-kerolite gneiss

8s Hornblende-biotite tonalite gneiss

8t Garnet-muscovite tourmaline granite

7 Mafic Intrusives

7a Gabbro (CI = 35-90)

7b Leucogabbro (CI = 10-35)

7c Plagioclase-phryic gabro

7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks

7i Peridotite

7j Ultramafic rocks and altered equivalents of probable intrusive origin

7k Amphibolite

7l Anorthositic gabro

7m Gabbroic anorthositic and anorthositic

6 Clastic Sediments

6 Unsubdivided

6a Clay-supported conglomerate

6b Matrix-supported conglomerate

6c Oligomitic conglomerate

6d Psammitic conglomerate

6e Boulder (>256 mm) conglomerate

6f Cobble (64 to 256 mm) conglomerate

6g Pebble (4 to 64 mm) conglomerate

6h Granule (2 to 4 mm) conglomerate

6i Waacke

6m Arkose

6n Mudstone

6p Felsipamic waacke

6r Felsipamic arenite

6s Quartz arenite

6u Amphibole-bearing mudstone/sandstone /conglomerate

6v Biotite-bearing mudstone/sandstone

6w Garnet-bearing mudstone/sandstone

6x Chlorite-bearing mudstone/sandstone conglomerate

6y Amphibole-biotite bearing foliated rock of probable sedimentary origin

6z Ultramafic rock interbedded with metasediments

6i Anhydrite-bearing metasediments

6j Garnet-rich layers associated with metapelites and/or banded iron formation

4 Chemical Sediments

4a Chert-grunerite

4b Chert-magnetite iron formation

4c Carbonate chert-magnetite iron formation

4d Carbonate magnetite

4e Garnet-amphibole iron formation

4f Garnet-biotite schist

4h Sulphide iron formation

4i Graphitic iron formation

4ea Garnet-amphibole-grunerite iron formation

4ep Chert

4cp Chert with pyrite and pyrrhotite

4b Banded iron formation tectonic breccia

3 Intermediate to Felsic Volcanics

3a Intermediate flow

3b Intermediate pyroclastic breccia, tuff-breccia

3c Intermediate tuff, lapilli tuff

3d Felsic flow

3e Felsic pyroclastic breccia, tuff-breccia

3f Felsic tuff, lapilli tuff

3g Subvolcanic rocks, unsubdivided

3h Subvolcanic quartz-plagioclase porphyry

3i Subvolcanic quartz porphyry

3k Subvolcanic plagioclase porphyry

3m Felsic volcanoclastic rocks

3p Intermediate dikes, sills, small intrusions

2 Mafic Volcanics

2 Unsubdivided

2a Massive, fine to medium-grained flow

2b Amygdaloidal flow

2c Pillow flow, pillow breccia, hyaloclastite

2d Flow breccia

2e Pyroclastic breccia, tuff-breccia

2f Tuff, lapilli tuff

2g Medium- to coarse-grained flow centres

2h Dikes, sills, small intrusions

2m Chlorite-actinolite schist of probable volcanic origin

2n Vasoitic flow

2p Amphibolite

2q Metavolcanics containing diopside-plagioclase -epidote tourmaline garnet pods and/or layers

2r Hornblende-plagioclase schist characterized by mm to cm scale zoning

2s Hornblende-porphyrroblastite

2t Biotite-bearing metavolcanics

2u Garnet-bearing metavolcanics

1 Ultramafic Volcanics

1 Unsubdivided

1a Massive flow

1b Spinifex-textured flow

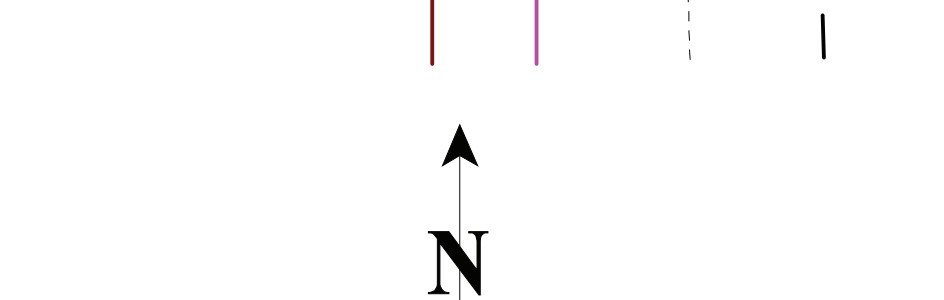
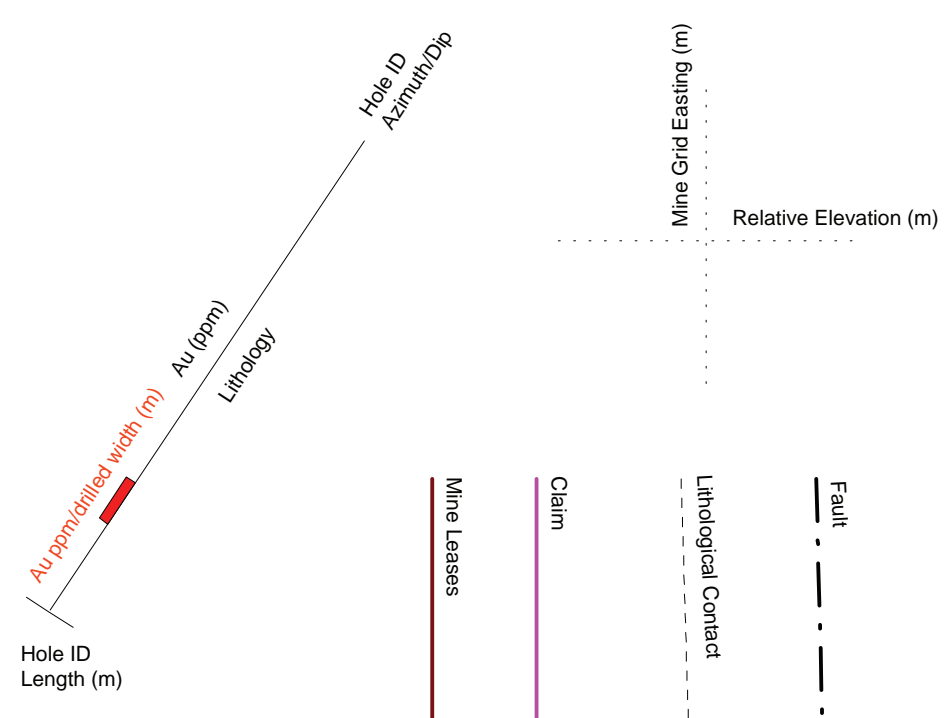
1c Ophiolite (pyroxenite)-textured flow

1d Talc-carbonate/magnetite/serpentine schist of probable volcanic origin

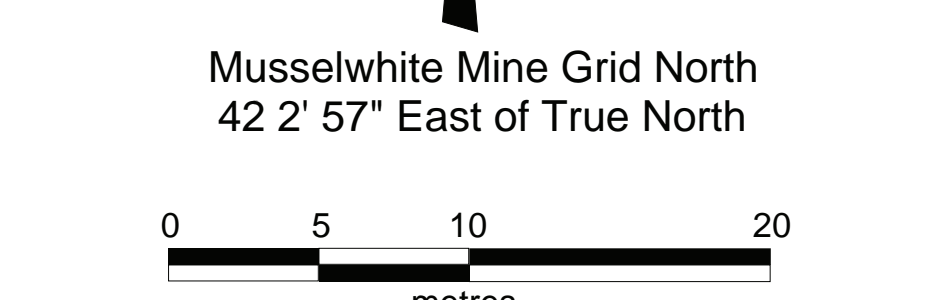
1e Flow top breccia

1f Pillow flow

1h Vasoitic flow



Musselwhite Mine Grid North  
42° 57' East of True North



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



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05-KAZ-019, 051, 055

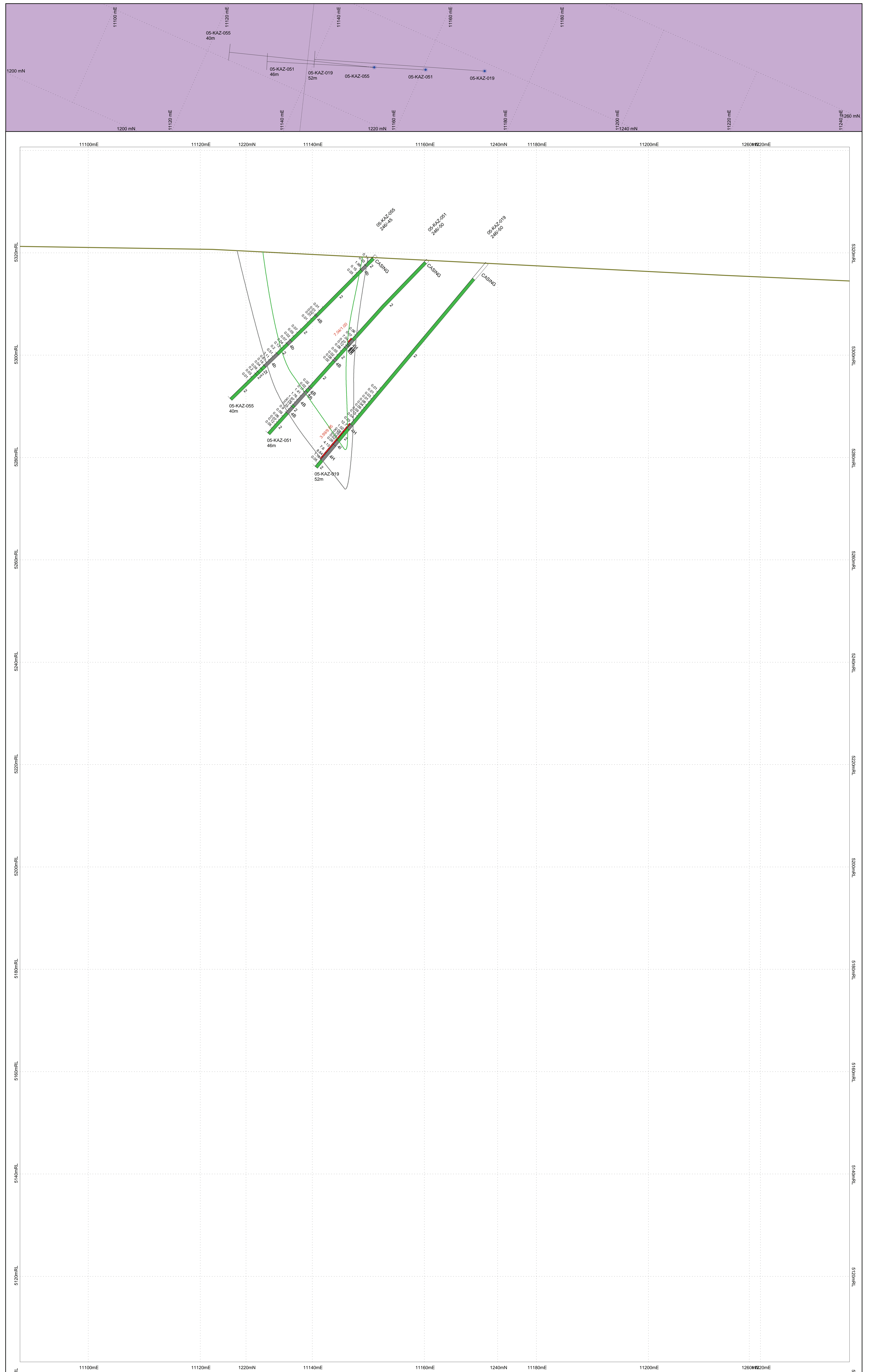
Author: M. Thompson

Date: 31/03/2007

NTS: 53B/09

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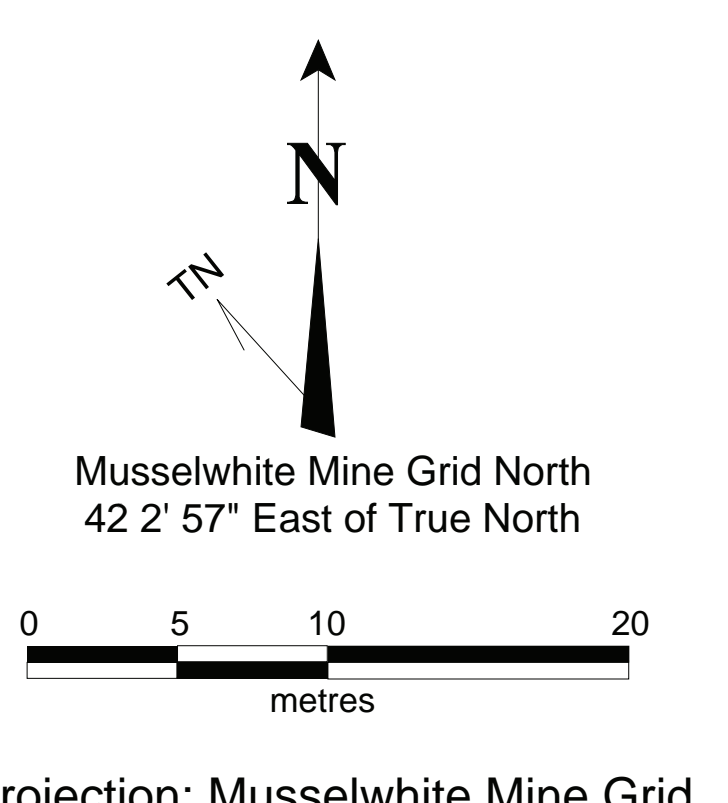
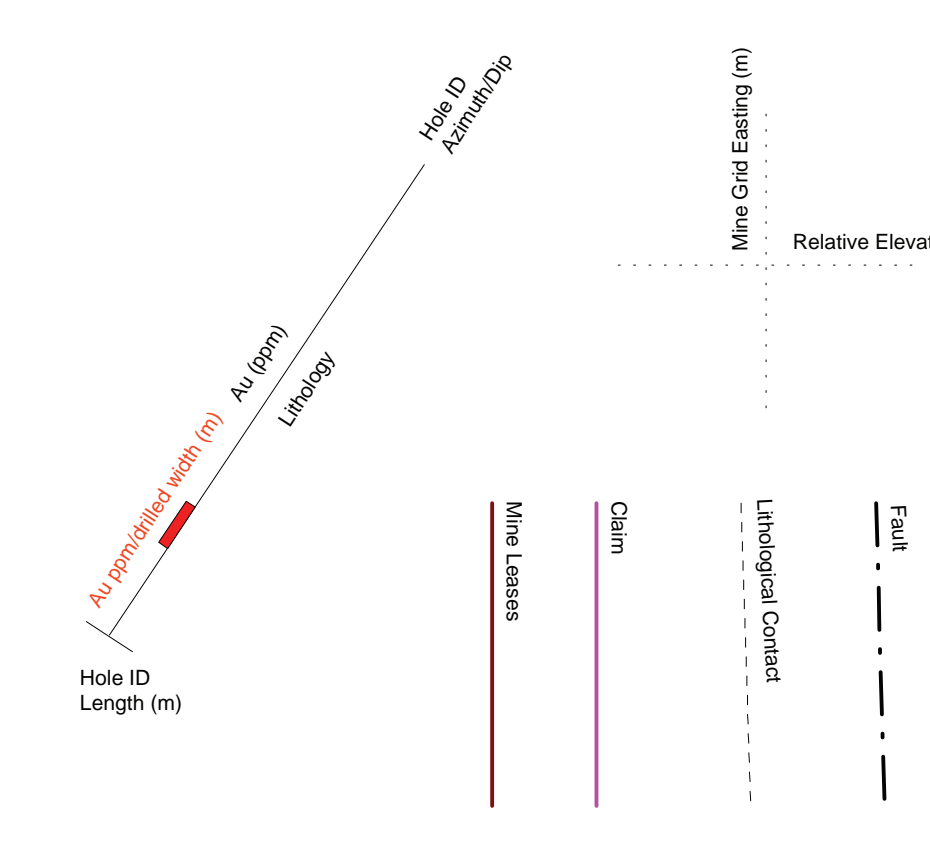
**2005 Drilling Program**  
**Karl Zeemal Zone**  
**Musselwhite Mine**





# Legend

- Phanerozoic**
- Quaternary**
- Qa Overburden
  - Qb Glacial, glacioluvial, and lacustrine deposits
- Precambrian**
- Late Precambrian**
- 10 Mafic Intrusives
  - 10a Diabase
- Early Precambrian**
- Intermediate to Felsic Intrusives**
- 9a Granite pegmatite
  - a Intermediate to Felsic Intrusives
- 8 Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granitic pegmatite
  - 8h Biotite trondhjemite
  - 8i Granite
  - 8k Quartz monzonite
  - 8m Gneissic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parenthesis)
  - 8p Mylonitic gabbroic gabbro
  - 8q Biotite-muscovite fluorite trondhjemite/syenite
  - 8r Biotite-trondhjemite gabbro
  - 8s Hornblende-biotite tonalite gabbro
  - 8u Garnet-muscovite tourmaline granite
- Mafic Intrusives**
- 7a Gabbro (CI = 35-50)
  - 7b Leucogabbro (CI = 10-35)
  - 7c Plagioclase-phyric gabbro
  - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
  - 7e Peridotite
  - 7f Ultramafic rocks and altered equivalents of probable intrusive origin
  - 7g Amphibolite
  - 7k Anorthositic gabbro
  - 7l Gabbroic anorthositic and anorthositic
- Clastic Sediments**
- 6 Unsubdivided
  - 6a Clast-supported conglomerate
  - 6b Matrix-supported conglomerate
  - 6c Oligomictic conglomerate
  - 6d Polymictic conglomerate
  - 6e Boulder (2 to 250 mm) conglomerate
  - 6f Cobble (64 to 256 mm) conglomerate
  - 6g Pebble (16 to 64 mm) conglomerate
  - 6h Granite (2 to 4 mm) conglomerate
  - 6k Waste
  - 6m Arenite
  - 6n Mudstone
  - 6p Feldspathic wacke
  - 6r Feldspathic arenite
  - 6t Quartz arenite
  - 6u Amphibole-bearing mudstone/sandstone conglomerate
  - 6v Biotite-bearing mudstone/sandstone
  - 6w Garnet-bearing mudstone/sandstone
  - 6x Chlorite-bearing mudstone/sandstone conglomerate
  - 6y Amphibole-bearing related rock of probable sedimentary origin
  - 6z Ultramafic rock interbedded with metasediments
  - 6i Arkosite-bearing metasediments
  - 6j Garnet-rich layers associated with metapelites and/or banded iron formation
- Chemical Sediments**
- 4a Chert-gneunite
  - 4b Chert-magnetite iron formation
  - 4c Carbonate chert-magnetite iron formation
  - 4d Carbonate magnetite
  - 4e Garnet-amphibole iron formation
  - 4f Garnet-biotite schist
  - 4h Sulphide iron formation
  - 4i Graphitic iron formation
  - 4ea Garnet-amphibole-gneunite iron formation
  - 4ch Chert
  - 4cp Chert with pyrite and pyrrhotite
  - 4b Banded iron formation tectonic breccia
- Intermediate to Felsic Volcanics**
- 3a Intermediate flow
  - 3b Intermediate pyroclastic breccia, tuff-breccia
  - 3c Intermediate tuff, lapilli tuff
  - 3d Felsic flow
  - 3e Felsic pyroclastic breccia, tuff-breccia
  - 3f Felsic tuff, lapilli tuff
  - 3g Subvolcanic rocks, unsubdivided
  - 3h Subvolcanic quartz-plagioclase porphyry
  - 3i Subvolcanic quartz-porphry
  - 3k Subvolcanic plagioclase porphyry
  - 3m Felsic volcanoclastic rocks
  - 3p Intermediate dikes, sills, small intrusions
- Mafic Volcanics**
- 2 Unsubdivided
  - 2a Massive, fine- to medium-grained flow
  - 2b Amygdaloid flow
  - 2c Pillowed flow, pillow breccia, hyaloclastite
  - 2d Flow breccia
  - 2g Pyroclastic breccia, tuff-breccia
  - 2h Tuff, lapilli-tuff
  - 2i Medium- to coarse-grained flow centres
  - 2k Dikes, sills, small intrusions
  - 2m Chlorite-actinolite schist of probable volcanic origin
  - 2n Variscite flow
  - 2p Amphibolite
  - 2q Metavolcanics containing deplete-plagioclase xenocrysts containing garnet pods and/or layers
  - 2r Hornblende-plagioclase schist characterized by cm to cm scale layering
  - 2s Hornblende-porphyrphyroblastic
  - 2t Biotite-bearing metavolcanics
  - 2u Garnet-bearing metavolcanics
- Ultramafic Volcanics**
- 1 Unsubdivided
  - 1a Massive flow
  - 1b Spinifex textured flow
  - 1c Olivine (dolomite) textured flow
  - 1d Talc-carbonate+magnetite+trondhjemite+serpentine schist of probable volcanic origin
  - 1e Flow top breccia
  - 1f Pillowed flow
  - 1h Variscite flow



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05-KAZ-021, 052, 053

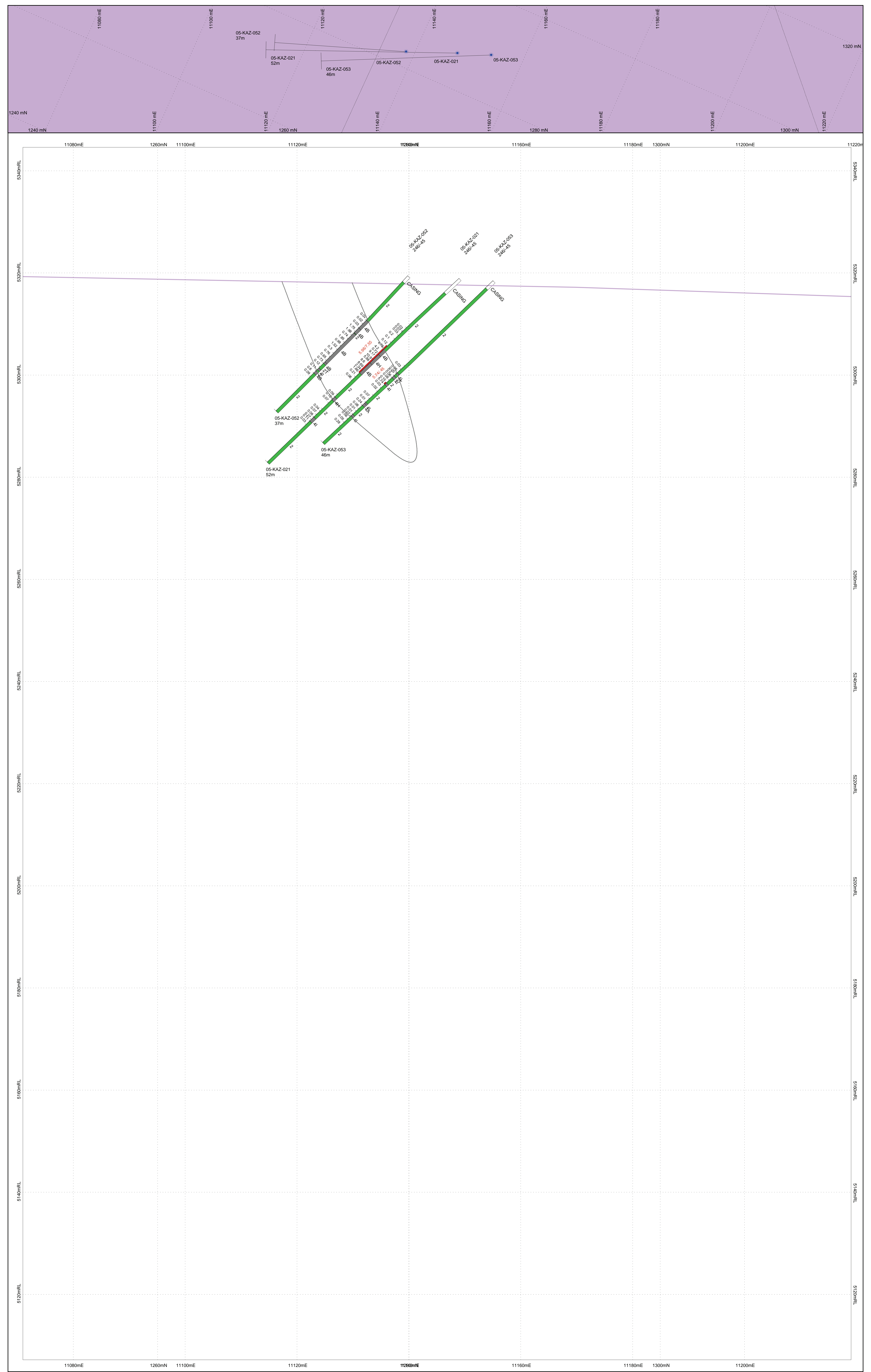
Author: M. Thompson

Date: 31/03/2007

NTS: 530/09

Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- 10 Mafic Intrusives
- 10a Diabase

### Early Precambrian

- 9 Intermediate to Felsic Intrusives
- 9a Granite pegmatite
- 9 Intermediate to Felsic Intrusives
  - 8 Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granitic pegmatite
  - 8g Biotite trondhjemite
  - 8h Granite
  - 8i Quartz monzonite
  - 8m Gneissic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
  - 8p Mylonitic gneissic rocks
  - 8q Biotite-muscovite-fluorite trondhjemite/yanite
  - 8r Biotite-tourmaline gneiss
  - 8s Hornblende-biotite-tourmaline gneiss
  - 8u Garnet-muscovite-tourmaline granite
- 7 Mafic Intrusives
  - 7a Gabro (CI = 35-50)
  - 7b Leucogabbro (CI = 10-35)
  - 7c Plagioclase-sphynx gabbro
  - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
  - 7e Felsite
  - 7f Ultramafic rocks and altered equivalents of probable intrusive origin
  - 7g Amphibolite
  - 7h Anorthositic gabbro
  - 7i Gabroic anorthositic and anorthositic

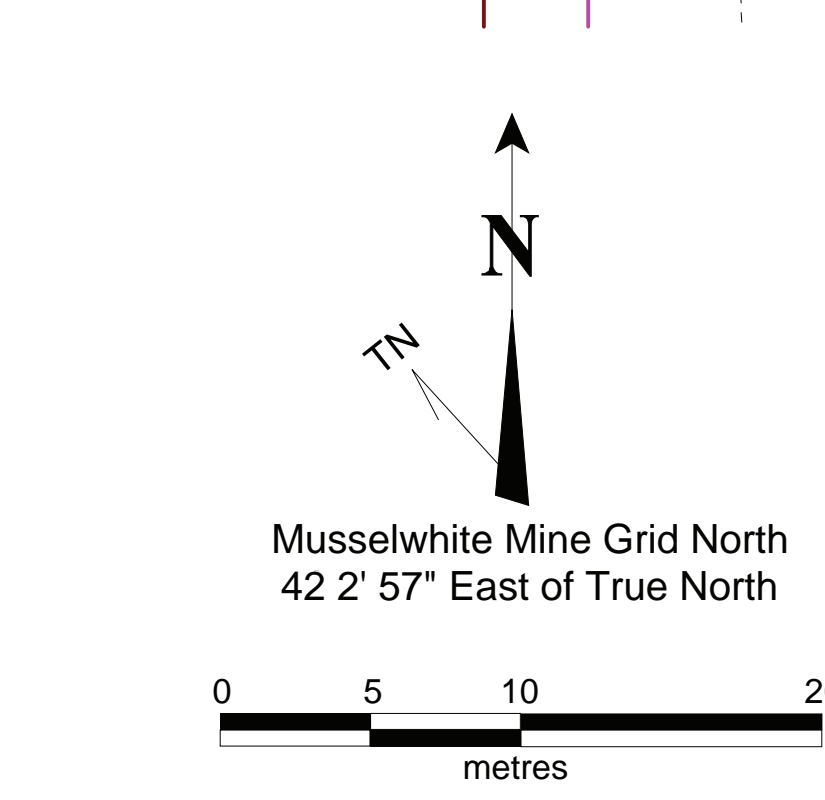
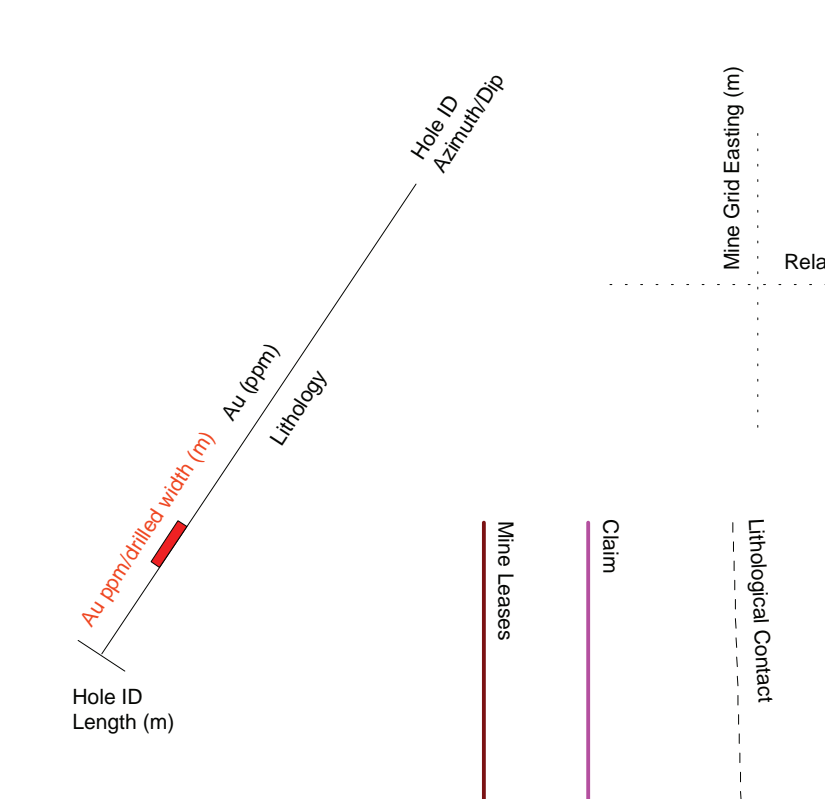
- 6 Clastic Sediments
  - 6a Unsubdivided
  - 6b Clay-supported conglomerate
  - 6c Matrix-supported conglomerate
  - 6d Clastic conglomerate
  - 6e Polymictic conglomerate
  - 6f Boulder (256 mm) conglomerate
  - 6g Cobble (64 to 256 mm) conglomerate
  - 6h Pebble (4 to 64 mm) conglomerate
  - 6i Granite (2 to 4 mm) conglomerate
  - 6j Wacke
  - 6m Aronite
  - 6n Mudstone
  - 6o Feldspathic wacke
  - 6p Feldspathic siltstone
  - 6q Quartz arenite
  - 6r Amphibole-bearing mudstone/sandstone conglomerate
  - 6s Biotite-bearing mudstone/sandstone
  - 6t Garnet-bearing mudstone/sandstone
  - 6u Chlorite-bearing mudstone/sandstone conglomerate
  - 6v Amphibole-biotite-bearing foliated rock of probable sedimentary origin
  - 6w Ultramafic rock interbedded with metasediments
  - 6x Anisulphide-bearing metasediments
  - 6y Garnet-rich layers associated with metapelites and/or banded iron formation

- 4 Chemical Sediments
  - 4a Chert-grunite
  - 4b Chert-magnetite iron formation
  - 4c Carbonate-chert-magnetite iron formation
  - 4d Carbonate magnetite
  - 4e Garnet-amphibole iron formation
  - 4f Garnet-sulphide schist
  - 4g Sulphide iron formation
  - 4h Graphitic iron formation
  - 4i Garnet-amphibole-grunite iron formation
  - 4j Chert
  - 4k Chert with pyrite and pyrrhotite
  - 4l Banded iron formation tectonic breccia

- 3 Intermediate to Felsic Volcanics
  - 3a Intermediate flow
  - 3b Intermediate pyroclastic breccia, tuff-breccia
  - 3c Intermediate tuff, lapilli-tuff
  - 3d Felsic flow
  - 3e Felsic pyroclastic breccia, tuff-breccia
  - 3f Felsic tuff, lapilli-tuff
  - 3g Subvolcanic rocks, unsubdivided
  - 3h Subvolcanic quartz-plagioclase porphyry
  - 3i Subvolcanic quartz-porphyr
  - 3j Subvolcanic plagioclase porphyry
  - 3k Felsic volcaniclastic rocks
  - 3l Intermediate dikes, sills, small intrusions

- 2 Mafic Volcanics
  - 2 Unsubdivided
  - 2a Massive, fine to medium-grained flow
  - 2b Amygdaloidal flow
  - 2c Pillow flow, pillow breccia, hyaloclastite
  - 2d Flow breccia
  - 2e Pyroclastic breccia, tuff-breccia
  - 2f Tuff, lapilli-tuff
  - 2g Medium to coarse-grained flow centres
  - 2h Dikes, sills, small intrusions
  - 2i Chlorite-schistose schist of probable volcanic origin
  - 2j Variscite flow
  - 2k Amphibolite
  - 2l Metavolcanics containing claspide-plagioclase + biotite-tourmaline garnet pods and/or layers
  - 2m Hornblende-plagioclase schist characterized by mm to cm scale scaling
  - 2n Hornblende porphyroblastic
  - 2o Biotite-bearing metavolcanics
  - 2p Garnet-bearing metavolcanics

- 1 Ultramafic Volcanics
  - 1 Unsubdivided
  - 1a Massive flow
  - 1b Spinifex-textured flow
  - 1c Diphant (dolomite-replaced) flow
  - 1d Talc-carbonate + magnetite + tremolite + serpentine schist of probable volcanic origin
  - 1e Flow top breccia
  - 1f Pillow flow
  - 1h Variscite flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



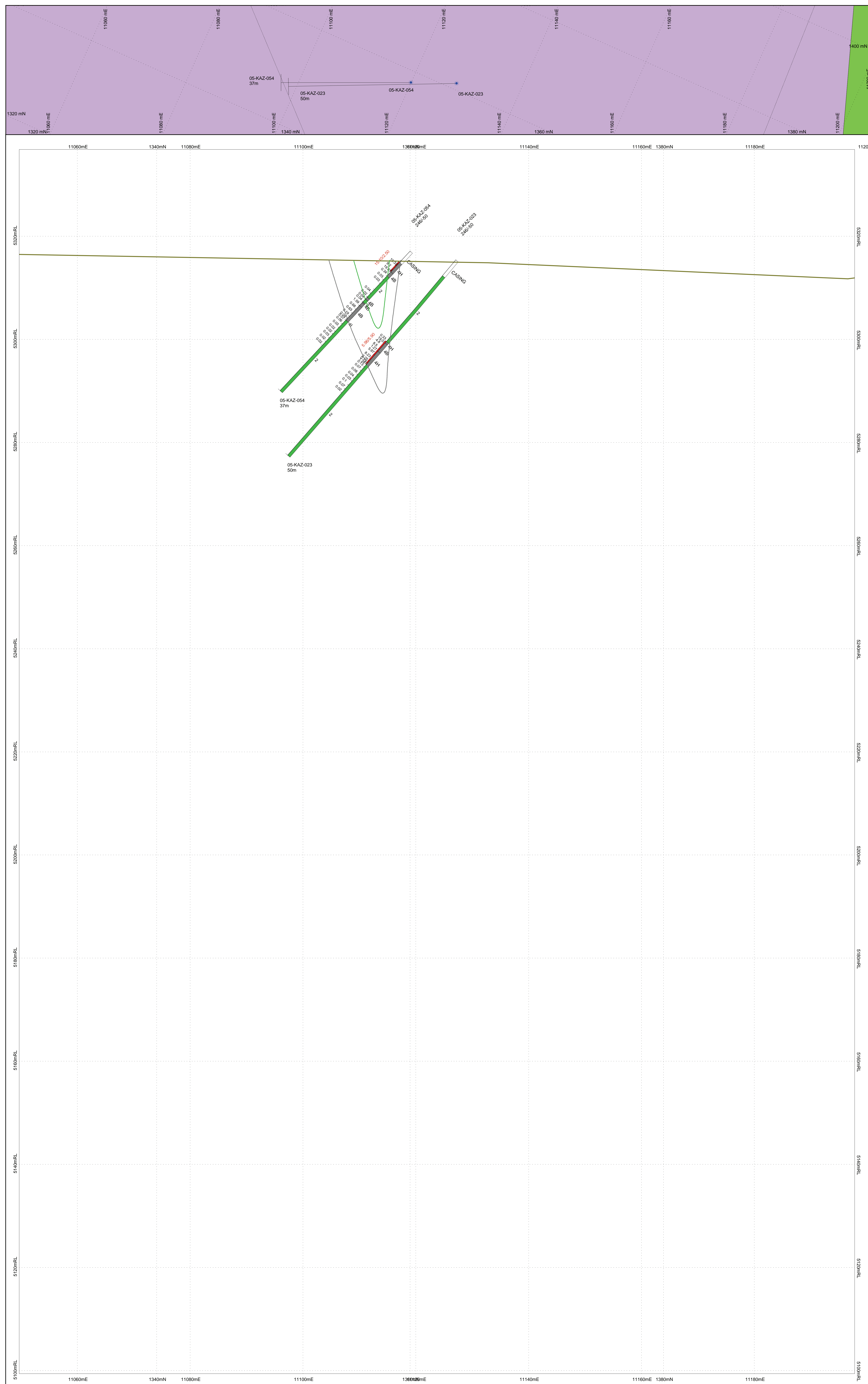
05-KAZ-023, 054

Author: M. Thompson

Date: 31/03/2007

NTS: 538/09

Scale: 1:250





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

### Precambrian

#### Late Precambrian

- 1b Mafic Intrusives
- 1ba Dabase

#### Early Precambrian

##### Intermediate to Felsic Intrusives

##### 8

- 8 Unsubdivided
- 8a Quartz diorite
- 8b Trondhjemite
- 8c Tonalite
- 8d Granodiorite
- 8e Granite pegmatite
- 8f Biotite trondhjemite
- 8g Granite
- 8h Quartz monzonite
- 8i Granitic granite
- 8j Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
- 8k Mylonitized granitoid rocks
- 8l Biotite-muscovite fluonite trondhjemite/syenite
- 8m Biotite-tourmaline gneiss
- 8n Hornblende-biotite tonalite gneiss
- 8o Garnet-muscovite tourmaline granite

##### 7

- 7a Gabbro (CI = 35-50)
- 7b Leucogabbro (CI = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7g Amphibolite
- 7h Anorthositic gabbro
- 7i Gabbroic anorthosite and anorthosite

##### 6

- 6 Unsubdivided
- 6a Clay-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Digenetic conglomerate
- 6d Polygenic conglomerate
- 6e Boulder (>250 mm) conglomerate
- 6f Cobble (64 to 250 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Gravel (2 to 4 mm) conglomerate
- 6i Wickie
- 6j Arenite
- 6k Mudstone
- 6l Feldspathic siltstone
- 6m Feldspathic arenite
- 6n Quartz arenite
- 6o Amphibole-bearing mudstone/sandstone (conglomerate)
- 6p Biotite-bearing mudstone/sandstone
- 6q Garnet-bearing mudstone/sandstone
- 6r Chlorite-bearing mudstone/sandstone conglomerate
- 6s Amphibole-biotite bearing foliated rock of probable sedimentary origin
- 6t Ultramafic rock interbedded with metasediments
- 6u Anorthosite-bearing metasediments
- 6v Garnet-rich layers associated with metapelites and/or banded iron formation

##### 4

- 4a Chert-gneunite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4g Banded iron formation
- 4h Graphitic iron formation
- 4i Garnet-amphibole-gneunite iron formation
- 4j Chert
- 4k Chert with pyrite and pyrrhotite
- 4l Banded iron formation tectonic breccia

##### 3

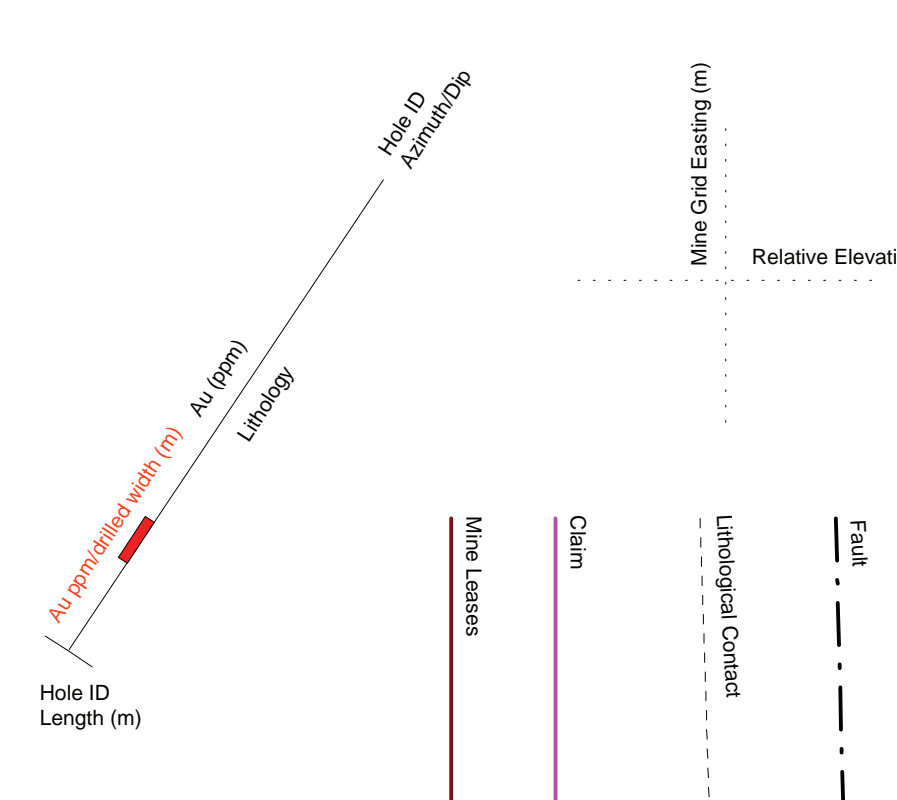
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3j Subvolcanic plagioclase porphyry
- 3k Felsic volcanitoid rocks
- 3l Intermediate dikes, sills, small intrusions

