



**Environmental Division**

**Certificate of Analysis**

OZ MINERALS CANADA RESOURCES INC.

ATTN: ANDREW MITCHELL

200 - 1159 ALLOY DRIVE

THUNDER BAY ON P7B 6M8

**Report Date:** 24-AUG-09 14:13 (MT)

**Version:** FINAL

**Lab Work Order #:** L806856

**Date Received:** 18-AUG-09

**Project P.O. #:** 09-00623

**Job Reference:** Q21392

**Legal Site Desc:**

**CofC Numbers:** 08-011425

**Other Information:**

**Comments:**

MAUREEN OLINEK  
Senior Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L806856-1 LUP-14									
Sampled By: AM on 17-AUG-09 @ 13:00									
Matrix: WATER									
Total Metals - CCME									
Mercury (Hg) - Total									
Mercury (Hg)-Total		<0.00010		0.00010	mg/L		20-AUG-09	CLR	R914663
Total Metals in Water by ICPMS (Low)									
Aluminum (Al)-Total		0.017		0.010	mg/L		22-AUG-09	SYF	R914206
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		22-AUG-09	SYF	R914206
Arsenic (As)-Total		0.00736		0.00040	mg/L		22-AUG-09	SYF	R914206
Barium (Ba)-Total		0.0155		0.0030	mg/L		22-AUG-09	SYF	R914206
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		22-AUG-09	SYF	R914206
Boron (B)-Total		<0.050		0.050	mg/L		22-AUG-09	SYF	R914206
Cadmium (Cd)-Total		<0.000050		0.000050	mg/L		22-AUG-09	SYF	R914206
Chromium (Cr)-Total		<0.0050		0.0050	mg/L		22-AUG-09	SYF	R914206
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		22-AUG-09	SYF	R914206
Copper (Cu)-Total		0.0018		0.0010	mg/L		22-AUG-09	SYF	R914206
Lead (Pb)-Total		0.00016		0.00010	mg/L		22-AUG-09	SYF	R914206
Lithium (Li)-Total		0.051		0.010	mg/L		22-AUG-09	SYF	R914206
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		22-AUG-09	SYF	R914206
Nickel (Ni)-Total		0.0065		0.0020	mg/L		22-AUG-09	SYF	R914206
Selenium (Se)-Total		<0.0020	DLM	0.0020	mg/L		22-AUG-09	SYF	R914206
Silver (Ag)-Total		<0.00010		0.00010	mg/L		22-AUG-09	SYF	R914206
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		22-AUG-09	SYF	R914206
Tin (Sn)-Total		<0.050		0.050	mg/L		22-AUG-09	SYF	R914206
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		22-AUG-09	SYF	R914206
Uranium (U)-Total		<0.00010		0.00010	mg/L		22-AUG-09	SYF	R914206
Vanadium (V)-Total		<0.0010		0.0010	mg/L		22-AUG-09	SYF	R914206
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		22-AUG-09	SYF	R914206
Total Metals in Water by ICPOES (Low)									
Calcium (Ca)-Total		28.5		0.50	mg/L		21-AUG-09	JWU	R917946
Iron (Fe)-Total		0.165		0.010	mg/L		21-AUG-09	JWU	R917946
Magnesium (Mg)-Total		5.36		0.10	mg/L		21-AUG-09	JWU	R917946
Manganese (Mn)-Total		0.0388		0.0020	mg/L		21-AUG-09	JWU	R917946
Potassium (K)-Total		3.25		0.10	mg/L		21-AUG-09	JWU	R917946
Sodium (Na)-Total		27.1		1.0	mg/L		21-AUG-09	JWU	R917946
Ammonia-N		<0.050		0.050	mg/L		19-AUG-09	LMK	R912448
Biochemical Oxygen Demand		<2.0		2.0	mg/L		19-AUG-09	LJD	R918292
MF - Fecal Coliforms		<1		1	CFU/100 mL		18-AUG-09	PB	R913179
Hardness (as CaCO3)		93.3			mg/L		24-AUG-09		
Orthophosphate (PO4-P)		<0.010		0.010	mg/L		19-AUG-09	LIW	R913129
Phosphorus, Total		<0.020		0.020	mg/L	19-AUG-09	19-AUG-09	LIW	R912846
Total Kjeldahl Nitrogen		0.61		0.20	mg/L	21-AUG-09	21-AUG-09	LMK	R916523
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

## Reference Information

### Sample Parameter Qualifier key listed:

Qualifier	Description
DLM	Detection Limit Adjustment For Sample Matrix Effects

### Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BOD-ED	Water	Biochemical Oxygen Demand (BOD)		APHA 5210 B-5 day Incub.-O2 electrode
ETL-HARDNESS-TOT-ED	Water	Hardness (from Total Ca and Mg)		APHA 2340 B-Calculation
FCC-MF-PB	Water	Fecal Coliform Count-MF		APHA 9222D MF
HG-T-CVAA-ED	Water	Mercury (Hg) - Total		EPA 245.7 / EPA 245.1
MET-T-L-ICP-ED	Water	Total Metals in Water by ICPOES (Low)	EPA3015	EPA 200.7
MET-T-L-MS-ED	Water	Total Metals in Water by ICPMS (Low)	EPA3015	EPA 6020
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen		APHA 4500N-C -Dig.-Auto-Colorimetry
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
P-TOTAL-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PO4-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry

