

NI 43-101 Technical Report on Mineral Resources for the Mankarga 5 Gold Deposit Tanlouka Property, Burkina Faso for Channel Resources Ltd.

Prepared for:  
**Channel Resources Ltd.**

Prepared by:  
**Jeffrey K. Smith P.Geo.**

Effective Date:  
**August 17, 2012**

Project Number:  
**168988**

#### **IMPORTANT NOTICE**

This report was prepared as a National Instrument 43-101 Technical Report for Channel Resources Ltd. (Channel) by AMEC Americas Limited (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Channel subject to the terms and conditions of its contract with AMEC. This contract permits Channel to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to NI 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial and territorial securities law, any other uses of this report by any third party is at that party's sole risk.

Prepared by: Jeffrey K. Smith, P.Geo.

Reviewed by: Stella Searston, F.AusIMM, MAIG

Approved by: Stella Searston, F.AusIMM, MAIG

---

**CONTENTS**


---

1.0	SUMMARY .....	1-1
1.1	Project Description and Location .....	1-1
1.2	Mineral Tenure and Property Title .....	1-1
1.3	Permits and Environment .....	1-2
1.4	Geology and Mineralization .....	1-2
1.5	Drilling .....	1-3
1.6	Sample Preparation and Analysis .....	1-5
1.7	Data Verification .....	1-6
1.8	Mineral Resource Estimation.....	1-7
1.9	Interpretation and Conclusions.....	1-8
1.10	Recommendations.....	1-10
	1.10.1 Socio-Economic.....	1-11
	1.10.2 Mineral Resources.....	1-11
2.0	INTRODUCTION .....	2-1
2.1	Introduction .....	2-1
2.2	Terms of Reference .....	2-1
2.3	Qualified Persons .....	2-1
2.4	Effective Dates .....	2-1
2.5	Site Visits .....	2-2
2.6	Previous Technical Reports.....	2-3
2.7	Information Sources and References.....	2-3
3.0	RELIANCE ON OTHER EXPERTS.....	3-1
3.1	Introduction .....	3-1
3.2	Mineral Tenure .....	3-1
3.3	Surface Rights, Access and Permitting .....	3-1
4.0	PROPERTY DESCRIPTION AND LOCATION.....	4-1
4.1	Location .....	4-1
4.2	Ownership and Agreements .....	4-2
4.3	Mineral Title in Burkina Faso .....	4-4
4.4	Land Tenure .....	4-5
4.5	Permits.....	4-6
4.6	Surface Rights .....	4-8
4.7	Royalties .....	4-8
4.8	Environmental.....	4-8
	4.8.1 Baseline Surveys .....	4-8
	4.8.2 Socio-Economics .....	4-10
4.9	Comments on Section 4 .....	4-13
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY .....	5-1
5.1	Accessibility .....	5-1
5.2	Climate.....	5-1
5.3	Vegetation .....	5-1
5.4	Local Resources and Infrastructure .....	5-1
5.5	Physiography .....	5-3