##### 2

- 2 Unsubdivided
- 2a Massive, fine to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pilowed flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2i Chlorite-schistose schist of probable volcanic origin
- 2j Varolitic flow
- 2k Amphibolite
- 2l Metavolcanics containing diopside-plagioclase +oxide tourmaline garnet pods and/or layers
- 2m Hornblende-plagioclase schist characterized by mm to cm scale layering
- 2n Hornblende-porphroblastic
- 2o Biotite-bearing metavolcanics
- 2p Garnet-bearing metavolcanics

##### 1

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinifex-textured flow
- 1c Oligphant (polytreme) textured flow
- 1d Talc-carbonate-magnetite-tremolite+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pilowed flow
- 1g Varolitic flow



Musselwhite Mine Grid North  
42° 2' 57" East of True North

0 5 10 20 metres

Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



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05-KAZ-024, 058, 059

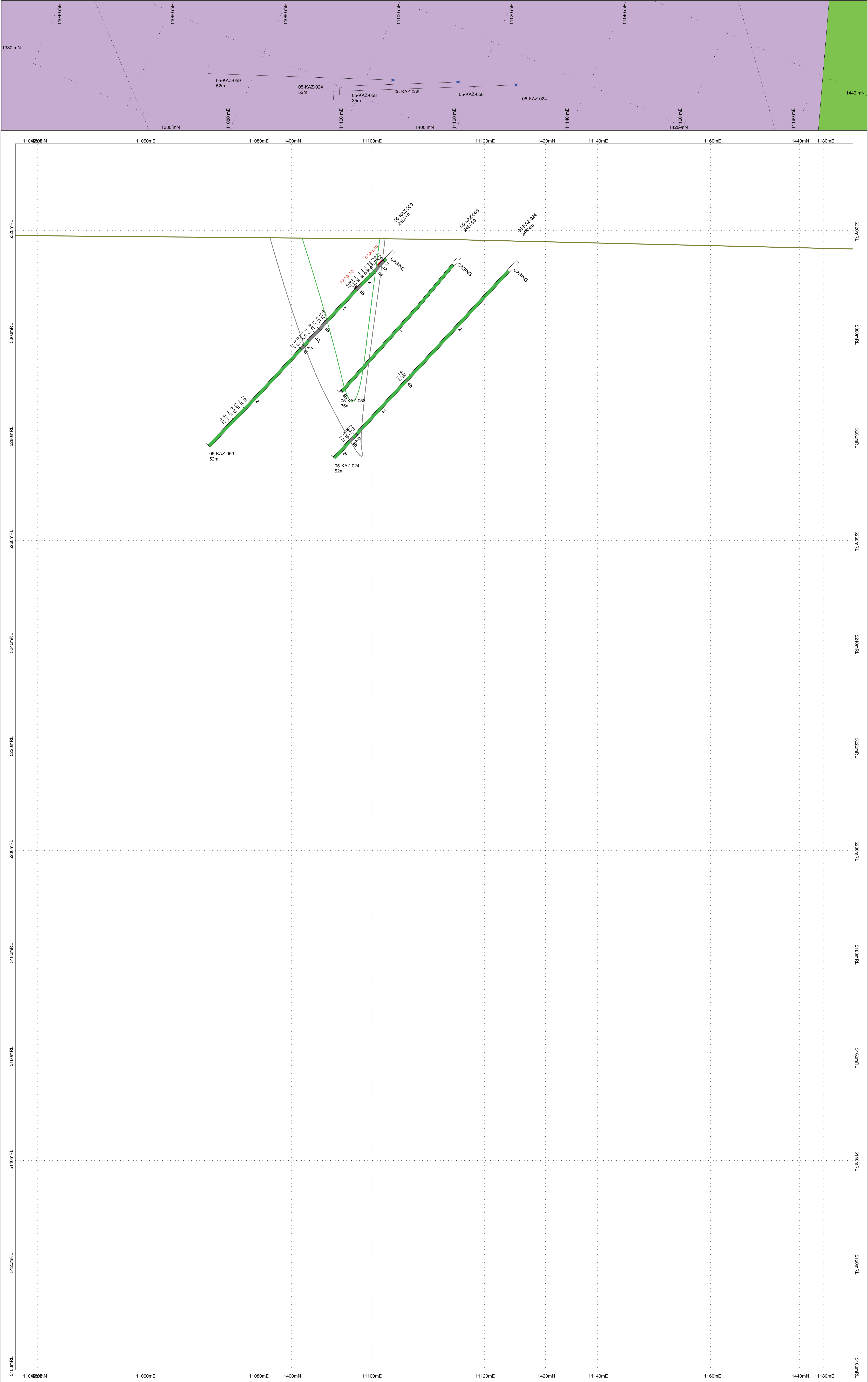
Author: M. Thompson

Date: 3/10/2007

NTS: SSB09

Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- 10 Mafic Intrusives
- 10a Diabase

### Early Precambrian

- 9 Intermediate to Felsic Intrusives
  - 9a Granite pegmatite
- 8 Intermediate to Felsic Intrusives
  - 8 Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trochilite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granitic pegmatite
  - 8h Biotite trondhjemite
  - 8i Granite
  - 8k Quartz monzonite
  - 8m Granitic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
  - 8p Mylonitized granitoid rocks
  - 8q Biotite-muscovite fluoro trondhjemite/syenite
  - 8r Biotite-tourmaline gneiss
  - 8s Hornblende-biotite tonalite gneiss
  - 8u Garnet-muscovite tourmaline granite

### Mafic Intrusives

- 7a Gabbro (CI = 35-50)
- 7b Leucogabbro (CI = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7j Amphibolite
- 7k Anorthositic gabbro and anorthosite
- 7l Gabbroic anorthosite and anorthosite

### Clastic Sediments

- 6 Unsubdivided
- 6a Clay-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymictic conglomerate
- 6e Boulder (>250 mm) conglomerate
- 6f Cobble (64 to 250 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Gravel (2 to 4 mm) conglomerate
- 6k Arkose
- 6m Mudstone
- 6p Felspathic wacke
- 6r Felspathic arenite
- 6s Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone (conglomerate)
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Arkosidite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

### Chemical Sediments

- 4a Chert-grunerite iron formation
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4h Sulphide iron formation
- 4i Graphitic iron formation
- 4ea Garnet-amphibole-grunerite iron formation
- 4ch Chert
- 4cb Chert with pyrite and pyrrhotite
- 4cb Banded iron formation tectonic breccia

### Intermediate to Felsic Volcanics

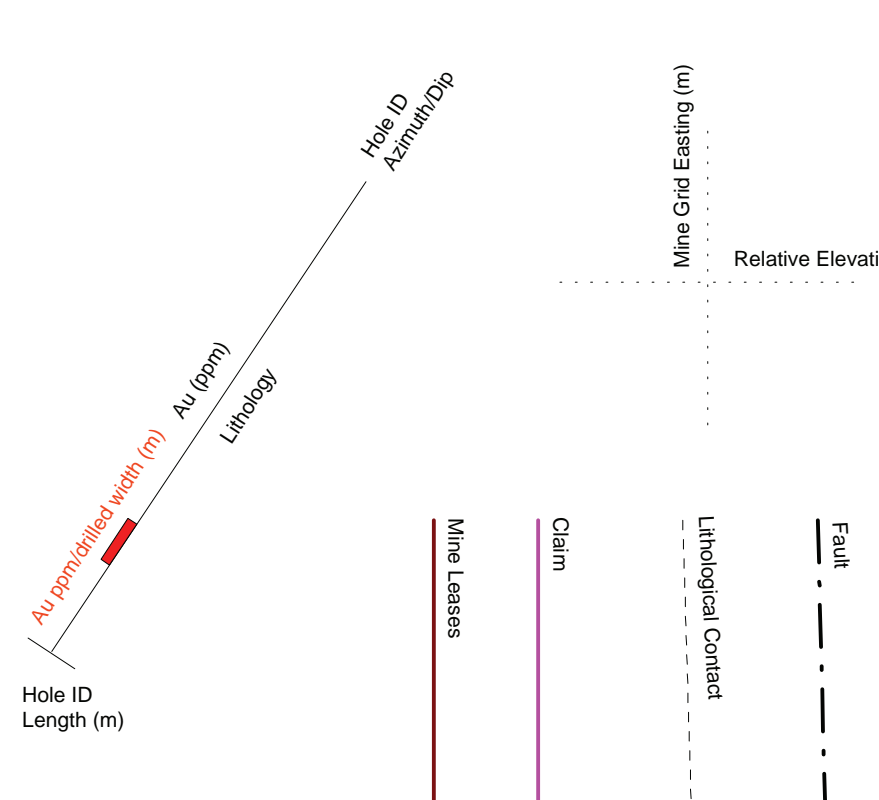
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, Unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcanoclastic rocks
- 3p Intermediate dikes, sills, small intrusions

### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pilaeed flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium to coarse-grained flow centres
- 2k Dikes, sills, small intrusions
- 2m Clinohornfels schist of probable volcanic origin
- 2n Variscite flow
- 2p Metavolcanics containing diopside-plagioclase -epidote tourmaline garnet pods and/or layers
- 2r Hornblende-plagioclase schist characterized by mm to cm scale layering
- 2s Hornblende-epidote schist
- 2i Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinifex-textured flow
- 1c Oliphant (polystrat) textured flow
- 1d Talc-carbonate-iron-magnetite-tourmaline-serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1h Variscite flow



Musselwhite Mine Grid North  
42° 2' 57" East of True North

0 5 10 20  
metres

Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



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05-KAZ-025, 056

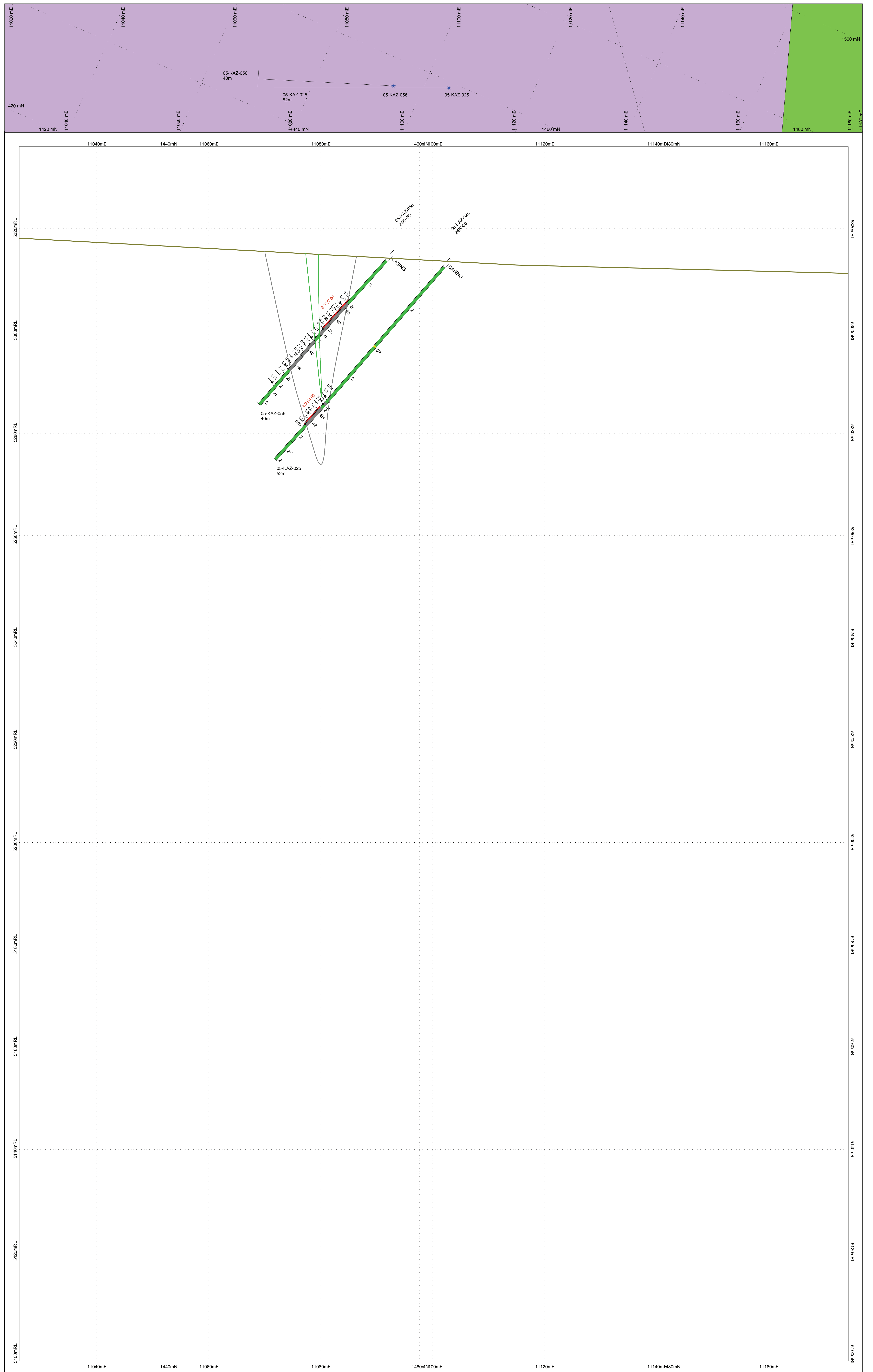
Author: M. Thompson

Date: 3/10/2007

NTS: S3B-09

Scale: 1:250

**2005 Drilling Program**  
**Karl Zeemal Zone**  
**Musselwhite Mine**





# Legend

## Phanerozoic

### Quaternary

#### OB Overburden

OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

#### 10 Mafic Intrusives

#### 10a Diabase

### Early Precambrian

#### 9 Intermediate to Felsic Intrusives

#### 9a Granite pegmatite

#### 8 Intermediate to Felsic Intrusives

#### 8 Unsubdivided

#### 8a Diorite

#### 8b Quartz diorite

#### 8c Trondhjemite

#### 8d Tonalite

#### 8e Granodiorite

#### 8f Granite pegmatite

#### 8g Biotite trondhjemite

#### 8h Granite

#### 8k Quartz monzonite

#### 8m Granite

#### 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)

#### 8p Mylonitized granitoid rocks

#### 8q Biotite-muscovite / biotite trondhjemite/sericite

#### 8r Biotite-sillarsite gneiss

#### 8s Hornblende-biotite tonalite gneiss

#### 8u Garnet-muscovite / tourmaline granite

#### 7 Mafic Intrusives

#### 7a Gabbrro (CI = 35-90)

#### 7b Leucogabbro (CI = 10-35)

#### 7c Plagioclase-phyric gabbro

#### 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks

#### 7e Peridotite

#### 7f Ultramafic rocks and altered equivalents of probable intrusive origin

#### 7g Amphibolite

#### 7k Anorthositic gabbro

#### 7l Gabbroic anorthosite and anorthosite

#### 6 Clastic Sediments

#### 6 Unsubdivided

#### 6a Clay-supported conglomerate

#### 6b Matrix-supported conglomerate

#### 6c Dipsandstone conglomerate

#### 6d Polymictic conglomerate

#### 6e Boulder (>256 mm) conglomerate

#### 6f Cobble (64 to 256 mm) conglomerate

#### 6g Pebble (4 to 64 mm) conglomerate

#### 6h Gravel (2 to 4 mm) conglomerate

#### 6k Wacke

#### 6m Arenite

#### 6n Mudstone

#### 6p Felspathic siltstone

#### 6r Felspathic arenite

#### 6s Quartz arenite

#### 6u Amphibole-bearing mudstone/sandstone (conglomerate)

#### 6v Biotite-bearing mudstone/sandstone

#### 6w Garnet-bearing mudstone/sandstone

#### 6x Chlorite-bearing mudstone/sandstone conglomerate

#### 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin

#### 6z Ultramafic rock interbedded with metasediments

#### 6 Anhydrite-bearing metasediments

#### 6 Garnet-rich layers associated with metapelites and/or banded iron formation

#### 4 Chemical Sediments

#### 4a Chert-grunerite

#### 4b Chert-magnetite iron formation

#### 4c Carbonate-chert-magnetite iron formation

#### 4d Carbonate magnetite

#### 4e Garnet-amphibole iron formation

#### 4f Garnet-biotite schist

#### 4g Sulfide iron formation

#### 4h Graphitic iron formation

#### 4ea Garnet-amphibole-grunerite iron formation

#### 4ch Chert

#### 4cnp Chert with pyrite and pyrrhotite

#### 4b Banded iron formation (banded breccia)

#### 3 Intermediate to Felsic Volcanics

#### 3a Intermediate flow

#### 3b Intermediate pyroclastic breccia, tuff-breccia

#### 3c Intermediate tuff, lapilli-tuff

#### 3d Felsic flow

#### 3e Felsic pyroclastic breccia, tuff-breccia

#### 3f Felsic tuff, lapilli tuff

#### 3g Subvolcanic rocks, unsubdivided

#### 3h Subvolcanic quartz-plagioclase porphyry

#### 3i Subvolcanic quartz porphyry

#### 3k Subvolcanic plagioclase porphyry

#### 3m Felsic volcanoclastic rocks

#### 3p Intermediate dikes, sills, small intrusions

#### 2 Mafic Volcanics

#### 2 Unsubdivided

#### 2a Massive, fine to medium-grained flow

#### 2b Amygdaloidal flow

#### 2c Pilowed flow, pillow breccia, hyaloclastite

#### 2d Flow breccia

#### 2e Pyroclastic breccia, tuff-breccia

#### 2f Tuff, lapilli-tuff

#### 2g Medium to coarse-grained flow centres

#### 2k Dikes, sills, small intrusions

#### 2l Chlorite-schistose schist of probable volcanic origin

#### 2m Variscite flow

#### 2n Amphibolite

#### 2p Metavolcanics containing diopside-plagioclase

#### 2q -sillite tourmaline garnet pods and/or layers

#### 2r Hornblende-plagioclase schist characterized by mm to cm scale splaying

#### 2s Hornblende-poor/abundant

#### 2t Biotite-bearing metavolcanics

#### 2u Garnet-bearing metavolcanics

#### 1 Ultramafic Volcanics

#### 1 Unsubdivided

#### 1a Massive flow

#### 1b Sprifex-reared flow

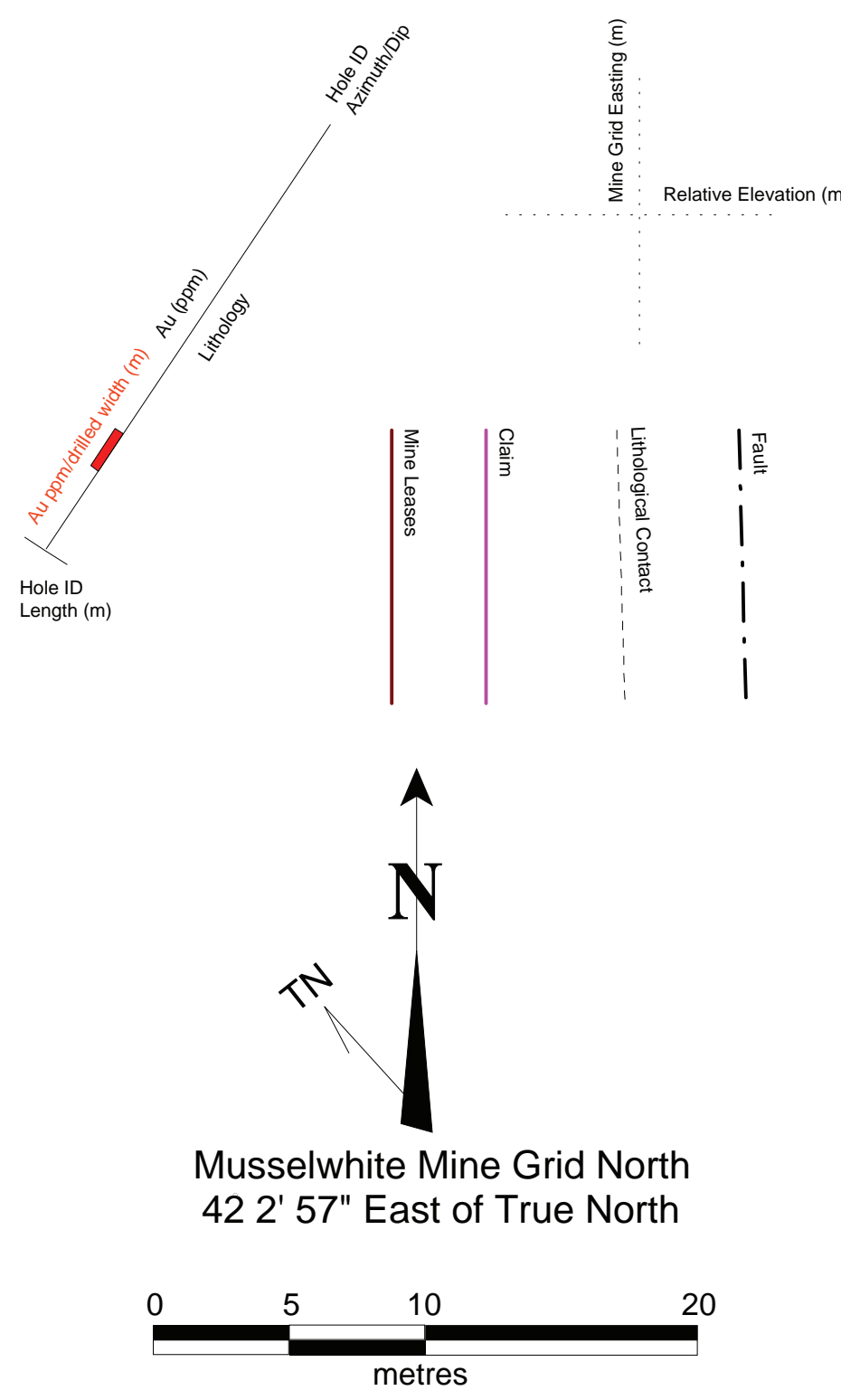
#### 1c Dipsandstone (polystrat) reared flow

#### 1d Talc-carbonate-magnetite-tourmaline-serpentine schist of probable volcanic origin

#### 1e Flow top breccia

#### 1f Pilowed flow

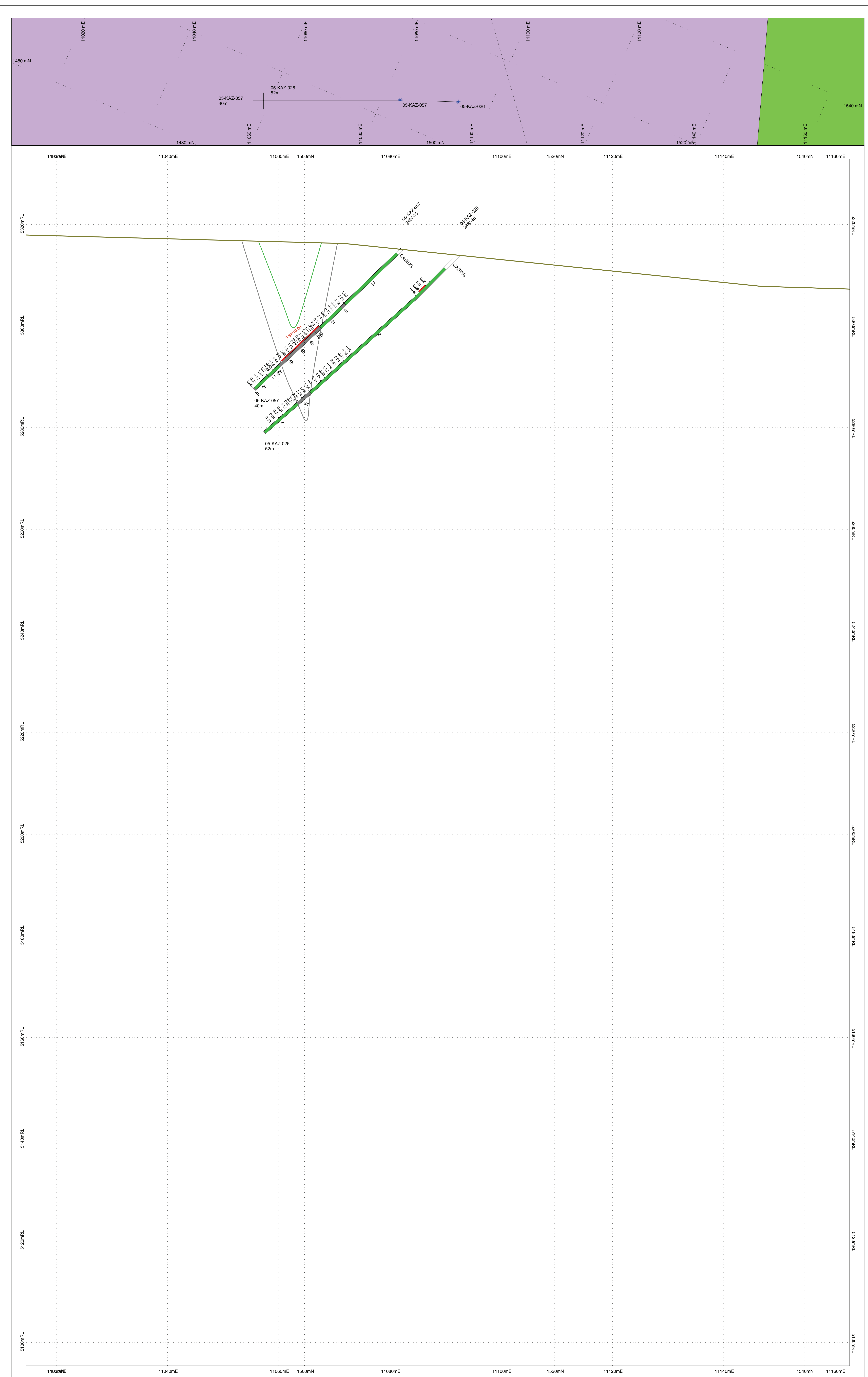
#### 1h Variscite flow



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Author: M. Thompson  
Date: 3/10/2007  
NTS: 538/09  
Scale: 1:250

05-KAZ-026, 057  
2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

### Precambrian

#### Late Precambrian

- 10 Mafic intrusives
- 10a Diabase

#### Early Precambrian

- 9 Intermediate to felsic intrusives
- 9a Granite pegmatite
- 8 Intermediate to felsic intrusives
  - 8 Unsubdivided
  - 8a Diorite
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granitic pegmatite
  - 8g Diatite trondhjemite
  - 8h Granite
  - 8k Quartz monzonite
  - 8m Gneissic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
  - 8o Mylonitized granitoid rocks
  - 8p Biotite-muscovite-fluorite-trondhjemite/syenite
  - 8r Biotite-tonalite gneiss
  - 8s Hornblende-biotite tonalite gneiss
  - 8u Garnet-muscovite-tourmaline granite
- 7 Mafic intrusives
  - 7a Gabbro (C = 35-90)
  - 7b Leucogabbro (C = 10-35)
  - 7c Plagioclase-chryso-gabbro
  - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
  - 7i Peridotite
  - 7j Ultramafic rocks and altered equivalents of probable igneous origin
  - 7k Amphibolite
  - 7l Anorthositic gabbro
  - 7m Gabbroic anorthositic and anorthositic

#### 6 Clastic Sediments

- 6 Unsubdivided
- 6a Clast-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomictic conglomerate
- 6d Polyimictic conglomerate
- 6e Boulder (>25 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granite (2 to 4 mm) conglomerate
- 6i Vastite
- 6m Arenite
- 6n Mudstone
- 6o Feldspathic wacke
- 6p Feldspathic arenite
- 6q Quartz arenite
- 6r Amphibole-bearing mudstone/sandstone conglomerate
- 6s Biotite-bearing mudstone/sandstone
- 6t Garnet-bearing mudstone/sandstone
- 6u Chlorite-bearing mudstone/sandstone conglomerate
- 6v Amphibole-bearing banded rock of probable sedimentary origin
- 6w Ultramafic rock interbedded with metasediments
- 6x Arkosite-bearing metasediments
- 6y Garnet-rich layers associated with metapelites and/or banded iron formation

#### 4 Chemical Sediments

- 4a Chert-grunite
- 4b Chert-magnetite iron formation
- 4c Carbonate-chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-arenite iron formation
- 4f Garnet-biotite schist
- 4g Sulphate iron formation
- 4h Graphitic iron formation
- 4ea Garnet-amphibole-grunite iron formation
- 4ch Chert
- 4chp Chert with pyrite and pyrrhotite
- 4bs Banded iron formation tectonic breccia

#### 3 Intermediate to felsic volcanics

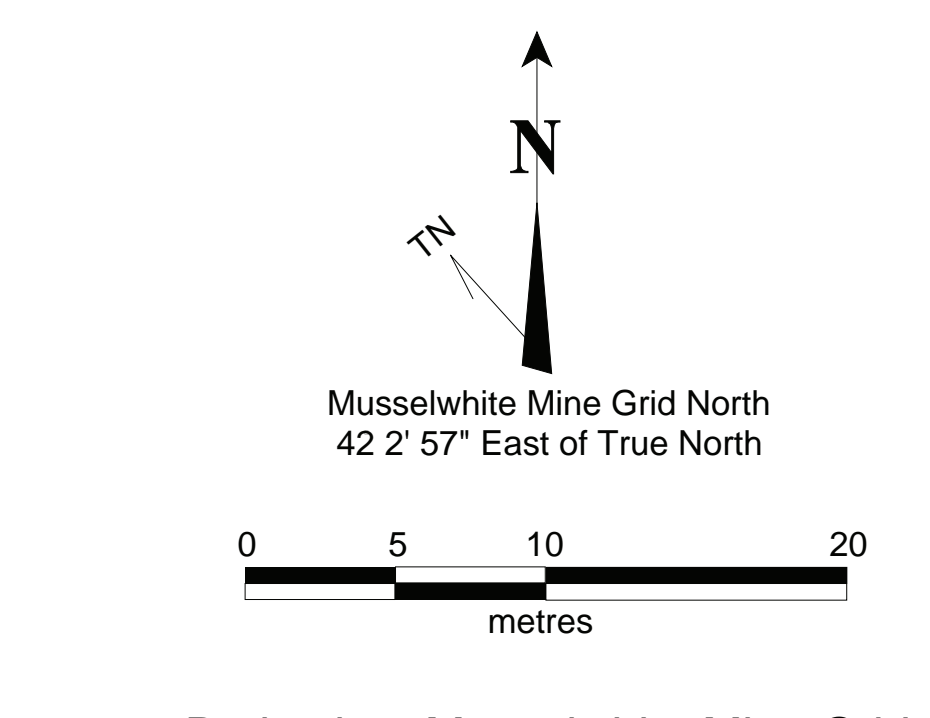
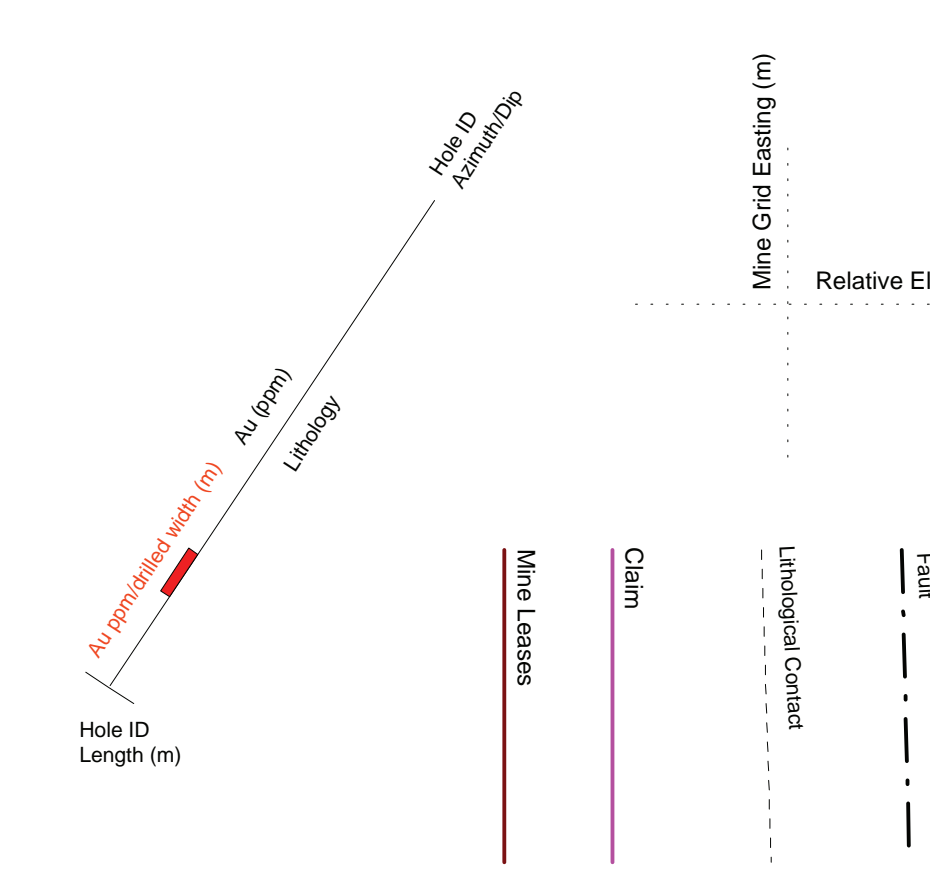
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rock
- 3p Intermediate dikes, sills, small intrusions

#### 2 Mafic volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloid flow
- 2c Pillow flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium- to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2i Chlorite-actinolite schist of probable volcanic origin
- 2j Varzotic flow
- 2k Amphibolite
- 2l Metavolcanics containing diopside-plagioclase-epidote-tourmaline garnet pods and/or layers
- 2m Hornblende plagioclase schist characterized by iron to iron scale eyeing
- 2n Hornblende porphyroblastic
- 2p Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

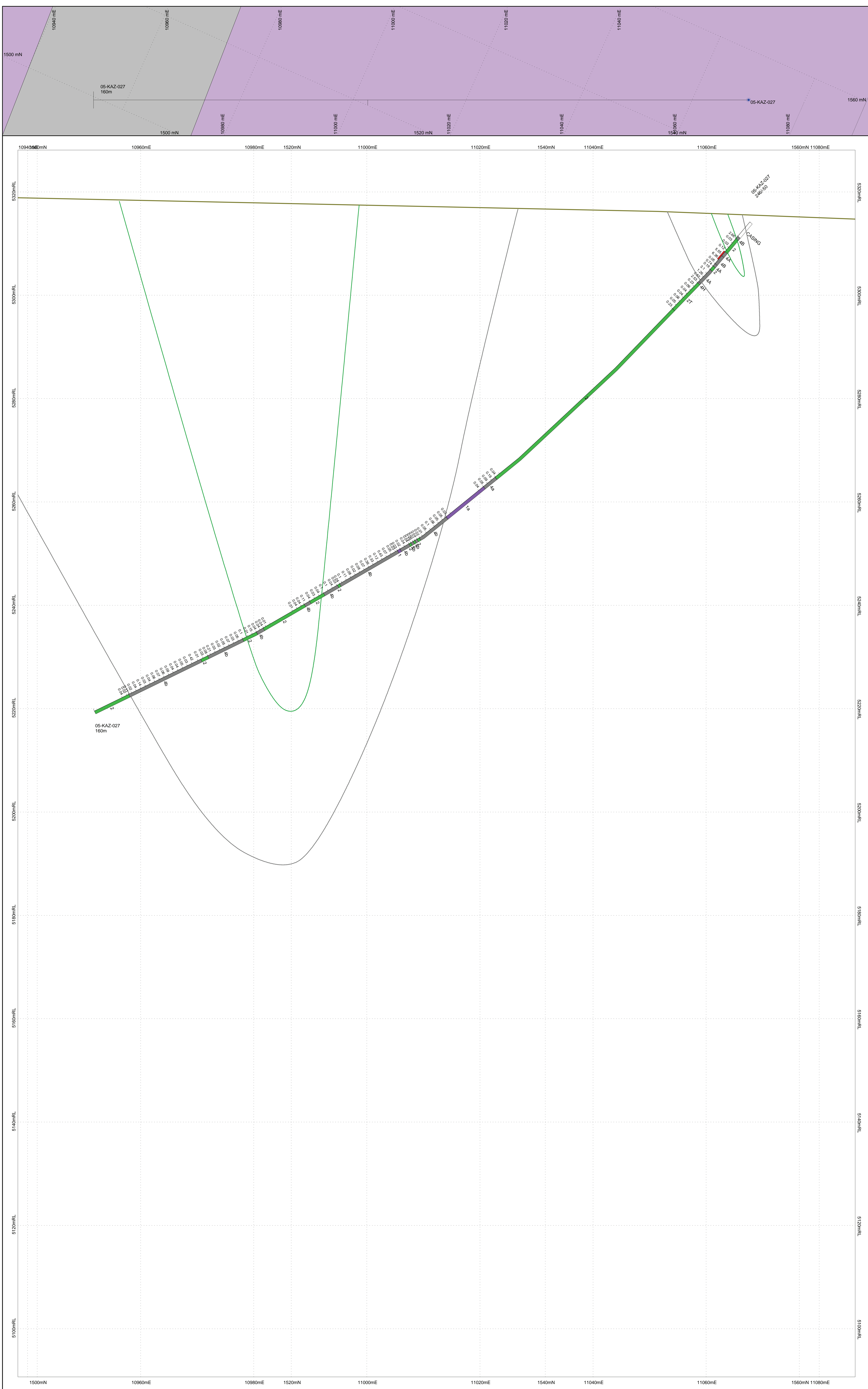
#### 1 Ultramafic volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spindle-textured flow
- 1c Oliphant (polysynthetic) textured flow
- 1d Talc-carbonate-magnetite-hornblende-serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillow flow
- 1h Varzotic flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest

<b>goldcorp</b> CANADA LTD.	
05-KAZ-027	
Author: M. Thompson	<b>2005 Drilling Program Karl Zeemal Zone Musselwhite Mine</b>
Date: 31/03/2007	
NTS: S38/09	
Scale: 1:250	





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

### Precambrian

#### Late Precambrian

- 11 Mafic Intrusives
- 10a Diabase

#### Early Precambrian

- 9 Intermediate to Felsic Intrusives
- 9a Granite pegmatite
- 8 Intermediate to Felsic Intrusives
- 8 Unsubdivided
- 8a Diorite
- 8b Quartz-diorite
- 8c Trondhjemite
- 8d Tonalite
- 8e Granodiorite
- 8f Granite pegmatite
- 8g Biotite trondhjemite
- 8h Granite
- 8i Quartz monzonite
- 8m Gneissic granite
- 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
- 8p Mylonitized granodiorite
- 8q Biotite-muscovite-fluorite trondhjemite/tonalite
- 8r Biotite-tonalite gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite tourmaline granite

#### Mafic Intrusives

- 7a Gabro (C = 35-90)
- 7b Leucogabro (C = 10-35)
- 7c Plagioclase-phryic gabro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Pseudite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7j Amphibolite
- 7k Anorthositic gabro
- 7l Gabbroic anorthosite and anorthosite

#### Clastic Sediments

- 6 Unsubdivided
- 6a Class-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymictic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Gravel (2 to 4 mm) conglomerate
- 6k Wacke
- 6m Anarite
- 6n Mudstone
- 6p Feldspathic wacke
- 6q Feldspathic arenite
- 6r Quartz arenite
- 6s Amphibole-bearing mudstone/sandstone conglomerate
- 6t Biotite-bearing mudstone/sandstone
- 6u Garnet-bearing mudstone/sandstone
- 6v Chlorite-bearing mudstone/sandstone conglomerate
- 6w Amphibole-biotite-bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6aa Amphibole-bearing metasediments
- 6ab Garnet-rich layers associated with metapelites and/or banded iron formation

#### Chemical Sediments

- 4a Chert-grunite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4g Sphalerite iron formation
- 4h Graphitic iron formation
- 4ea Garnet-amphibole-grunite iron formation
- 4ch Chert
- 4ci Chert with pyrite and pyrrhotite
- 4cb Banded iron formation tectonic breccia

#### Intermediate to Felsic Volcanics

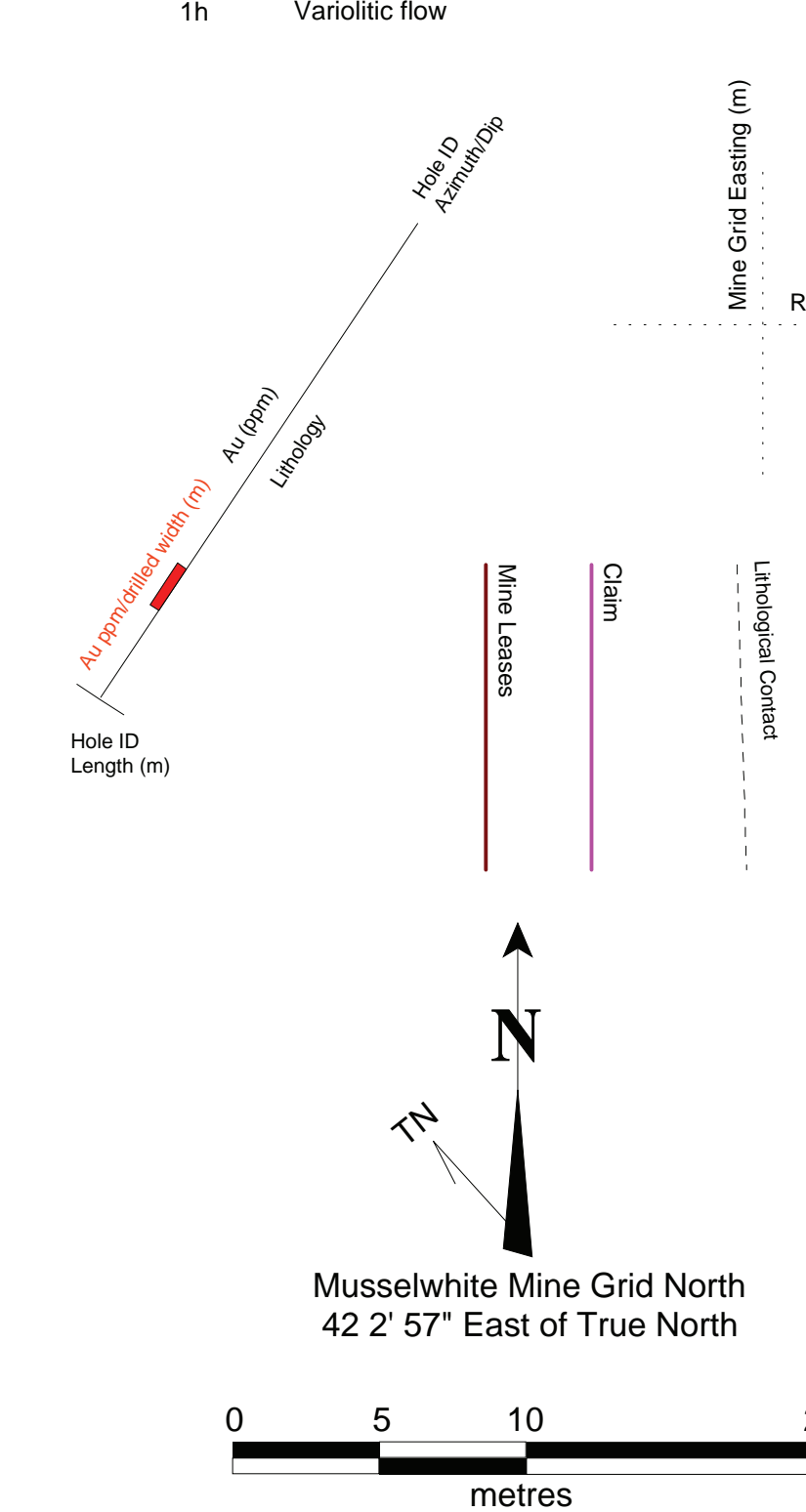
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli-tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rocks
- 3p Intermediate dikes, sills, small intrusions

#### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive flow to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillow flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium- to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2m Chlorite-actinolite schist of probable volcanic origin
- 2n Variscite flow
- 2p Amphibolite
- 2q Metavolcanics containing diopside-plagioclase-epidote tourmaline garnet pods and/or layers
- 2r Hornblende-plagioclase schist characterized by mm to cm scale sphering
- 2s Hornblende-porphyrilite
- 2t Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

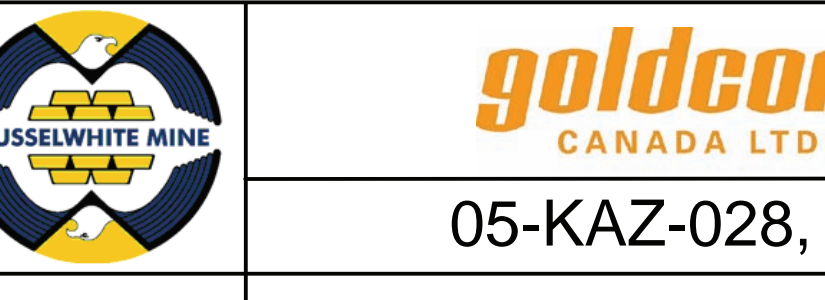
#### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spinifex-textured flow
- 1c Olivine (poikilocryst) textured flow
- 1d Talc-carbonate+magnetite+hematite+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillow flow
- 1h Variscite flow



Musselwhite Mine Grid North  
42° 2' 57" East of True North

Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



05-KAZ-028, 060

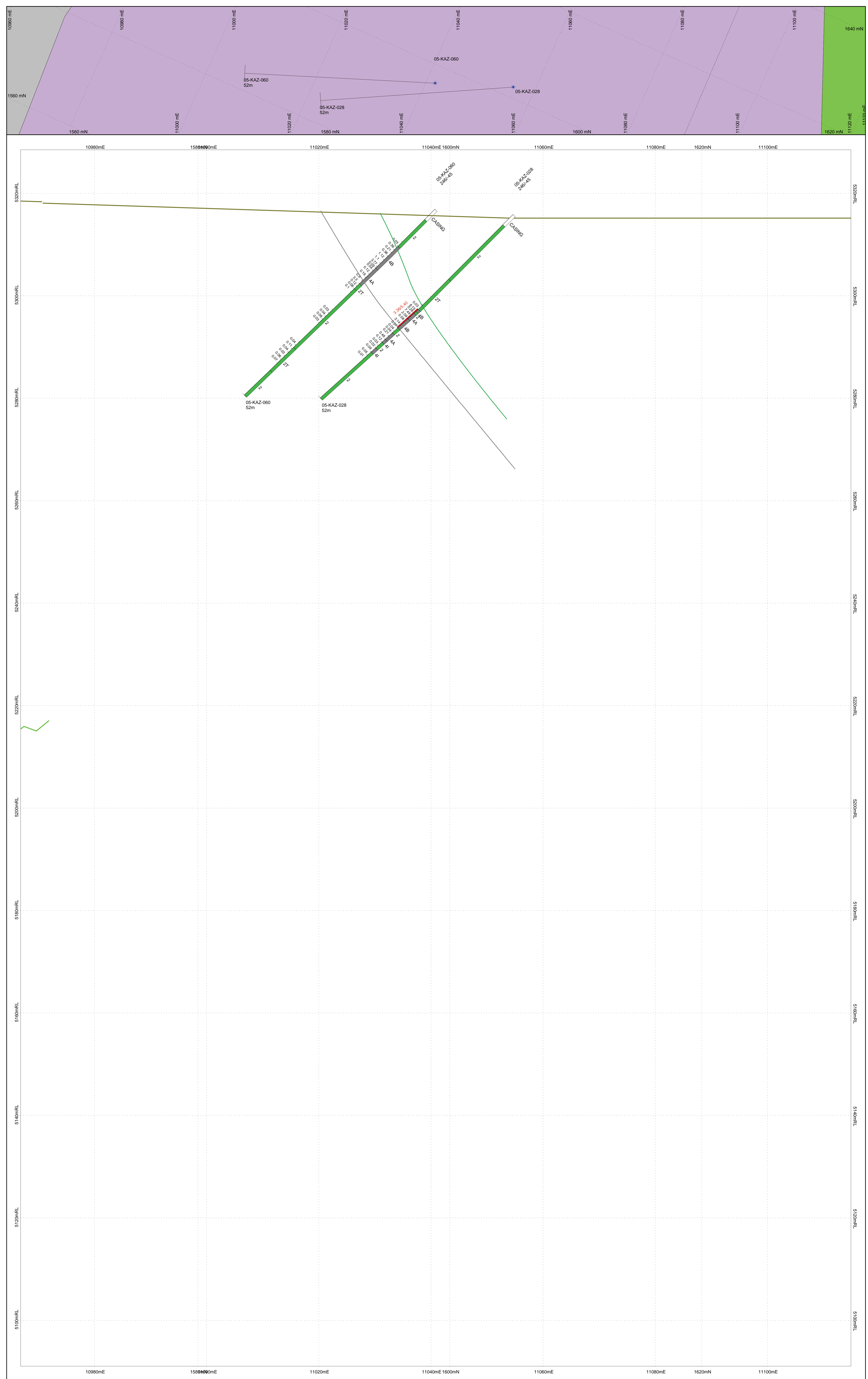
Author: M. Thompson

Date: 31/03/2007

NTS: 538/09

Scale: 1:250

## 2005 Drilling Program Karl Zeemal Zone Musselwhite Mine





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- 10 Mafic intrusives
- 10a Diabase

### Early Precambrian

- 9 Intermediate to felsic intrusives
  - 9a Granite pegmatite
- 8 Intermediate to felsic intrusives
  - 8 Unsubdivided
  - 8a Diabase
  - 8b Quartz diorite
  - 8c Trondhjemite
  - 8d Tonalite
  - 8e Granodiorite
  - 8f Granite pegmatite
  - 8g Biotite trondhjemite
  - 8h Granite
  - 8i Quartz monzonite
  - 8m Gneissic granite
  - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
  - 8o Mylonitized granitoid rocks
  - 8p Biotite-muscovite-fluorite-trondhjemite/kyanite
  - 8r Biotite-tonalite gneiss
  - 8s Hornblende-biotite tonalite gneiss
  - 8u Garnet-muscovite-tourmaline granite

### Mafic Intrusives

- 7a Gabro (CI = 35-90)
- 7b Leucogabbro (CI = 10-30)
- 7c Plagioclase-phyllic gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7g Amphibolite
- 7h Anorthositic gabbro
- 7i Gabroic anorthositic and anorthositic

### Clastic Sediments

- 6 Unsubdivided
- 6a Clay-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymitic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granite (2 to 4 mm) conglomerate
- 6i Wash
- 6m Arenite
- 6n Mudstone
- 6o Feldspathic wacke
- 6p Feldspathic arenite
- 6q Quartz arenite
- 6r Amphibole-bearing mudstone/sandstone
- 6s Conglomerate
- 6t Biotite-bearing mudstone/sandstone
- 6u Garnet-bearing mudstone/sandstone
- 6v Chromite-bearing mudstone/sandstone conglomerate
- 6w Amphibole-biotite-bearing foliated rock of probable sedimentary origin
- 6x Ultramafic rock interbedded with metasediments
- 6y Arkosite-bearing metasediments
- 6z Garnet-rich layers associated with metapelites and/or banded iron formation

### Chemical Sediments

- 4a Chert-grunite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-arkosite iron formation
- 4f Garnet-biotite schist
- 4g Sulphide iron formation
- 4h Graphitic iron formation
- 4ea Garnet-arkosite schist-grunite iron formation
- 4eb Chert
- 4cp Chert with pyrite and pyrrhotite
- 4d' Banded iron formation tectonic breccia

### Intermediate to felsic volcanics

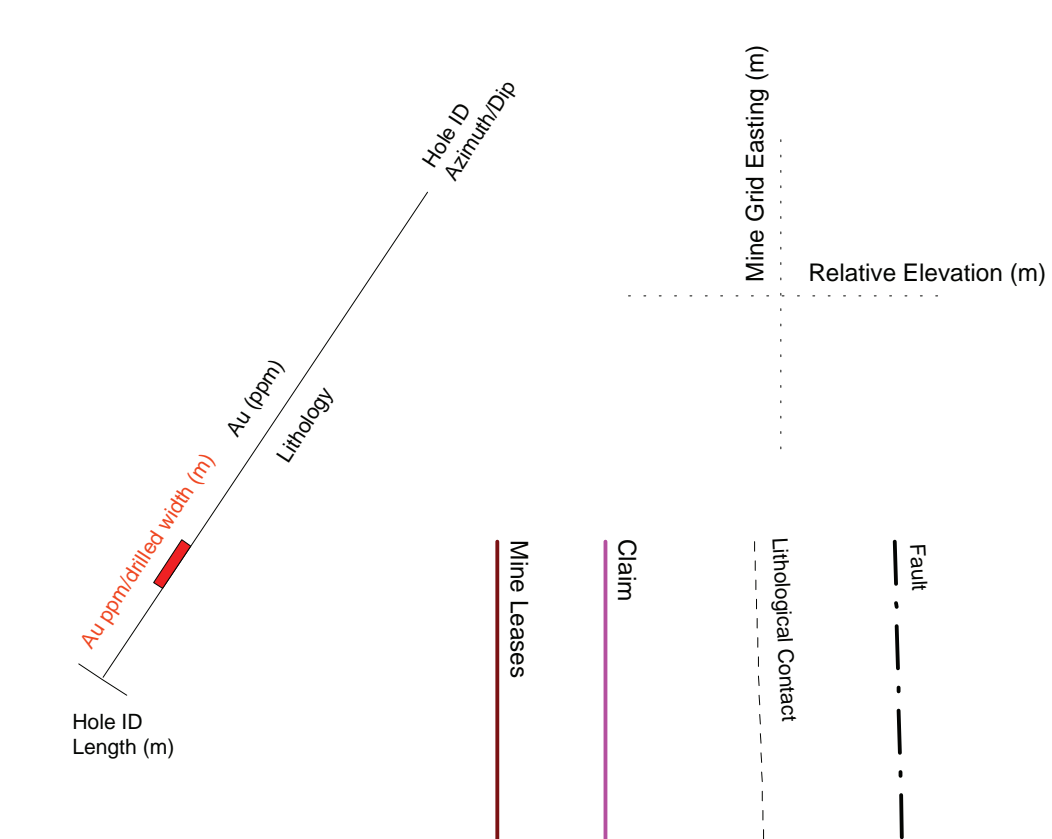
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3k Subvolcanic plagioclase porphyry
- 3m Felsic volcaniclastic rocks
- 3p Intermediate dikes, sills, small intrusions

### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillowed flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli tuff
- 2g Medium to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2m Chlorite-actinolite schist of probable volcanic origin
- 2n Variscite flow
- 2o Amphibolite
- 2q Metavolcanics containing diopside-plagioclase-epidote-tourmaline garnet pods and/or layers
- 2r Hornblende-plagioclase schist characterized by mm to cm scale zoning
- 2s Hornblende porphyroblastic
- 2t Biotite-bearing metavolcanics
- 2u Garnet-bearing metavolcanics

### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spiniferous textured flow
- 1c Ophiham (polyurea) textured flow
- 1d Talc-chlorite-magnetite-tremolite+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1h Variscite flow



Musselwhite Mine Grid North  
42° 57' East of True North

0 5 10 20  
metres

Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



**goldcorp**  
CANADA LTD

05-KAZ-029

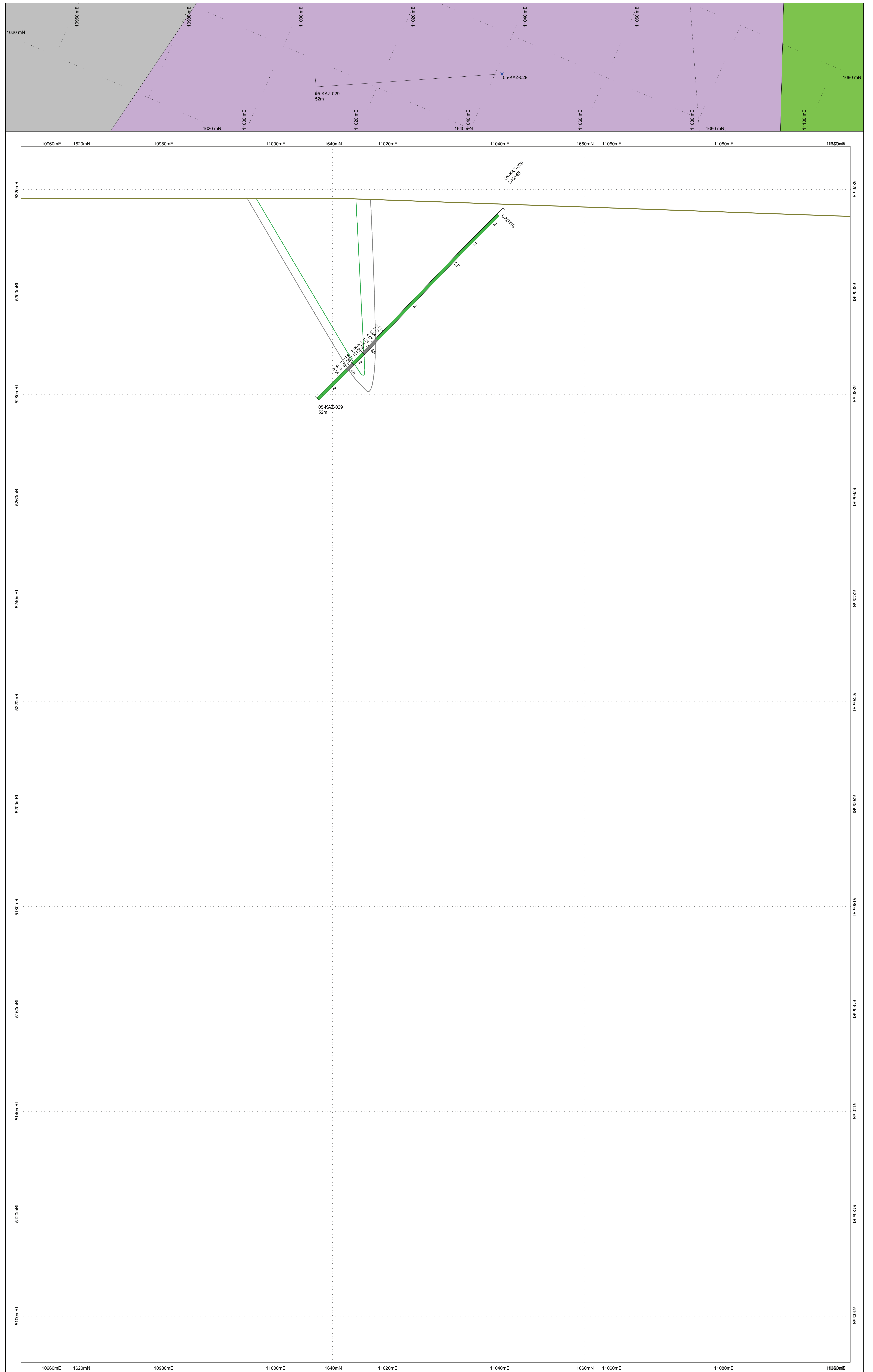
Author: M. Thompson

Date: 31/03/2007

NTS: S3B/09

Scale: 1:250

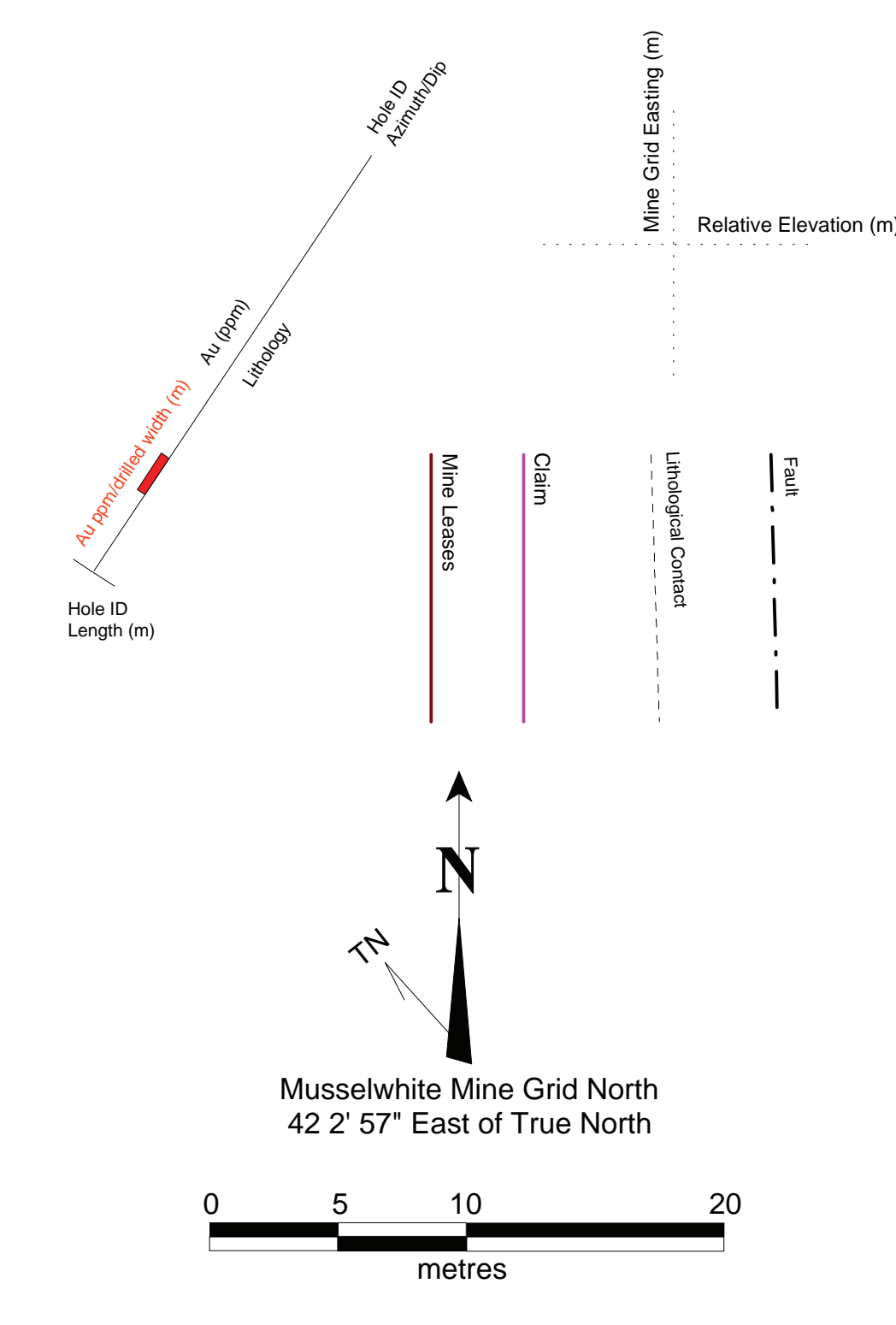
2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

- Phanerozoic**
- Quaternary**
- OB Overburden
  - OB Glacial, glaciofluvial, and lacustrine deposits
- Precambrian**
- Late Precambrian**
- 10 Mafic Intrusives
    - 10a Diabase
- Early Precambrian**
- 9 Intermediate to Felsic Intrusives
    - 9a Granite pegmatite
  - 8 Intermediate to Felsic Intrusives
    - 8 Unsubdivided
    - 8a Diabase
    - 8b Quartz diorite
    - 8c Trondhjemite
    - 8d Tonalite
    - 8e Granodiorite
    - 8f Granitic pegmatite
    - 8g Biotite trondhjemite
    - 8h Granite
    - 8k Quartz monzonite
    - 8m Gneissic granite
    - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
    - 8o Mylonitized granitoid rocks
    - 8p Biotite-muscovite-fluorite trondhjemite/yanite
    - 8r Biotite-tonalite gneiss
    - 8s Hornblende-biotite tonalite gneiss
    - 8u Garnet-muscovite tourmaline granite
  - 7 Mafic Intrusives
    - 7a Gabbrro (CI = 35-90)
    - 7b Leucogabbro (CI = 10-35)
    - 7c Pigeonite-olivine gabbro
    - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
    - 7e Peridotite
    - 7f Ultramafic rocks and altered equivalents of probable intrusive origin
    - 7g Amphibolite
    - 7h Anorthositic gabbro
    - 7i Gabbroic anorthositic and anorthositic
  - 6 Clastic Sediments
    - 6 Unsubdivided
    - 6a Clay-supported conglomerate
    - 6b Matrix-supported conglomerate
    - 6c Oligomitic conglomerate
    - 6d Polymictic conglomerate
    - 6e Boulders (256 mm) conglomerate
    - 6f Cobble (64 to 256 mm) conglomerate
    - 6g Pebble (4 to 64 mm) conglomerate
    - 6h Granule (2 to 4 mm) conglomerate
    - 6i Vastite
    - 6m Arenite
    - 6n Mudstone
    - 6o Feldspathic wacke
    - 6p Feldspathic arenite
    - 6q Quartz arenite
    - 6r Amphibole-bearing mudstone/sandstone conglomerate
    - 6s Biotite-bearing mudstone/sandstone
    - 6t Garnet-bearing mudstone/sandstone
    - 6u Chlorite-bearing mudstone/sandstone conglomerate
    - 6v Amphibole-biotite bearing foliated rock of probable sedimentary origin
    - 6w Ultramafic rock interbedded with metasediments
    - 6x Andalusite-bearing metasediments
    - 6y Garnet-rich layers associated with metapelites and/or banded iron formation
  - 4 Chemical Sediments
    - 4a Chert-gneunite
    - 4b Chert-magnetite iron formation
    - 4c Carbonate chert-magnetite iron formation
    - 4d Carbonate magnetite
    - 4e Garnet-amphibole iron formation
    - 4f Garnet-biotite schist
    - 4g Sulphide iron formation
    - 4h Graphitic iron formation
    - 4ea Garnet-amphibole-gneunite iron formation
    - 4eb Chert
    - 4ch Chert with pyrite and pyrrhotite
    - 4chp Banded iron formation tectonic breccia
- Intermediate to Felsic Volcanics**
- 3a Intermediate flow
  - 3b Intermediate pyroclastic breccia, tuff-breccia
  - 3c Intermediate tuff, lapilli tuff
  - 3d Felsic flow
  - 3e Felsic pyroclastic breccia, tuff-breccia
  - 3f Felsic tuff, lapilli tuff
  - 3g Subvolcanic rocks, unsubdivided
  - 3h Subvolcanic quartz-plagioclase porphyry
  - 3i Subvolcanic quartz porphyry
  - 3k Subvolcanic plagioclase porphyry
  - 3m Felsic volcaniclastic rocks
  - 3p Intermediate dikes, sills, small intrusions
- Mafic Volcanics**
- 2 Unsubdivided
  - 2a Massive, fine- to medium-grained flow
  - 2b Amygdaloidal flow
  - 2c Pillow flow, pillow breccia, hyaloclastite
  - 2d Flow breccia
  - 2e Pyroclastic breccia, tuff-breccia
  - 2f Tuff, lapilli tuff
  - 2g Medium to coarse-grained flow centres
  - 2k Dikes, sills, small intrusions
  - 2m Chlorite-actinolite spots of probable volcanic origin
  - 2n Varolitic flow
  - 2p Amphibolite
  - 2q Metavolcanics containing diopside-plagioclase-epidote tourmaline garnet pods and/or layers
  - 2r Hornblende-plagioclase schist characterized by mm to cm scale zoning
  - 2s Hornblende-porphyrphyroblastic
  - 2t Biotite-bearing metavolcanics
  - 2u Garnet-bearing metavolcanics
- Ultramafic Volcanics**
- 1 Unsubdivided
  - 1a Massive flow
  - 1b Spindle-tailed flow
  - 1c Ophiang (polyisure) textured flow
  - 1d Talc-carbonates+magnetite+hornblende+serpentine schist of probable volcanic origin
  - 1e Flow top breccia
  - 1f Pillow flow
  - 1h Varolitic flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



05-KAZ-030

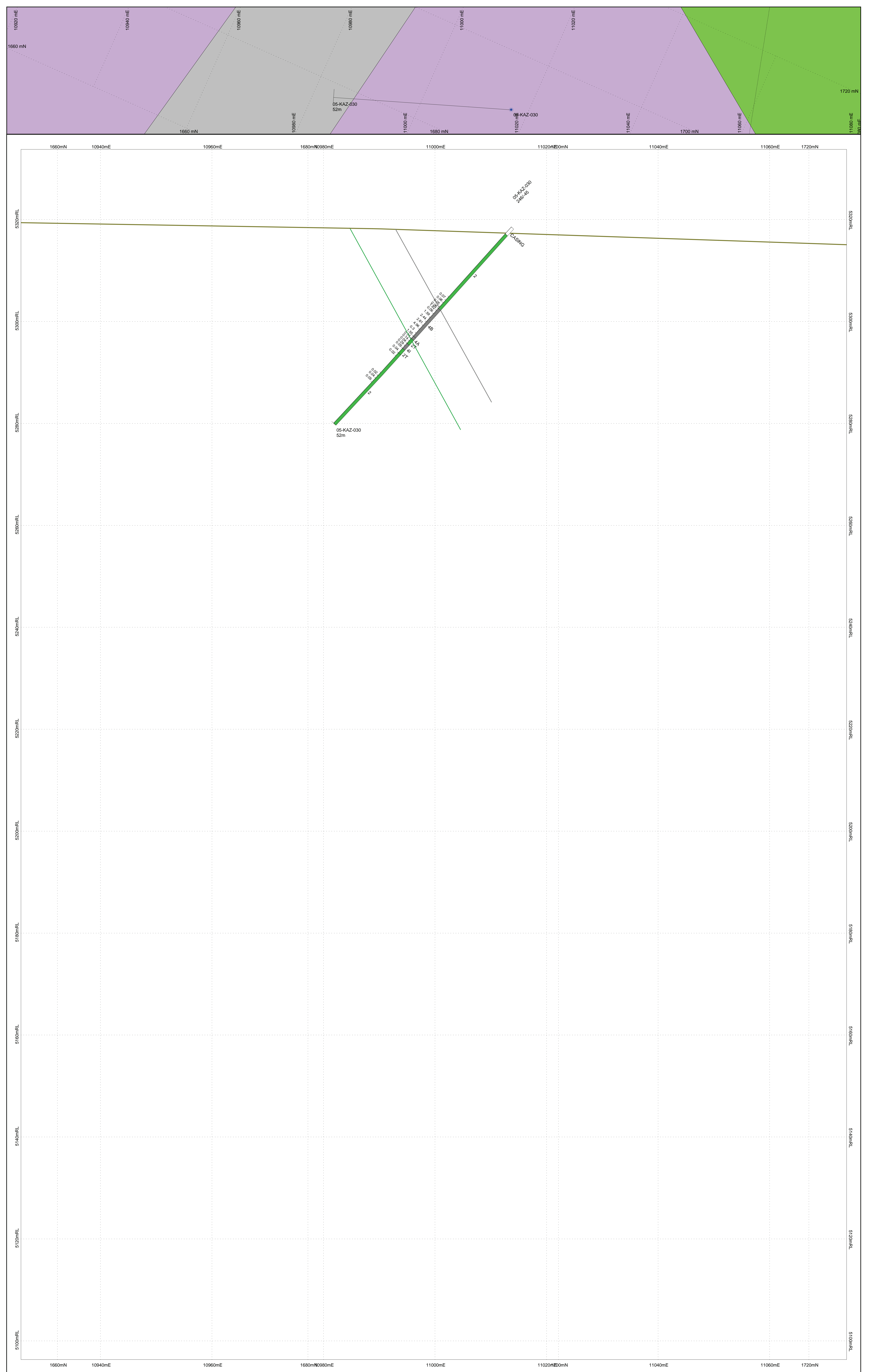
Author: M. Thompson

Date: 3/10/2007

NTS: 538/09

Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





# Legend

## Phanerozoic

- Quaternary
- Q6 Overburden
  - Q6 Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

### Late Precambrian

- 10 Mafic intrusives
- 10a Diabase

### Early Precambrian

- 9 Intermediate to felsic intrusives
- 9a Granite pegmatite

### Intermediate to felsic intrusives

- 8 Unsubdivided
- 8a Diorite
- 8b Quartz diorite
- 8c Trondhjemite
- 8d Tonalite
- 8e Granodiorite
- 8f Granite pegmatite
- 8h Biotite trondhjemite
- 8i Granite
- 8k Quartz monzonite
- 8m Gneissic granite
- 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
- 8p Mylonitized granitoid rocks
- 8q Biotite-muscovite-fluorite trondhjemite/yerite
- 8r Biotite-tonalite gneiss
- 8s Hornblende-biotite tonalite gneiss
- 8v Garnet-muscovite-tourmaline granite

### Mafic intrusives

- 7a Gabbro (CI = 35-90)
- 7b Leucogabbro (CI = 10-35)
- 7c Pyroxenite/phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7f Peridotite
- 7h Ultramafic rocks and altered equivalents of probable intrusive origin
- 7j Amphibolite
- 7k Anorthositic gabbro
- 7l Gabbroic anorthositic and anorthositic

### Clastic Sediments

- 6 Unsubdivided
- 6a Clay-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Clastic conglomerate
- 6d Polymictic conglomerate
- 6e Biotite (2-20 mm) conglomerate
- 6f Cobble (84 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Gravel (2 to 4 mm) conglomerate
- 6k Wacke
- 6m Arenite
- 6n Mudstone
- 6p Feldspathic wacke
- 6r Feldspathic arenite
- 6s Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate
- 6y Amphibole-biotite bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6a Andalusite-bearing metasediments
- 6b Garnet-rich layers associated with metapelites and/or banded iron formation

### Chemical Sediments

- 4a Chert-gruniteite iron formation
- 4b Carbonate chert-magnetite iron formation
- 4c Carbonate magnetite
- 4d Garnet-amphibole iron formation
- 4e Garnet-biotite schist
- 4f Sulphide iron formation
- 4g Garnet iron formation
- 4h Garnet-amphibole-gruniteite iron formation
- 4i Chert
- 4j Chert with pyrite and pyrrhotite
- 4k Banded iron formation tectonic breccia

### Intermediate to felsic volcanics

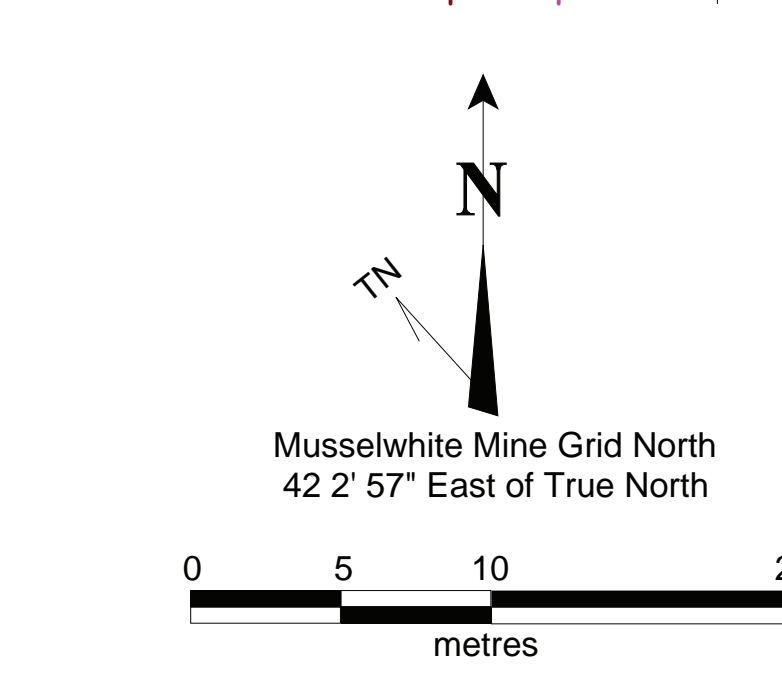
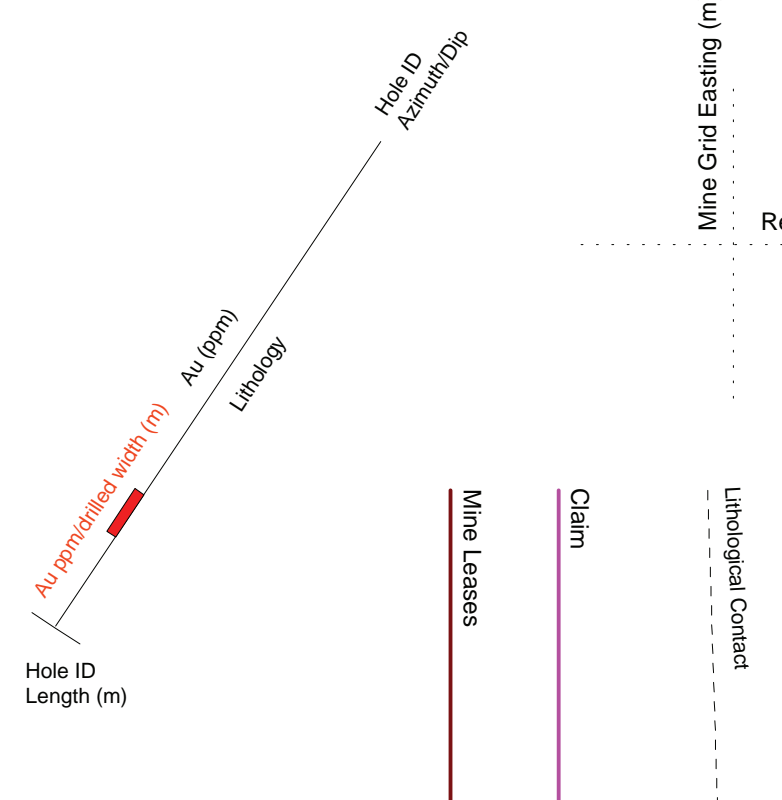
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli-tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli-tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz-porphphy
- 3j Subvolcanic plagioclase porphyry
- 3k Felsic volcaniclastic rocks
- 3m Intermediate dikes, sills, small intrusions
- 3p Intermediate dikes, sills, small intrusions

### Mafic volcanics

- 2 Unsubdivided
- 2a Massive, fine- to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillowed flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli-tuff
- 2g Medium to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2i Chlorite-actinolite schist of probable volcanic origin
- 2j Varolitic flow
- 2k Amphibolite
- 2l Metavolcanics containing diopside-plagioclase + apatite tourmaline garnet poofs and/or layers
- 2m Hornblende-plagioclase schist characterized by mm to cm scale layering
- 2n Hornblende-porphphyritic
- 2o Biotite-bearing metavolcanics
- 2p Garnet-bearing metavolcanics

### Ultramafic volcanics

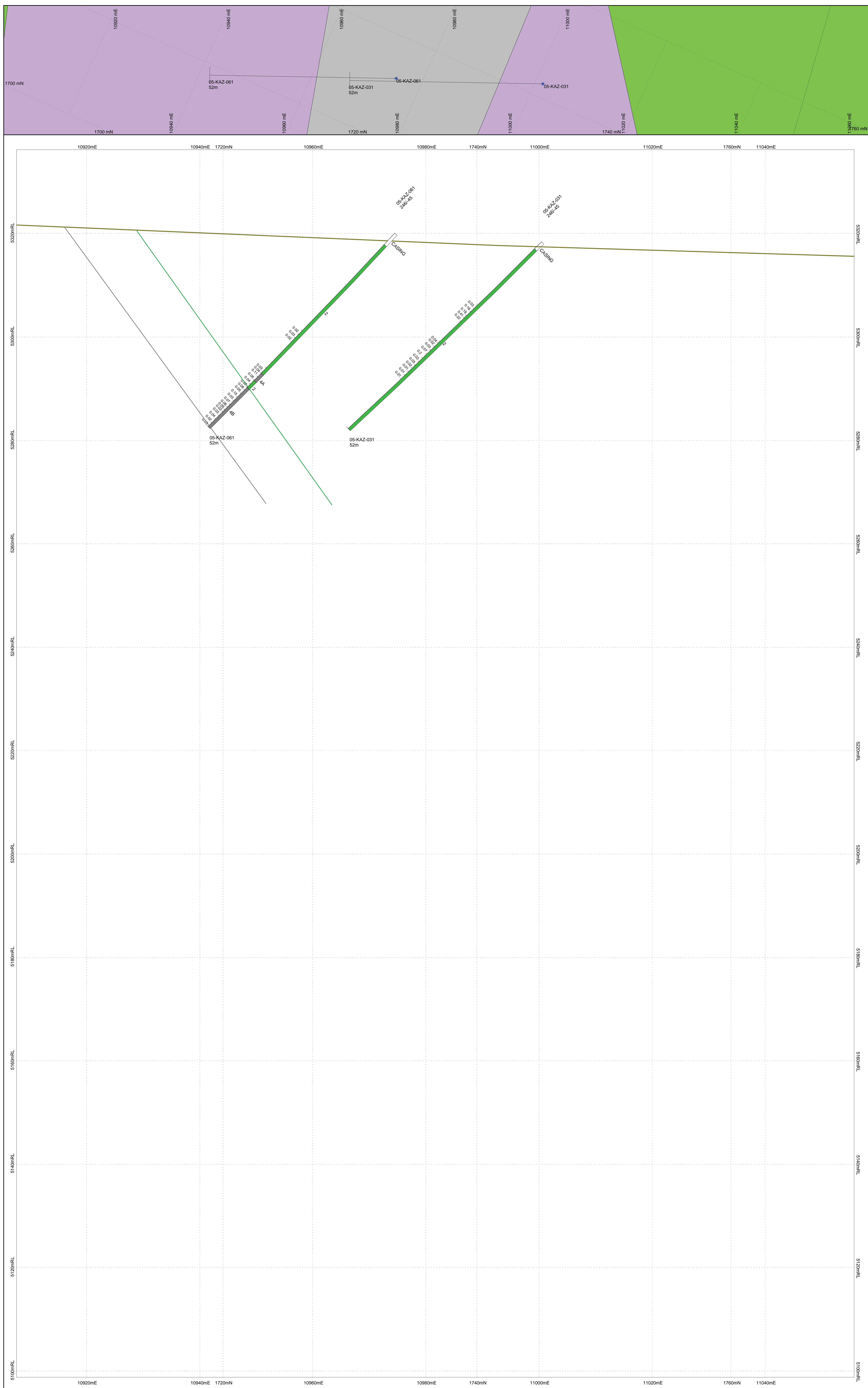
- 1 Unsubdivided
- 1a Massive flow
- 1b Spinifex-textured flow
- 1c Chert (porphyritic) textured flow
- 1d Talc-carbonate+magnetite+chromite+serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1h Varolitic flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



05-KAZ-031, 061  
Author: M. Thompson  
Date: 31/03/2007  
NTS: 53B/09  
Scale: 1:250





# Legend

## Phanerozoic

### Quaternary

- OB Overburden
- OB Glacial, glaciofluvial, and lacustrine deposits

### Precambrian

#### Late Precambrian

- 10a Mafic Intrusives
- 10a Diabase

#### Early Precambrian

- 9 Intermediate to Felsic Intrusives
  - 9a Granite pegmatite
  - 8 Intermediate to Felsic Intrusives
    - 8 Unsubdivided
    - 8a Diorite
    - 8b Quartz diorite
    - 8c Trondhjemite
    - 8d Tonalite
    - 8e Granodiorite
    - 8f Granitic pegmatite
    - 8g Biotite-tonalite
    - 8h Granite
    - 8i Quartz monzonite
    - 8j Gneissic granite
    - 8k Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
    - 8l Mylonitized granitoid rocks
    - 8m Biotite-muscovite-fluorite-trondhjemite/yanerite
    - 8n Biotite-sillite gneiss
    - 8o Hornblende-biotite tonalite gneiss
    - 8p Garnet-muscovite-tourmaline granite

#### Mafic Intrusives

- 7a Gabro (C = 35-40)
- 7b Leucogabbro (C = 10-35)
- 7c Plagioclase-phytic gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7e Peridotite
- 7f Ultramafic rocks and altered equivalents of probable intrusive origin
- 7g Amphibolite
- 7h Anorthositic gabbro
- 7i Gabroic anorthosite and anorthosite