\*\* Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

### Chain of Custody numbers:

08-011425

*The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:*

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
PB	PBR LABORATORIES	ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA

### GLOSSARY OF REPORT TERMS

*Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.*

*The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.*

*mg/kg (units) - unit of concentration based on mass, parts per million.*

*mg/L (units) - unit of concentration based on volume, parts per million.*

*< - Less than.*

*D.L. - The reporting limit.*

*N/A - Result not available. Refer to qualifier code and definition for explanation.*

*Test results reported relate only to the samples as received by the laboratory.*

*UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.*

*UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.*

*Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.*

*ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.*



ALS 090819-13 (09-CCO)

## **CONFIDENTIAL ANALYSIS REPORT**

**REPORT #:** 090819-13

**WO #:** 09-CCO

**PO #:** L806856

**CLIENT:** ALS Laboratory Group - Edmonton  
9936-67 Avenue  
Edmonton, AB  
T6E 0P5

**ATTENTION:** ALSED Reporting  
**Tel:** (780) 413-5227  
**Fax:** (780) 437-2311

**SAMPLE DESCRIPTION:** Water Sample

**DATE AND TIME OF SAMPLE COLLECTION:** August 17, 2009/00:00

**DATE AND TIME OF SAMPLE RECEIPT:** August 18, 2009/14:43

**SAMPLE TEMPERATURE WHEN RECEIVED:** 13.2° Celsius

**TEST PERFORMED:** Fecal Coliform by MF

**TEST START DATE:** August 18, 2009/14:43

**DATE COMPLETED:** August 19, 2009

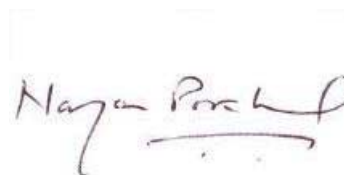
# Certificate of Analysis

PBR ID	Sample #	Client ID	Lot #	Test	Protocol	Result	Units	Comments
09-CCO-1	L806856-1	LUP-14		Fecal Coliform by MF	APHA-9222D	<1	CFU/100ml	1

**Comments**

1 CFU = Colony Forming Unit.

&lt;1 = No counts were detected based on the volume/dilution analyzed.

Mukesh Patel (Analyst)  
Date: Aug 20 2009

Approved By: \_\_\_\_\_

Narayan Pokharel, Ph.D.  
Date: Aug 20 2009



**Report to:** ANDREW MITCHELL  
**Company:** MING RESOURCES INC.  
**Contact:**  
**Address:**  
**Phone:** Fax:  
**Invoice To:** Same as Report? ☒ Yes ☐ No  
**Company:**  
**Contact:**  
**Address:**  
**Phone:** Fax:  
**Lab Work Order #** (lab use only)  
**Quote #:**  
**ALS Contact:** OLIVIER  
**Sampler:** AM

**Report Format / Distribution**  
Standard: ☒ Other:  
Select: PDF ☒ Excel ☐ Digital  
Email 1:  
Email 2:  
**Client / Project Information:**  
Job #:  
PO / AFE:  
Legal Site Description:

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	Analysis Request					Number of Containers
					PH, TSS	ALKALINITY	HARDNESS	METALS	NH <sub>4</sub>	
LUP-20	<del>AD Q21340</del>	16AUG	3:30P	GRAB	✓	✓	✓	✓	✓	✓
LUP-21	<del>AD Q21351</del>	16AUG	4:00P	GRAB	✓	✓	✓	✓	✓	✓
LUP-22	<del>AD Q21352</del>	16AUG	4:26P	GRAB	✓	✓	✓	✓	✓	✓
LUP-23	<del>AD Q21353</del>	16AUG	4:55P	GRAB	✓	✓	✓	✓	✓	✓
LUP-24	<del>AD Q21354</del>	16AUG	5:20P	GRAB	✓	✓	✓	✓	✓	✓
LUP-25	<del>AD Q21355</del>	16AUG	5:00P	GRAB	✓	✓	✓	✓	✓	✓
LUP-26	<del>AD Q21356</del>	16AUG	8:00P	GRAB	✓	✓	✓	✓	✓	✓
LUP-27	<del>AD Q21357</del>	16AUG	11:54a	GRAB	✓	✓	✓	✓	✓	✓
LUP-28	<del>AD Q21358</del>	16AUG	1:00PM	GRAB	✓	✓	✓	✓	✓	✓
LUP-29	<del>AD Q21359</del>	16AUG	11:54a	GRAB	✓	✓	✓	✓	✓	✓
LUP-30	<del>AD Q21360</del>	16AUG								
LUP-31	<del>AD Q21361</del>	16AUG								
LUP-32	<del>AD Q21362</del>	16AUG								
LUP-33	<del>AD Q21363</del>	16AUG								
LUP-34	<del>AD Q21364</del>	16AUG								
LUP-35	<del>AD Q21365</del>	16AUG								
LUP-36	<del>AD Q21366</del>	16AUG								
LUP-37	<del>AD Q21367</del>	16AUG								
LUP-38	<del>AD Q21368</del>	16AUG								
LUP-39	<del>AD Q21369</del>	16AUG								
LUP-40	<del>AD Q21370</del>	16AUG								
LUP-41	<del>AD Q21371</del>	16AUG								
LUP-42	<del>AD Q21372</del>	16AUG								
LUP-43	<del>AD Q21373</del>	16AUG								
LUP-44	<del>AD Q21374</del>	16AUG								
LUP-45	<del>AD Q21375</del>	16AUG								
LUP-46	<del>AD Q21376</del>	16AUG								
LUP-47	<del>AD Q21377</del>	16AUG								
LUP-48	<del>AD Q21378</del>	16AUG								
LUP-49	<del>AD Q21379</del>	16AUG								
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LUP-51	<del>AD Q21381</del>	16AUG								
LUP-52	<del>AD Q21382</del>	16AUG								
LUP-53	<del>AD Q21383</del>	16AUG								
LUP-54	<del>AD Q21384</del>	16AUG								
LUP-55	<del>AD Q21385</del>	16AUG								
LUP-56	<del>AD Q21386</del>	16AUG								
LUP-57	<del>AD Q21387</del>	16AUG								
LUP-58	<del>AD Q21388</del>	16AUG								
LUP-59	<del>AD Q21389</del>	16AUG								
LUP-60	<del>AD Q21390</del>	16AUG								
LUP-61	<del>AD Q21391</del>	16AUG								
LUP-62	<del>AD Q21392</del>	16AUG								
LUP-63	<del>AD Q21393</del>	16AUG								
LUP-64	<del>AD Q21394</del>	16AUG								
LUP-65	<del>AD Q21395</del>	16AUG								
LUP-66	<del>AD Q21396</del>	16AUG								
LUP-67	<del>AD Q21397</del>	16AUG								
LUP-68	<del>AD Q21398</del>	16AUG								
LUP-69	<del>AD Q21399</del>	16AUG								
LUP-70	<del>AD Q21400</del>	16AUG								
LUP-71	<del>AD Q21401</del>	16AUG								
LUP-72	<del>AD Q21402</del>	16AUG								
LUP-73	<del>AD Q21403</del>	16AUG								
LUP-74	<del>AD Q21404</del>	16AUG								
LUP-75	<del>AD Q21405</del>	16AUG								
LUP-76	<del>AD Q21406</del>	16AUG								
LUP-77	<del>AD Q21407</del>	16AUG								
LUP-78	<del>AD Q21408</del>	16AUG								
LUP-79	<del>AD Q21409</del>	16AUG								
LUP-80	<del>AD Q21410</del>	16AUG								
LUP-81	<del>AD Q21411</del>	16AUG								
LUP-82	<del>AD Q21412</del>	16AUG								
LUP-83	<del>AD Q21413</del>	16AUG								
LUP-84	<del>AD Q21414</del>	16AUG								
LUP-85	<del>AD Q21415</del>	16AUG								
LUP-86	<del>AD Q21416</del>	16AUG								
LUP-87	<del>AD Q21417</del>	16AUG								
LUP-88	<del>AD Q21418</del>	16AUG								
LUP-89	<del>AD Q21419</del>	16AUG								
LUP-90	<del>AD Q21420</del>	16AUG								
LUP-91	<del>AD Q21421</del>	16AUG								
LUP-92	<del>AD Q21422</del>	16AUG								
LUP-93	<del>AD Q21423</del>	16AUG								
LUP-94	<del>AD Q21424</del>	16AUG								
LUP-95	<del>AD Q21425</del>	16AUG								
LUP-96	<del>AD Q21426</del>	16AUG								
LUP-97	<del>AD Q21427</del>	16AUG								
LUP-98	<del>AD Q21428</del>	16AUG								
LUP-99	<del>AD Q21429</del>	16AUG								
LUP-100	<del>AD Q21430</del>	16AUG								

Special Instructions / Regulations / Hazardous Details

PRIORITY SERVICE ON Sample LUP-10 ONLY.

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)		SHIPMENT VERIFICATION (lab use only)	
Released by:	Date & Time:	Received by:	Date:	Verified by:	Date & Time:
		R3	18-Aug-09		9:21
			Temperature:		5.5
			Observations:		
			Yes / No ?		
			If Yes attach SIF		