6.0	HISTORY .....	6-1
6.1	Exploration History 1989-2006 .....	6-1
7.0	GEOLOGICAL SETTING AND MINERALIZATION .....	7-1
7.1	Regional Geology .....	7-1
7.2	Property Geology.....	7-4
7.3	Comment on Section 7 .....	7-7
8.0	DEPOSIT TYPES .....	8-1
9.0	EXPLORATION .....	9-1
9.1	Survey Coordinate system .....	9-1
9.1.1	Geological Mapping and Rock Sampling .....	9-1
9.2	Geophysical Surveys.....	9-3
9.2.1	Aerodat-1996.....	9-3
9.2.2	Sagax-2008 .....	9-4
9.2.3	UTS Aeroquest-2011 .....	9-6
9.3	Regional Soil Geochemistry .....	9-9
9.4	Detailed Soil Geochemistry-Mankarga.....	9-16
9.5	Petrography Studies .....	9-17
9.6	Current Exploration Update .....	9-18
9.7	Exploration Potential.....	9-21
9.8	Comment on Section 9 .....	9-21
10.0	DRILLING .....	10-1
10.1	2000 RAB Drilling-Mankarga Area .....	10-1
10.1.1	L35800N / Fence 2 (F-2) .....	10-1
10.1.2	L35800N / Fence 3 (F-3) .....	10-3
10.1.3	L35900N / Fence 4 (F-4) .....	10-3
10.1.4	L36600N / Fence 5 (F-5) .....	10-3
10.2	Phase 1 RC Drilling .....	10-3
10.2.1	Mankarga 5.....	10-5
10.2.2	Mankarga 1 .....	10-6
10.2.3	Mankarga 1 North.....	10-7
10.2.4	Mankarga 2-Southwest.....	10-7
10.2.5	Mankarga 2-Northeast.....	10-7
10.2.6	Mankarga 3.....	10-8
10.2.7	Mankarga 4.....	10-8
10.3	Phase 2 RC Drilling .....	10-9
10.4	Phase 3 Core Drilling.....	10-11
10.5	Current Drill Program Update .....	10-16
10.6	Comment on Section 10 .....	10-18
11.0	SAMPLE PREPARATION, ANALYSES AND SECURITY .....	11-1
11.1	Analytical Laboratories .....	11-1
11.2	Sample Security .....	11-1
11.3	Sample Preparation.....	11-2
11.4	Sample Analysis .....	11-3
11.5	Sample Storage.....	11-3
11.6	Density Determinations .....	11-4
11.7	Comment on Section 11 .....	11-4
12.0	DATA VERIFICATION.....	12-1
12.1	Drill Hole Database Verification.....	12-1

12.1.1	Collar Table .....	12-2
12.1.2	Assay Table .....	12-3
12.1.3	Survey Table .....	12-3
12.1.4	Lithology Table .....	12-4
12.2	AMEC QA/QC Review.....	12-4
12.2.1	Quality Assurance and Quality Control (QA/QC) .....	12-4
12.2.2	Phase 1 QA/QC Analysis-Channel.....	12-5
12.2.3	Phase 1 QA/QC Analysis-Abilab .....	12-7
12.2.4	Phase 2 QA/QC Analysis-Channel.....	12-8
12.2.5	Phase 2 QA/QC Analysis-Abilab .....	12-8
12.2.6	Phase 3 QA/QC Analysis-Channel.....	12-9
12.2.7	Analytical Precision .....	12-10
12.2.8	Analytical Accuracy .....	12-10
12.2.9	Analytical Accuracy from Check Samples.....	12-11
12.2.10	Contamination .....	12-11
12.3	Comment on Section 12 .....	12-12
13.0	<b>MINERAL PROCESSING AND METALLURGICAL TESTING .....</b>	13-1
13.1	Metallurgical Testwork.....	13-1
13.2	Comment on Section 13 .....	13-3
14.0	<b>MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES.....</b>	14-1
14.1	Project Database .....	14-1
14.2	Introduction .....	14-1
14.3	Wireframe Interpretations .....	14-1
14.4	Exploratory Data Analysis (EDA) .....	14-4
14.4.1	Compositing.....	14-5
14.4.2	Grade Capping .....	14-8
14.4.3	Variography .....	14-8
14.5	Density.....	14-9
14.6	AMEC Block Model Estimation.....	14-10
14.6.1	Validation of AMEC Block Models .....	14-11
14.6.2	Visual Inspection .....	14-11
14.6.3	Statistical Comparisons of Resource Models.....	14-11
14.6.4	Swath Plots.....	14-14
14.7	Mineral Resource Classification .....	14-15
14.8	Assessment of Reasonable Prospects of Economic Extraction.....	14-15
14.9	Mineral Resource Statement.....	14-17
14.10	Comments on Section 14 .....	14-20
15.0	<b>MINERAL RESERVE ESTIMATES .....</b>	15-1
16.0	<b>MINING METHODS.....</b>	16-1
17.0	<b>RECOVERY METHODS .....</b>	17-1
18.0	<b>PROJECT INFRASTRUCTURE.....</b>	18-1
19.0	<b>MARKET STUDIES .....</b>	19-1
20.0	<b>ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT .....</b>	20-1
21.0	<b>CAPITAL AND OPERATING COSTS .....</b>	21-1
22.0	<b>ECONOMIC ANALYSIS .....</b>	22-1