#### Clastic Sediments

- 6 Unsubdivided
- 6a Clay-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomitic conglomerate
- 6d Polymitic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granule (2 to 4 mm) conglomerate
- 6i Vase
- 6m Arenite
- 6n Mudstone
- 6o Feldspathic wacke
- 6p Feldspathic arenite
- 6q Quartz arenite
- 6r Amphibole-bearing mudstone/sandstone conglomerate
- 6s Biotite-bearing mudstone/sandstone
- 6t Garnet-bearing mudstone/sandstone
- 6u Chlorite-bearing mudstone/sandstone conglomerate
- 6v Amphibole-biotite-bearing foliated rock of probable sedimentary origin
- 6w Ultramafic rock interbedded with metasediments
- 6x Andalusite-bearing metasediments
- 6y Garnet-rich layers associated with metapelites and/or banded iron formation

#### Chemical Sediments

- 4a Chert-grunite
- 4b Chert-magnetite iron formation
- 4c Carbonate chert-magnetite iron formation
- 4d Carbonate magnetite
- 4e Garnet-arenite iron formation
- 4f Garnet-biotite schist
- 4g Sulfur iron formation
- 4h Graphitic iron formation
- 4i Garnet-arenite iron formation
- 4j Chert
- 4k Chert with pyrite and pyrrhotite
- 4l Banded iron formation tectonic breccia

#### Intermediate to Felsic Volcanics

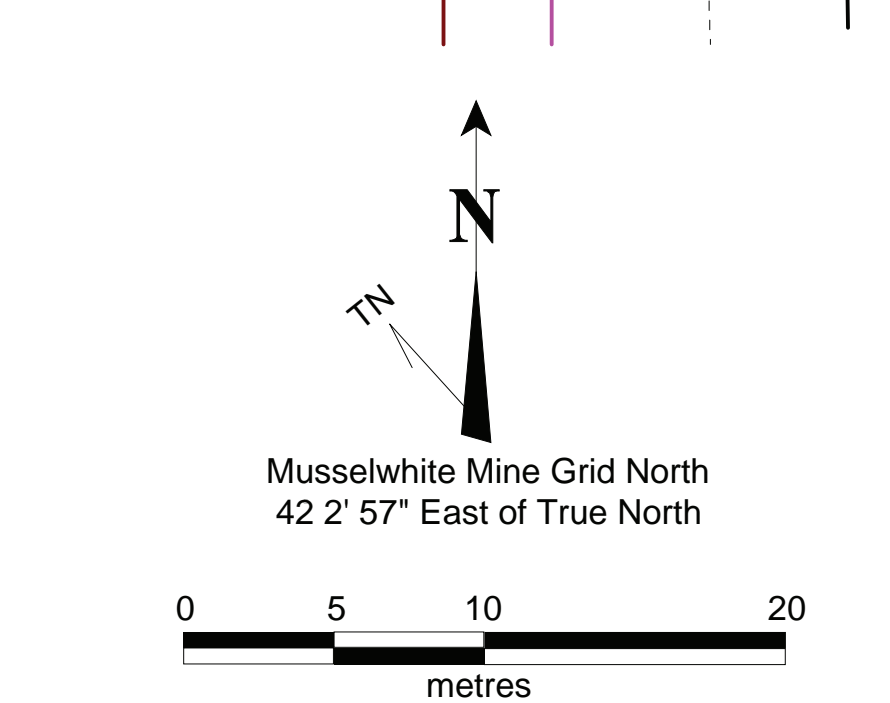
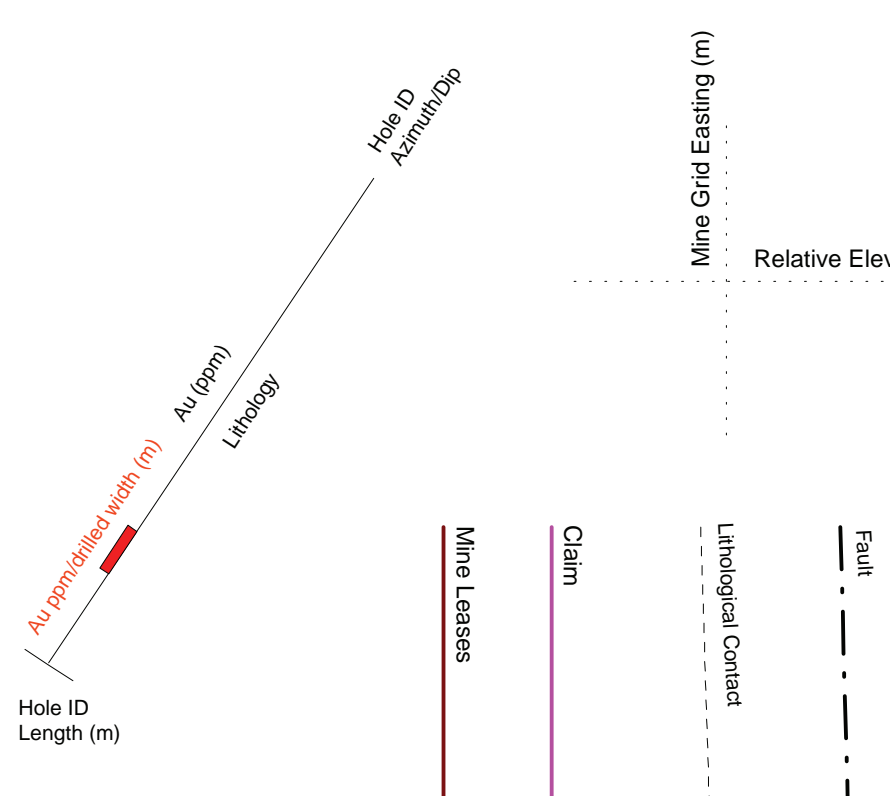
- 3a Intermediate flow
- 3b Intermediate pyroclastic breccia, tuff-breccia
- 3c Intermediate tuff, lapilli tuff
- 3d Felsic flow
- 3e Felsic pyroclastic breccia, tuff-breccia
- 3f Felsic tuff, lapilli tuff
- 3g Subvolcanic rocks, unsubdivided
- 3h Subvolcanic quartz-plagioclase porphyry
- 3i Subvolcanic quartz porphyry
- 3j Subvolcanic plagioclase porphyry
- 3k Felsic volcaniclastic rocks
- 3l Intermediate dikes, sills, small intrusions

#### Mafic Volcanics

- 2 Unsubdivided
- 2a Massive, fine to medium-grained flow
- 2b Amygdaloidal flow
- 2c Pillow flow, pillow breccia, hyaloclastite
- 2d Flow breccia
- 2e Pyroclastic breccia, tuff-breccia
- 2f Tuff, lapilli tuff
- 2g Medium to coarse-grained flow centres
- 2h Dikes, sills, small intrusions
- 2i Chlorite-actinolite schist of probable volcanic origin
- 2j Vaseitic flow
- 2k Amphibolite
- 2l Metavolcanics containing diopside-plagioclase-epidote-tourmaline garnet pods and/or layers
- 2m Hornblende-plagioclase schist characterized by cm to m scale veining
- 2n Hornblende porphyroblastic
- 2o Biotite-bearing metavolcanics
- 2p Garnet-bearing metavolcanics

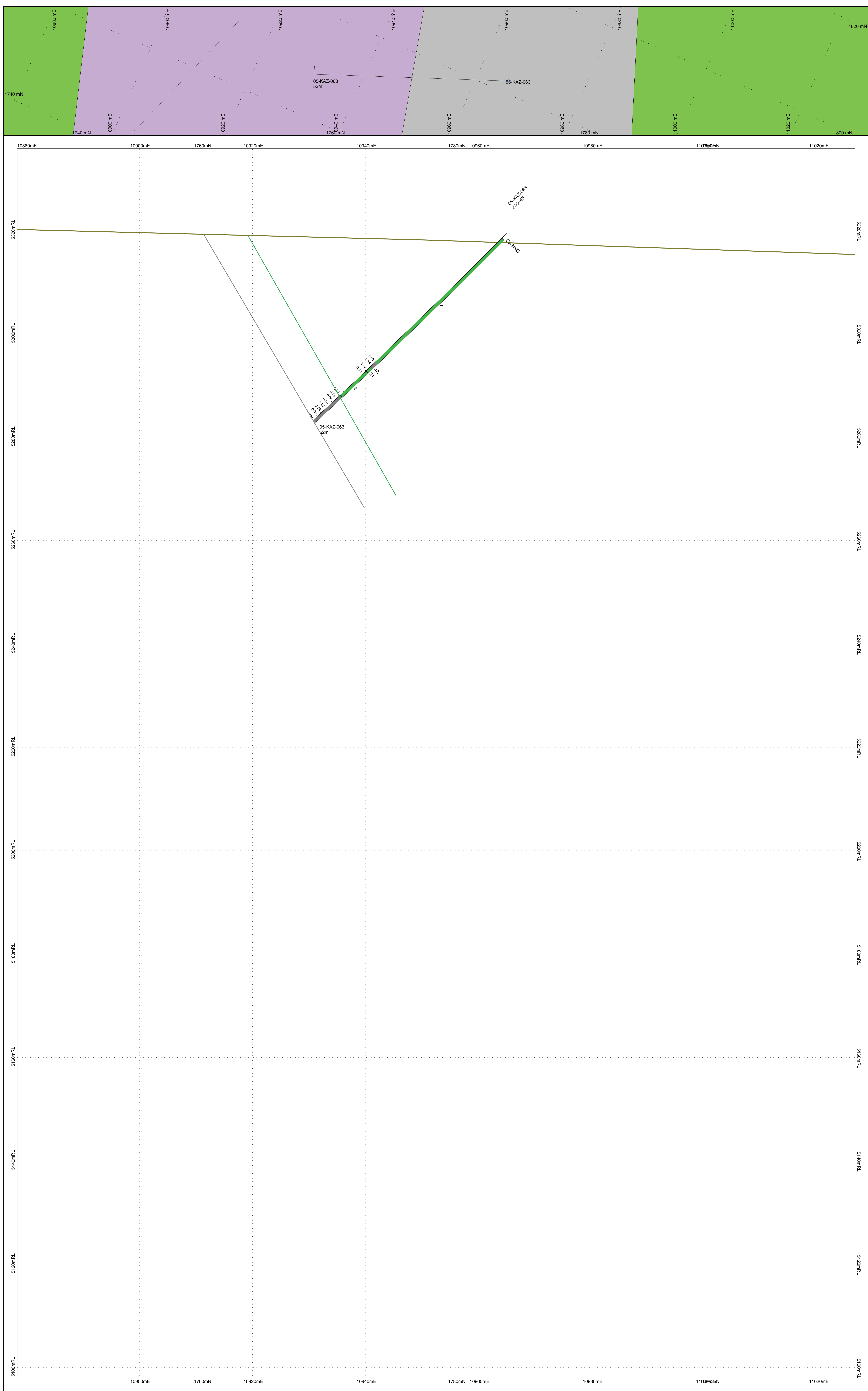
#### Ultramafic Volcanics

- 1 Unsubdivided
- 1a Massive flow
- 1b Spindle-textured flow
- 1c Diphant (polytuff) textured flow
- 1d Talc-carbonate/magnetite-tremolite/serpentine schist of probable volcanic origin
- 1e Flow top breccia
- 1f Pillowed flow
- 1g Vaseitic flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest

	05-KAZ-063
Author: M. Thompson	2005 Drilling Program Karl Zeemal Zone Musselwhite Mine
Date: 31/03/2007	
NTS: S3B/09	
Scale: 1:250	





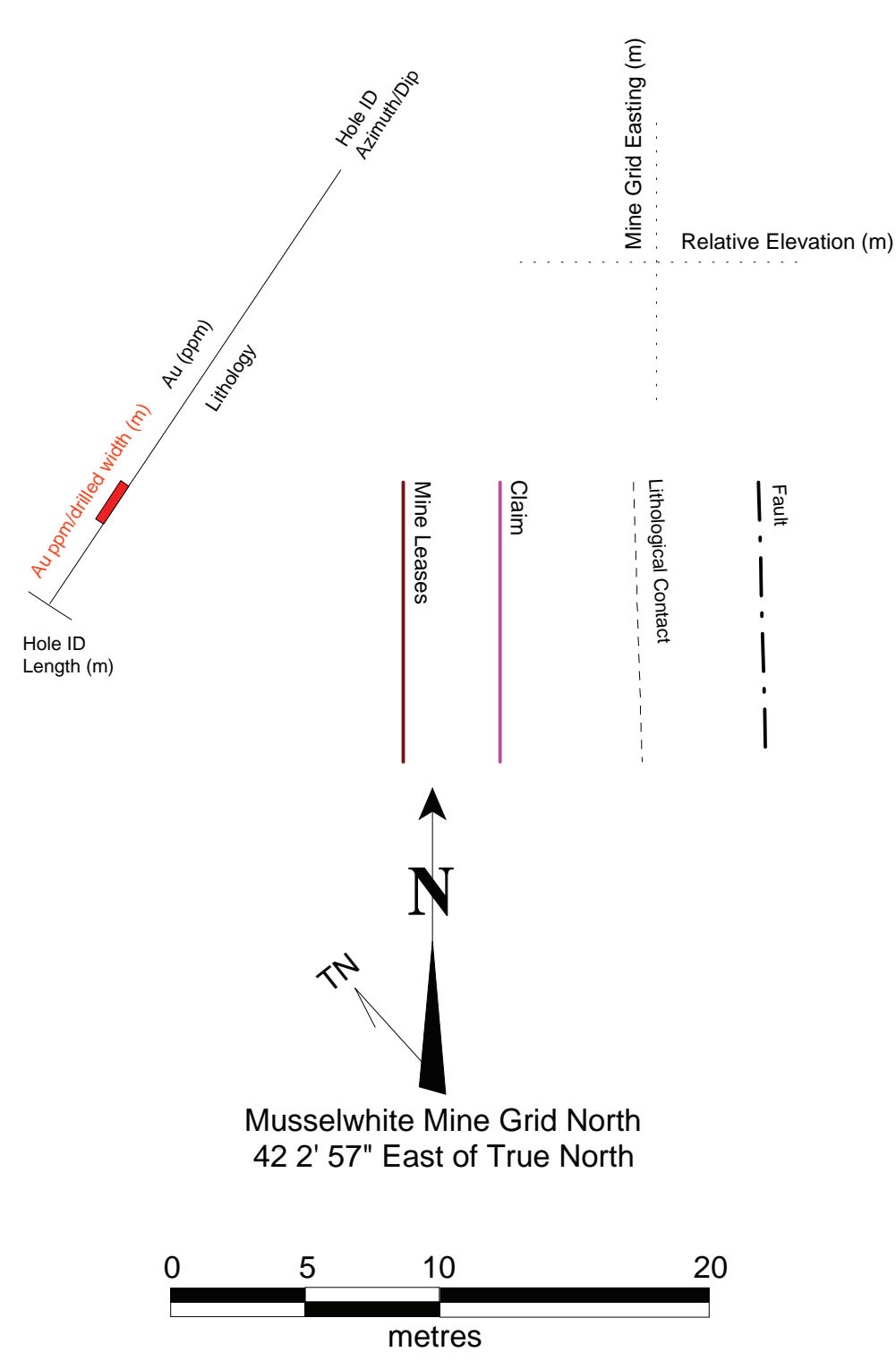
# Legend

## Phanerozoic

- Quaternary**
- Qb Overburden
  - Qb Glacial, glaciofluvial, and lacustrine deposits

## Precambrian

- Late Precambrian**
- 10 Mafic Intrusives
  - 10a Dabase
- Early Precambrian**
- 9 Intermediate to Felsic Intrusives
    - 9a Granite pegmatite
  - 8 Intermediate to Felsic Intrusives
    - 8 Unsubdivided
    - 8a Dabase
    - 8b Quartz diorite
    - 8c Trondhjemite
    - 8d Tonalite
    - 8e Granodiorite
    - 8f Granitic pegmatite
    - 8h Biotite trondhjemite
    - 8i Granite
    - 8k Quartz monzonite
    - 8m Gneissic granite
    - 8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parentheses)
      - 8a Mylonitized granitoid rocks
      - 8b Biotite-muscovite biotite trondhjemite/yerite
      - 8c Biotite-tonalite gneiss
      - 8d Hornblende-biotite tonalite gneiss
      - 8u Garnet-muscovite tourmaline granite
  - 7 Mafic Intrusives
    - 7a Gabbro (CI = 35-90)
    - 7b Leucogabbro (CI = 10-35)
    - 7c Pyroxenite-gabbro
    - 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
    - 7e Peridotite
    - 7f Ultramafic rocks and altered equivalents of probable intrusive origin
    - 7j Amphibolite
    - 7k Anorthositic gabbro
    - 7l Gabbroic anorthositic and anorthositic
  - 6 Clastic Sediments
    - 6 Unsubdivided
    - 6a Clast-supported conglomerate
    - 6b Matrix-supported conglomerate
    - 6c Oligomitic conglomerate
    - 6d Polymitic conglomerate
    - 6e Boulder (2 to 25 mm) conglomerate
    - 6f Cobble (64 to 256 mm) conglomerate
    - 6g Pebble (4 to 64 mm) conglomerate
    - 6h Granule (2 to 4 mm) conglomerate
    - 6i Waste
    - 6m Arenite
    - 6n Mudstone
    - 6o Felspathic waste
    - 6p Felspathic arenite
    - 6q Quartz arenite
    - 6r Amphibole-bearing mudstone/sandstone conglomerate
    - 6s Biotite-bearing mudstone/sandstone
    - 6t Garnet-bearing mudstone/sandstone
    - 6u Chlorite-bearing mudstone/sandstone conglomerate
    - 6v Amphibole-biotite bearing foliated rock of probable sedimentary origin
    - 6z Ultramafic rock interbedded with metasediments
    - 6i Andalusite-bearing metasediments
    - 6j Garnet-rich layers associated with metapelites and/or banded iron formation
  - 4 Chemical Sediments
    - 4a Chert-gruniteite
    - 4b Chert-magnetite iron formation
    - 4c Carbonate chert-magnetite iron formation
    - 4d Carbonate magnetite
    - 4e Garnet-amphibole iron formation
    - 4f Garnet-biotite schist
    - 4h Sulphide iron formation
    - 4i Graphite iron formation
    - 4ea Garnet-amphibole-gruniteite iron formation
    - 4ch Chert
    - 4chp Chert with pyrite and pyrrhotite
    - 4bc Banded iron formation tectonic breccia
  - 3 Intermediate to Felsic Volcanics
    - 3a Intermediate flow
    - 3b Intermediate pyroclastic breccia, tuff-breccia
    - 3c Intermediate tuff, lapilli-tuff
    - 3d Felsic flow
    - 3e Felsic pyroclastic breccia, tuff-breccia
    - 3f Felsic tuff, lapilli tuff
    - 3g Subvolcanic rocks, unsubdivided
    - 3h Subvolcanic quartz-plagioclase porphyry
    - 3i Subvolcanic quartz porphyry
    - 3k Subvolcanic plagioclase porphyry
    - 3m Felsic volcanoclastic rocks
    - 3p Intermediate dikes, sills, small intrusions
  - 2 Mafic Volcanics
    - 2 Unsubdivided
    - 2a Massive, fine- to medium-grained flow
    - 2b Amphibolite flow
    - 2c Pillow flow, pillow breccia, hyaloclastite
    - 2e Flow breccia
    - 2g Pyroclastic breccia, tuff-breccia
    - 2h Tuff, lapilli-tuff
    - 2i Medium- to coarse-grained flow centres
    - 2k Dikes, sills, small intrusions
    - 2m Chlorite-actinolite schist of probable volcanic origin
    - 2n Variscite flow
    - 2p Amphibolite
    - 2q Metavolcanics containing diopside-plagioclase epidote tourmaline garnet pods and/or layers
    - 2r Hornblende-plagioclase schist characterized by rim to rim scale zoning
    - 2s Hornblende-porphyrphyritic
    - 2t Biotite-bearing metakolinite
    - 2u Garnet-bearing metakolinite
  - 1 Ultramafic Volcanics
    - 1 Unsubdivided
    - 1a Massive flow
    - 1b Spinifex-textured flow
    - 1c Diphani (polyisotax) textured flow
    - 1d Talc-carbonate/magnetite-tremolite+serpentine schist of probable volcanic origin
    - 1e Flow top breccia
    - 1f Pillow flow
    - 1h Variscite flow



Projection: Musselwhite Mine Grid  
Section View: Looking Northwest



05-KAZ-033, 062

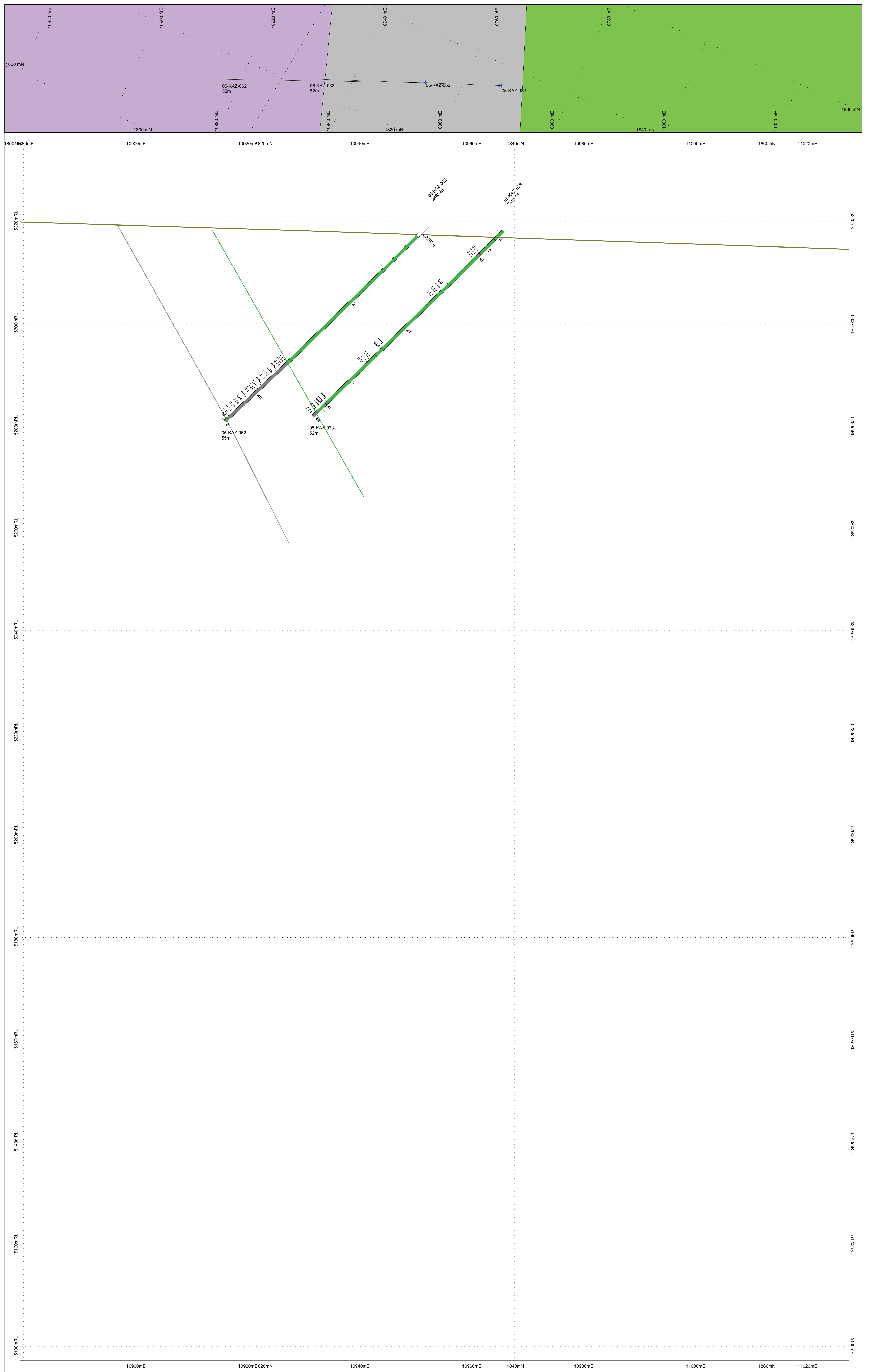
Author: M. Thompson

Date: 31/03/2007

NTS: 538/09

Scale: 1:250

2005 Drilling Program  
Karl Zeemal Zone  
Musselwhite Mine





## **Appendix V**

Diamond Drill Logs



































Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION										
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
					0	1.5	CASING															
	E320103	3	4	0.008																		
	E320104	4	5	0.036																		
5	E320105	5	6	0.0025																		
	E320106	6	7	0.059	1.5	11.9	2	The unit is dark green in colour. There is patchy areas of Boitite alteration which is brownish in colour. Carbonate veins are wispy and range between 2mm to 2 cm in width. Weakly silicified.						M	W	W				M	Boitite displays foliation well, patchy chlorite, Silicified between 4.10 - 4.70, 6.10 - 6.20, 10.10 - 10.40	
10	E320107	11	11.9	0.019																	Upper contact weak green amphibole. carbonate vein and pervasive within the groundmass.	
	E320108	11.9	12.9	3.71	11.9	12.9	4	Dark grey to Black, Contorted moderate foliated with moderate biotite at the upper contact							M							
	E320109	12.9	13.9	0.089																		
	E320111	13.9	14.9	0.117										M	W						foliated biotite carbonate veins .5 cm average width.	
15					12.9	19	2	Boitite alteration is pervassive (W to M) with pervassive carbonate within the ground mass and wispy veins. Lower contact is sharp with iron formation							W	M					Quartz flooding is intense. small zone of gra between 19.70 - 20.00	
	E320112	18	19	0.009																	Moderate chlorite becomes more intense down section	
	E320113	19	19.75	2.11																S		
	E320114	19.75	20.5	1.265	19	20.5	4B	Unit is rubbly with quartz flooding, exnterly contorted in areas of weak flooding green amphibole. Mineralization 3 PO fracture filled. Quartz veins or chert ?? between 19.10 and 19.40														
	E320115	20.5	21.5	0.09											W	M					Intense chlorite pervassive fault within this section	
					20.5	25.5	2	Unit has a washed out appearance. Chlorite moderate alteration with weak boitite. Core is blocky in the lower section between 24 - 25 metres. Lower contact at a fault zone.														Unit is weakly magnetic with weak grunerite bands and Fe carbonate staining brownish pink colour.
24	E320116	25.1	25.5	0.045										W	S						The unit has a slight blue hue with weak grunerite along edges of magnetite bands.	
	E320117	25.5	26.25	0.025																		
	E320118	26.25	27.1	1.86	25.5	27.1	4B	laminated, alternates between between chert and magnetite bands. The unit becomes contorted from 26.40 to 27.10.						M		W						
	E320119	27.1	28	1.23																		
	E320121	28	28.85	1.4	27.1	28.85	4H	Unit is strongly silicified ( Quartz flooding) and (Po 7-10%) mineralized as fracture fill. Strong blueish hue between 27.40 to 28 20						W		W				M		
	E320122	28.85	29.75	0.042																		
30					28.85	32.4	2	The unit is brown in colour and with moderate carbonate veining 30 to 50 degrees to Ca						M	W							
	E320123	31.4	32.4	0.737																		
	E320124	32.4	33.4	14.5																		
	E320125	33.4	34.1	8.68	32.4	34.1	4H	intense quartz flooding unit has a blue hue. Well foiated which becomes washed out by quartz flooding. Mineralization PO 5 - 7%. Weak biotite alteration						W		M				M	Contorted with trace biotite, Quartz flooding makes the unit have a blueish hue. With weak GRA at the lower contact	
	E320126	34.1	35.1	2.1																		
35	E320127	35.1	36	0.628																		
					34.1	52	2	Strong Pervassive Boitite alteration. Well eveloped Biotite alteration. Boitite alteration changes to more chloritic at 40.30. Carbonate veins. Weak Po Min. between 30.20 - 30.40	EOH at 52 m					S	W							

















Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION										
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
					0	3	CASING															
5														M	M							
10																						
15					3	22.25	2	The unit is well foliated in areas of moderate biotite alteration. between 11.50 - 12.60 wispy contorted carbonate veins. with a wavy boitite foliation lower contract with 4b is sharp.						W	W	M						
20														M	W							
22	E320128	21.25	22.25	0.2411																		
23	E320129	22.25	22.9	0.7585	22.25	23.45	4B	4B thin bands of magnetite and chert strongly magnetitic with weak grunerite alteration, and weak Fe carbonate						M		W						
24	E320131	22.9	23.45	1.1059																		
25	E320132	23.45	24.45	0.0584																		
27	E320133	30.1	31.1		23.45	31.1	2	grey green to brown in colour with mod.biotite alteration weak chlorite alteration						W	M	W						
28	E320134	31.1	31.45	0.0854																		
29	E320135	31.45	32.2	0.0383																		
30	E320136	32.2	32.5	0.0928	31.1	31.45	4B	bands of thin magnetite and chert						W		W						
31	E320137	32.5	33.3	0.01	31.45	32.2	2	Irregular contact greyish green in colour		4B	DI	GG	Contorted minor unit of 4B. Thin bands of magnetite and chert.	W	M							
32	E320138	33.3	33.6	21	32.2	32.5	4B	Zebra looking bands of chert and magnlite					W		W						Upper contact has moderate quartz flooding	
33	E320139	33.6	34.4	4.1007	32.5	33.3	4H	Po 5 - 7 % , contorted Po semi massive to fracture fill					W		W							
34	E320141	34.4	34.9	0.0772	33.3	33.6	4B	Well folded unit excellent S fold 7 cm in width.		2	MA	GG	Massive non magnetitic 2 green in colour	W		W						
35	E320142	34.9	35.9	0.0474	33.6	34.9	2	Well foliated Boitite rich 2					M	W	W							
36	E320143	35.9	36.9	0.0291						4B	LA	G	Thin bands of magnetite and chert, minor knife faults on a mm scale.									
37	E320144	36.9	37.7	0.0241																		
38	E320145	37.7	38.35	0.0175	34.9	38.35	4B	well laminated, folded nose are thick .5cm wide with thin limbs on a 2mm scale. There is a well developed S2 that is I1 to S1 at 55. Strongly magnetitic						W		W						In areas could be a weak 4A Mafic close to a 4A 15% grunerite
39	E320146	38.35	38.6	0.037	38.35	38.6	2								M							
40	E320147	38.6	39.05	4.0482	38.6	39.05	4B	weak grunerite alteration. Weak M fold						W		M						
41	E320148	39.05	40.05	0.409	39.05	50	2	Moderate biotite alteration, weak carbonate alteration	EOH					M	W	W						







Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION										
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
					0	4	CASING															
5																						
10					4	21.8	2	Well laminated, with Biotite and chlorite alteration being weak to moderate. Carbonate alteration is moderate veins orientated between 50 and 60 degrees to CA. At 20.50 to 20.70 intense Biotite alteration and tight isoclinal folding, with moderate grunerite and weak to great and biotite alteration. Brass colour with a high Po. The quartz flooded. Bands are contorted. Po in fill fractures. Dark grey green in colour banding is contorted. Po 3 greyish green with weak biotite alteration and x cutting carbonate veins.						M	W	W						Carbonate is weak to locally moderate carbonate veins are 55 to 60 degrees to Ca average 0.05 cm wide
15	E320153	19.6	20.5					The unit is quartz flooded, with 7% Po. Core has a blue grey hue silica flooded													Intensely silicified Dark green soft	
	E320154	20.5	21	0.1118				Tight isoclinal folds, with weak grunerite													Matrix of gra with magnetite crystals of magnetite	
	E320155	21	21.8	2.3313				biotite rich well laminated. carbonate veining is wispy to feathery						W		M						
	E320156	21.8	22.3	0.0421				isoclinal folds with thick noses and longer thinner limbs (Nose .5 to .7 cm in width ) (Limbs 2 to.5 mm in width and 2 -6 cm wide. Weak grunerite						W		M						
	E320157	22.3	23.05	0.048	21.8	22.3	4B	biotite rich dark green in colour						W		M						
	E320158	23.05	23.8	5.639	22.3	23.05	4H	Well laminated with Po 3%, Moderate grunerite. Again tight isoclinal folds						W		M						
	E320159	23.8	24.3	4.1034	23.05	23.75	4B	Brass coloured with a blue quartz hue Po 10 % fracture fill						W		M						
	E320161	24.3	25.05	0.0637	23.75	24.3	2	Grunerite alteration is moderate to strong. The 4B is quartz flooded with Po 3% fracture filled between bands of grunerite.						W		M						
	E320162	25.05	25.7	2.4034	24.3	25.7	4H	Secondary structures preserved tight isoclinal folds with Semi massive Po 5%						W		M					4B unit with intense quartz flooding and grunerite	
	E320163	25.7	26.5	2.8439	25.7	26.5	4B	Well laminated Zebra looking 4B with a small bed of green amphibole with magnetite crystals						W		M						
	E320164	26.5	26.9	0.0997	26.5	26.9	2	weak biotite foliation with weak pervasive carbonate with in the matrix						W		M						
	E320165	26.9	27.4	0.0254	26.9	27.4	4B	good 4B Zebra looking rock with moderate grunerite.						W		M						
	E320166	27.4	27.95	0.019	27.4	27.95	2	Intense quartz flooding with weak grunerite Po 5% fracture fill						W		M						
	E320167	27.95	28.9	0.0129	27.95	28.9	2	Mafica are soft moderate chlorite with patch zones of intense biotite alteration between ( 42.60 - 45.85). Carboante veining varies form wispy to quartz carboante veins up to 10 cm wide						W		M						
	E320168	28.9	29.3	0.352	28.9	29.3	4B							W		M						
	E320169	29.3	30.15	9.7	29.3	30.15	4H							W		M						
	E320171	30.15	30.9	10.966	29.3	30.15	4B							W		M						
	E320172	30.9	31.9	6.1247	30.15	31.7	4H							W		M						
	E320173	31.9	31.9	3.7949	31.7	31.9	4B							W		M						
	E320174	31.9	32.9	0.0993	31.9	33.6	2							W		M						
	E320175	32.9	33.6	0.0228	31.9	33.6	2							W		M						
	E320176	33.6	34.6	0.0576	33.6	35.65	4B							W		M						
	E320177	34.6	35.65	0.0304	33.6	35.65	4B							W		M						
	E320178	35.65	36.75	2.6098	35.65	36.75	4H							W		M						
	E320179	36.75	37.75	0.0743	35.65	36.75	4H							W		M						
	E320179	37.75	38.75	0.0131	36.75	50	2							W		M						









Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION										
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
0					0	3.25	CASING															
5																						
10																						
15																						
20					3.25	37.9	2	Dark green well foliated mafic volcanix with local bitoite alteration.						w	w						w	
25																						
30																						
35																						
	E320444	37	37.9	0.0533																		
	E320445	37.9	38.7	7.0484	37.9	38.7	4b	Very well lamiated striped zebra rock 4b, with small 30cm minor unit of 4h from 37.0-38.2m, strongly isoclinal folding		4h				w		m				w		
	E320446	38.7	39.35	0.0403	38.7	39.35	2	Very well laminated 4b, zebra rock, tightly folded, isoclinal like. as above listed 4b.														
	E320447	39.35	40	0.0184	39.35	43.05	4b							w		m				w		







Depth	Assay				MAJOR UNIT			MINOR UNIT			ALTERATION											
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
0					0	6	CASING															
5																						
10																						
15														M	W							Biotie shows a well developed foliation, swirls of Biotie and wispy carbonate. Carbonate is pervassive within the matrix.
20																						
25					6	40.2	2	S1 fabric is the same thought out the unit 50 to 55 degrees. alteration variations form mod. chlorite to mod biotie with well foliated swirls. Weak carbonate veing is pervassive	Po present between 28.00 - 28.50 (3% local) and 39.60 - 40.20 semi massive Po 5% Po a semi massive seam 1.5 cm wide													More massive looking Dark green in colour soft
26	E320181	26	27	0.0305											W	M						
27	E320182	27	28	0.0217																		
28	E320183	28	29	0.1277																		
29	E320184	29	30	0.023																		
30	E320185	30	31	0.0175																		
31	E320186	31	31.75	0.0288																		
32	E320187	31.75	32.8	0.0329																		
33	E320188	32.8	34	0.0692										M	W							WEll developed foliation with swirls of biotie between 31.75 to 32.85 with 3% Po.
34																						
35	E320189	39	39.6	0.0602																		Mod. Chlorite dark green in colour with weak wispy carbonate veins
36	E320191	39.6	40.2	11.6666										W	M							









Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION										
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
0					0	1.65	CASING															
5					1.65	25.4	2	Well foliated mafic volcanix with local pachy biotite alteration, local qtz-carb veins/shrz with minor Po and Pyrite.						m	w						w	
10	E333468	16.5	17.5	0.3015																		
15	E333469	23	24.2	0.0465																		
20	E333471	24.2	25.4	0.0501																		
25	E333472	25.4	26	7.1319	25.4	27.05	4h	Well foliated/laminated sulphide fe formation with approx 85% Po and 15% pyrite. with pyrite tending to occur as larger blebs and PO as semie massive.							w						m	
	E333473	26	27.05	14.6																		
	E333474	27.05	28	2.6314	27.05	29.55	4b	Well lamianed chert mag. meta chem. sed., zebra type 4b with strong folding and moderate qtz flooding.							w		m				m	
	E333475	28	28.75	0.1301																		
	E333476	28.75	29.55	0.3496																		
30	E333477	29.55	30.6	0.0127																		
	E333478	30.6	31.7	0.029	29.55	35.75	2	Moderately foliated mafic volcanix with local qtz carb veining, trace py and po														
35	E333479	34.75	35.75	0.0155																		
	E333481	35.75	36.9	1.2911																		
	E333482	36.9	38	5.433	35.75	42.55	4b	Well laminated zebra type 4b rock, with high increase in grunerite and qtz flooding from 39.6-42.55. Upper 4m of unit is high degree of shearing and knife faults along with folding and qtz flooding.		2		mafics folded within		w		m				m		
	E333483	38	39	2.2408																		
	E333484	39	39.6	3.0683																		
	E333485	39.6	40.5	1.9364						4a		35%		w		s				s		







Depth	Assay				MAJOR UNIT			Comments	MINOR UNIT			ALTERATION									
	Sample	From	To	AU ppm	From	To	Unit		Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
0					0	4	CASING														
5																					
10					4	18	2	Well Laminated 50 degrees to Ca. Weak carbonate veining					M	W						Well laminated Biotite	
15																					
20					18	28.1	2B	Weakly biotitic with Amg. infilled with calcite and the odd one is Dark grey. In some areas biotite masks primary structures. Blocky core between 23.05 and 23.60					W	W	M					Massive flow. with weak biotite masking amg. near the lower contact with 4H	
25												M	W							Well laminated 2	
	E320201	26.3	27.1	0.1465																	
	E320202	27.1	28.1	0.4197				Brass coloured massive Po 15 - 20%. The mialeralization decrease down the unit at 28.65 unit is 4B looking with 3 - 5 % Po along weak grunerite bands						W		W			M	Moderate quartz flooding with weak grunerite and traces of green amphibole. moderate foliation	
	E320203	28.1	28.9	14.9	28.1	28.9	4H														
	E320204	28.9	30	0.1641				mod. biotite alteration with weak wispy carbonate Lower contract is sharp					M	W							
30					28.9	31.4	2														
					31.4	31.8	4A	Well lamiated zebra looking 4B for the first 8 cm and ten becomes contorted with more amphibole present down section.								W					
35					31.8	41	2	Mod. biotite, medium green in colour with minor section from 40.05 - 41.00 is massive looking with less carbonate						W	M						Dark green soft









Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION									
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments
0					0	4	CASING														
5																					
10																					
15																					
20					4	41.2	2	Mod. biotite, Wispy carbonate veins .05 cm wide and smaller Core is rubbly between 25.50 - 25.75. chloritic along fracture planes	Between 34.80 and 37.70 the unit is silicified and chloritic Po up to 7% fracture fill. With a minor 4B unit between 39.75 - 40.10					M	W						mod. Biotite with wispy carbonate veins .05 cm
25																					
30																					
35	E320216	32	33	0.01																	
	E320217	33	34	0.0144																	
	E320218	34	34.8	0.0262																	
	E320219	34.8	35.6	0.01																	
	E320221	35.6	36.35	0.0845											W	M				M	Po mialization associated moderate silicification.
	E320222	36.35	37	0.0371										M							
	E320223	37	37.7	0.091																S	Zone of intense silicification Po 7%
	E320224	37.7	38.6	0.0903																	
	E320225	38.6	39.15	0.1548										M							
	E320226	39.15	40.2	0.0394												W					Minor unit of 4B







Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION											
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments		
0					0	4	CASING	blocky rubble 3.80															
5					4	20.3	2	Moderate Biotite with wispy carbonate veins. The core is blocky between 19.60 - 19.90. Quartz vein at 19.30 - 19.35. 2% Po locally between 19.25 - 19.40						M	W								
14	E320242	14.1	15.1	0.0347																			
	E320243	15.1	15.3	0.0681						4I	DI	BK	Small graphitic zone with 5% Po. Spotty carboante pea sized			M						Graphitic	
	E320244	15.3	16.3	0.025																			
	E320784	16.3	17.3	0.2046																			
	E320785	17.3	18.3	0.0954																			
	E320786	18.3	19.3	0.1216																			
	E320245	19.3	20.3	4.7831																			
20	E320246	20.3	21.2	4.1984	20.3	21.7	4B	tight isoclinal folds. Weak micro scale M folds and knife faults. very contorted. lower section has Grunerite and green amphibole (15 4A)						M	M						W	Fe carbonate veing (Strain Pink Colour)	
	E320247	21.2	21.7	0.7181																			
	E320248	21.7	22.7	9.1695																			
	E320249	22.7	23.3	10.9141	21.7	24	4H	Quartz flooded 4H. 10 % Po. and grunerite bands.															
	E313501	23.3	24	5.8818																			
	E313502	24	25	8.6																			
24	E313503	25	25.6	8.691	24	26.85	4B	Quartz flooded. Po 4%. with 20 % grunerite bands weak magnetite present.															
	E313504	25.6	26.3	2.3398																			
	E313505	26.3	26.85	1.6637																			
	E313506	26.85	28	0.2121																			
	E313507	28	29	0.0573																			
30					26.85	33.6	2	Mineralization bleeds over in mafics upper 15 cm contorted with 4% Po. No carbonate veining. Massive looking. At 33.20 Moderate biotite to the lower contract with a 4H															
	E313508	32.9	33.6	0.0912																			
	E313509	33.6	34.3	0.1771	33.6	34.4	4H	Strang looking unit could be a 4H. 4I. The unit is dark grey with spotty carbonate from pea to dime sized. Weakly graphitic. Po 10% semi massive.															Weakly graphitic spotty carbonate
	E313511	34.3	35.3	0.0722																			
35					34.4	39.3	2	The unit is well laminated with moderate biotite. At 37.90 the unit becomes contorted and fracture filled Po 5% is present. The is a semi massive section between 39.00 - 39.05	Small laminated section of 2 with a well defined contact with 4I														Carbonate is moderate from 38.05 - 39.39
	E313512	37	37.6	0.0432																			
	E313513	37.6	38.6	0.0654																			
	E313514	38.6	39.3	0.0763																			
	E313515	39.3	40	0.266	39.3	40.4	4I	THs 4I is similar to the one above. Lots of spoty carbonate and contorted veins of Carb. Graphite smears on hands Po 7%.															Graphitic 4I unit spoty carbonate



























