

Technical Review of Recent Exploration Activities on the Dixie Lake Project, Red Lake, Ontario

Dixie Lake Property

Prepared for:

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Executive Summary

The Dixie Lake Property is a gold exploration property in the Red Lake mining district of Ontario, currently held under a 50% Joint Venture agreement between Alberta Star Development Corporation, as the funding partner, and Fronteer Development Group Inc., as the operator. SRK Consulting has prepared this report to document recent exploration activities and geological modeling on the property, following the guidelines of the National Instrument 43-101 "Standards of Disclosure for Mineral Projects".

Alberta Star has incurred expenditures in excess of \$1,170,000, in completing three programs of drilling (Fall 2003, Winter 2004, Spring 2004) and exploration work on the Dixie Lake property, for a total of 6,594 metres in 22 drillholes. Additional work includes a ground magnetometer survey, and collection of MMI soil samples that remain to be analyzed. Recent work has focused on the 88-04 Zone, originally discovered by Mutual Resources Ltd in 1988, while testing a coincident Max-Min conductor and magnetic anomaly. The zone is also characterized by strong chargeability and high resistivity anomalies.

The Dixie Lake property is underlain by rocks assigned to the Heyson thoeiitic sequence of the Confederation assemblage by recent investigators from the Geological Survey of Canada (Sanborn-Barrie et al., 2001; 2004). This sequence consists of thick felsic volcanics, including tuffs, rhyolite flows and flow breccias, interlayered with pillowed mafic flows, quartz-feldspar crystal tuff and plagioclase-phyric basaltic andesites, with local, argillaceous interflow sediments associated with varying amounts of quartz-magnetite iron formation.

Alberta Star and Fronteer successfully predicted and confirmed, through the use of structural measurements in oriented drill core, that the 88-04 zone contains a gold-enriched shoot, coinciding with enhanced silicification and thickness, that plunges subparallel to the dominant stretching lineation. Their work unequivocally demonstrates a strong, predictable, structural control on the mineralization. Visible gold is not uncommon within this zone and several of the best assay results exceed 36 g/t Au over true widths of approximately 0.3 to 0.7 metres, but also include wider intercepts, up to 2.6 metres true width, averaging better than 13 g/t Au.

3D geological modeling, in conjunction with structural interpretation of airborne and ground magnetic data indicate that the 88-04 zone is a narrow, slightly curved body entrained in a wide D_2 high strain zone. Fabric relationships show that the zone is transposed by this deformation, rather than sheared by it, and that enhanced silicification, thickness, and gold mineralization are most likely controlled by dilational processes occurring within a minor fold hinge along the 88-04 zone. This model constrains the targeting focus to larger fold hinges occurring at either end of the 88-04 zone, as well as, along an adjacent unit with similar magnetic characteristics to the 88-04 zone.

3D grade interpolations generated by Leapfrog software indicate that the gold distribution within the silicified shoot is coherent and well-defined within the 1 and 2 g/t Au isosurfaces. At 2 g/t Au the shoot is pipe-like and at >3 g/t Au the grade distribution is discontinuous down the plunge of the shoot. No further work on the silicified shoot is recommended at this time, rather, a strategic focus on the higher priority targets defined by the new folding model should form the basis of future work.

Table of Contents

kecutive Summary	iii
able of Contents	iv
st of Tables	vi
st of Figures	vi
Introduction and Terms of Reference	1
Disclaimer	1
Property Description and Location	2
Accessibility, Climate, Local Resources, Infrastructure and Physiography	t
History	8
Geological Setting	13 16 18
Deposit Types	27
Mineralization	28
9.1 Diamond Drilling	32 32 32
9.2 Sampling Method and Approach 9.3 Sample Preparation, Analyses and Security 9.3.5 Quality Assurance and Quality Control Programs 9.3.6 Sampling Bias 9.3.7 Sample Security	35 36 39 40
9.3.8 Specific Gravity Data	41 42 43
Mineral Processing and Metallurgical Testing	46
	ble of Contents

	10.1.1 Sample Descriptions	46
	10.1.2 Test description and conditions	47
	10.1.3 Results	47
11	Mineral Resource Estimation	48
12	Interpretation and Geological Modeling	48
	12.1.1 Leapfrog Modeling	48
	12.1.2 Gemcom Solids	50
13	Conclusions	52
14	Recommendations	53
	14.1 QA/QC	
	14.2 Opportunities	
15	References	54