Depth	Assay				MAJOR UNIT			MINOR UNIT			ALTERATION											
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
0					0	2	CASING															
5																						
10					2	22.4	2	Dark grey in colour with carbonate veining which is moderate between 11.50 to 13.60 tending II to the foliation. at 50 to CA. Moderate Biotite in this section..	The unit is bleached and massive from 17.80 - 19.45 moderately silicified. Light green to 22.40 with wispy carbonate					M	M							
15																						
20																						M
22.4					22.4	22.8	6P	Coarse grained wacke						M	W							
25																						
30					22.8	37.1	2	The unit is well laminated with carbonate veins again II to the foliation. 0.5 cm to 2 cm wide Possible flow banding trending at 60 derees to Ca	The unit becomes more silicified at 34.60 to 35.60 with Po 4%.. The unit then is moderately biotitic to 37.10					M	W							
33	E313538	33.6	34.6	0.0145																		
	E313539	34.6	35.6	0.0985																		S
	E313541	35.6	36.6	0.0838																		
	E313542	36.6	37.1	0.0473																		
	E313543	37.1	37.7	0.0652	37.1	37.7	4I	Graphitic Ironstone with carbonate spots pea size to dime size. Po 5%. There is a small biotite band between 37.15 - 37.20						M	W							
	E313544	37.7	38.5	0.4038	37.7	38.5	2	Moderate biotite and possible flow banding						M								
	E313545	38.5	39.5	14.73																		
	E313546	39.5	40.3	4.8958	38.5	40.3	4H	The unit is quartz flooded with 7% Po. The lower unit has weak grunerite ( weak 4B).								S					S	















































Depth	Assay				MAJOR UNIT				MINOR UNIT				ALTERATION									
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
	E313612	40	41	0.016	39.4	42.3	2	F. gr. Mafic volcanic with with weak to moderate biotitic alteratio and very weak carboante veins. The lower contact is sheared at 40 degrees to Ca between 42.00 - 42.30 augen to lens shaped cabonate up to 2 cm wide	5% Po mineralization between 42.00 and 42.30.					M	W							
	E313613	41	41.9	0.0329																		
	E313614	41.9	42.3	0.4298																		
	E313615	42.3	43	1.1434																		
	E313616	43	44	1.1557	42.3	44	4A	THE as a light grey blue hue as a result of quartz flooding. Bands are more contorted than the above 4a unit. Grunerite is thinly laminated ranging between .5mm to 2mm in width	3% Po mineralization.													5 - 10% grunerite with strong quartz flooding.
44	E313617	44	45	0.1446	44	52	2	The unit is weakly foliated with weak biotite alteration and	The lower 2m of the hole is blocky at 51.40 there is Slickenside surfaces minerali lineation is 70 degrees to the Ca.					M	W							
	E313618	45	46	0.0416																		



05-KAZ-029

Depth	MAJOR UNIT			MINERALS							QTZ VEINING						FABRIC						FOLD						FAULT										
	From	To	Unit	As%	Cp%	Mt%	Po%	Py%	VG Specks	Comments	From	To	Vein Type	Vein %	Tex	Contact Type	Alpha deg	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments			
0	1.6	CASING																																					
1.6	4.5	2																																					
5																																							
4.5	12.6	2																																		Moderate open fold 2 cm wide.			
12.6	15.4	2T																																					
15.4	35.6	2																																					
21.5	21.5																	40	MOD	S1																			
21.8	21.8																	50	WEK	S1																			
22.1	22.1																	45	WEK	S1																			
25.8	25.8																	50	MOD	S1																			
27.1	27.1																	50	MOD	S1																			
28.5	28.5																	50	WEK	S1																			
31.25	31.25						1											50	MOD	S1																			
33.7	35.6						0.25											55	MOD	S1																			
35.6	39.4	4A					2											55	MOD	S1																			
39.4	42.3	2					5											55	MOD	S1																			

within quartz carbonate vein

within a shear zone between 33.50 to 33.60. Po 3% within shear zone

Well banded grunerite lamiations

Small weak shear with 3% Po



Depth	Assay				MAJOR UNIT				MINOR UNIT				ALTERATION								
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments
0					0	1.8	CASING														
5					1.8	21.5	2	The unit is lt. to med grey with a moderate fault between 8.8 to 9.20 blocky with slicken sides. Weak to moderate carbonate alteration is pervasive along with x cutting fractures with a general trend II to CA.	Between 18.30 to 18.60 quartz flooding. Fine grained basalt. Note the shear between 19.30 to 19.60 weak shear with moderate quartz flooding with 2% AS and 3% Po between 19.80 -20.50					W	W						Strong silicification quartz flooding and no mineralization
10	E314501	18.4	19.3																		S
	E314502	19.3	20	0.0734										W	M						Moderate shear zone between 19.30 and 19.60 . THE unit black with silicification note mineralization
20	E314503	20	21	0.0506											M						M
	E314504	21	21.5	0.0576																	
	E314505	21.5	22	1.8205																	
	E314506	22	22.9	0.0639																	
	E314507	22.9	23.9	1.5901																	
	E314508	23.9	25	2.4383																	
22	E314509	25	26	2.6092	21.5	28.8	4B	The unit is well lam. with a wide variation in colour and texture. Ranges from well lam Zerba rock from 21.50 to 22.90 with moderate quartz flooding	At 21.90 there is a quartz vein or (chert clast) lam. pinch around the clast. From 22.90 to 29.90 more chert rich, amp and grn layers are dis. 15% grn and 10% amp. bgy green. 3 -5 % Po. 26.9 to 28 zebra rock. Form 28 to 28.80 60% grn. amp.							M				M	Moderate silicification
	E314511	26	27	4.9597																	
	E314512	27	28	0.3015																	
	E314513	28	28.8	1.5496												W					
	E314514	28.8	29.4	0.7411	28.8	29.4	4A	Fine grained strongly biotitic grains of biotite visible and show a well developed foliation. weak pervasive carbonate alteration.													M
30	E314515	29.4	30	0.1425	29.4	30.7	2T							S	W						
	E314516	30	30.7	0.041																	
	E314517	30.7	31.3	0.2853																	
	E314518	31.3	32	0.0912	30.7	32	4	Weakly graphitic with pervasive carbonate. Po is fracture filled 5% to 7% mineralization.							M						Weakly graphitic
	E314519	32	33.2	0.0405	32	33.2	2T	Well foliated basalt brown in colour, with weak pervasive carbonate alteration.						S							2T
	E314521	33.2	34	0.0162																	
35					33.2	52	2	Moderately foliated between 35.5 to 36.80. From 33.2 to 35.2 is massive looking weak to moderately silicified.	35.20 to 49 moderate to strong silicification glass looking dark grey A minor shear zone between 39.20 - 39.50 with 3 -5 % fracture filled Po												
	E314522	38.4	39.2	0.0199																	
	E314523	39.2	39.9	0.0424												S					Shear Zone
	E314524	39.9	41	0.0471										S							













05-KAZ-031

Depth	MAJOR UNIT			MINERALS							QTZ VEINING							FABRIC						FOLD						FAULT								
	From	To	Unit	As%	Cp%	Mt%	Po %	Py%	VG Specks	Comments	From	To	Vein Type	Vein %	Tex	Contact Type	Alpha deg	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments		
0	1.9	CASING																	1.9	15.2	50	MOD	S1															
5																																						
10																																						
15							0.25												15.2	18.4	50	WEK	S1															
							1																															
							0.25			Po is Fracture filled																												
							1																															
							2													18.4	21	40	WEK	S1														
							1																															
19.9	52	2					1				21	21.3	QZ-CA	85	l	D	50		21	27.6	50	WEK	S1															
25							0.25																															
							0.25				27.6	27.8	QZ-CA	95	m	D	50		27.6	29.5	50	MOD	S1															
							0.25																															
30							0.25																															
							2																															
							0.25				34.4	34.5	QZ-CA	0.25	ay	D	75		33.2	35	40	MOD	S1															
35							2																															
							0.25																															
							2																															
					</																																	



Depth	Assay				MAJOR UNIT				MINOR UNIT				ALTERATION									
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
					0	2.4	2	F. gr., medium basalt highly fractured with carbonate veining														
					2.4	6.4	2	Moderate to Strong biotitic F. Gr basalt. The core is very blocky and weak to moderate carbonate veins.							M							
5	E313637	5.8	6.4	0.0315										M	W							
	E313638	6.4	7.05	0.0573	6.4	7.05	4	graphitic iron formation with 5% Po. and moderate carboante intense contorted laminations							M							Strongly graphitic
	E313639	7.05	8	0.0536																		
10					7.05	18.5	2	F. gr basalt starts of very blocky from 7.00 to 10 m. between RQD down section	The unit has patch zones of moderate silicification. Moderate to Strong silicification between 16.70 and 17.30. Po 2 % in the above section.					M								
	E313641	15	16	0.0277																		
	E313642	16	17	0.0674																		
	E313643	17	18	0.0573																		
	E313644	18	19.2	0.0195										M	W							
20					18.5	34.9	2T	There is pervasive carbonate through out the unit. The upper section has caronate veins that disappear at 19.20. The unit is strongly biotitic and well foliated	There are some block sections between 23.00 to 23.30 and from 27.90 - 28.40 from 29.50 - 29.90. small faults foliation is is between 50 and 55 degrees to Ca. The lower contract is faulted with gouge from 33.50 to 34.90					S	W							
25																						
	E313645	31.5	32.5	0.0142																		
	E313646	32.5	33.5	0.0148																		
30																						
	E313647	35.2	36.3	0.0915										M	M							
35	E313648	36.3	37	0.1252																		
	E313649	37	38	0.0142	34.9	48.1	2	The upper contract is faulted with 2T. from 34.90 to 36.30 the unit is weakly sheared with strong pervasive carbonate alteration	The unit becomes more homogeneous down section and with patchy moderate to strong silicification (Very strong between 46.60 to 48.10 with 1% Po with in ithe above section.					M	W							









































Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION										
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments	
					0	2.7	CASING															
5					2.7	9.9	2															
	E313203	7.3	8.3	0.0427						4h	La	g	poor 4h, 2% po									
	E313204	8.3	8.8	2.3007						2t	La	b		W	W							
	E313205	8.8	9.9	0.043						4b	LA	g										
10	E313206	9.9	10.9	0.021																		
	E313207	10.9	11.9	0.0306																		
	E313208	11.9	12.9	0.4548																		
	E313209	12.9	13.9	0.0526																		
15	E313211	13.9	14.9	0.0284	9.9	17.9	4b	well-laminated, typical SIF 4b, laminae folded & knife-faulted														
	E313212	14.9	15.9	0.6904																		
	E313213	15.9	16.9	0.2076																		
	E313214	16.9	17.9	0.444																		
	E313215	17.9	18.9	0.1873																		
20	E313216	18.9	19.9	0.0286	17.9	20.4	2	mod chloritized, weakly carbonatized							W	M						
	E313217	19.9	20.4	0.0548																		
	E313218	20.4	20.8	3.5485	20.4	20.9	4h	mod 4h, 10% po throughout, bottom is distorted due to shear zone														
	E313219	20.8	21.8	0.3678	20.9	21.8	4b	contains pervasively chloritized 1-2cm layers														
	E313221	21.8	22.8	0.0272																		
	E313222	22.8	23.8	0.019																		
25	E313223	25.5	26.5	0.0297	21.8	26.5	2	mod chloritized, weakly carbonatized							W	M						
	E313224	26.5	27.5	1.63	26.5	27	4b	well-laminated														
	E313225	27.5	28.5	1.7848																		
	E313226	28.5	29.5	2.0695	27	30.3	4a	10% grun (locally 20%)														
30	E313227	29.5	30.25	0.3644																		
	E313228	30.25	30.55	0.1131						4h	Di	g	poor 4h, 5% po, 1% aspy									
	E313229	30.55	31.55	0.0532																		
	E313231	31.55	32.55	0.0409																		
35					30.3	37	2t	bt content variable from 5-15%						W	W							





05-KAZ-047

Depth	MAJOR UNIT			MINERALS						QTZ VEINING						FABRIC					FOLD					FAULT																
	From	To	Unit	As%	Cp%	Mt%	Po%	Py%	VG Specks	Comments	From	To	Vein Type	Vein %	Tex	Contact Type	Alpha deg	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments						
0	4.2	CASING																																								
5																																										
4.2	13	2									7.3	11	CA	5	m	S	50																									
13	14	4h				5				up to 10% locally														13.6	13.6	50	MOD	FD														
14	19	2																																								
19	21.8	4h				10	0.1			5-30% po																																
21.8	23.9	4b																						22.4	22.4	45	MOD	SF														
																								23.3	23.3	65	MOD	MF														
23.9	29.6	2																																								
29.6	30.1	4b																																								
30.1	34	4a				1																																				
34	37	2									34	37	CA	3	m	l	55																									







Depth	Assay				MAJOR UNIT			Comments	Comments	MINOR UNIT			ALTERATION						
	Sample	From	To	AU ppm	From	To	Unit			Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser
0					0	2.8	CASING												
5					2.8	12.1	2												
	E313128	11	12.1	0.0229															
	E313129	12.1	13	0.0435	12.1	13	4b	typical SIF 4b, moderately distorted laminae, z-folds and M-fold											
	E313131	13	14	0.0314	13	14	2	weak chl+cal											
	E313132	14	15	7.0338															
	E313133	15	15.9	0.1208	14	17	4b	laminae distorted at top of unit, s-fold and boudinaged chert layers											
	E313134	15.9	17	0.1807						2	MA	gg							
	E313135	17	18	0.053															
20					17	22.3	2												
					22.3	24.3	2t	biotized mafics, also mod carbonatized						M	W				
	E313136	24	25.1	0.0709	24.3	25.1	2	wk carbonatized											
24	E313137	25.1	26	0.2144	25.1	27	4b	most of unit occurs within shear zone, mod-strong distortion, contains chl+ser+grun+gt "bands", unit is overall 10% grun											
	E313138	26	27	0.4478															
	E313139	27	28	6.4998															
	E313141	28	29	0.1734	27	30.4	4a	wk-mod magnetic, but lower mag susc than in 4b (mag due to SZ?). 5-10% grun, decreasing downhole											
	E313142	29	30	0.5956															
	E313143	30	30.4	1.7519															
	E313144	30.4	31.4	0.0569	30.4	32.2	2	wk chl+cal											
	E313145	31.4	32.2	0.0253															
	E313146	32.2	33	0.0372															
	E313147	33	33.8	0.1408	32.2	34.4	2t	wk-mod distortion of unit, unit includes small xenos of chert (4b?)						M	W				
	E313148	33.8	35	0.0134															
30					34.4	36.6	2												
					36.6	37	2t	mod carbonatization						M	W				





































Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION									
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments
					0	0.8	CASING														
	E313259	0.8	1.8	0.112	0.8	2.8	2														
	E313261	1.8	2.8	0.0277																	
	E313262	2.8	4.05	1.978	2.8	4.05	4b	sheared, intensely distorted. very rubbly core.													
	E313263	4.05	5.05	0.1536	4.05	16.45	2														
	E313264	5.05	6.05	0.0338																	
	E313265	14.45	15.45	0.015	16.45	16.7	4b														
	E313266	15.45	16.45	0.01																	
	E313267	16.45	16.7	0.024																	
	E313268	16.7	17.7	0.0117																	
	E313269	17.7	18.7	0.01	16.7	23.55	2	moderately foliated.													
	E313271	20.55	21.55	0.0715																	
	E313272	21.55	22.55	0.0514																	
	E313273	22.55	23.55	0.0228																	
	E313274	23.55	24.5	0.067	23.55	24.5	4b	intensely distored, folded, boudinaged chert bands, shear fabric.													
	E313275	24.5	25.3	0.0376	24.5	27.25	2	strong foliation fabric with narrow <10cm bands of sheared 4b throughout unit.													
	E313276	25.3	26.25	0.1301																	
	E313277	26.25	27.25	0.2032																	
	E313278	27.25	28.25	0.5073	27.25	30.7	4b	highly deformed 4b/4a with strong shear fabric, moderate amounts of qtz flooding and qrunurite alteration.													
	E313279	28.25	29.25	3.1073																	
	E313281	29.25	30	0.6105																	
	E313282	30	30.7	0.1902																	
	E313283	30.7	31.55	0.0367	30.7	31.55	2t	strong shear fabric with intense biotite and carbonate alteration.						s	m	m					
	E313284	31.55	32.45	0.0899	31.55	32.45	2	strongly qtz flooded sheared mafics with weak Po mineralization.													
	E313285	32.45	33.05	0.1958	32.45	33.05	2														
	E313286	33.05	34.05	0.0277																	
	E313287	34.05	35.05	0.01	33.05	40	2	EOH													























































Depth	Assay				MAJOR UNIT			MINOR UNIT				ALTERATION																				
	Sample	From	To	AU ppm	From	To	Unit	Comments	Comments	Unit	Tex	Colour	Comments	Bio	Car	Chl	Gru	Hem	Ser	Si	Comments											
40	E314581	40	41	0.0581	38.6	54.6	4B	Typical Zebera looking rock with bands between .25 to .5 cm wide to start and increase in width 1 - 2cm wide between 44.30 - 45.20. From 45.80 to 53 the unit has strong isoclinal folding	The unit is very blocky. Extremely difficult to orientate core with any degree of certainty. The unit shows strong quartz flooding between 44.50 - 45.90. Po with in this section is 2%	2	MA	GG	small Fine grained mafic unit																			
41	E314582	41	42	0.1293																												
42	E314583	42	43	0.9296																												
43	E314584	43	44	0.1097																												
44	E314585	44	45	0.0559																												
45	E314586	45	46	0.0373																												
46	E314587	46	46.5	0.1273																												
46.5	E314588	46.5	47	0.1221																												
47	E314589	47	48	0.0294																												
48	E314591	48	49	0.0267																												
49	E314592	49	50	0.0506																												
50	E314593	50	51	0.075																												
51	E314594	51	52	0.0637																												
52	E314595	52	53	0.1465																												
53	E314596	53	53.7	0.1274																												
53.7	E314597	53.7	54.4	0.3757																												
54.6		54.6	55		54.6	55	2	Fine grained basalt																								

intense quartz flooding with 2% Po fracture filled mineralization

05-KAZ-062

Depth	MAJOR UNIT			MINERALS						QTZ VEINING						FABRIC						FOLD						FAULT													
	From	To	Unit	As%	Cp%	Mt%	Po%	Py%	VG Specks	Comments	From	To	Vein Type	Vein %	Tex	Contact Type	Alpha deg	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments	From	To	Alpha deg	Int	Type	Comments					
0	2.75	CASING																																							
4	4																45	MOD	S1																						
7	7																45	MOD	S1																						
10	10																60	MOD	S1																						
13	13																50	MOD	S1																						
19.2	19.2						0.5			Blebbly							50	MOD	S1																						
22	22						0.5										50	MOD	S1																						
26	26						0.1																																		
26.1	27.3						0.2																																		
28.5	28.5						0.1																																		
26	26						0.1										55	MOD	S1																						
28	29.2						1			with in fault zone																															
28.5	28.5						0.1										35	MOD	S1																						
34	34						1			open space filling																															
37	37						0.5																																		
38.6	54.6	4B					0.1																																		

Open space filling with some fault gauge











## **Appendix VI**

Assay Lab Certificates



HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-051	E313076	CORE	43.80	44.80	0.0500	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313077	CORE	8.60	9.60	0.0356	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313078	CORE	9.60	10.70	1.8300	24-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313079	CORE	10.70	11.60	0.1770	23-Feb-05	19-Feb-05	INTERNAL
	E313080	GRBLANK			0.0159	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313081	CORE	11.60	12.50	0.0534	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313082	CORE	12.50	12.90	9.1227	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313083	CORE	12.90	13.30	0.0721	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313084	CORE	13.30	14.30	2.3605	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313085	CORE	14.30	15.00	0.3422	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313086	CORE	15.00	15.90	9.0000	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313087	CORE	15.90	16.60	5.6700	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313088	CORE	16.60	17.60	0.4645	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313089	CORE	17.60	18.60	0.0299	23-Feb-05	19-Feb-05	INTERNAL
	E313090	STD900			3.2369	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313091	CORE	18.60	19.60	0.1246	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313092	CORE	19.60	20.60	0.0362	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313093	CORE	20.60	21.60	0.0558	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313094	CORE	21.60	22.80	0.1690	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313095	CORE	22.80	23.80	0.0432	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313096	CORE	28.30	29.30	0.0396	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313097	CORE	29.30	29.90	0.7259	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313098	CORE	29.90	30.50	0.0199	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313099	CORE	30.50	31.40	0.2165	23-Feb-05	19-Feb-05	INTERNAL
	E313100	GRBLANK			0.0100	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313101	CORE	31.40	32.40	1.5483	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313102	CORE	32.40	33.40	0.8302	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313103	CORE	33.40	34.50	0.2853	24-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313104	CORE	34.50	35.50	0.3474	24-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313105	CORE	35.50	36.50	0.1152	24-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313106	CORE	36.50	37.50	0.3058	24-Feb-05	19-Feb-05	INTERNAL
05-KAZ-050	E313107	CORE	37.50	38.50	0.0438	24-Feb-05	19-Feb-05	INTERNAL
05-KAZ-048	E313108	CORE	9.00	10.00	0.0516	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313109	CORE	10.00	10.90	3.1144	06-Mar-05	23-Feb-05	INTERNAL
	E313110	STD900			3.1986	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313111	CORE	10.90	11.30	6.5729	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313112	CORE	11.30	12.30	0.2145	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313113	CORE	15.90	16.90	0.8483	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313114	CORE	16.90	17.60	12.5700	18-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313115	CORE	17.60	17.90	3.8401	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313116	CORE	17.90	18.20	3.8152	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313117	CORE	18.20	18.60	0.1089	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313118	CORE	18.60	19.60	0.0459	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313119	CORE	25.50	26.50	0.0289	06-Mar-05	23-Feb-05	INTERNAL
	E313120	GRBLANK			0.0245	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313121	CORE	26.50	27.30	0.5610	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313122	CORE	27.30	28.40	2.5142	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313123	CORE	28.40	29.60	6.8669	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313124	CORE	29.60	30.40	0.2776	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313125	CORE	30.40	31.20	0.4795	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313126	CORE	31.20	32.20	0.6396	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-048	E313127	CORE	32.20	33.20	0.0273	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313128	CORE	11.00	12.10	0.0229	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313129	CORE	12.10	13.00	0.0435	07-Mar-05	23-Feb-05	INTERNAL
	E313130	STD999			6.9589	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313131	CORE	13.00	14.00	0.0314	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313132	CORE	14.00	15.00	7.0338	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313133	CORE	15.00	15.90	0.1208	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313134	CORE	15.90	17.00	0.1807	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313135	CORE	17.00	18.00	0.0530	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313136	CORE	24.00	25.10	0.0709	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313137	CORE	25.10	26.00	0.2144	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313138	CORE	26.00	27.00	0.4478	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313139	CORE	27.00	28.00	6.4998	06-Mar-05	23-Feb-05	INTERNAL
	E313140	GRBLANK			0.0502	06-Mar-05	23-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-049	E313141	CORE	28.00	29.00	0.1734	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313142	CORE	29.00	30.00	0.5956	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313143	CORE	30.00	30.40	1.7519	07-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313144	CORE	30.40	31.40	0.0569	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313145	CORE	31.40	32.20	0.0253	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313146	CORE	32.20	33.00	0.0372	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313147	CORE	33.00	33.80	0.1408	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-049	E313148	CORE	33.80	35.00	0.0134	06-Mar-05	23-Feb-05	INTERNAL
05-KAZ-047	E313149	CORE	12.00	13.00	0.0639	06-Mar-05	24-Feb-05	INTERNAL
	E313150	STD900			3.0225	06-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313151	CORE	13.00	14.00	2.1731	06-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313152	CORE	14.00	15.00	0.1556	06-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313153	CORE	15.00	16.00	0.0354	06-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313154	CORE	16.00	17.00	0.2907	06-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313155	CORE	17.00	18.00	0.0441	06-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313156	CORE	18.00	19.00	0.0645	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313157	CORE	19.00	19.50	4.0967	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313158	CORE	19.50	20.50	10.9375	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313159	CORE	20.50	21.50	6.9842	07-Mar-05	24-Feb-05	INTERNAL
	E313160	GRBLANK			0.0424	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313161	CORE	21.50	21.80	17.4666	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313162	CORE	21.80	22.80	1.4876	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313163	CORE	22.80	23.90	0.0562	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313164	CORE	23.90	25.00	0.0309	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313165	CORE	28.60	29.60	0.0392	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313166	CORE	29.60	30.10	0.2201	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313167	CORE	30.10	31.00	2.3781	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313168	CORE	31.00	32.00	2.2778	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313169	CORE	32.00	33.00	4.7078	07-Mar-05	24-Feb-05	INTERNAL
	E313170	STD999			6.9156	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313171	CORE	33.00	34.00	0.4353	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-047	E313172	CORE	34.00	35.00	0.0408	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313173	CORE	2.20	3.20	0.0544	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313174	CORE	3.20	4.20	0.0535	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313175	CORE	4.20	5.20	0.0152	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313176	CORE	5.20	6.20	0.0948	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313177	CORE	6.20	7.20	0.0737	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313178	CORE	7.20	8.20	0.0380	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313179	CORE	8.20	9.20	0.0132	07-Mar-05	24-Feb-05	INTERNAL
	E313180	GRBLANK			0.0428	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313181	CORE	9.20	10.20	0.0208	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313182	CORE	10.20	11.20	0.0280	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313183	CORE	11.20	12.20	0.0597	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313184	CORE	12.20	13.20	0.0706	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313185	CORE	17.00	18.00	0.0590	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313186	CORE	18.00	18.60	3.6821	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313187	CORE	18.60	19.60	0.1181	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313188	CORE	21.00	22.20	0.0674	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313189	CORE	22.20	23.20	0.0504	07-Mar-05	24-Feb-05	INTERNAL
	E313190	STD900			3.1242	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313191	CORE	23.20	24.30	0.0684	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313192	CORE	24.30	24.70	1.0597	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-043	E313193	CORE	24.70	26.00	0.0778	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313194	CORE	30.25	31.25	0.0215	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313195	CORE	31.25	31.55	0.0157	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313196	CORE	31.55	32.55	0.0322	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313197	CORE	44.65	45.65	0.0144	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313198	CORE	45.65	45.95	0.0338	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313199	CORE	45.95	46.60	0.1161	07-Mar-05	24-Feb-05	INTERNAL
	E313200	GRBLANK			0.0127	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313201	CORE	46.60	47.55	0.3848	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-024	E313202	CORE	47.55	48.55	0.3065	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-046	E313203	CORE	7.30	8.30	0.0427	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313204	CORE	8.30	8.80	2.3007	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313205	CORE	8.80	9.90	0.0430	12-Mar-05	25-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-046	E313206	CORE	9.90	10.90	0.0210	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313207	CORE	10.90	11.90	0.0306	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313208	CORE	11.90	12.90	0.4548	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313209	CORE	12.90	13.90	0.0526	12-Mar-05	25-Feb-05	INTERNAL
	E313210	STD900			3.1130	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313211	CORE	13.90	14.90	0.0284	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313212	CORE	14.90	15.90	0.6904	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313213	CORE	15.90	16.90	0.2076	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313214	CORE	16.90	17.90	0.4440	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313215	CORE	17.90	18.90	0.1873	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313216	CORE	18.90	19.90	0.0286	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313217	CORE	19.90	20.40	0.0548	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313218	CORE	20.40	20.80	3.5485	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313219	CORE	20.80	21.80	0.3678	12-Mar-05	25-Feb-05	INTERNAL
	E313220	GRBLANK			0.0485	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313221	CORE	21.80	22.80	0.0272	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313222	CORE	22.80	23.80	0.0190	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313223	CORE	25.50	26.50	0.0297	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313224	CORE	26.50	27.50	1.6300	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313225	CORE	27.50	28.50	1.7848	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313226	CORE	28.50	29.50	2.0695	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313227	CORE	29.50	30.25	0.3644	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313228	CORE	30.25	30.55	0.1131	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313229	CORE	30.55	31.55	0.0532	12-Mar-05	25-Feb-05	INTERNAL
	E313230	STD999			6.8224	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-046	E313231	CORE	31.55	32.55	0.0409	12-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313232	CORE	11.90	12.90	0.0187	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313233	CORE	12.90	13.90	0.4267	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313234	CORE	13.90	15.00	1.2358	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313235	CORE	15.00	15.70	7.1472	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313236	CORE	15.70	16.40	0.2593	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313237	CORE	16.40	17.10	1.1136	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313238	CORE	17.10	18.10	0.5754	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313239	CORE	18.10	19.10	0.2190	14-Mar-05	25-Feb-05	INTERNAL
	E313240	GRBLANK			0.0318	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313241	CORE	19.10	20.00	6.9173	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313242	CORE	20.00	20.70	15.8000	15-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313243	CORE	20.70	22.00	0.2084	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313244	CORE	22.00	22.80	0.0420	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313245	CORE	22.80	23.60	0.0209	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313246	CORE	23.60	24.60	0.0662	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313247	CORE	24.60	25.60	0.0412	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313248	CORE	25.60	26.50	0.0204	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313249	CORE	26.50	27.40	0.1455	14-Mar-05	25-Feb-05	INTERNAL
	E313250	STD900			3.2517	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313251	CORE	27.40	28.10	1.0717	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313252	CORE	28.10	29.10	0.4007	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313253	CORE	29.10	30.10	0.3848	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313254	CORE	30.10	31.10	0.8355	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313255	CORE	31.10	32.20	0.1913	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313256	CORE	32.20	33.40	0.0670	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313257	CORE	33.40	34.40	0.0644	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-056	E313258	CORE	34.40	35.40	0.0224	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-055	E313259	CORE	0.80	1.80	0.1120	13-Mar-05	28-Feb-05	INTERNAL
	E313260	GRBLANK			0.0254	13-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313261	CORE	1.80	2.80	0.0277	12-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313262	CORE	2.80	4.05	1.9780	13-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313263	CORE	4.05	5.05	0.1536	13-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313264	CORE	5.05	6.05	0.0338	13-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313265	CORE	14.45	15.45	0.0150	13-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313266	CORE	15.45	16.45	0.0100	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313267	CORE	16.45	16.70	0.0240	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313268	CORE	16.70	17.70	0.0117	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313269	CORE	17.70	18.70	0.0100	09-Mar-05	28-Feb-05	INTERNAL
	E313270	STD999			7.0772	09-Mar-05	28-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-055	E313271	CORE	20.55	21.55	0.0715	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313272	CORE	21.55	22.55	0.0514	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313273	CORE	22.55	23.55	0.0228	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313274	CORE	23.55	24.50	0.0670	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313275	CORE	24.50	25.30	0.0376	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313276	CORE	25.30	26.25	0.1301	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313277	CORE	26.25	27.25	0.2032	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313278	CORE	27.25	28.25	0.5073	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313279	CORE	28.25	29.25	3.1073	09-Mar-05	28-Feb-05	INTERNAL
	E313280	GRBLANK			0.0349	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313281	CORE	29.25	30.00	0.6105	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313282	CORE	30.00	30.70	0.1902	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313283	CORE	30.70	31.55	0.0367	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313284	CORE	31.55	32.45	0.0899	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313285	CORE	32.45	33.05	0.1958	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313286	CORE	33.05	34.05	0.0277	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-055	E313287	CORE	34.05	35.05	0.0100	09-Mar-05	28-Feb-05	INTERNAL
05-KAZ-021	E313501	CORE	23.30	24.00	5.8818	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313502	CORE	24.00	25.00	8.6000	15-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313503	CORE	25.00	25.60	8.6910	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313504	CORE	25.60	26.30	2.3398	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313505	CORE	26.30	26.85	1.6637	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313506	CORE	26.85	28.00	0.2121	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313507	CORE	28.00	29.00	0.0573	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313508	CORE	32.90	33.60	0.0912	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313509	CORE	33.60	34.30	0.1771	11-Feb-05	09-Feb-05	INTERNAL
	E313510	STD900			3.1465	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313511	CORE	34.30	35.30	0.0722	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313512	CORE	37.00	37.60	0.0432	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313513	CORE	37.60	38.60	0.0654	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313514	CORE	38.60	39.30	0.0763	11-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313515	CORE	39.30	40.00	0.2660	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313516	CORE	40.00	40.40	0.1075	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E313517	CORE	40.40	41.40	0.0296	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313518	CORE	19.80	20.80	0.3337	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313519	CORE	20.80	21.15	19.0333	12-Feb-05	09-Feb-05	INTERNAL
	E313520	GRBLANK			0.1215	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313521	CORE	21.15	22.00	4.7953	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313522	CORE	22.00	22.80	8.5000	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313523	CORE	22.80	23.30	1.2747	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313524	CORE	23.30	24.30	5.9666	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313525	CORE	24.30	25.40	8.2333	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313526	CORE	25.40	25.90	2.2543	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313527	CORE	25.90	26.30	0.7900	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313528	CORE	26.30	26.70	1.3397	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313529	CORE	26.70	27.30	0.1282	12-Feb-05	09-Feb-05	INTERNAL
	E313530	STD999			7.0596	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313531	CORE	27.30	28.30	0.0665	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313532	CORE	28.30	29.30	0.0765	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313533	CORE	29.30	30.30	0.0358	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313534	CORE	30.30	31.00	0.0252	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313535	CORE	31.00	32.00	0.1014	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313536	CORE	32.00	33.00	0.0667	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-023	E313537	CORE	33.00	34.00	0.0186	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-025	E313538	CORE	33.60	34.60	0.0145	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313539	CORE	34.60	35.60	0.0985	18-Feb-05	10-Feb-05	INTERNAL
	E313540	GRBLANK			0.0139	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313541	CORE	35.60	36.60	0.0838	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313542	CORE	36.60	37.10	0.0473	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313543	CORE	37.10	37.70	0.0652	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313544	CORE	37.70	38.50	0.4038	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313545	CORE	38.50	39.50	14.7300	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313546	CORE	39.50	40.30	4.8958	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313547	CORE	40.30	41.00	2.3651	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313548	CORE	41.00	42.00	1.0249	18-Feb-05	10-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-025	E313549	CORE	42.00	43.00	0.9467	18-Feb-05	10-Feb-05	INTERNAL
	E313550	STD900			3.1033	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-025	E313551	CORE	43.00	44.00	0.0296	18-Feb-05	10-Feb-05	INTERNAL
05-KAZ-026	E313552	CORE	8.00	9.10	0.0548	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313553	CORE	9.10	10.10	5.9277	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313554	CORE	10.10	10.90	0.8900	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313555	CORE	10.90	11.90	0.0307	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313556	CORE	28.00	29.00	0.0169	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313557	CORE	29.00	30.00	0.1625	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313558	CORE	30.00	31.00	0.0391	19-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313559	CORE	31.00	32.00	0.0408	20-Feb-05	12-Feb-05	INTERNAL
	E313560	GRBLANK			0.0100	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313561	CORE	32.00	33.00	2.6324	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313562	CORE	33.00	34.00	0.0379	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313563	CORE	34.00	35.00	0.0184	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313564	CORE	35.00	36.00	0.0342	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313565	CORE	36.00	37.00	1.0631	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313566	CORE	37.00	38.00	0.0504	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313567	CORE	38.00	39.00	0.1017	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313568	CORE	39.00	40.05	0.0372	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313569	CORE	40.05	41.05	1.4809	20-Feb-05	12-Feb-05	INTERNAL
	E313570	STD999			7.0589	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313571	CORE	41.05	42.00	2.7882	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313572	CORE	42.00	43.00	2.3743	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313573	CORE	43.00	43.45	0.3927	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313574	CORE	43.45	44.30	0.0104	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313575	CORE	44.30	45.00	0.0336	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313576	CORE	45.00	46.00	0.0134	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313577	CORE	46.00	47.00	0.0100	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313578	CORE	47.00	48.00	0.0100	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313579	CORE	48.00	49.10	0.0354	20-Feb-05	12-Feb-05	INTERNAL
	E313580	GRBLANK			0.0100	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-026	E313581	CORE	49.10	50.00	0.0289	20-Feb-05	12-Feb-05	INTERNAL
05-KAZ-028	E313582	CORE	25.00	26.20	0.0328	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313583	CORE	26.20	26.80	8.1455	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313584	CORE	26.80	27.30	0.2836	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313585	CORE	27.30	28.30	7.4907	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313586	CORE	28.30	28.90	2.0923	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313587	CORE	28.90	29.90	0.5831	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313588	CORE	29.90	31.00	3.1427	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313589	CORE	31.00	31.60	0.5709	20-Feb-05	13-Feb-05	INTERNAL
	E313590	STD900			3.1729	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313591	CORE	31.60	32.60	0.0406	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313592	CORE	32.60	33.00	0.0382	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313593	CORE	33.00	34.00	0.2066	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313594	CORE	34.00	34.90	0.4771	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313595	CORE	34.90	35.75	0.1184	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313596	CORE	35.75	36.75	0.0322	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313597	CORE	36.75	37.40	0.0187	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313598	CORE	37.40	38.60	0.0943	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313599	CORE	38.60	39.60	0.0458	20-Feb-05	13-Feb-05	INTERNAL
	E313600	GRBLANK			0.0100	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-028	E313601	CORE	39.60	40.60	0.0100	20-Feb-05	13-Feb-05	INTERNAL
05-KAZ-029	E313602	CORE	33.10	33.60	0.0132	20-Feb-05	21-Feb-05	INTERNAL
05-KAZ-029	E313603	CORE	33.60	34.60	0.2097	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313604	CORE	34.60	35.60	0.0436	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313605	CORE	35.60	36.60	1.6671	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313606	CORE	36.60	37.60	1.7094	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313607	CORE	37.60	38.00	4.5969	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313608	CORE	38.00	39.00	2.1945	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313609	CORE	39.00	39.40	0.9596	20-Feb-05	14-Feb-05	INTERNAL
	E313610	STD900			3.1708	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313611	CORE	39.40	40.00	0.0239	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313612	CORE	40.00	41.00	0.0160	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313613	CORE	41.00	41.90	0.0329	19-Feb-05	14-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-029	E313614	CORE	41.90	42.30	0.4298	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313615	CORE	42.30	43.00	1.1434	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313616	CORE	43.00	44.00	1.1557	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313617	CORE	44.00	45.00	0.1446	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-029	E313618	CORE	45.00	46.00	0.0416	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313619	CORE	17.40	18.40	0.0286	19-Feb-05	14-Feb-05	INTERNAL
	E313620	GRBLANK			0.0100	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313621	CORE	18.40	19.30	0.1563	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313622	CORE	19.30	20.40	0.1777	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313623	CORE	20.40	21.00	0.4119	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313624	CORE	21.00	22.00	0.2212	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313625	CORE	27.60	28.00	0.0412	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313626	CORE	28.00	29.00	0.0181	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313627	CORE	29.00	30.00	0.0298	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313628	CORE	30.00	31.00	0.0668	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313629	CORE	31.00	32.20	0.2023	19-Feb-05	14-Feb-05	INTERNAL
	E313630	STD999			6.7824	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313631	CORE	32.20	33.20	0.0340	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313632	CORE	33.20	34.20	0.0284	19-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313633	CORE	34.20	35.00	0.0219	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313634	CORE	35.00	36.00	0.0100	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313635	CORE	36.00	37.00	0.0100	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-031	E313636	CORE	37.00	38.00	0.0100	20-Feb-05	14-Feb-05	INTERNAL
05-KAZ-033	E313637	CORE	5.80	6.40	0.0315	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313638	CORE	6.40	7.05	0.0573	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313639	CORE	7.05	8.00	0.0536	19-Feb-05	15-Feb-05	INTERNAL
	E313640	GRBLANK			0.0100	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313641	CORE	15.00	16.00	0.0277	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313642	CORE	16.00	17.00	0.0674	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313643	CORE	17.00	18.00	0.0573	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313644	CORE	18.00	19.20	0.0195	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313645	CORE	31.50	32.50	0.0142	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313646	CORE	32.50	33.50	0.0148	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313647	CORE	35.20	36.30	0.0915	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313648	CORE	36.30	37.00	0.1252	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313649	CORE	37.00	38.00	0.0142	19-Feb-05	15-Feb-05	INTERNAL
	E313650	STD900			3.0672	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313651	CORE	47.00	48.10	0.0122	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313652	CORE	48.10	48.50	0.0397	19-Feb-05	15-Feb-05	INTERNAL
05-KAZ-033	E313653	CORE	48.50	49.00	0.0100	19-Feb-05	16-Feb-05	INTERNAL
05-KAZ-033	E313654	CORE	49.00	49.80	0.0263	19-Feb-05	16-Feb-05	INTERNAL
05-KAZ-033	E313655	CORE	49.80	50.80	0.0104	19-Feb-05	16-Feb-05	INTERNAL
05-KAZ-033	E313656	CORE	50.80	52.00	0.0374	19-Feb-05	16-Feb-05	INTERNAL
05-KAZ-052	E313657	CORE	10.90	11.90	0.0197	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313658	CORE	11.90	12.90	0.0160	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313659	CORE	12.90	14.00	0.0334	22-Feb-05	17-Feb-05	INTERNAL
	E313660	GRBLANK			0.0190	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313661	CORE	14.00	15.00	1.7536	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313662	CORE	15.00	16.00	1.9764	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313663	CORE	16.00	17.00	0.7441	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313664	CORE	17.00	18.00	1.8512	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313665	CORE	18.00	19.00	0.9820	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313666	CORE	19.00	20.00	1.5228	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313667	CORE	20.00	21.00	0.2988	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313668	CORE	21.00	22.00	0.7579	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313669	CORE	22.00	23.00	0.6503	21-Feb-05	17-Feb-05	INTERNAL
	E313670	STD999			6.8694	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313671	CORE	23.00	23.80	0.7265	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313672	CORE	23.80	24.80	0.1175	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313673	CORE	24.80	25.90	0.1084	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313674	CORE	25.90	26.50	0.5985	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-052	E313675	CORE	26.50	27.50	0.0941	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313676	CORE	3.00	4.00	19.3300	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313677	CORE	4.00	5.00	9.2045	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313678	CORE	5.00	5.50	19.0700	22-Feb-05	17-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-054	E313679	CORE	5.50	6.60	0.3360	21-Feb-05	17-Feb-05	INTERNAL
	E313680	GRBLANK			0.0303	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313681	CORE	6.60	7.60	0.0265	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313682	CORE	7.60	8.60	0.0299	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313683	CORE	10.20	11.20	0.0366	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313684	CORE	11.20	12.20	0.0215	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313685	CORE	12.20	12.70	0.0359	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313686	CORE	12.70	13.45	0.0414	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313687	CORE	13.45	14.45	1.5886	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313688	CORE	14.45	15.45	0.6794	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313689	CORE	15.45	16.45	0.6254	21-Feb-05	17-Feb-05	INTERNAL
	E313690	STD900			3.0916	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313691	CORE	16.45	17.30	0.1879	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313692	CORE	17.30	18.00	0.0444	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313693	CORE	18.00	18.30	0.0726	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313694	CORE	18.30	19.30	0.0554	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313695	CORE	19.30	20.30	0.0282	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313696	CORE	20.30	21.30	0.0167	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313697	CORE	21.30	22.00	0.0176	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313698	CORE	22.00	23.00	0.0336	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313699	CORE	23.00	24.00	0.0212	21-Feb-05	17-Feb-05	INTERNAL
	E313700	GRBLANK			n/rcvd	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-054	E313701	CORE	24.00	25.00	0.0230	01-Mar-05	17-Feb-05	INTERNAL
05-KAZ-053	E313702	CORE	24.00	25.00	0.0278	01-Mar-05	17-Feb-05	INTERNAL
05-KAZ-053	E313703	CORE	25.00	26.00	0.0456	01-Mar-05	17-Feb-05	INTERNAL
05-KAZ-053	E313704	CORE	26.00	26.25	0.0463	01-Mar-05	17-Feb-05	INTERNAL
05-KAZ-053	E313705	CORE	26.25	26.85	0.2033	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313706	CORE	26.85	27.40	0.0628	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313707	CORE	27.40	28.15	0.0783	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313708	CORE	28.15	28.90	0.1506	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313709	CORE	28.90	29.35	5.7390	21-Feb-05	17-Feb-05	INTERNAL
	E313710	STD900			3.2598	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313711	CORE	29.35	30.35	0.0296	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313712	CORE	30.35	31.35	0.0209	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313713	CORE	32.45	33.45	0.0710	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313714	CORE	33.45	34.45	0.0100	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313715	CORE	34.45	35.35	0.2355	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313716	CORE	35.35	36.35	0.0790	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313717	CORE	36.35	37.00	0.0100	25-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313718	CORE	37.00	37.90	0.0100	25-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313719	CORE	37.90	38.35	0.0724	21-Feb-05	17-Feb-05	INTERNAL
	E313720	GRBLANK			0.0100	21-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313721	CORE	38.35	39.25	0.0614	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313722	CORE	39.25	40.25	0.0526	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-053	E313723	CORE	40.25	41.25	0.2812	22-Feb-05	17-Feb-05	INTERNAL
05-KAZ-051	E313724	CORE	19.30	20.30	0.0637	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313725	CORE	20.30	21.30	0.0746	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313726	CORE	21.30	22.30	7.0372	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313727	CORE	22.30	23.00	0.2735	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313728	CORE	23.00	23.50	0.1151	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313729	CORE	23.50	24.50	0.0585	22-Feb-05	19-Feb-05	INTERNAL
	E313730	STD999			7.0050	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313731	CORE	24.50	25.50	0.0281	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313732	CORE	25.50	26.40	0.0218	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313733	CORE	26.40	26.90	0.0782	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313734	CORE	26.90	27.90	0.0187	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313735	CORE	32.80	33.80	0.0221	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313736	CORE	33.80	34.60	0.0169	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313737	CORE	34.60	35.30	0.1688	22-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313738	CORE	35.30	36.30	1.4063	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313739	CORE	36.30	37.30	1.7649	23-Feb-05	19-Feb-05	INTERNAL
	E313740	GRBLANK			0.0314	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313741	CORE	37.30	38.00	1.9749	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313742	CORE	38.00	38.60	0.7595	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313743	CORE	38.60	39.00	0.1674	23-Feb-05	19-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-051	E313744	CORE	39.00	39.80	0.3331	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313745	CORE	39.80	40.60	0.9035	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313746	CORE	40.60	41.60	0.0936	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313747	CORE	41.60	42.60	0.0584	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313748	CORE	42.60	43.20	0.0679	23-Feb-05	19-Feb-05	INTERNAL
05-KAZ-051	E313749	CORE	43.20	43.80	0.1241	23-Feb-05	19-Feb-05	INTERNAL
	E313750	STD900			3.1258	23-Feb-05	19-Feb-05	INTERNAL
	E314500	GRBLANK			0.0238	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314501	CORE	18.40	19.30	0.0734	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314502	CORE	19.30	20.00	0.0575	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314503	CORE	20.00	21.00	0.0506	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314504	CORE	21.00	21.50	0.0576	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314505	CORE	21.50	22.00	1.8205	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314506	CORE	22.00	22.90	0.0639	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314507	CORE	22.90	23.90	1.5901	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314508	CORE	23.90	25.00	2.4383	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314509	CORE	25.00	26.00	2.6092	25-Mar-05	10-Mar-05	INTERNAL
	E314510	STD900			2.9529	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314511	CORE	26.00	27.00	4.9597	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314512	CORE	27.00	28.00	0.3015	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314513	CORE	28.00	28.80	1.5496	25-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314514	CORE	28.80	29.40	0.7411	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314515	CORE	29.40	30.00	0.1425	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314516	CORE	30.00	30.70	0.0410	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314517	CORE	30.70	31.30	0.2853	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314518	CORE	31.30	32.00	0.0912	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314519	CORE	32.00	33.20	0.0405	26-Mar-05	10-Mar-05	INTERNAL
	E314520	GRBLANK			0.0100	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314521	CORE	33.20	34.00	0.0162	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314522	CORE	38.40	39.20	0.0199	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314523	CORE	39.20	39.90	0.0424	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-030	E314524	CORE	39.90	41.00	0.0471	26-Mar-05	10-Mar-05	INTERNAL
05-KAZ-060	E314525	CORE	9.00	10.20	0.0275	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314526	CORE	10.20	11.20	0.3611	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314527	CORE	11.20	12.00	0.2067	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314528	CORE	12.00	13.00	0.3619	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314529	CORE	13.00	14.00	1.1219	25-Mar-05	11-Mar-05	INTERNAL
	E314530	STD999			7.3286	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314531	CORE	14.00	15.00	1.0956	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314532	CORE	15.00	15.90	3.7703	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314533	CORE	15.90	16.30	0.0924	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314534	CORE	16.30	17.00	0.0413	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314535	CORE	17.00	18.00	0.1227	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314536	CORE	18.00	19.00	0.1919	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314537	CORE	19.00	20.00	0.8969	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314538	CORE	20.00	20.70	3.2984	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314539	CORE	20.70	21.40	0.1156	25-Mar-05	11-Mar-05	INTERNAL
	E314540	GRBLANK			0.0449	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314541	CORE	21.40	22.10	0.0588	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314542	CORE	22.10	23.00	0.1046	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314543	CORE	28.00	29.00	0.0314	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314544	CORE	29.00	29.90	0.0363	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314545	CORE	29.90	30.70	0.0836	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314546	CORE	30.70	31.70	0.0334	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314547	CORE	37.00	38.00	0.0385	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314548	CORE	38.00	39.00	0.1134	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314549	CORE	39.00	40.00	0.0391	25-Mar-05	11-Mar-05	INTERNAL
	E314550	STD900			3.0436	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314551	CORE	40.00	41.00	0.0322	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314552	CORE	41.00	42.00	0.0575	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-060	E314553	CORE	42.00	43.00	0.0695	25-Mar-05	11-Mar-05	INTERNAL
05-KAZ-061	E314554	CORE	26.00	27.00	0.0209	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314555	CORE	27.00	28.00	0.0329	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314556	CORE	28.00	29.00	0.0157	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314557	CORE	36.00	37.00	0.0312	27-Mar-05	13-Mar-05	INTERNAL



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05-KAZ-061	E314558	CORE	37.00	37.40	0.0438	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314559	CORE	37.40	38.40	0.1133	27-Mar-05	13-Mar-05	INTERNAL
	E314560	GRBLANK			0.0177	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314561	CORE	38.40	39.40	0.0509	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314562	CORE	39.40	40.40	0.0437	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314563	CORE	40.40	41.30	0.0330	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314564	CORE	41.30	42.00	0.0809	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314565	CORE	42.00	43.00	0.0476	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314566	CORE	43.00	44.00	0.1493	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314567	CORE	44.00	45.00	0.0288	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314568	CORE	45.00	46.00	0.0664	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314569	CORE	46.00	46.70	0.0592	27-Mar-05	13-Mar-05	INTERNAL
	E314570	STD999			7.3964	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314571	CORE	46.70	47.40	0.0510	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314572	CORE	47.40	48.00	0.0225	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314573	CORE	48.00	49.00	0.0251	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314574	CORE	49.00	50.00	0.0370	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314575	CORE	50.00	51.00	0.0229	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-061	E314576	CORE	51.00	52.00	0.0288	27-Mar-05	13-Mar-05	INTERNAL
05-KAZ-062	E314577	CORE	37.90	38.60	0.0329	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314578	CORE	38.60	39.00	0.0855	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314579	CORE	39.00	40.00	0.0410	25-Mar-05	14-Mar-05	INTERNAL
	E314580	GRBLANK			0.0235	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314581	CORE	40.00	41.00	0.0581	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314582	CORE	41.00	42.00	0.1293	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314583	CORE	42.00	43.00	0.9296	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314584	CORE	43.00	44.00	0.1097	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314585	CORE	44.00	45.00	0.0559	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314586	CORE	45.00	46.00	0.0373	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314587	CORE	46.00	46.50	0.1273	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314588	CORE	46.50	47.00	0.1221	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314589	CORE	47.00	48.00	0.0294	25-Mar-05	14-Mar-05	INTERNAL
	E314590	STD900			3.2972	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314591	CORE	48.00	49.00	0.0267	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314592	CORE	49.00	50.00	0.0506	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314593	CORE	50.00	51.00	0.0750	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314594	CORE	51.00	52.00	0.0637	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314595	CORE	52.00	53.00	0.1465	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314596	CORE	53.00	53.70	0.1274	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-062	E314597	CORE	53.70	54.40	0.3757	25-Mar-05	14-Mar-05	INTERNAL
05-KAZ-063	E314598	CORE	35.00	35.70	0.0321	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314599	CORE	35.70	36.90	0.1434	30-Mar-05	15-Mar-05	INTERNAL
	E314600	GRBLANK			0.0221	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314601	CORE	36.90	38.10	0.0683	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314602	CORE	38.10	39.10	0.0344	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314603	CORE	44.00	45.20	0.0266	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314604	CORE	45.20	46.00	0.0472	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314605	CORE	46.00	47.00	0.0410	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314606	CORE	47.00	48.00	0.1384	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314607	CORE	48.00	49.00	0.0209	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314608	CORE	49.00	50.00	0.0867	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314609	CORE	50.00	51.00	0.0799	30-Mar-05	15-Mar-05	INTERNAL
	E314610	STD900			3.1855	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-063	E314611	CORE	51.00	52.00	0.0359	30-Mar-05	15-Mar-05	INTERNAL
05-KAZ-059	E314612	CORE	2.10	2.70	0.0395	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314613	CORE	2.70	3.40	4.5807	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314614	CORE	3.40	4.10	5.4618	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314615	CORE	4.10	4.80	0.0267	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314616	CORE	4.80	5.40	0.0581	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314617	CORE	5.40	6.40	0.2263	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314618	CORE	6.40	7.00	0.0263	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314619	CORE	7.00	8.10	0.0251	30-Mar-05	16-Mar-05	INTERNAL
	E314620	GRBLANK			0.0142	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314621	CORE	8.10	9.20	0.0346	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314622	CORE	9.20	9.80	0.0882	30-Mar-05	16-Mar-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-059	E314623	CORE	9.80	10.40	22.3300	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314624	CORE	10.40	11.10	0.5986	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314625	CORE	17.30	18.10	0.0393	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314626	CORE	18.10	19.00	0.0782	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314627	CORE	19.00	20.00	1.6873	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314628	CORE	20.00	20.90	1.1724	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314629	CORE	20.90	22.00	2.9746	30-Mar-05	16-Mar-05	INTERNAL
	E314630	STD999			7.0253	30-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314631	CORE	22.00	23.20	0.3193	27-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314632	CORE	23.20	23.90	0.1465	27-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314633	CORE	23.90	24.50	0.0650	27-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314634	CORE	24.50	25.30	0.1167	27-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314635	CORE	25.30	26.10	0.1813	27-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314636	CORE	26.10	27.10	0.0133	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314637	CORE	40.00	41.00	0.0100	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314638	CORE	41.00	42.00	0.1460	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314639	CORE	42.00	43.00	0.0100	31-Mar-05	16-Mar-05	INTERNAL
	E314640	GRBLANK			0.0113	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314641	CORE	43.00	44.00	0.0283	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314642	CORE	44.00	45.00	0.0103	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314643	CORE	45.00	46.00	0.0272	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-059	E314644	CORE	46.00	47.00	0.0225	31-Mar-05	16-Mar-05	INTERNAL
05-KAZ-001	E320001	CORE	3.60	4.60	0.1280	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320002	CORE	4.60	4.90	7.7800	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320003	CORE	4.90	6.00	0.2520	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320004	CORE	6.00	6.70	0.0180	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320005	CORE	6.70	7.30	0.0710	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320006	CORE	7.30	7.60	0.0680	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320007	CORE	7.60	8.60	0.1810	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320008	CORE	13.40	14.40	0.0140	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320009	CORE	14.40	14.70	0.2180	25-Feb-05	30-Jan-05	CHEMEX
	E320010	STD900			3.3500	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320011	CORE	14.70	16.00	0.0130	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320012	CORE	16.00	17.00	0.0290	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320013	CORE	17.00	17.90	0.0940	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320014	CORE	17.90	18.20	0.1740	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320015	CORE	18.20	19.20	0.0170	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320016	CORE	21.00	21.90	0.8510	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320017	CORE	21.90	22.30	0.0270	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320018	CORE	22.30	23.10	0.0650	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320019	CORE	23.10	23.70	0.0290	25-Feb-05	30-Jan-05	CHEMEX
	E320020	GRBLANK			0.0025	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320021	CORE	23.70	24.20	0.0050	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320022	CORE	24.20	24.70	0.0025	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320023	CORE	24.70	25.20	0.0050	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320024	CORE	25.20	25.50	0.0170	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-001	E320025	CORE	25.50	26.50	0.0050	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320026	CORE	8.70	9.70	0.0330	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320027	CORE	9.70	10.10	12.3000	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320028	CORE	10.10	11.10	0.6070	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320029	CORE	11.10	12.10	0.0420	25-Feb-05	30-Jan-05	CHEMEX
	E320030	STD999			6.9100	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320031	CORE	12.10	13.10	0.0180	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320032	CORE	13.10	14.10	0.0140	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320033	CORE	14.10	15.20	0.0090	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320034	CORE	15.20	16.40	0.0590	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320035	CORE	16.40	17.00	0.0080	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320036	CORE	17.00	17.50	5.0900	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320037	CORE	17.50	18.20	2.5500	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320038	CORE	18.20	19.20	0.0910	25-Feb-05	30-Jan-05	CHEMEX
05-KAZ-002	E320039	CORE	121.50	122.50	0.0180	25-Feb-05	01-Feb-05	CHEMEX
	E320040	GRBLANK			0.0050	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320041	CORE	122.50	123.70	0.1470	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320042	CORE	123.70	124.70	0.0050	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320043	CORE	135.80	136.80	0.0810	25-Feb-05	01-Feb-05	CHEMEX

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-002	E320044	CORE	136.80	137.70	0.7380	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320045	CORE	137.70	138.10	0.5320	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320046	CORE	138.10	138.40	0.3720	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320047	CORE	138.40	139.00	0.0250	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320048	CORE	139.00	140.00	0.0080	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320049	CORE	140.00	141.00	0.0390	25-Feb-05	01-Feb-05	CHEMEX
	E320050	STD900			3.2100	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320051	CORE	141.00	142.00	0.0240	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320052	CORE	142.00	143.00	0.0160	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320053	CORE	143.00	144.10	0.0310	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320054	CORE	144.10	145.10	0.0100	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320055	CORE	148.95	149.95	0.0110	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320056	CORE	149.95	150.90	0.0600	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320057	CORE	150.90	151.85	0.0150	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320058	CORE	151.85	152.35	0.0350	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-002	E320059	CORE	152.35	153.35	0.0025	25-Feb-05	01-Feb-05	CHEMEX
	E320060	GRBLANK			0.0025	25-Feb-05	01-Feb-05	CHEMEX
05-KAZ-041	E320061	CORE	6.45	7.45	0.0240	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320062	CORE	7.45	8.45	0.0230	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320063	CORE	8.45	9.10	0.0025	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320064	CORE	9.10	10.25	0.0025	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320065	CORE	10.25	11.00	0.0240	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320066	CORE	11.00	12.00	0.0025	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320067	CORE	12.00	12.80	0.0080	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320068	CORE	12.80	13.80	0.0025	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320069	CORE	13.80	14.80	0.0025	25-Feb-05	03-Feb-05	CHEMEX
	E320070	STD999			7.0400	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320071	CORE	14.80	15.80	0.0110	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320072	CORE	15.80	16.80	0.0180	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320073	CORE	16.80	17.80	1.9850	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320074	CORE	17.80	18.85	4.8300	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320075	CORE	18.85	19.35	3.9700	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320076	CORE	19.35	20.00	0.5770	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320077	CORE	20.00	20.55	0.2570	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320078	CORE	20.55	21.05	0.3550	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320079	CORE	21.05	22.00	4.4300	25-Feb-05	03-Feb-05	CHEMEX
	E320080	GRBLANK			0.0090	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320081	CORE	22.00	23.00	1.2450	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320082	CORE	23.00	24.00	0.1620	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320083	CORE	24.00	25.00	1.1700	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320084	CORE	25.00	26.00	2.6100	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320085	CORE	26.00	27.00	3.1700	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320086	CORE	27.00	28.10	0.1750	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320087	CORE	28.10	28.80	0.2450	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320088	CORE	28.80	29.80	0.1050	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320089	CORE	29.80	30.90	0.0560	25-Feb-05	03-Feb-05	CHEMEX
	E320090	STD900			3.3300	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320091	CORE	30.90	32.00	0.0170	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320092	CORE	32.00	33.00	0.0170	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320093	CORE	33.00	34.00	0.0250	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320094	CORE	34.00	35.00	0.0290	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320095	CORE	35.00	36.00	0.0410	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320096	CORE	36.00	36.50	0.0430	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320097	CORE	36.50	37.00	0.0820	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320098	CORE	37.00	38.00	0.0090	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320099	CORE	38.00	39.00	0.0410	25-Feb-05	03-Feb-05	CHEMEX
	E320100	GRBLANK			0.0025	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320101	CORE	39.00	40.00	0.0025	25-Feb-05	03-Feb-05	CHEMEX
05-KAZ-041	E320102	CORE	40.00	41.00	0.0110	25-Feb-05	07-Feb-05	CHEMEX
05-KAZ-003	E320103	CORE	3.00	4.00	0.0080	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320104	CORE	4.00	5.00	0.0360	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320105	CORE	5.00	6.00	0.0025	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320106	CORE	6.00	7.00	0.0590	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320107	CORE	11.00	11.90	0.0190	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320108	CORE	11.90	12.90	3.7100	25-Feb-05	05-Feb-05	CHEMEX

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-003	E320109	CORE	12.90	13.90	0.0890	25-Feb-05	05-Feb-05	CHEMEX
	E320110	STD900			3.2400	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320111	CORE	13.90	14.90	0.1170	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320112	CORE	18.00	19.00	0.0090	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320113	CORE	19.00	19.75	2.1100	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320114	CORE	19.75	20.50	1.2650	25-Feb-05	09-Feb-05	CHEMEX
05-KAZ-003	E320115	CORE	20.50	21.50	0.0900	25-Feb-05	09-Feb-05	CHEMEX
05-KAZ-003	E320116	CORE	25.10	25.50	0.0450	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320117	CORE	25.50	26.25	0.0250	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320118	CORE	26.25	27.10	1.8600	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320119	CORE	27.10	28.00	1.2300	25-Feb-05	05-Feb-05	CHEMEX
	E320120	GRBLANK			0.0070	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320121	CORE	28.00	28.85	1.4000	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320122	CORE	28.85	29.75	0.0420	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320123	CORE	31.40	32.40	0.7370	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320124	CORE	32.40	33.40	14.5000	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320125	CORE	33.40	34.10	8.6800	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320126	CORE	34.10	35.10	2.1000	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-003	E320127	CORE	35.10	36.00	0.6280	25-Feb-05	05-Feb-05	CHEMEX
05-KAZ-007	E320128	CORE	21.25	22.25	0.2411	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320129	CORE	22.25	22.90	0.7585	13-Feb-05	06-Feb-05	INTERNAL
	E320130	STD999			6.9708	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320131	CORE	22.90	23.45	1.1059	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320132	CORE	23.45	24.45	0.0584	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320133	CORE	30.10	31.10	0.0854	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320134	CORE	31.10	31.45	0.0383	13-Feb-05	15-Feb-05	INTERNAL
05-KAZ-007	E320135	CORE	31.45	32.20	0.0928	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320136	CORE	32.20	32.50	0.0100	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320137	CORE	32.50	33.30	21.0000	14-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320138	CORE	33.30	33.60	4.1007	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320139	CORE	33.60	34.40	0.0772	13-Feb-05	06-Feb-05	INTERNAL
	E320140	GRBLANK			0.0100	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320141	CORE	34.40	34.90	0.0474	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320142	CORE	34.90	35.90	0.0291	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320143	CORE	35.90	36.90	0.0241	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320144	CORE	36.90	37.70	0.0175	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320145	CORE	37.70	38.35	0.0100	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320146	CORE	38.35	38.60	0.0370	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320147	CORE	38.60	39.05	4.0482	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320148	CORE	39.05	40.05	0.4090	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320149	CORE	40.05	41.00	0.0989	13-Feb-05	06-Feb-05	INTERNAL
	E320150	STD900			3.1826	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320151	CORE	41.00	42.00	0.0132	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-007	E320152	CORE	42.00	43.00	0.0149	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320153	CORE	19.60	20.50	0.1118	12-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320154	CORE	20.50	21.00	2.3313	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320155	CORE	21.00	21.80	0.0421	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320156	CORE	21.80	22.30	0.0480	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320157	CORE	22.30	23.05	5.6390	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320158	CORE	23.05	23.80	4.1034	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320159	CORE	23.80	24.30	0.0637	13-Feb-05	06-Feb-05	INTERNAL
	E320160	GRBLANK			0.0100	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320161	CORE	24.30	25.05	2.4034	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320162	CORE	25.05	25.70	2.8439	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320163	CORE	25.70	26.50	0.0997	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320164	CORE	26.50	26.90	0.0254	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320165	CORE	26.90	27.40	0.0190	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320166	CORE	27.40	27.95	0.0129	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320167	CORE	27.95	28.90	0.3520	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320168	CORE	28.90	29.30	9.7000	14-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320169	CORE	29.30	30.15	10.9660	14-Feb-05	06-Feb-05	INTERNAL
	E320170	STD999			6.8878	14-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320171	CORE	30.15	30.90	6.1247	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320172	CORE	30.90	31.90	3.7949	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320173	CORE	31.90	32.90	0.0993	13-Feb-05	06-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-009	E320174	CORE	32.90	33.60	0.0228	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320175	CORE	33.60	34.60	0.0576	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320176	CORE	34.60	35.65	0.0304	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320177	CORE	35.65	36.75	2.6098	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320178	CORE	36.75	37.75	0.0743	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-009	E320179	CORE	37.75	38.75	0.0131	13-Feb-05	06-Feb-05	INTERNAL
	E320180	GRBLANK			0.0100	13-Feb-05	06-Feb-05	INTERNAL
05-KAZ-013	E320181	CORE	26.00	27.00	0.0305	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320182	CORE	27.00	28.00	0.0217	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320183	CORE	28.00	29.00	0.1277	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320184	CORE	29.00	30.00	0.0230	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320185	CORE	30.00	31.00	0.0175	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320186	CORE	31.00	31.75	0.0288	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320187	CORE	31.75	32.80	0.0329	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320188	CORE	32.80	34.00	0.0692	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320189	CORE	39.00	39.60	0.0602	15-Feb-05	07-Feb-05	INTERNAL
	E320190	STD900			3.2335	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320191	CORE	39.60	40.20	11.6666	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320192	CORE	40.20	41.05	10.5865	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320193	CORE	41.05	42.00	0.1782	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320194	CORE	42.00	42.75	0.0469	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320195	CORE	42.75	43.35	0.0344	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320196	CORE	43.35	43.90	2.8588	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320197	CORE	43.90	44.40	1.3034	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320198	CORE	44.40	45.00	0.0661	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-013	E320199	CORE	45.00	46.00	0.0418	16-Feb-05	07-Feb-05	INTERNAL
	E320200	GRBLANK			0.0140	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320201	CORE	26.30	27.10	0.1465	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320202	CORE	27.10	28.10	0.4197	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320203	CORE	28.10	28.90	14.9000	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320204	CORE	28.90	30.00	0.1641	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320205	CORE	40.00	41.00	0.0534	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320206	CORE	41.00	42.00	0.1451	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320207	CORE	42.00	43.00	0.2973	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320208	CORE	43.00	44.00	4.4310	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320209	CORE	44.00	45.00	1.2721	16-Feb-05	07-Feb-05	INTERNAL
	E320210	STD900			3.1756	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320211	CORE	45.00	45.50	0.9884	16-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320212	CORE	45.50	46.20	0.1020	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320213	CORE	46.20	47.00	0.1602	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320214	CORE	47.00	48.00	0.0488	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-017	E320215	CORE	48.00	49.00	0.0308	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-019	E320216	CORE	32.00	33.00	0.0100	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320217	CORE	33.00	34.00	0.0144	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320218	CORE	34.00	34.80	0.0262	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320219	CORE	34.80	35.60	0.0100	17-Feb-05	08-Feb-05	INTERNAL
	E320220	GRBLANK			0.0100	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320221	CORE	35.60	36.35	0.0845	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320222	CORE	36.35	37.00	0.0371	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320223	CORE	37.00	37.70	0.0910	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320224	CORE	37.70	38.60	0.0903	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320225	CORE	38.60	39.15	0.1548	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320226	CORE	39.15	40.20	0.0394	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320227	CORE	40.20	41.20	0.2530	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320228	CORE	41.20	42.20	12.7000	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320229	CORE	42.20	43.20	1.0239	17-Feb-05	08-Feb-05	INTERNAL
	E320230	STD999			6.9967	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320231	CORE	43.20	43.80	0.0762	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320232	CORE	43.80	44.20	0.1558	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320233	CORE	44.20	45.00	0.0407	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320234	CORE	45.00	45.30	0.0229	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320235	CORE	45.30	46.40	0.0490	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320236	CORE	46.40	47.60	4.1306	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320237	CORE	47.60	48.60	7.5990	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320238	CORE	48.60	49.60	8.8406	17-Feb-05	08-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-019	E320239	CORE	49.60	50.25	1.1611	17-Feb-05	08-Feb-05	INTERNAL
	E320240	GRBLANK			0.0267	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-019	E320241	CORE	50.25	51.25	0.0537	17-Feb-05	08-Feb-05	INTERNAL
05-KAZ-021	E320242	CORE	14.10	15.10	0.0347	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320243	CORE	15.10	15.30	0.0651	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320244	CORE	15.30	16.30	0.0250	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320245	CORE	19.30	20.30	4.7831	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320246	CORE	20.30	21.20	4.1984	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320247	CORE	21.20	21.70	0.7181	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320248	CORE	21.70	22.70	9.1695	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-021	E320249	CORE	22.70	23.30	10.9141	12-Feb-05	09-Feb-05	INTERNAL
	E320250	STD900			3.2626	12-Feb-05	09-Feb-05	INTERNAL
05-KAZ-005	E320414	CORE	21.25	22.25	0.0230	11-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320415	CORE	22.25	23.05	5.4078	11-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320416	CORE	23.05	24.05	3.4417	11-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320417	CORE	24.05	25.20	0.0743	11-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320418	CORE	25.20	26.40	0.0492	11-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320419	CORE	26.40	27.00	0.0495	11-Feb-05	05-Feb-05	INTERNAL
	E320420	GRBLANK			0.0175	11-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320421	CORE	27.00	28.00	0.0808	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320422	CORE	28.00	29.00	0.1815	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320423	CORE	29.00	29.60	1.5732	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320424	CORE	29.60	30.30	1.0567	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320425	CORE	30.30	31.30	0.8474	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320426	CORE	31.30	32.25	2.3758	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320427	CORE	32.25	33.25	0.0580	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320428	CORE	33.25	34.00	0.0311	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320429	CORE	34.00	35.00	0.1280	12-Feb-05	05-Feb-05	INTERNAL
	E320430	STD999			7.0068	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320431	CORE	35.00	36.00	0.0380	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320432	CORE	36.00	36.95	0.3090	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320433	CORE	36.95	37.50	14.1330	13-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320434	CORE	37.50	38.10	0.9170	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320435	CORE	38.10	39.00	3.9198	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320436	CORE	39.00	39.80	5.1000	13-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320437	CORE	39.80	40.65	0.0644	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320438	CORE	40.65	41.40	0.2972	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320439	CORE	41.40	41.90	0.2288	12-Feb-05	05-Feb-05	INTERNAL
	E320440	GRBLANK			0.0112	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320441	CORE	41.90	43.00	0.1537	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320442	CORE	43.00	44.00	0.0776	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-005	E320443	CORE	44.00	45.00	0.0180	12-Feb-05	05-Feb-05	INTERNAL
05-KAZ-011	E320444	CORE	37.00	37.90	0.0533	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320445	CORE	37.90	38.70	7.0484	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320446	CORE	38.70	39.35	0.0403	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320447	CORE	39.35	40.00	0.0184	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320448	CORE	40.00	41.00	0.9412	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320449	CORE	41.00	42.00	0.0354	15-Feb-05	06-Feb-05	INTERNAL
	E320450	STD900			3.0895	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320451	CORE	42.00	43.05	1.2661	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320452	CORE	43.05	44.00	0.0394	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320453	CORE	44.00	45.00	0.0328	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320454	CORE	46.00	47.00	0.0360	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320455	CORE	47.00	48.00	0.0359	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-011	E320456	CORE	48.00	49.00	0.1332	15-Feb-05	06-Feb-05	INTERNAL
05-KAZ-045	E320576	CORE	1.30	2.05	0.0100	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320577	CORE	2.05	2.80	0.0100	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320578	CORE	2.80	3.80	0.0202	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320579	CORE	3.80	4.80	0.0207	07-Mar-05	24-Feb-05	INTERNAL
	E320580	GRBLANK			0.0100	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320581	CORE	4.80	5.95	0.1595	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320582	CORE	5.95	7.00	0.0964	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320583	CORE	7.00	8.00	0.0152	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320584	CORE	8.00	8.70	0.0174	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320585	CORE	8.70	9.40	0.0461	07-Mar-05	24-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-045	E320586	CORE	9.40	10.40	0.0754	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320587	CORE	10.40	11.40	0.0303	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320588	CORE	11.40	11.90	4.1701	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320589	CORE	11.90	12.55	0.0493	07-Mar-05	24-Feb-05	INTERNAL
	E320590	STD900			3.2014	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320591	CORE	12.55	12.85	0.0549	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320592	CORE	12.85	13.10	0.1431	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320593	CORE	13.10	14.10	0.0433	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320594	CORE	14.10	15.10	0.2606	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320595	CORE	15.10	16.10	0.0498	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320596	CORE	16.10	17.10	0.0160	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320597	CORE	17.10	18.10	0.0354	07-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320598	CORE	18.10	19.10	0.0471	08-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320599	CORE	19.10	20.30	0.1667	08-Mar-05	24-Feb-05	INTERNAL
	E320600	GRBLANK			0.0190	08-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320601	CORE	20.30	21.30	0.0541	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320602	CORE	21.30	22.30	0.0206	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320603	CORE	22.30	22.95	0.0599	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320604	CORE	22.95	23.40	3.8041	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320605	CORE	23.40	24.40	0.0151	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320606	CORE	24.40	25.40	0.0115	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320607	CORE	26.80	27.80	0.0169	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320608	CORE	27.80	28.80	0.0298	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320609	CORE	28.80	29.80	1.4910	13-Mar-05	24-Feb-05	INTERNAL
	E320610	STD900			3.0669	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320611	CORE	29.80	30.75	1.2689	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320612	CORE	30.75	31.75	0.0349	21-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320613	CORE	31.75	32.75	0.1187	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320614	CORE	32.75	34.00	0.0304	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320615	CORE	34.00	34.45	0.1094	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320616	CORE	34.45	35.45	0.0223	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-045	E320617	CORE	35.45	36.45	0.0419	13-Mar-05	24-Feb-05	INTERNAL
05-KAZ-044	E320618	CORE	5.20	6.00	0.0253	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320619	CORE	6.00	7.00	0.0762	13-Mar-05	25-Feb-05	INTERNAL
	E320620	GRBLANK			0.0100	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320621	CORE	7.00	8.00	0.0309	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320622	CORE	8.00	9.00	4.9005	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320623	CORE	9.00	9.80	0.0579	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320624	CORE	9.80	11.00	0.1921	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320625	CORE	11.00	12.00	0.1294	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320626	CORE	12.00	13.00	0.0183	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320627	CORE	13.00	14.00	0.0105	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320628	CORE	14.00	15.00	0.0137	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320629	CORE	15.00	16.00	0.0571	13-Mar-05	25-Feb-05	INTERNAL
	E320630	STD999			6.9970	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320631	CORE	16.00	17.00	0.3076	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320632	CORE	17.00	17.40	0.0236	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320633	CORE	17.40	18.40	0.0112	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320634	CORE	18.40	19.40	0.0123	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320635	CORE	21.25	22.15	0.6549	13-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320636	CORE	24.60	25.60	0.0179	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320637	CORE	25.60	26.60	0.0337	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320638	CORE	26.60	27.60	0.0273	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320639	CORE	27.60	28.85	2.4128	14-Mar-05	25-Feb-05	INTERNAL
	E320640	GRBLANK			0.0466	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320641	CORE	28.85	29.85	0.3428	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-044	E320642	CORE	29.85	30.85	0.0182	14-Mar-05	25-Feb-05	INTERNAL
05-KAZ-057	E320751	CORE	13.45	14.45	0.0265	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320752	CORE	14.45	15.45	0.0256	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320753	CORE	15.45	16.50	0.1188	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320754	CORE	16.50	17.35	0.0410	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320755	CORE	17.35	18.15	0.0449	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320756	CORE	18.15	19.15	0.1170	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320757	CORE	19.15	20.15	0.4392	14-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320758	CORE	20.15	21.15	0.0972	14-Mar-05	27-Feb-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-057	E320759	CORE	21.15	22.15	0.0782	11-Mar-05	27-Feb-05	INTERNAL
	E320760	GRBLANK			0.0100	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320761	CORE	22.15	22.90	7.8996	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320762	CORE	22.90	23.50	22.9333	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320763	CORE	23.50	24.40	1.2665	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320764	CORE	24.40	25.30	0.0858	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320765	CORE	25.30	26.20	0.1828	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320766	CORE	26.20	26.90	6.8154	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320767	CORE	26.90	27.55	0.1080	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320768	CORE	27.55	28.20	0.5740	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320769	CORE	28.20	29.20	1.5227	11-Mar-05	27-Feb-05	INTERNAL
	E320770	STD999			6.7452	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320771	CORE	29.20	30.20	1.2908	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320772	CORE	30.20	31.20	2.6806	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320773	CORE	31.20	32.20	2.0569	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320774	CORE	32.20	33.20	0.4442	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320775	CORE	33.20	34.15	0.0640	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320776	CORE	34.15	34.70	0.4338	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320777	CORE	34.70	35.45	0.2507	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320778	CORE	35.45	36.20	0.2019	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320779	CORE	36.20	37.20	0.0433	11-Mar-05	27-Feb-05	INTERNAL
	E320780	GRBLANK			0.0127	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320781	CORE	37.20	38.20	0.0171	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320782	CORE	38.20	39.20	0.0278	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-057	E320783	CORE	39.20	40.00	0.0469	11-Mar-05	27-Feb-05	INTERNAL
05-KAZ-021	E320784	CORE	16.30	17.30	0.2046	14-Mar-05	02-Mar-05	INTERNAL
05-KAZ-021	E320785	CORE	17.30	18.30	0.0954	14-Mar-05	02-Mar-05	INTERNAL
05-KAZ-021	E320786	CORE	18.30	19.30	0.1216	14-Mar-05	02-Mar-05	INTERNAL
05-KAZ-027	E333001	CORE	3.60	4.20	2.6592	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333002	CORE	4.20	5.30	0.0319	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333003	CORE	5.30	6.40	0.0326	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333004	CORE	6.40	7.50	0.1231	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333005	CORE	7.50	8.50	5.5465	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333006	CORE	8.50	9.50	6.3604	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333007	CORE	9.50	10.50	0.0450	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333008	CORE	10.50	11.10	0.7374	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333009	CORE	11.10	12.00	0.1914	06-Feb-05	26-Jan-05	INTERNAL
	E333010	STD900			3.1228	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333011	CORE	12.00	13.00	3.0960	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333012	CORE	13.00	13.90	1.2555	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333013	CORE	13.90	14.70	0.6157	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333014	CORE	14.70	15.50	2.5322	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333015	CORE	15.50	16.50	0.2337	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333016	CORE	16.50	17.50	0.0592	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333017	CORE	17.50	18.50	0.0402	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333018	CORE	18.50	19.50	0.0380	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333019	CORE	19.50	20.50	0.0585	06-Feb-05	26-Jan-05	INTERNAL
	E333020	GRBLANK			0.0207	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333021	CORE	20.50	21.50	0.0537	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333022	CORE	21.50	22.50	0.2345	06-Feb-05	26-Jan-05	INTERNAL
05-KAZ-027	E333023	CORE	68.80	69.80	0.0417	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333024	CORE	69.80	70.80	0.1940	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333025	CORE	70.80	71.80	0.0850	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333026	CORE	71.80	72.80	0.0455	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333027	CORE	72.80	74.00	0.0401	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333028	CORE	81.00	82.00	0.0254	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333029	CORE	82.00	83.00	0.0475	06-Feb-05	28-Jan-05	INTERNAL
	E333030	STD999			7.1177	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333031	CORE	83.00	84.00	0.0546	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333032	CORE	84.00	85.00	0.0558	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333033	CORE	85.00	86.00	0.0980	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333034	CORE	86.00	87.00	0.0469	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333035	CORE	87.00	88.00	0.0100	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333036	CORE	88.00	88.60	0.0161	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333037	CORE	88.60	89.20	0.0405	06-Feb-05	28-Jan-05	INTERNAL




HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-027	E333038	CORE	89.20	89.70	0.0147	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333039	CORE	89.70	90.10	0.0562	06-Feb-05	28-Jan-05	INTERNAL
	E333040	GRBLANK			0.0198	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333041	CORE	90.10	90.60	0.1890	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333042	CORE	90.60	91.00	0.0441	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333043	CORE	91.00	92.00	0.0353	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333044	CORE	92.00	93.00	0.0181	06-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333045	CORE	93.00	93.60	0.0325	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333046	CORE	93.60	94.00	0.0259	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333047	CORE	94.00	95.00	0.0486	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333048	CORE	95.00	96.00	0.0657	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333049	CORE	96.00	97.00	0.4254	07-Feb-05	28-Jan-05	INTERNAL
	E333050	STD900			3.1764	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333051	CORE	97.00	98.00	0.1235	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333052	CORE	98.00	99.00	0.3286	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333053	CORE	99.00	100.00	0.3585	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333054	CORE	100.00	101.00	0.0665	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333055	CORE	101.00	102.00	0.0848	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333056	CORE	102.00	103.00	0.0248	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333057	CORE	103.00	104.00	0.0808	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333058	CORE	104.00	105.00	0.1141	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333059	CORE	105.00	106.00	0.1006	07-Feb-05	28-Jan-05	INTERNAL
	E333060	GRBLANK			0.0244	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333061	CORE	106.00	106.50	0.0446	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333062	CORE	106.50	107.10	0.0320	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333063	CORE	107.10	108.10	0.0399	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333064	CORE	108.10	109.10	0.1010	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333065	CORE	109.10	110.10	0.1001	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333066	CORE	110.10	111.10	0.0435	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333067	CORE	111.10	112.10	0.0299	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333068	CORE	112.10	113.20	0.0420	07-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333069	CORE	113.20	114.40	0.1069	08-Feb-05	28-Jan-05	INTERNAL
	E333070	STD999			7.1193	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333071	CORE	114.40	115.10	0.0417	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333072	CORE	115.10	116.00	0.0377	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333073	CORE	116.00	117.00	0.0100	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333074	CORE	122.00	123.00	0.0100	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333075	CORE	123.00	123.50	0.0383	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333076	CORE	123.50	124.30	0.0441	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333077	CORE	124.30	125.10	0.0388	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333078	CORE	125.10	126.00	0.1520	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333079	CORE	126.00	127.00	0.0113	08-Feb-05	28-Jan-05	INTERNAL
	E333080	GRBLANK			0.0100	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333081	CORE	127.00	128.10	0.0994	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333082	CORE	128.10	129.00	0.0474	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333083	CORE	129.00	130.00	0.0264	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333084	CORE	130.00	131.00	0.0721	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333085	CORE	131.00	132.00	0.0481	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333086	CORE	132.00	133.00	0.0208	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333087	CORE	133.00	134.00	0.0287	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333088	CORE	134.00	135.00	0.2095	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333089	CORE	135.00	135.60	0.0770	08-Feb-05	28-Jan-05	INTERNAL
	E333090	STD999			7.2824	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333091	CORE	135.60	136.60	0.0250	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333092	CORE	136.60	137.70	0.0126	08-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333093	CORE	137.70	139.00	0.4175	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333094	CORE	139.00	140.00	0.0314	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333095	CORE	140.00	141.00	0.0494	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333096	CORE	141.00	142.00	0.0364	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333097	CORE	142.00	143.00	0.0354	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333098	CORE	143.00	144.00	0.0861	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333099	CORE	144.00	145.00	0.0586	09-Feb-05	28-Jan-05	INTERNAL
	E333100	GRBLANK			0.0100	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333101	CORE	145.00	146.00	0.0693	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333102	CORE	146.00	147.00	0.0561	09-Feb-05	28-Jan-05	INTERNAL

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB
05-KAZ-027	E333103	CORE	147.00	148.00	0.0390	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333104	CORE	148.00	149.00	0.0341	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333105	CORE	149.00	150.00	0.1421	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333106	CORE	150.00	151.00	0.0442	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333107	CORE	151.00	152.00	0.0160	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333108	CORE	152.00	152.60	0.1084	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333109	CORE	152.60	153.00	0.0182	09-Feb-05	28-Jan-05	INTERNAL
	E333110	STD900			6.9259	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-027	E333111	CORE	153.00	154.00	0.0362	09-Feb-05	28-Jan-05	INTERNAL
05-KAZ-015	E333468	CORE	16.50	17.50	0.3015	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333469	CORE	23.00	24.20	0.0465	15-Feb-05	07-Feb-05	INTERNAL
	E333470	STD999			7.1062	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333471	CORE	24.20	25.40	0.0501	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333472	CORE	25.40	26.00	7.1319	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333473	CORE	26.00	27.05	14.6000	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333474	CORE	27.05	28.00	2.6314	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333475	CORE	28.00	28.75	0.1301	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333476	CORE	28.75	29.55	0.3496	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333477	CORE	29.55	30.60	0.0127	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333478	CORE	30.60	31.70	0.0290	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333479	CORE	34.75	35.75	0.0155	14-Feb-05	07-Feb-05	INTERNAL
	E333480	GRBLANK			0.0123	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333481	CORE	35.75	36.90	1.2911	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333482	CORE	36.90	38.00	5.4330	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333483	CORE	38.00	39.00	2.2408	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333484	CORE	39.00	39.60	3.0683	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333485	CORE	39.60	40.50	1.9364	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333486	CORE	40.50	41.00	0.1115	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333487	CORE	41.00	41.70	0.1034	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333488	CORE	41.70	42.55	0.1484	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333489	CORE	42.55	43.50	0.0354	15-Feb-05	07-Feb-05	INTERNAL
	E333490	STD900			3.1375	15-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333491	CORE	43.50	44.50	0.0824	14-Feb-05	07-Feb-05	INTERNAL
05-KAZ-015	E333492	CORE	49.00	50.00	0.0616	14-Feb-05	07-Feb-05	INTERNAL

**GOLDCORP MUSSELWHITE MINE  
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**KARL ZEEMAL DRILLING 2005**

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

<b>SAMPLEID</b>	<b>AU_PPM_FA</b>	<b>AnalysisDate</b>
E313076	0.0500	23-Feb-05
E313077	0.0356	23-Feb-05
E313078	1.8300	24-Feb-05
E313079	0.1770	23-Feb-05
E313080	0.0159	23-Feb-05
E313081	0.0534	23-Feb-05
E313082	9.1227	23-Feb-05
E313083	0.0721	23-Feb-05
E313084	2.3605	23-Feb-05
E313085	0.3422	23-Feb-05
E313086	9.0000	23-Feb-05
E313087	5.6700	23-Feb-05
E313088	0.4645	23-Feb-05
E313089	0.0299	23-Feb-05
E313090	3.2369	23-Feb-05
E313091	0.1246	23-Feb-05
E313092	0.0362	23-Feb-05
E313093	0.0558	23-Feb-05
E313094	0.1690	23-Feb-05
E313095	0.0432	23-Feb-05
E313096	0.0396	23-Feb-05
E313097	0.7259	23-Feb-05
E313098	0.0199	23-Feb-05
E313099	0.2165	23-Feb-05
E313100	0.0100	23-Feb-05
E313101	1.5483	23-Feb-05
E313102	0.8302	23-Feb-05
E313103	0.2853	24-Feb-05
E313104	0.3474	24-Feb-05
E313105	0.1152	24-Feb-05
E313106	0.3058	24-Feb-05
E313107	0.0438	24-Feb-05
E313108	0.0516	06-Mar-05
E313109	3.1144	06-Mar-05
E313110	3.1986	06-Mar-05
E313111	6.5729	06-Mar-05
E313112	0.2145	06-Mar-05
E313113	0.8483	06-Mar-05
E313114	12.5700	18-Mar-05
E313115	3.8401	06-Mar-05
E313116	3.8152	06-Mar-05
E313117	0.1089	06-Mar-05
E313118	0.0459	06-Mar-05
E313119	0.0289	06-Mar-05
E313120	0.0245	06-Mar-05
E313121	0.5610	06-Mar-05
E313122	2.5142	06-Mar-05
E313123	6.8669	07-Mar-05
E313124	0.2776	07-Mar-05
E313125	0.4795	07-Mar-05
E313126	0.6396	07-Mar-05

GOLDCORP MUSSELWHITE MINE  
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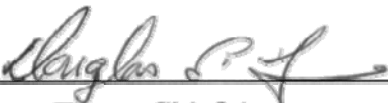
KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313127	0.0273	07-Mar-05
E313128	0.0229	07-Mar-05
E313129	0.0435	07-Mar-05
E313130	6.9589	07-Mar-05
E313131	0.0314	07-Mar-05
E313132	7.0338	07-Mar-05
E313133	0.1208	07-Mar-05
E313134	0.1807	06-Mar-05
E313135	0.0530	06-Mar-05
E313136	0.0709	06-Mar-05
E313137	0.2144	06-Mar-05
E313138	0.4478	06-Mar-05
E313139	6.4998	06-Mar-05
E313140	0.0502	06-Mar-05
E313141	0.1734	06-Mar-05
E313142	0.5956	06-Mar-05
E313143	1.7519	07-Mar-05
E313144	0.0569	06-Mar-05
E313145	0.0253	06-Mar-05
E313146	0.0372	06-Mar-05
E313147	0.1408	06-Mar-05
E313148	0.0134	06-Mar-05
E313149	0.0639	06-Mar-05
E313150	3.0225	06-Mar-05
E313151	2.1731	06-Mar-05
E313152	0.1556	06-Mar-05
E313153	0.0354	06-Mar-05
E313154	0.2907	06-Mar-05
E313155	0.0441	06-Mar-05
E313156	0.0645	07-Mar-05
E313157	4.0967	07-Mar-05
E313158	10.9375	07-Mar-05
E313159	6.9842	07-Mar-05
E313160	0.0424	07-Mar-05
E313161	17.4666	07-Mar-05
E313162	1.4876	07-Mar-05
E313163	0.0562	07-Mar-05
E313164	0.0309	07-Mar-05
E313165	0.0392	07-Mar-05
E313166	0.2201	07-Mar-05
E313167	2.3781	07-Mar-05
E313168	2.2778	07-Mar-05
E313169	4.7078	07-Mar-05
E313170	6.9156	07-Mar-05
E313171	0.4353	07-Mar-05
E313172	0.0408	07-Mar-05
E313173	0.0544	07-Mar-05
E313174	0.0535	07-Mar-05
E313175	0.0152	07-Mar-05
E313176	0.0948	07-Mar-05
E313177	0.0737	07-Mar-05

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KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313178	0.0380	07-Mar-05
E313179	0.0132	07-Mar-05
E313180	0.0428	07-Mar-05
E313181	0.0208	07-Mar-05
E313182	0.0280	07-Mar-05
E313183	0.0597	07-Mar-05
E313184	0.0706	07-Mar-05
E313185	0.0590	07-Mar-05
E313186	3.6821	07-Mar-05
E313187	0.1181	07-Mar-05
E313188	0.0674	07-Mar-05
E313189	0.0504	07-Mar-05
E313190	3.1242	07-Mar-05
E313191	0.0684	07-Mar-05
E313192	1.0597	07-Mar-05
E313193	0.0778	07-Mar-05
E313194	0.0215	07-Mar-05
E313195	0.0157	07-Mar-05
E313196	0.0322	07-Mar-05
E313197	0.0144	07-Mar-05
E313198	0.0338	07-Mar-05
E313199	0.1161	07-Mar-05
E313200	0.0127	07-Mar-05
E313201	0.3848	07-Mar-05
E313202	0.3065	07-Mar-05
E313203	0.0427	12-Mar-05
E313204	2.3007	12-Mar-05
E313205	0.0430	12-Mar-05
E313206	0.0210	12-Mar-05
E313207	0.0306	12-Mar-05
E313208	0.4548	12-Mar-05
E313209	0.0526	12-Mar-05
E313210	3.1130	12-Mar-05
E313211	0.0284	12-Mar-05
E313212	0.6904	12-Mar-05
E313213	0.2076	12-Mar-05
E313214	0.4440	12-Mar-05
E313215	0.1873	12-Mar-05
E313216	0.0286	12-Mar-05
E313217	0.0548	12-Mar-05
E313218	3.5485	12-Mar-05
E313219	0.3678	12-Mar-05
E313220	0.0485	12-Mar-05
E313221	0.0272	12-Mar-05
E313222	0.0190	12-Mar-05
E313223	0.0297	12-Mar-05
E313224	1.6300	12-Mar-05
E313225	1.7848	12-Mar-05
E313226	2.0695	12-Mar-05
E313227	0.3644	12-Mar-05
E313228	0.1131	12-Mar-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313229	0.0532	12-Mar-05
E313230	6.8224	12-Mar-05
E313231	0.0409	12-Mar-05
E313232	0.0187	14-Mar-05
E313233	0.4267	14-Mar-05
E313234	1.2358	14-Mar-05
E313235	7.1472	14-Mar-05
E313236	0.2593	14-Mar-05
E313237	1.1136	14-Mar-05
E313238	0.5754	14-Mar-05
E313239	0.2190	14-Mar-05
E313240	0.0318	14-Mar-05
E313241	6.9173	14-Mar-05
E313242	15.8000	15-Mar-05
E313243	0.2084	14-Mar-05
E313244	0.0420	14-Mar-05
E313245	0.0209	14-Mar-05
E313246	0.0662	14-Mar-05
E313247	0.0412	14-Mar-05
E313248	0.0204	14-Mar-05
E313249	0.1455	14-Mar-05
E313250	3.2517	14-Mar-05
E313251	1.0717	14-Mar-05
E313252	0.4007	14-Mar-05
E313253	0.3848	14-Mar-05
E313254	0.8355	14-Mar-05
E313255	0.1913	14-Mar-05
E313256	0.0670	14-Mar-05
E313257	0.0644	14-Mar-05
E313258	0.0224	14-Mar-05
E313259	0.1120	13-Mar-05
E313260	0.0254	13-Mar-05
E313261	0.0277	12-Mar-05
E313262	1.9780	13-Mar-05
E313263	0.1536	13-Mar-05
E313264	0.0338	13-Mar-05
E313265	0.0150	13-Mar-05
E313266	0.0100	09-Mar-05
E313267	0.0240	09-Mar-05
E313268	0.0117	09-Mar-05
E313269	0.0100	09-Mar-05
E313270	7.0772	09-Mar-05
E313271	0.0715	09-Mar-05
E313272	0.0514	09-Mar-05
E313273	0.0228	09-Mar-05
E313274	0.0670	09-Mar-05
E313275	0.0376	09-Mar-05
E313276	0.1301	09-Mar-05
E313277	0.2032	09-Mar-05
E313278	0.5073	09-Mar-05
E313279	3.1073	09-Mar-05

GOLDCORP MUSSELWHITE MINE  
CERTIFICATE OF ANALYSIS


KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313280	0.0349	09-Mar-05
E313281	0.6105	09-Mar-05
E313282	0.1902	09-Mar-05
E313283	0.0367	09-Mar-05
E313284	0.0899	09-Mar-05
E313285	0.1958	09-Mar-05
E313286	0.0277	09-Mar-05
E313287	0.0100	09-Mar-05
E313501	5.8818	12-Feb-05
E313502	8.6000	15-Feb-05
E313503	8.6910	11-Feb-05
E313504	2.3398	11-Feb-05
E313505	1.6637	11-Feb-05
E313506	0.2121	11-Feb-05
E313507	0.0573	11-Feb-05
E313508	0.0912	11-Feb-05
E313509	0.1771	11-Feb-05
E313510	3.1465	11-Feb-05
E313511	0.0722	11-Feb-05
E313512	0.0432	11-Feb-05
E313513	0.0654	11-Feb-05
E313514	0.0763	11-Feb-05
E313515	0.2660	12-Feb-05
E313516	0.1075	12-Feb-05
E313517	0.0296	12-Feb-05
E313518	0.3337	12-Feb-05
E313519	19.0333	12-Feb-05
E313520	0.1215	12-Feb-05
E313521	4.7953	12-Feb-05
E313522	8.5000	12-Feb-05
E313523	1.2747	12-Feb-05
E313524	5.9666	12-Feb-05
E313525	8.2333	12-Feb-05
E313526	2.2543	12-Feb-05
E313527	0.7900	12-Feb-05
E313528	1.3397	12-Feb-05
E313529	0.1282	12-Feb-05
E313530	7.0596	12-Feb-05
E313531	0.0665	12-Feb-05
E313532	0.0765	12-Feb-05
E313533	0.0358	12-Feb-05
E313534	0.0252	12-Feb-05
E313535	0.1014	12-Feb-05
E313536	0.0667	12-Feb-05
E313537	0.0186	12-Feb-05
E313538	0.0145	18-Feb-05
E313539	0.0985	18-Feb-05
E313540	0.0139	18-Feb-05
E313541	0.0838	18-Feb-05
E313542	0.0473	18-Feb-05
E313543	0.0652	18-Feb-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005


  
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SAMPLEID	AU_PPM_FA	AnalysisDate
E313544	0.4038	18-Feb-05
E313545	14.7300	18-Feb-05
E313546	4.8958	18-Feb-05
E313547	2.3651	18-Feb-05
E313548	1.0249	18-Feb-05
E313549	0.9467	18-Feb-05
E313550	3.1033	18-Feb-05
E313551	0.0296	18-Feb-05
E313552	0.0548	19-Feb-05
E313553	5.9277	19-Feb-05
E313554	0.8900	19-Feb-05
E313555	0.0307	19-Feb-05
E313556	0.0169	19-Feb-05
E313557	0.1625	19-Feb-05
E313558	0.0391	19-Feb-05
E313559	0.0408	20-Feb-05
E313560	0.0100	20-Feb-05
E313561	2.6324	20-Feb-05
E313562	0.0379	20-Feb-05
E313563	0.0184	20-Feb-05
E313564	0.0342	20-Feb-05
E313565	1.0631	20-Feb-05
E313566	0.0504	20-Feb-05
E313567	0.1017	20-Feb-05
E313568	0.0372	20-Feb-05
E313569	1.4809	20-Feb-05
E313570	7.0589	20-Feb-05
E313571	2.7882	20-Feb-05
E313572	2.3743	20-Feb-05
E313573	0.3927	20-Feb-05
E313574	0.0104	20-Feb-05
E313575	0.0336	20-Feb-05
E313576	0.0134	20-Feb-05
E313577	0.0100	20-Feb-05
E313578	0.0100	20-Feb-05
E313579	0.0354	20-Feb-05
E313580	0.0100	20-Feb-05
E313581	0.0289	20-Feb-05
E313582	0.0328	20-Feb-05
E313583	8.1455	20-Feb-05
E313584	0.2836	20-Feb-05
E313585	7.4907	20-Feb-05
E313586	2.0923	20-Feb-05
E313587	0.5831	20-Feb-05
E313588	3.1427	20-Feb-05
E313589	0.5709	20-Feb-05
E313590	3.1729	20-Feb-05
E313591	0.0406	20-Feb-05
E313592	0.0382	20-Feb-05
E313593	0.2066	20-Feb-05
E313594	0.4771	20-Feb-05



GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005

  
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SAMPLEID	AU_PPM_FA	AnalysisDate
E313595	0.1184	20-Feb-05
E313596	0.0322	20-Feb-05
E313597	0.0187	20-Feb-05
E313598	0.0943	20-Feb-05
E313599	0.0458	20-Feb-05
E313600	0.0100	20-Feb-05
E313601	0.0100	20-Feb-05
E313602	0.0132	20-Feb-05
E313603	0.2097	20-Feb-05
E313604	0.0436	20-Feb-05
E313605	1.6671	20-Feb-05
E313606	1.7094	20-Feb-05
E313607	4.5969	20-Feb-05
E313608	2.1945	20-Feb-05
E313609	0.9596	20-Feb-05
E313610	3.1708	20-Feb-05
E313611	0.0239	20-Feb-05
E313612	0.0160	19-Feb-05
E313613	0.0329	19-Feb-05
E313614	0.4298	19-Feb-05
E313615	1.1434	19-Feb-05
E313616	1.1557	19-Feb-05
E313617	0.1446	19-Feb-05
E313618	0.0416	19-Feb-05
E313619	0.0286	19-Feb-05
E313620	0.0100	19-Feb-05
E313621	0.1563	19-Feb-05
E313622	0.1777	19-Feb-05
E313623	0.4119	19-Feb-05
E313624	0.2212	19-Feb-05
E313625	0.0412	19-Feb-05
E313626	0.0181	19-Feb-05
E313627	0.0298	19-Feb-05
E313628	0.0668	19-Feb-05
E313629	0.2023	19-Feb-05
E313630	6.7824	19-Feb-05
E313631	0.0340	19-Feb-05
E313632	0.0284	19-Feb-05
E313633	0.0219	20-Feb-05
E313634	0.0100	20-Feb-05
E313635	0.0100	20-Feb-05
E313636	0.0100	20-Feb-05
E313637	0.0315	19-Feb-05
E313638	0.0573	19-Feb-05
E313639	0.0536	19-Feb-05
E313640	0.0100	19-Feb-05
E313641	0.0277	19-Feb-05
E313642	0.0674	19-Feb-05
E313643	0.0573	19-Feb-05
E313644	0.0195	19-Feb-05
E313645	0.0142	19-Feb-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313646	0.0148	19-Feb-05
E313647	0.0915	19-Feb-05
E313648	0.1252	19-Feb-05
E313649	0.0142	19-Feb-05
E313650	3.0672	19-Feb-05
E313651	0.0122	19-Feb-05
E313652	0.0397	19-Feb-05
E313653	0.0100	19-Feb-05
E313654	0.0263	19-Feb-05
E313655	0.0104	19-Feb-05
E313656	0.0374	19-Feb-05
E313657	0.0197	22-Feb-05
E313658	0.0160	22-Feb-05
E313659	0.0334	22-Feb-05
E313660	0.0190	22-Feb-05
E313661	1.7536	21-Feb-05
E313662	1.9764	21-Feb-05
E313663	0.7441	21-Feb-05
E313664	1.8512	21-Feb-05
E313665	0.9820	21-Feb-05
E313666	1.5228	21-Feb-05
E313667	0.2988	21-Feb-05
E313668	0.7579	21-Feb-05
E313669	0.6503	21-Feb-05
E313670	6.8694	21-Feb-05
E313671	0.7265	21-Feb-05
E313672	0.1175	21-Feb-05
E313673	0.1084	21-Feb-05
E313674	0.5985	21-Feb-05
E313675	0.0941	21-Feb-05
E313676	19.3300	22-Feb-05
E313677	9.2045	21-Feb-05
E313678	19.0700	22-Feb-05
E313679	0.3360	21-Feb-05
E313680	0.0303	21-Feb-05
E313681	0.0265	21-Feb-05
E313682	0.0299	21-Feb-05
E313683	0.0366	21-Feb-05
E313684	0.0215	21-Feb-05
E313685	0.0359	21-Feb-05
E313686	0.0414	21-Feb-05
E313687	1.5886	21-Feb-05
E313688	0.6794	21-Feb-05
E313689	0.6254	21-Feb-05
E313690	3.0916	21-Feb-05
E313691	0.1879	21-Feb-05
E313692	0.0444	21-Feb-05
E313693	0.0726	21-Feb-05
E313694	0.0554	21-Feb-05
E313695	0.0282	21-Feb-05
E313696	0.0167	21-Feb-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313697	0.0176	21-Feb-05
E313698	0.0336	21-Feb-05
E313699	0.0212	21-Feb-05
E313700	n/rcvd	21-Feb-05
E313701	0.0230	01-Mar-05
E313702	0.0278	01-Mar-05
E313703	0.0456	01-Mar-05
E313704	0.0463	01-Mar-05
E313705	0.2033	21-Feb-05
E313706	0.0628	21-Feb-05
E313707	0.0783	21-Feb-05
E313708	0.1506	21-Feb-05
E313709	5.7390	21-Feb-05
E313710	3.2598	21-Feb-05
E313711	0.0296	21-Feb-05
E313712	0.0209	21-Feb-05
E313713	0.0710	21-Feb-05
E313714	0.0100	21-Feb-05
E313715	0.2355	21-Feb-05
E313716	0.0790	21-Feb-05
E313717	0.0100	25-Feb-05
E313718	0.0100	25-Feb-05
E313719	0.0724	21-Feb-05
E313720	0.0100	21-Feb-05
E313721	0.0614	22-Feb-05
E313722	0.0526	22-Feb-05
E313723	0.2812	22-Feb-05
E313724	0.0637	22-Feb-05
E313725	0.0746	22-Feb-05
E313726	7.0372	22-Feb-05
E313727	0.2735	22-Feb-05
E313728	0.1151	22-Feb-05
E313729	0.0585	22-Feb-05
E313730	7.0050	22-Feb-05
E313731	0.0281	22-Feb-05
E313732	0.0218	22-Feb-05
E313733	0.0782	22-Feb-05
E313734	0.0187	22-Feb-05
E313735	0.0221	22-Feb-05
E313736	0.0169	22-Feb-05
E313737	0.1688	22-Feb-05
E313738	1.4063	23-Feb-05
E313739	1.7649	23-Feb-05
E313740	0.0314	23-Feb-05
E313741	1.9749	23-Feb-05
E313742	0.7595	23-Feb-05
E313743	0.1674	23-Feb-05
E313744	0.3331	23-Feb-05
E313745	0.9035	23-Feb-05
E313746	0.0936	23-Feb-05
E313747	0.0584	23-Feb-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E313748	0.0679	23-Feb-05
E313749	0.1241	23-Feb-05
E313750	3.1258	23-Feb-05
E314500	0.0238	25-Mar-05
E314501	0.0734	25-Mar-05
E314502	0.0575	25-Mar-05
E314503	0.0506	25-Mar-05
E314504	0.0576	25-Mar-05
E314505	1.8205	25-Mar-05
E314506	0.0639	25-Mar-05
E314507	1.5901	25-Mar-05
E314508	2.4383	25-Mar-05
E314509	2.6092	25-Mar-05
E314510	2.9529	25-Mar-05
E314511	4.9597	25-Mar-05
E314512	0.3015	25-Mar-05
E314513	1.5496	25-Mar-05
E314514	0.7411	26-Mar-05
E314515	0.1425	26-Mar-05
E314516	0.0410	26-Mar-05
E314517	0.2853	26-Mar-05
E314518	0.0912	26-Mar-05
E314519	0.0405	26-Mar-05
E314520	0.0100	26-Mar-05
E314521	0.0162	26-Mar-05
E314522	0.0199	26-Mar-05
E314523	0.0424	26-Mar-05
E314524	0.0471	26-Mar-05
E314525	0.0275	25-Mar-05
E314526	0.3611	25-Mar-05
E314527	0.2067	25-Mar-05
E314528	0.3619	25-Mar-05
E314529	1.1219	25-Mar-05
E314530	7.3286	25-Mar-05
E314531	1.0956	25-Mar-05
E314532	3.7703	25-Mar-05
E314533	0.0924	25-Mar-05
E314534	0.0413	25-Mar-05
E314535	0.1227	25-Mar-05
E314536	0.1919	25-Mar-05
E314537	0.8969	25-Mar-05
E314538	3.2984	25-Mar-05
E314539	0.1156	25-Mar-05
E314540	0.0449	25-Mar-05
E314541	0.0588	25-Mar-05
E314542	0.1046	25-Mar-05
E314543	0.0314	25-Mar-05
E314544	0.0363	25-Mar-05
E314545	0.0836	25-Mar-05
E314546	0.0334	25-Mar-05
E314547	0.0385	25-Mar-05

GOLDCORP MUSSELWHITE MINE  
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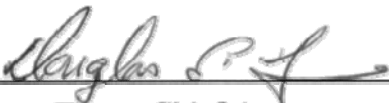
KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E314548	0.1134	25-Mar-05
E314549	0.0391	25-Mar-05
E314550	3.0436	25-Mar-05
E314551	0.0322	25-Mar-05
E314552	0.0575	25-Mar-05
E314553	0.0695	25-Mar-05
E314554	0.0209	27-Mar-05
E314555	0.0329	27-Mar-05
E314556	0.0157	27-Mar-05
E314557	0.0312	27-Mar-05
E314558	0.0438	27-Mar-05
E314559	0.1133	27-Mar-05
E314560	0.0177	27-Mar-05
E314561	0.0509	27-Mar-05
E314562	0.0437	27-Mar-05
E314563	0.0330	27-Mar-05
E314564	0.0809	27-Mar-05
E314565	0.0476	27-Mar-05
E314566	0.1493	27-Mar-05
E314567	0.0288	27-Mar-05
E314568	0.0664	27-Mar-05
E314569	0.0592	27-Mar-05
E314570	7.3964	27-Mar-05
E314571	0.0510	27-Mar-05
E314572	0.0225	27-Mar-05
E314573	0.0251	27-Mar-05
E314574	0.0370	27-Mar-05
E314575	0.0229	27-Mar-05
E314576	0.0288	27-Mar-05
E314577	0.0329	25-Mar-05
E314578	0.0855	25-Mar-05
E314579	0.0410	25-Mar-05
E314580	0.0235	25-Mar-05
E314581	0.0581	25-Mar-05
E314582	0.1293	25-Mar-05
E314583	0.9296	25-Mar-05
E314584	0.1097	25-Mar-05
E314585	0.0559	25-Mar-05
E314586	0.0373	25-Mar-05
E314587	0.1273	25-Mar-05
E314588	0.1221	25-Mar-05
E314589	0.0294	25-Mar-05
E314590	3.2972	25-Mar-05
E314591	0.0267	25-Mar-05
E314592	0.0506	25-Mar-05
E314593	0.0750	25-Mar-05
E314594	0.0637	25-Mar-05
E314595	0.1465	25-Mar-05
E314596	0.1274	25-Mar-05
E314597	0.3757	25-Mar-05
E314598	0.0321	30-Mar-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E314599	0.1434	30-Mar-05
E314600	0.0221	30-Mar-05
E314601	0.0683	30-Mar-05
E314602	0.0344	30-Mar-05
E314603	0.0266	30-Mar-05
E314604	0.0472	30-Mar-05
E314605	0.0410	30-Mar-05
E314606	0.1384	30-Mar-05
E314607	0.0209	30-Mar-05
E314608	0.0867	30-Mar-05
E314609	0.0799	30-Mar-05
E314610	3.1855	30-Mar-05
E314611	0.0359	30-Mar-05
E314612	0.0395	30-Mar-05
E314613	4.5807	30-Mar-05
E314614	5.4618	30-Mar-05
E314615	0.0267	30-Mar-05
E314616	0.0581	30-Mar-05
E314617	0.2263	30-Mar-05
E314618	0.0263	30-Mar-05
E314619	0.0251	30-Mar-05
E314620	0.0142	30-Mar-05
E314621	0.0346	30-Mar-05
E314622	0.0882	30-Mar-05
E314623	22.3300	30-Mar-05
E314624	0.5986	30-Mar-05
E314625	0.0393	30-Mar-05
E314626	0.0782	30-Mar-05
E314627	1.6873	30-Mar-05
E314628	1.1724	30-Mar-05
E314629	2.9746	30-Mar-05
E314630	7.0253	30-Mar-05
E314631	0.3193	27-Mar-05
E314632	0.1465	27-Mar-05
E314633	0.0650	27-Mar-05
E314634	0.1167	27-Mar-05
E314635	0.1813	27-Mar-05
E314636	0.0133	31-Mar-05
E314637	0.0100	31-Mar-05
E314638	0.1460	31-Mar-05
E314639	0.0100	31-Mar-05
E314640	0.0113	31-Mar-05
E314641	0.0283	31-Mar-05
E314642	0.0103	31-Mar-05
E314643	0.0272	31-Mar-05
E314644	0.0225	31-Mar-05
E320128	0.2411	13-Feb-05
E320129	0.7585	13-Feb-05
E320130	6.9708	13-Feb-05
E320131	1.1059	13-Feb-05
E320132	0.0584	13-Feb-05

GOLDCORP MUSSELWHITE MINE  
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Doug Town, Chief Assayer  
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SAMPLEID	AU_PPM_FA	AnalysisDate
E320133	0.0854	13-Feb-05
E320134	0.0383	13-Feb-05
E320135	0.0928	13-Feb-05
E320136	0.0100	13-Feb-05
E320137	21.0000	14-Feb-05
E320138	4.1007	13-Feb-05
E320139	0.0772	13-Feb-05
E320140	0.0100	13-Feb-05
E320141	0.0474	13-Feb-05
E320142	0.0291	13-Feb-05
E320143	0.0241	13-Feb-05
E320144	0.0175	13-Feb-05
E320145	0.0100	13-Feb-05
E320146	0.0370	13-Feb-05
E320147	4.0482	13-Feb-05
E320148	0.4090	13-Feb-05
E320149	0.0989	13-Feb-05
E320150	3.1826	13-Feb-05
E320151	0.0132	13-Feb-05
E320152	0.0149	13-Feb-05
E320153	0.1118	12-Feb-05
E320154	2.3313	13-Feb-05
E320155	0.0421	13-Feb-05
E320156	0.0480	13-Feb-05
E320157	5.6390	13-Feb-05
E320158	4.1034	13-Feb-05
E320159	0.0637	13-Feb-05
E320160	0.0100	13-Feb-05
E320161	2.4034	13-Feb-05
E320162	2.8439	13-Feb-05
E320163	0.0997	13-Feb-05
E320164	0.0254	13-Feb-05
E320165	0.0190	13-Feb-05
E320166	0.0129	13-Feb-05
E320167	0.3520	13-Feb-05
E320168	9.7000	14-Feb-05
E320169	10.9660	14-Feb-05
E320170	6.8878	14-Feb-05
E320171	6.1247	13-Feb-05
E320172	3.7949	13-Feb-05
E320173	0.0993	13-Feb-05
E320174	0.0228	13-Feb-05
E320175	0.0576	13-Feb-05
E320176	0.0304	13-Feb-05
E320177	2.6098	13-Feb-05
E320178	0.0743	13-Feb-05
E320179	0.0131	13-Feb-05
E320180	0.0100	13-Feb-05
E320181	0.0305	15-Feb-05
E320182	0.0217	15-Feb-05
E320183	0.1277	15-Feb-05

GOLDCORP MUSSELWHITE MINE  
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KARL ZEEMAL DRILLING 2005


  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E320184	0.0230	15-Feb-05
E320185	0.0175	15-Feb-05
E320186	0.0288	15-Feb-05
E320187	0.0329	15-Feb-05
E320188	0.0692	15-Feb-05
E320189	0.0602	15-Feb-05
E320190	3.2335	15-Feb-05
E320191	11.6666	16-Feb-05
E320192	10.5865	15-Feb-05
E320193	0.1782	16-Feb-05
E320194	0.0469	16-Feb-05
E320195	0.0344	16-Feb-05
E320196	2.8588	16-Feb-05
E320197	1.3034	16-Feb-05
E320198	0.0661	16-Feb-05
E320199	0.0418	16-Feb-05
E320200	0.0140	16-Feb-05
E320201	0.1465	14-Feb-05
E320202	0.4197	14-Feb-05
E320203	14.9000	16-Feb-05
E320204	0.1641	15-Feb-05
E320205	0.0534	15-Feb-05
E320206	0.1451	16-Feb-05
E320207	0.2973	16-Feb-05
E320208	4.4310	16-Feb-05
E320209	1.2721	16-Feb-05
E320210	3.1756	16-Feb-05
E320211	0.9884	16-Feb-05
E320212	0.1020	15-Feb-05
E320213	0.1602	15-Feb-05
E320214	0.0488	15-Feb-05
E320215	0.0308	15-Feb-05
E320216	0.0100	17-Feb-05
E320217	0.0144	17-Feb-05
E320218	0.0262	17-Feb-05
E320219	0.0100	17-Feb-05
E320220	0.0100	17-Feb-05
E320221	0.0845	17-Feb-05
E320222	0.0371	17-Feb-05
E320223	0.0910	17-Feb-05
E320224	0.0903	17-Feb-05
E320225	0.1548	17-Feb-05
E320226	0.0394	17-Feb-05
E320227	0.2530	17-Feb-05
E320228	12.7000	17-Feb-05
E320229	1.0239	17-Feb-05
E320230	6.9967	17-Feb-05
E320231	0.0762	17-Feb-05
E320232	0.1558	17-Feb-05
E320233	0.0407	17-Feb-05
E320234	0.0229	17-Feb-05



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**KARL ZEEMAL DRILLING 2005**

  
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<b>SAMPLEID</b>	<b>AU_PPM_FA</b>	<b>AnalysisDate</b>
E320235	0.0490	17-Feb-05
E320236	4.1306	17-Feb-05
E320237	7.5990	17-Feb-05
E320238	8.8406	17-Feb-05
E320239	1.1611	17-Feb-05
E320240	0.0267	17-Feb-05
E320241	0.0537	17-Feb-05
E320242	0.0347	12-Feb-05
E320243	0.0651	12-Feb-05
E320244	0.0250	12-Feb-05
E320245	4.7831	12-Feb-05
E320246	4.1984	12-Feb-05
E320247	0.7181	12-Feb-05
E320248	9.1695	12-Feb-05
E320249	10.9141	12-Feb-05
E320250	3.2626	12-Feb-05
E320414	0.0230	11-Feb-05
E320415	5.4078	11-Feb-05
E320416	3.4417	11-Feb-05
E320417	0.0743	11-Feb-05
E320418	0.0492	11-Feb-05
E320419	0.0495	11-Feb-05
E320420	0.0175	11-Feb-05
E320421	0.0808	12-Feb-05
E320422	0.1815	12-Feb-05
E320423	1.5732	12-Feb-05
E320424	1.0567	12-Feb-05
E320425	0.8474	12-Feb-05
E320426	2.3758	12-Feb-05
E320427	0.0580	12-Feb-05
E320428	0.0311	12-Feb-05
E320429	0.1280	12-Feb-05
E320430	7.0068	12-Feb-05
E320431	0.0380	12-Feb-05
E320432	0.3090	12-Feb-05
E320433	14.1330	13-Feb-05
E320434	0.9170	12-Feb-05
E320435	3.9198	12-Feb-05
E320436	5.1000	13-Feb-05
E320437	0.0644	12-Feb-05
E320438	0.2972	12-Feb-05
E320439	0.2288	12-Feb-05
E320440	0.0112	12-Feb-05
E320441	0.1537	12-Feb-05
E320442	0.0776	12-Feb-05
E320443	0.0180	12-Feb-05
E320444	0.0533	15-Feb-05
E320445	7.0484	15-Feb-05
E320446	0.0403	15-Feb-05
E320447	0.0184	15-Feb-05
E320448	0.9412	15-Feb-05

**GOLDCORP MUSSELWHITE MINE  
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**KARL ZEEMAL DRILLING 2005**

  
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Placer Dome – Musselwhite Mine

<b>SAMPLEID</b>	<b>AU_PPM_FA</b>	<b>AnalysisDate</b>
E320449	0.0354	15-Feb-05
E320450	3.0895	15-Feb-05
E320451	1.2661	15-Feb-05
E320452	0.0394	15-Feb-05
E320453	0.0328	15-Feb-05
E320454	0.0360	15-Feb-05
E320455	0.0359	15-Feb-05
E320456	0.1332	15-Feb-05
E320576	0.0100	07-Mar-05
E320577	0.0100	07-Mar-05
E320578	0.0202	07-Mar-05
E320579	0.0207	07-Mar-05
E320580	0.0100	07-Mar-05
E320581	0.1595	07-Mar-05
E320582	0.0964	07-Mar-05
E320583	0.0152	07-Mar-05
E320584	0.0174	07-Mar-05
E320585	0.0461	07-Mar-05
E320586	0.0754	07-Mar-05
E320587	0.0303	07-Mar-05
E320588	4.1701	07-Mar-05
E320589	0.0493	07-Mar-05
E320590	3.2014	07-Mar-05
E320591	0.0549	07-Mar-05
E320592	0.1431	07-Mar-05
E320593	0.0433	07-Mar-05
E320594	0.2606	07-Mar-05
E320595	0.0498	07-Mar-05
E320596	0.0160	07-Mar-05
E320597	0.0354	07-Mar-05
E320598	0.0471	08-Mar-05
E320599	0.1667	08-Mar-05
E320600	0.0190	08-Mar-05
E320601	0.0541	13-Mar-05
E320602	0.0206	13-Mar-05
E320603	0.0599	13-Mar-05
E320604	3.8041	13-Mar-05
E320605	0.0151	13-Mar-05
E320606	0.0115	13-Mar-05
E320607	0.0169	13-Mar-05
E320608	0.0298	13-Mar-05
E320609	1.4910	13-Mar-05
E320610	3.0669	13-Mar-05
E320611	1.2689	13-Mar-05
E320612	0.0349	21-Mar-05
E320613	0.1187	13-Mar-05
E320614	0.0304	13-Mar-05
E320615	0.1094	13-Mar-05
E320616	0.0223	13-Mar-05
E320617	0.0419	13-Mar-05
E320618	0.0253	13-Mar-05

GOLDCORP MUSSELWHITE MINE  
CERTIFICATE OF ANALYSIS


KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E320619	0.0762	13-Mar-05
E320620	0.0100	13-Mar-05
E320621	0.0309	13-Mar-05
E320622	4.9005	13-Mar-05
E320623	0.0579	13-Mar-05
E320624	0.1921	13-Mar-05
E320625	0.1294	13-Mar-05
E320626	0.0183	13-Mar-05
E320627	0.0105	13-Mar-05
E320628	0.0137	13-Mar-05
E320629	0.0571	13-Mar-05
E320630	6.9970	13-Mar-05
E320631	0.3076	13-Mar-05
E320632	0.0236	13-Mar-05
E320633	0.0112	13-Mar-05
E320634	0.0123	13-Mar-05
E320635	0.6549	13-Mar-05
E320636	0.0179	14-Mar-05
E320637	0.0337	14-Mar-05
E320638	0.0273	14-Mar-05
E320639	2.4128	14-Mar-05
E320640	0.0466	14-Mar-05
E320641	0.3428	14-Mar-05
E320642	0.0182	14-Mar-05
E320751	0.0265	14-Mar-05
E320752	0.0256	14-Mar-05
E320753	0.1188	14-Mar-05
E320754	0.0410	14-Mar-05
E320755	0.0449	14-Mar-05
E320756	0.1170	14-Mar-05
E320757	0.4392	14-Mar-05
E320758	0.0972	14-Mar-05
E320759	0.0782	11-Mar-05
E320760	0.0100	11-Mar-05
E320761	7.8996	11-Mar-05
E320762	22.9333	11-Mar-05
E320763	1.2665	11-Mar-05
E320764	0.0858	11-Mar-05
E320765	0.1828	11-Mar-05
E320766	6.8154	11-Mar-05
E320767	0.1080	11-Mar-05
E320768	0.5740	11-Mar-05
E320769	1.5227	11-Mar-05
E320770	6.7452	11-Mar-05
E320771	1.2908	11-Mar-05
E320772	2.6806	11-Mar-05
E320773	2.0569	11-Mar-05
E320774	0.4442	11-Mar-05
E320775	0.0640	11-Mar-05
E320776	0.4338	11-Mar-05
E320777	0.2507	11-Mar-05

GOLDCORP MUSSELWHITE MINE  
CERTIFICATE OF ANALYSIS


KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E320778	0.2019	11-Mar-05
E320779	0.0433	11-Mar-05
E320780	0.0127	11-Mar-05
E320781	0.0171	11-Mar-05
E320782	0.0278	11-Mar-05
E320783	0.0469	11-Mar-05
E320784	0.2046	14-Mar-05
E320785	0.0954	14-Mar-05
E320786	0.1216	14-Mar-05
E333001	2.6592	06-Feb-05
E333002	0.0319	06-Feb-05
E333003	0.0326	06-Feb-05
E333004	0.1231	06-Feb-05
E333005	5.5465	06-Feb-05
E333006	6.3604	06-Feb-05
E333007	0.0450	06-Feb-05
E333008	0.7374	06-Feb-05
E333009	0.1914	06-Feb-05
E333010	3.1228	06-Feb-05
E333011	3.0960	06-Feb-05
E333012	1.2555	06-Feb-05
E333013	0.6157	06-Feb-05
E333014	2.5322	06-Feb-05
E333015	0.2337	06-Feb-05
E333016	0.0592	06-Feb-05
E333017	0.0402	06-Feb-05
E333018	0.0380	06-Feb-05
E333019	0.0585	06-Feb-05
E333020	0.0207	06-Feb-05
E333021	0.0537	06-Feb-05
E333022	0.2345	06-Feb-05
E333023	0.0417	06-Feb-05
E333024	0.1940	06-Feb-05
E333025	0.0850	06-Feb-05
E333026	0.0455	06-Feb-05
E333027	0.0401	06-Feb-05
E333028	0.0254	06-Feb-05
E333029	0.0475	06-Feb-05
E333030	7.1177	06-Feb-05
E333031	0.0546	06-Feb-05
E333032	0.0558	06-Feb-05
E333033	0.0980	06-Feb-05
E333034	0.0469	06-Feb-05
E333035	0.0100	06-Feb-05
E333036	0.0161	06-Feb-05
E333037	0.0405	06-Feb-05
E333038	0.0147	06-Feb-05
E333039	0.0562	06-Feb-05
E333040	0.0198	06-Feb-05
E333041	0.1890	06-Feb-05
E333042	0.0441	06-Feb-05

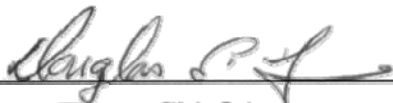
GOLDCORP MUSSELWHITE MINE  
CERTIFICATE OF ANALYSIS

KARL ZEEMAL DRILLING 2005

  
Doug Town, Chief Assayer  
Placer Dome – Musselwhite Mine

SAMPLEID	AU_PPM_FA	AnalysisDate
E333043	0.0353	06-Feb-05
E333044	0.0181	06-Feb-05
E333045	0.0325	07-Feb-05
E333046	0.0259	07-Feb-05
E333047	0.0486	07-Feb-05
E333048	0.0657	07-Feb-05
E333049	0.4254	07-Feb-05
E333050	3.1764	07-Feb-05
E333051	0.1235	07-Feb-05
E333052	0.3286	07-Feb-05
E333053	0.3585	07-Feb-05
E333054	0.0665	07-Feb-05
E333055	0.0848	07-Feb-05
E333056	0.0248	07-Feb-05
E333057	0.0808	07-Feb-05
E333058	0.1141	07-Feb-05
E333059	0.1006	07-Feb-05
E333060	0.0244	07-Feb-05
E333061	0.0446	07-Feb-05
E333062	0.0320	07-Feb-05
E333063	0.0399	07-Feb-05
E333064	0.1010	07-Feb-05
E333065	0.1001	07-Feb-05
E333066	0.0435	07-Feb-05
E333067	0.0299	07-Feb-05
E333068	0.0420	07-Feb-05
E333069	0.1069	08-Feb-05
E333070	7.1193	08-Feb-05
E333071	0.0417	08-Feb-05
E333072	0.0377	08-Feb-05
E333073	0.0100	08-Feb-05
E333074	0.0100	08-Feb-05
E333075	0.0383	08-Feb-05
E333076	0.0441	08-Feb-05
E333077	0.0388	08-Feb-05
E333078	0.1520	08-Feb-05
E333079	0.0113	08-Feb-05
E333080	0.0100	08-Feb-05
E333081	0.0994	09-Feb-05
E333082	0.0474	09-Feb-05
E333083	0.0264	09-Feb-05
E333084	0.0721	09-Feb-05
E333085	0.0481	08-Feb-05
E333086	0.0208	08-Feb-05
E333087	0.0287	08-Feb-05
E333088	0.2095	08-Feb-05
E333089	0.0770	08-Feb-05
E333090	7.2824	08-Feb-05
E333091	0.0250	08-Feb-05
E333092	0.0126	08-Feb-05
E333093	0.4175	09-Feb-05

**GOLDCORP MUSSELWHITE MINE  
CERTIFICATE OF ANALYSIS**

  
 Doug Town, Chief Assayer  
 Placer Dome – Musselwhite Mine

**KARL ZEEMAL DRILLING 2005**

<b>SAMPLEID</b>	<b>AU_PPM_FA</b>	<b>AnalysisDate</b>
E333094	0.0314	09-Feb-05
E333095	0.0494	09-Feb-05
E333096	0.0364	09-Feb-05
E333097	0.0354	09-Feb-05
E333098	0.0861	09-Feb-05
E333099	0.0586	09-Feb-05
E333100	0.0100	09-Feb-05
E333101	0.0693	09-Feb-05
E333102	0.0561	09-Feb-05
E333103	0.0390	09-Feb-05
E333104	0.0341	09-Feb-05
E333105	0.1421	09-Feb-05
E333106	0.0442	09-Feb-05
E333107	0.0160	09-Feb-05
E333108	0.1084	09-Feb-05
E333109	0.0182	09-Feb-05
E333110	6.9259	09-Feb-05
E333111	0.0362	09-Feb-05
E333468	0.3015	15-Feb-05
E333469	0.0465	15-Feb-05
E333470	7.1062	15-Feb-05
E333471	0.0501	14-Feb-05
E333472	7.1319	14-Feb-05
E333473	14.6000	15-Feb-05
E333474	2.6314	14-Feb-05
E333475	0.1301	15-Feb-05
E333476	0.3496	15-Feb-05
E333477	0.0127	15-Feb-05
E333478	0.0290	15-Feb-05
E333479	0.0155	14-Feb-05
E333480	0.0123	14-Feb-05
E333481	1.2911	14-Feb-05
E333482	5.4330	15-Feb-05
E333483	2.2408	14-Feb-05
E333484	3.0683	14-Feb-05
E333485	1.9364	14-Feb-05
E333486	0.1115	14-Feb-05
E333487	0.1034	14-Feb-05
E333488	0.1484	14-Feb-05
E333489	0.0354	15-Feb-05
E333490	3.1375	15-Feb-05
E333491	0.0824	14-Feb-05
E333492	0.0616	14-Feb-05
<b>Number of Samples</b>		<b>1,012</b>
<b>Samples Not Received</b>		<b>1</b>
<b>Total Number of Samples</b>		<b>1,011</b>



**ALS Chemex**  
**EXCELLENCE IN ANALYTICAL CHEMISTRY**  
 ALS Canada Ltd.  
 212 Brooksbank Avenue  
 North Vancouver BC V7J 2C1  
 Phone: 604 984 0221 Fax: 604 984 0218

PLACER DOME NORTH AMERICA  
 MUSSELWHITE MINE  
 PO BOX 7500  
 THUNDER BAY ON P7B 6S8

Page: 1  
 Finalized Date: 25-FEB-2005  
 Account: OPB

**CERTIFICATE TB05009667**

Project: OS-KAZ-001,002,003,004  
 P.O. No.:  
 This report is for 127 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 11-FEB-2005.  
 The following have access to data associated with this certificate:

ANDREW CHEATLE MUSSELWHITE WEB ACCOUN	PETER LAUDER	GARY SNOW
--	--------------	-----------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
DRY-22	Drying - Maximum Temp 60C
CRU-31	Fine crushing - 70% <2mm
LOG-22	Sample login - Rcd w/o BarCode
PUL-31	Pulverize split to 85% <75 um
SPL-21	Split sample - riffle splitter
LOG-24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM

To: PLACER DOME NORTH AMERICA  
 ATTN: ANDREW CHEATLE  
 MUSSELWHITE MINE  
 PO BOX 7500  
 THUNDER BAY ON P7B 6S8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:



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 Finalized Date: 25-FEB-2005  
 Account: OPB

Project: OS-KAZ-001,002,003,004

**CERTIFICATE OF ANALYSIS TB05009667**

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	Au-AA23	Au-AA23	Au-GRA21
		Recvd Wt. kg	Au ppm	Au Check ppm	Au Check ppm	Au ppm
E320001		1.87	0.128			
E320002		1.07	7.78			
E320003		2.44	0.252			
E320004		1.45	0.018			
E320005		1.42	0.071			
E320006		0.90	0.068			
E320007		2.27	0.181			
E320008		2.37	0.014			
E320009		0.63	0.218			
E320010		0.10	3.35			
E320011		2.76	0.013			
E320012		2.17	0.029			
E320013		2.00	0.094			
E320014		0.70	0.174			
E320015		2.23	0.017			
E320016		2.00	0.851			
E320017		0.83	0.027			
E320018		1.83	0.065			
E320019		1.26	0.029			
E320020		1.38	<0.005			
E320021		1.30	0.005			
E320022		1.67	<0.005			
E320023		1.16	0.005			
E320024		0.55	0.017			
E320025		2.28	0.005			
E320026		1.27	0.033			
E320027		2.20	>10.0		12.30	
E320028		2.35	0.607			
E320029		2.06	0.042			
E320030		0.08	6.91			
E320031		2.16	0.018			
E320032		2.31	0.014			
E320033		3.16	0.009			
E320034		3.34	0.959			
E320035		1.42	0.008			
E320036		1.34	5.09			
E320037		1.49	2.55			
E320038		2.17	0.091			
E320039		2.31	0.018			
E320040		1.41	0.005			

Comments: Some samples in this set exhibit possible Au nugget effect. Additional Au assay value for sample E320121 is 1.145 ppm.





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## CERTIFICATE OF ANALYSIS TB05009667

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	Au-AA23	Au-AA23	Au-GRA21
		Recvd Wt. Kg	Au ppm	Au Check ppm	Au Check ppm	Au ppm
		0.02	0.005	0.005	0.005	0.05
E320041		2.75	0.147			
E320042		2.38	0.005			
E320043		2.50	0.081			
E320044		2.09	0.738			
E320045		1.30	0.532			
E320046		0.68	0.372			
E320047		1.29	0.025			
E320048		2.33	0.008			
E320049		2.64	0.039			
E320050		0.08	3.21			
E320051		2.53	0.024			
E320052		2.68	0.016			
E320053		2.70	0.031			
E320054		2.31	0.010			
E320055		2.33	0.011			
E320056		2.47	0.060			
E320057		2.45	0.015			
E320058		1.24	0.035			
E320059		2.33	<0.005			
E320060		0.95	<0.005			
E320061		2.21	0.024			
E320062		2.60	0.023			
E320063		1.55	<0.005			
E320064		2.84	<0.005			
E320065		2.34	0.024			
E320066		2.48	<0.005			
E320067		1.57	0.008			
E320068		2.38	<0.005			
E320069		1.93	<0.005			
E320070		0.07	7.04			
E320071		2.55	0.011			
E320072		2.28	0.018			
E320073		2.36	1.985			
E320074		2.98	4.83			
E320075		2.06	3.97			
E320076		1.55	0.577			
E320077		1.39	0.257			
E320078		1.32	0.355			
E320079		2.65	4.43			
E320080		1.31	0.009			

Comments: Some samples in this set exhibit possible Au nugget effect. Additional Au assay value for sample E320121 is 1.145 ppm.



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Project: OS-KAZ-001,002,003,004

## CERTIFICATE OF ANALYSIS TB05009667

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	Au-AA23	Au-AA23	Au-GRA21
		Recvd Wt. kg	Au ppm	Au Check ppm	Au Check ppm	Au ppm
		0.02	0.005	0.005	0.005	0.05
E320081		2.79	1.245			
E320082		2.43	0.162			
E320083		2.28	1.170			
E320084		2.55	2.61			
E320085		2.45	3.17			
E320086		2.86	0.175			
E320087		1.71	0.245			
E320088		2.32	0.105			
E320089		1.94	0.056			
E320090		0.08	3.33			
E320091		2.94	0.017			
E320092		2.54	0.017			
E320093		2.43	0.025			
E320094		2.41	0.029			
E320095		1.91	0.041			
E320096		1.13	0.043			
E320097		1.57	0.082			
E320098		2.27	0.009			
E320099		2.51	0.041			
E320100		1.34	<0.005			
E320101		2.49	<0.005			
E320102		2.43	0.011			
E320103		1.92	0.008			
E320104		2.41	0.036			
E320105		2.29	<0.005			
E320106		2.18	0.059			
E320107		2.00	0.019			
E320108		2.28	3.71			
E320109		2.45	0.089			
E320110		0.08	3.24			
E320111		2.75	0.117	0.137	0.197	
E320112		2.22	0.009			
E320113		1.75	2.11			
E320114		2.04	1.265	1.995	1.780	
E320115		2.26	0.090	0.071		
E320116		1.15	0.045			
E320117		1.99	0.025			
E320118		2.24	1.860	1.815		
E320119		2.39	1.230			
E320120		1.11	0.007			

Comments: Some samples in this set exhibit possible Au nugget effect. Additional Au assay value for sample E320121 is 1.145 ppm.



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Project: OS-KAZ-001,002,003,004

## CERTIFICATE OF ANALYSIS TB05009667

Sample Description	Method Analyte Units LOR	WEI-21	Au-AA23	Au-AA23	Au-AA23	Au-GRA21
		Recvd Wt. kg	Au ppm	Au Check ppm	Au Check ppm	Au ppm
		0.02	0.005	0.005	0.005	0.05
E320121		1.89	1.400	2.39	2.58	
E320122		2.12	0.042			
E320123		2.41	0.737			
E320124		2.75	>10.0			
E320125		1.60	8.68			14.50
E320126		2.30	2.10			
E320127		2.19	0.628			

Comments: Some samples in this set exhibit possible Au nugget effect. Additional Au assay value for sample E320121 is 1.145 ppm.

## **Appendix VII**

Assay Lab Quality Control Procedures

## **Sample Preparation and Analysis**

### **Drill Core Samples – ALS Chemex**

Thunder Bay Laboratory  
1160 Commerce Street  
Thunder Bay, Ontario  
Canada P7E 6E9  
Phone: (807) 475-3329  
Fax: (807) 475-9196  
Michael Kuemmel  
Laboratory Manager

Vancouver - Main Laboratory  
212 Brooksbank Avenue  
North Vancouver, British Columbia.  
Canada V7J 2C1  
Phone: (604) 984-0221  
Fax: (604) 984-0218  
Maryann Anderson  
Client Services/Marketing

### **Sample Preparation**

<u>ALS CODE</u>	<u>Description</u>
WEI-21	Received Sample Weight
CRU-31	Fine Crushing – 70% <2mm
LOG-22	Sample Login – Received without barcode
PUL-31	Pulverize split to 85% <75mm
SPL-21	Split Sample – Riffle splitter
LOG-24	Pulp Login – Received without barcode
DRY-22	Drying – Maximum Temperature 60C

### **Analytical Procedures**

<u>ALS CODE</u>	<u>Description</u>	<u>Instrument</u>
Au-AA23	Au 30g FA-AA finish	AAS
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM

### **Fire Assay-Atomic Absorption Procedures for Exploration and Low to Medium Grade Ore Samples**

Many samples arriving at ALS Chemex laboratories have "intermediate" levels of gold; that is in the range of 3-10 g/t (0.1-0.3 oz/ton). These samples are best analyzed using FA-AAS procedures Au-AA23.

### **The Fire Assay-Gravimetric Procedure for Ore Grade Samples**

The classical technique for determining gold is the fire assay fusion followed by cupellation and a gravimetric finish (Au-GRA21). This is still the preferred procedure for the analysis of high grade ores. There is no upper quantitative limit applied for these procedures but it should be noted that the detection limit is significantly higher than for procedures that use spectroscopic measurement techniques.

## **Quality Control Procedures for the Determination of Gold in Geological Samples**

The Quality Assurance program at ALS Chemex is a multi-level program involving every area of our operations that is enhanced by a corporate culture dedicated to the encouragement of excellence in measurement techniques. The program involves clearly defined quality control procedures for sample preparation and analysis, plus a quality assessment stage that includes data review and statistical analysis. QA/QC reports are available with every Certificate of Analysis and Chemex can provide custom reports at any time.

Major responsibility for the QA/QC program lies with the ALS Chemex Quality Assurance group headed by Dr. Brenda Caughlin (Manager, Quality Assurance), acting in co-operation with senior staff from all sample preparation and analytical areas. ALS Chemex technical managers attend regularly scheduled review meetings, either in person or by teleconference. This interaction among key personnel helps identify ways in which the program can be improved and enhanced. It is a dynamic process, allowing for continual fine-tuning through the addition of new ideas and the latest technologies. As well, ALS Chemex pays close attention to client comments by maintaining records of all inquiries and special issues raised. The Quality Assurance team in conjunction with department managers investigates any issue raised on a priority basis to ensure prompt resolution.

### **Laboratory Registration**

ALS Chemex has attained ISO 9001:2000 registration at all of our North American and Peruvian laboratories as well as the Brisbane, Australia site, with Chile and the rest of Australia actively pursuing registration. Recently, we were accredited to ISO 9001:2000 for North America. ISO 9001:2000 requires evidence of a quality management system covering all aspects of our organisation. To ensure compliance with this system regular internal audits are undertaken by staff members specially trained in auditing techniques. In addition, the ALS Chemex Vancouver laboratory is accredited to ISO 17025 by Standards Council of Canada for a number of specific test procedures including fire assay Au by AA, ICP and gravimetric finish, multi-element ICP and AA Assays for Ag, Cu, Pb, and Zn. This accreditation provides specific assessment of our laboratories' analytical competence for the analytical techniques listed in our scope of accreditation (Scope of Accreditation, Certificate of Accreditation). In addition to twice yearly proficiency tests, auditors experienced in minerals analysis have performed detailed technical reviews at our site. It is Chemex's opinion that the combination of the two ISO standards provides our clients complete assurance regarding the quality of every aspect of ALS Chemex operations. The Brisbane laboratory is similarly accredited by NATA for key analytical methods.

Aside from laboratory registration, ALS Chemex has been a leader in participating in and sponsoring the Assayer Certification program in the Canadian province of British Columbia, one of the few jurisdictions that maintains a rigorous assayer registration program. ALS Chemex have on staff a number of Registered Assayers who have undergone extensive theoretical and practical training and passed comprehensive examinations prior to receiving their certificates.

### **Proficiency Testing**

As part of ALS Chemex's progress towards ISO 17025 registration ALS Chemex laboratories participate in a number of international proficiency tests, such as those managed by CANMET (Proficiency Testing Program – Minerals Analysis Laboratories) and Geostats. Both of these agencies circulate samples for analysis twice a year and evaluate the performance of participating laboratories.

### **Documentation**

All sample preparation and analytical procedures have been assigned unique code numbers so that ALS Chemex always know exactly which procedure is to be followed. Each code is fully documented by written procedures that contain unique filenames and a revision number. Senior technical staff and the Quality Assurance Manager must approve any new revision. All new methods must go through a process of method validation that ensures the proposed procedure conforms to reasonable standards with respect to such critical parameters as accuracy, precision and detection limit.

### **Assessment Procedures**

Quality Assessment is the system of activities employed to assure our clients and ourselves that our quality control procedures are effective in providing accurate data. Part of this assessment involves a continuing evaluation of the performance of our analytical systems, primarily through statistical analysis. There are, however, other aspects to ALS Chemex's quality assessment program:

#### **Evaluation of Routine Quality Control Data**

ALS Chemex standard operating procedures require the analysis of quality control samples (reference materials, duplicates and blanks) with all sample batches. As part of the assessment of every data set, results from the control samples are evaluated to ensure they meet set standards determined by the precision and accuracy requirements of the method.

In the event that any reference material or duplicate result falls outside the established control limits, an Error Report is automatically generated. This ensures the person evaluating the sample set for data release is made aware that a problem may exist with the data set and investigation can be initiated.

All data generated from quality control samples is automatically captured and retained in a separate database used for Quality Assessment. Control charts for in-house reference materials from frequently used analytical methods are regularly generated and evaluated by senior technical staff at Quality Assurance meetings to ensure internal specifications for precision and accuracy are being met.

#### **Quality Control Reports**

Quality control data for reference materials and duplicates are routinely reported to clients so that they may monitor laboratory data independently. These reports are generated at no charge to the client and are issued together with the Certificates of Analysis. QC data summaries and customised QC reports are also available. Please contact ALS Chemex's Quality Assurance Department to request custom QC reports.

### **Round Robin Exchanges**

Quality Assurance staff control monthly inter-laboratory test programs covering both gold and base metal determinations to monitor the quality of data generated by our network of laboratories. The Quality Assurance group selects and circulates the samples and then evaluates the performance of each laboratory through statistical analysis.

### **Sample Preparation Quality Control**

As part of the routine procedures, ALS Chemex uses barren wash material between sample preparation batches and, where necessary, between highly mineralised samples. This cleaning material is tested before use to ensure no contaminants are present and results are retained for reference. In addition, logs are maintained for all sample preparation activities. In the event a problem with a prep batch is identified, these logs can be used to trace the sample batch preparation and initiate appropriate action. Performing regular QC checks on prepared material monitors sample preparation quality. Laboratories are required to submit results from QC checks to the Quality Assurance department to compile and make sure standards outlined in the Service Schedule are being met.

### **Confidentiality of Data and Data Security**

The results of any analyses generated by ALS Chemex are strictly confidential and the sole property of the client. Unauthorised use or release of any analytical data is not permitted. Furthermore all internal ALS Chemex documents, reports, lists, files and methods may not be disclosed or photocopied without permission. Any act in violation of these rules would be considered grounds for dismissal. The policy on client confidentiality is in the Staff Brochure that is given to all new employees. ALS Chemex also requires new employees to sign a Confidentiality Agreement indicating that they understand these terms of employment and accept them.

Information stored in our computer system is available only to authorised staff and clients, all of whom have password-protected accounts. Clients can retrieve their data electronically in a secure fashion using our Webtrieve™ system. The internal security system maintains a record of any activity in a client workorder file, including the act of viewing a file, and records the name of the user and the time, date and nature of the activity. In this way ALS Chemex can verify and confirm that no unauthorised activities have taken place in a client file. Other technological advances that have helped improve data security include autofaxing from the computer so that accidental misdialling does not occur.



## **Musselwhite Mine Assay Lab**

### **Gold Determination in Geological Samples**

#### **Sample Preparation**

Muck and chip samples are dried in a propane-fired oven for a minimum of 4 hours. Drill core is dried if necessary (water from saw, rain, snow). Samples are fed one at a time into the Rocklabs automated sampling system. Muck samples are crushed in the Big Boyd crusher to approximately ½", then crushed to 80% passing 6-mesh in the Boyd crusher. The sample is then split to 3000g (if the original sample was at least 3000g) and the split portion is pulverized to a minimum 90% passing 10-mesh. The sample is split again to 600g and this portion is pulverized to a minimum 90% passing 150-mesh. To minimize the chances of cross-contamination, 100-150 grams of material are allowed to pass through the pulverizer before collection begins. Reject material is not saved for these samples.

Drill core samples are prepared the same way as the mucks, however virtually all of the sample continues through the process (no material is sent to waste from the crushers) until the second-stage pulverizer, where the 10-mesh reject is bagged and stored.

#### **Fire Assay**

The samples are weighed at 30g and mixed with a pre-mixed flux. They are inquarted with AgNO<sub>3</sub> and fused at 1920°F for 50 to 60 minutes. The buttons are then cupelled and the resulting Doré beads are placed in 10ml test tubes.

#### **Analysis**

The beads are parted with 1ml of 33% HNO<sub>3</sub> in a hot water bath, and then the gold is digested with 1ml of concentrated HCl in the same bath. The solution is cooled and bulked to 10ml. The solutions are run on a Varian200 AA using an autosampler. The results are sent to the LIMS database for approval by the technicians.

#### **Quality Control**

Several QC methods are employed in this analysis. In sample preparation, each batch of drill core samples includes a granite blank and reference material submitted by geology and a granite grit blank inserted by the lab. Run-of-mine samples are treated the same, although no reference material is submitted with these. In fire assay, a reagent blank, pulp duplicate, and reference material are added to each batch received from sample prep. At the analysis stage, a spike standard is analyzed before every 12 samples, and a calibration or re-slope is performed at the same rate.

## **Appendix VIII**

QAQC Results





HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB	0.076 to 0.00 ppm Au	Failure	Explanation
	E313080	GRBLANK			0.0159	23-Feb-05	19-Feb-05	INTERNAL	0.0159		
	E313100	GRBLANK			0.0100	23-Feb-05	19-Feb-05	INTERNAL	0.01		
	E313120	GRBLANK			0.0245	06-Mar-05	23-Feb-05	INTERNAL	0.0245		
	E313140	GRBLANK			0.0502	06-Mar-05	23-Feb-05	INTERNAL	0.0502		
	E313160	GRBLANK			0.0424	07-Mar-05	24-Feb-05	INTERNAL	0.0424		
	E313180	GRBLANK			0.0428	07-Mar-05	24-Feb-05	INTERNAL	0.0428		
	E313200	GRBLANK			0.0127	07-Mar-05	24-Feb-05	INTERNAL	0.0127		
	E313220	GRBLANK			0.0485	12-Mar-05	25-Feb-05	INTERNAL	0.0485		
	E313240	GRBLANK			0.0318	14-Mar-05	25-Feb-05	INTERNAL	0.0318		
	E313260	GRBLANK			0.0254	13-Mar-05	28-Feb-05	INTERNAL	0.0254		
	E313280	GRBLANK			0.0349	09-Mar-05	28-Feb-05	INTERNAL	0.0349		
	E313520	GRBLANK			0.1215	12-Feb-05	09-Feb-05	INTERNAL	0.1215	0.0455	
	E313540	GRBLANK			0.0139	18-Feb-05	10-Feb-05	INTERNAL	0.0139		
	E313560	GRBLANK			0.0100	20-Feb-05	12-Feb-05	INTERNAL	0.01		
	E313580	GRBLANK			0.0100	20-Feb-05	12-Feb-05	INTERNAL	0.01		
	E313600	GRBLANK			0.0100	20-Feb-05	13-Feb-05	INTERNAL	0.01		
	E313620	GRBLANK			0.0100	19-Feb-05	14-Feb-05	INTERNAL	0.01		
	E313640	GRBLANK			0.0100	19-Feb-05	15-Feb-05	INTERNAL	0.01		
	E313660	GRBLANK			0.0190	22-Feb-05	17-Feb-05	INTERNAL	0.019		
	E313680	GRBLANK			0.0303	21-Feb-05	17-Feb-05	INTERNAL	0.0303		
	E313700	GRBLANK			n/rcvd	21-Feb-05	17-Feb-05	INTERNAL	n/rcvd		Undetermined Human Error
	E313720	GRBLANK			0.0100	21-Feb-05	17-Feb-05	INTERNAL	0.01		
	E313740	GRBLANK			0.0314	23-Feb-05	19-Feb-05	INTERNAL	0.0314		
	E314500	GRBLANK			0.0238	25-Mar-05	10-Mar-05	INTERNAL	0.0238		
	E314520	GRBLANK			0.0100	26-Mar-05	10-Mar-05	INTERNAL	0.01		
	E314540	GRBLANK			0.0449	25-Mar-05	11-Mar-05	INTERNAL	0.0449		
	E314560	GRBLANK			0.0177	27-Mar-05	13-Mar-05	INTERNAL	0.0177		
	E314580	GRBLANK			0.0235	25-Mar-05	14-Mar-05	INTERNAL	0.0235		
	E314600	GRBLANK			0.0221	30-Mar-05	15-Mar-05	INTERNAL	0.0221		
	E314620	GRBLANK			0.0142	30-Mar-05	16-Mar-05	INTERNAL	0.0142		
	E314640	GRBLANK			0.0113	31-Mar-05	16-Mar-05	INTERNAL	0.0113		
	E320020	GRBLANK			0.0025	25-Feb-05	30-Jan-05	CHEMEX	0.0025		
	E320040	GRBLANK			0.0050	25-Feb-05	01-Feb-05	CHEMEX	0.005		
	E320060	GRBLANK			0.0025	25-Feb-05	01-Feb-05	CHEMEX	0.0025		
	E320080	GRBLANK			0.0090	25-Feb-05	03-Feb-05	CHEMEX	0.009		
	E320100	GRBLANK			0.0025	25-Feb-05	03-Feb-05	CHEMEX	0.0025		
	E320120	GRBLANK			0.0070	25-Feb-05	05-Feb-05	CHEMEX	0.007		
	E320140	GRBLANK			0.0100	13-Feb-05	06-Feb-05	INTERNAL	0.01		
	E320160	GRBLANK			0.0100	13-Feb-05	06-Feb-05	INTERNAL	0.01		
	E320180	GRBLANK			0.0100	13-Feb-05	06-Feb-05	INTERNAL	0.01		
	E320200	GRBLANK			0.0140	16-Feb-05	07-Feb-05	INTERNAL	0.014		
	E320220	GRBLANK			0.0100	17-Feb-05	08-Feb-05	INTERNAL	0.01		
	E320240	GRBLANK			0.0267	17-Feb-05	08-Feb-05	INTERNAL	0.0267		
	E320420	GRBLANK			0.0175	11-Feb-05	05-Feb-05	INTERNAL	0.0175		
	E320440	GRBLANK			0.0112	12-Feb-05	05-Feb-05	INTERNAL	0.0112		
	E320580	GRBLANK			0.0100	07-Mar-05	24-Feb-05	INTERNAL	0.01		
	E320600	GRBLANK			0.0190	08-Mar-05	24-Feb-05	INTERNAL	0.019		
	E320620	GRBLANK			0.0100	13-Mar-05	25-Feb-05	INTERNAL	0.01		

HOLEID	SAMPLEID	SAMPLETYPE	SAMPFROM	SAMPTO	AU_PPM_FA	AnalysisDate	SampleDate	LAB	0.076 to 0.00 ppm Au	Failure	Explanation
	E320640	GRBLANK			0.0466	14-Mar-05	25-Feb-05	INTERNAL	0.0466		
	E320760	GRBLANK			0.0100	11-Mar-05	27-Feb-05	INTERNAL	0.01		
	E320780	GRBLANK			0.0127	11-Mar-05	27-Feb-05	INTERNAL	0.0127		
	E333020	GRBLANK			0.0207	06-Feb-05	26-Jan-05	INTERNAL	0.0207		
	E333040	GRBLANK			0.0198	06-Feb-05	28-Jan-05	INTERNAL	0.0198		
	E333060	GRBLANK			0.0244	07-Feb-05	28-Jan-05	INTERNAL	0.0244		
	E333080	GRBLANK			0.0100	08-Feb-05	28-Jan-05	INTERNAL	0.01		
	E333100	GRBLANK			0.0100	09-Feb-05	28-Jan-05	INTERNAL	0.01		
	E333480	GRBLANK			0.0123	14-Feb-05	07-Feb-05	INTERNAL	0.0123		
								<b>Total Failure</b>		<b>Total Failure Minus Human Error</b>	
								<b>Failure % +</b>	<b>1.75%</b>	<b>Failure % +</b>	<b>1.75%</b>
								<b>Failure % -</b>	<b>1.75%</b>	<b>Failure % -</b>	<b>0.00%</b>
								<b>Failure %</b>	<b>3.51%</b>	<b>Failure %</b>	<b>1.75%</b>

## **Appendix IX**

JD Barnes UTM-Mine Grid Conversion Table

JD Barnes UTM Nad 83 to Mine Grid (2002) Transformation Table

<b>Station</b>	<b>MG Easting</b>	<b>MG Northing</b>	<b>UTM Easting</b>	<b>UTM Northing</b>
SXT-2875	9213.45	9783.55	678569.65	5832754.97
STX-0602	8516.42	9619.61	678184.08	5832151.66
ST-1505	9013.89	9968.28	678297.97	5832748.5
ST-3989	7858.39	9396.49	677867.78	5831533.18
ST-3983	7093.51	9415.49	677306.14	5831013.64
ST-1521	6068.99	8791.2	677005.4	5829852.49
ST-1520	6534.35	8588.63	677480.33	5830031.4
ST-1519	7110.37	8411.19	678017.14	5830305.44
ST-5040	7707.94	8126.38	678644.22	5830517.54
ST-2858	8592.45	14228.97	675027.88	5835511.43
ST-2857	7753.79	14428.01	674287.61	5835070.08
ST-2855	6761.56	13672.56	674102.01	5833837.12
ST-1664	5000	13463.04	672984.35	5832459.86
ST-2853	4327.85	11721.29	673715.58	5830742.33
ST-1031	9849.87	8648.44	679816.89	5832384.8
ST-1028	9480.4	9169.75	679188.68	5832501.1
ST-5120	8616.29	8737.77	678869.81	5831588.78
ST-2851	5380.79	12512.34	673919.63	5832043.29
ST-2850	6069.84	12339.83	674534.15	5832399.45
ST-2849	6964.56	12209.44	675266.82	5832929.17
ST-2848	7790.68	12231.4	675844.15	5833520.39
ST-2846	8851.44	12049.44	676731.72	5834128.54
ST-3984	8095.85	9720.97	677811.8	5831931.28
ST-3386	8998.86	9665.76	678497.84	5832520.95
Tower	8215.14	9851.66	677806.18	5832108.14
Pad	8215.14	9851.66	677806.18	5832108.14



# **Appendix X**

## Significant Intersections

Hole ID	From (m)	To (m)	Au g/t	Drilled Width (m)	True Width (m)
05-KAZ-001	4.60	4.90	7.78	0.30	0.19
05-KAZ-002	9.70	10.10	12.30	0.40	0.31
05-KAZ-002	17.00	18.20	3.61	1.20	0.98
05-KAZ-003	11.90	12.90	3.71	1.00	0.50
05-KAZ-003	31.40	36.00	5.21	4.60	3.25
05-KAZ-005	22.25	24.05	4.32	1.80	1.27
05-KAZ-005	36.95	39.80	5.59	2.85	1.83
05-KAZ-007	32.50	33.60	16.39	1.10	0.71
05-KAZ-007	38.60	39.05	4.05	0.45	0.32
05-KAZ-009	22.30	25.70	3.23	3.40	2.79
05-KAZ-009	28.90	31.90	7.19	3.00	2.60
05-KAZ-011	37.90	38.70	7.05	0.80	0.66
05-KAZ-013	39.60	41.05	11.03	1.45	1.19
05-KAZ-013	39.60	44.40	3.84	4.80	3.93
05-KAZ-015	25.40	28.00	8.50	2.60	2.13
05-KAZ-017	28.10	28.90	14.90	0.80	0.66
05-KAZ-019	41.20	43.20	6.86	2.00	1.64
05-KAZ-019	41.20	50.25	3.99	9.05	7.41
05-KAZ-019	46.40	50.25	5.75	3.85	3.15
05-KAZ-021	19.30	26.85	5.98	7.55	6.18
05-KAZ-023	20.80	26.70	5.96	5.90	4.52
05-KAZ-025	38.50	43.00	4.95	4.50	3.69
05-KAZ-026	9.10	10.90	3.69	1.80	1.47
05-KAZ-027	7.50	9.50	5.95	2.00	1.64
05-KAZ-028	26.20	31.60	3.36	5.40	4.42
05-KAZ-041	16.80	19.35	3.55	2.55	1.80
05-KAZ-043	18.00	18.60	3.68	0.60	0.54
05-KAZ-044	8.00	9.00	4.90	1.00	0.94
05-KAZ-045	11.40	11.90	4.17	0.50	0.41
05-KAZ-045	22.95	23.40	3.80	0.45	0.29
05-KAZ-047	19.00	22.80	7.03	3.80	2.44
05-KAZ-048	10.00	11.30	4.18	1.30	0.92
05-KAZ-048	15.90	18.20	5.19	2.30	1.76
05-KAZ-048	26.50	29.60	3.70	3.10	2.19
05-KAZ-049	14.00	15.00	7.03	1.00	0.71
05-KAZ-050	12.50	16.60	4.47	4.10	2.35
05-KAZ-051	21.30	22.30	7.04	1.00	0.91
05-KAZ-053	28.90	29.35	5.74	0.45	0.32
05-KAZ-054	3.00	4.00	19.33	1.00	0.64
05-KAZ-054	3.00	5.50	15.10	2.50	1.61
05-KAZ-056	12.90	20.70	3.31	7.80	6.39
05-KAZ-057	22.15	24.40	9.25	2.25	1.29
05-KAZ-057	22.15	32.20	3.37	10.05	6.46
05-KAZ-059	2.70	4.10	5.02	1.40	1.07
05-KAZ-059	9.80	10.40	22.33	0.60	0.46

# **Appendix XI**

Lithological Legend

# Lithological Legend (Modified from OGS Legend)

## PHANEROZOIC

### QUATERNARY

#### RECENT

**Qr** Stream, lake, and swamp deposits

#### PLEISTOCENE

**Qp** Glacial, glaciofluvial, and lacustrine deposits

### *UNCONFORMITY*

## PRECAMBRIAN

### LATE PRECAMBRIAN (?)

#### UNMETAMORPHOSED ROCKS

##### **Mafic Intrusive Rocks**

**10** 10a Diabase

### EARLY PRECAMBRIAN

#### UNMETAMORPHOSED ROCKS

##### **Intermediate to Felsic Intrusive Rocks**

**9** 9a Granite pegmatite

#### METAMORPHOSED ROCKS

##### **Intermediate to Felsic Intrusive Rocks**

**8** 8 Unsubdivided  
8a Diorite  
8b Quartz diorite  
8c Trondhjemite  
8d Tonalite  
8e Granodiorite  
8f Granitic pegmatite  
8h Biotite trondhjemite  
8j Granite  
8k Quartz monzonite  
8m Gneissic granite  
8n Xenolithic felsic intrusive rocks (xenolith composition indicated in parenthesis)  
8p Mylonitized granitoid rocks  
8q Biotite-muscovite ± fluorite trondhjemite/syenite  
8r Biotite-tonalite gneiss

- 8s Hornblende-biotite tonalite gneiss
- 8u Garnet-muscovite ± tourmaline granite

***INTRUSIVE CONTACT***

**Mafic Intrusive Rocks**

- 7 7a Gabbro (Cl = 35-90)
- 7b Leucogabbro (Cl = 10-35)
- 7c Plagioclase-phyric gabbro
- 7d Mafic dikes, sills, small intrusions not related to mafic volcanic rocks
- 7f Peridotite
- 7h Ultramafic rocks and altered equivalents of probable intrusive origin
- 7j Amphibolite
- 7k Anorthositic gabbro
- 7l Gabbroic anorthosite and anorthosite

***INTRUSIVE CONTACT***

**Metasediments – Chemical Metasediments**

- 4 4a Chert-grunerite
- 4b Chert-magnetite iron formation
- 4c Carbonate 4b
- 4d Carbonate magnetite
- 4e Garnet-amphibole iron formation
- 4f Garnet-biotite schist
- 4h Sulphide iron formation
- 4i Graphitic iron formation
  
- 4ea Garnet-amphibole-grunerite iron formation
- 4ch Chert
- 4chp Chert with pyrite and pyrrhotite
- 4tb Banded iron formation tectonic breccia

**Metasediments – Clastic Metasediments**

- 6 6 Unsubdivided
- 6a Clast-supported conglomerate
- 6b Matrix-supported conglomerate
- 6c Oligomictic conglomerate
- 6d Polymictic conglomerate
- 6e Boulder (>256 mm) conglomerate
- 6f Cobble (64 to 256 mm) conglomerate
- 6g Pebble (4 to 64 mm) conglomerate
- 6h Granule (2 to 4 mm) conglomerate
- 6k Wacke
- 6m Arenite
- 6n Mudstone
- 6p Feldspathic wacke
- 6r Feldspathic arenite
- 6t Quartz arenite
- 6u Amphibole-bearing mudstone/sandstone/conglomerate
- 6v Biotite-bearing mudstone/sandstone
- 6w Garnet-bearing mudstone/sandstone
- 6x Chlorite-bearing mudstone/sandstone conglomerate

- 6y Amphibole ± biotite-bearing foliated rock of probable sedimentary origin
- 6z Ultramafic rock interbedded with metasediments
- 6i Andalusite-bearing metasediments
- 6j Garnet-rich layers associated with metapelites and/or banded iron formation

**Metavolcanics – Intermediate (C1=10-35) & Felsic (C1=0-10)**

- 3
  - 3a Intermediate flow
  - 3b Intermediate pyroclastic breccia, tuff-breccia
  - 3c Intermediate tuff, lapilli-tuff
  - 3d Felsic flow
  - 3e Felsic pyroclastic breccia, tuff-breccia
  - 3f Felsic tuff, lapilli tuff
  - 3g Subvolcanic rocks, unsubdivided
  - 3h Subvolcanic quartz-plagioclase porphyry
  - 3j Subvolcanic quartz-porphyry
  - 3k Subvolcanic plagioclase porphyry
  - 3m Felsic volcanoclastic rocks
  - 3p Intermediate dikes, sills, small intrusions

**Metavolcanics - Mafic**

- 2
  - 2 Unsubdivided
  - 2a Massive, fine- to medium-grained flow
  - 2b Amygdaloidal flow
  - 2d Pillowed flow, pillow breccia, hyaloclastite
  - 2e Flow breccia
  - 2g Pyroclastic breccia, tuff-breccia
  - 2h Tuff, lapilli-tuff
  - 2j Medium- to coarse-grained flow centres
  - 2k Dikes, sills, small intrusions
  - 2m Chlorite-actinolite schist of probable volcanic origin
  - 2n Variolitic flow
  - 2p Amphibolite
  - 2q Metavolcanics containing diopside-plagioclase-epidote ± tourmaline± garnet pods and/or layers
  - 2r Hornblende-plagioclase schist characterized by mm to cm scale layering
  - 2s Hornblende-porphyroblastic
  - 2t Biotite-bearing metavolcanics
  - 2u Garnet-bearing metavolcanics

**Metavolcanics - Ultramafic**

- 1
  - 1 Unsubdivided
  - 1a Massive flow
  - 1b Spinifex-textured flow
  - 1c Oliphant (polysuture)-textured flow
  - 1d Talc-carbonate ± magnetite ± tremolite ± serpentine schist of probable volcanic origin
  - 1e Flow top breccia
  - 1f Pillowed flow
  - 1h Variolitic flow