

We are committed to providing [accessible customer service](#).

If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).

Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).

**Assessment Report
On the
D2 Gold Property
Red Lake Mining Division
Northern Ontario
Canada**

**Prepared for
D2 Gold Inc.
810-789 West Pender St.
Vancouver, B.C. V6C 1H2**

Prepared by:
Brent Clark, P.Geo.



Clark Exploration
Consulting Inc.

Clark Exploration and Consulting Inc.
941 Cobalt Crescent
Thunder Bay, ON
P7B 5Z4

June 14, 2021

TABLE OF CONTENTS

1.0 SUMMARY	2
2.0 INTRODUCTION	4
4.0 PROPERTY DESCRIPTION AND LOCATION	6
5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY.....	23
6.0 HISTORY	25
7.0 GEOLOGICAL SETTING and Mineralization	26
7.1 Regional Geology	26
7.2 Local and Property Geology	30
7.3 Mineralization.....	32
8.0 DEPOSIT TYPES.....	34
9.0 EXPLORATION.....	34
10.0 INTERPRETATION AND CONCLUSIONS	37
11.0 RECOMMENDATIONS	38
12.0 REFERENCES.....	39
13.0 CERTIFICATE OF QUALIFICATIONS	40

TABLE OF FIGURES

Figure 1: Project Location	5
Figure 2: D2 Property Claims	22
Figure 5: Regional Geology	28
Figure 6: D2 Structures in the Red Lake Greenstone Belt	29
Figure 7: Deformation Zones in the Red Lake Greenstone Belt	30
Figure 8: D2 Property Geology	31
Figure 9: D2 Property Adjacent Great Bear Resources	33
Figure 10: Total Magnetic Intensity	36

TABLES

Table 1. D2 Property Claims.....	7
Table 2. D2 Property Previous Exploration.....	25

1.0 SUMMARY

D2 Gold Inc (“**D2**” or the “**Company**”) contracted Precision GeoSurveys of Langley B.C. to complete a detailed Helicopter Airborne Gradient Magnetic Survey to cover the D2 Gold Property (the “**Property**”). The survey totalled ~2508 line km on north – south spaced lines at 50 metre centres. The survey was completed between September 22 and 25th, 2020. The survey was designed to be approximately perpendicular to the dominant strike of the known rocks and structures. The total exploration expenditure for the program was \$109,580.

Clark Exploration and Consulting Inc. has been retained by D2 Gold Inc. to review and evaluate its D2 Gold Property in the Red Lake Mining Division, Northern Ontario (Figure 1), and to complete this assessment report filing.

The D2 Property is located in the area of the Red Lake Mining Division in northwestern Ontario, approximately 30 – 50 km southwest of the community of Red Lake. The UTM co-ordinates for the approximate centre of the claim block are 442490E, 5626285 N (NAD 83, Zone 15). The Property consists of 523 cells under MLAS, for a total area of ~ 2597 hectares (Figure 2). The claims list and due dates are listed in Table 1. The claims are presently held 100% by D2 Gold Inc. (subject to a 2% gross royalty).

The Property is accessible by a series of logging roads and trails that depart westerly from Highway 105 near Era Falls and Red Lake. Floatplane and helicopter in the summer and by snowmobile or air in the winter allows access to the areas away from logging roads.

The Property lies within the Red Lake greenstone belt of the Uchi Subprovince of the Archean Superior Province of the Canadian Shield. The most comprehensive geology description of the belt is provided by Sanborn-Barrie et al. (2001; 2004), compilations of Geological Survey of Canada (Open File 4256), and the Ontario Geological Survey (Preliminary Map P3460).

The geology of the Property is mostly defined from geophysics. The Property is 50% underlain by foliated tonalite dominantly in the north. There is an ellipsoid of migmatized supracrustal rocks within the foliated tonalites. The southern western tail of the Property is interpreted to be underlain by a northeast trending mafic to intermediate volcanics encompassed in a diorite-monzodiorite-granodiorite suite.

The Property has not been explored on the ground and most of the geological interpretation is from wide spaced government magnetic surveys and regional mapping. D2 has completed a detailed magnetic survey that has defined specific magnetic features not interpreted in the less detailed government surveys.

In the north portion of the Property distinctive east west features can be seen that had previously be interpreted as foliated tonalite but are potentially mafic-intermediate

lenses. In the southwest claims there is a defined magnetic low that probably represents a structural corridor.

An exploration program comprised of magnetic interpretation, prospecting and sampling, and Soil Gas Hydrocarbon (SGH) soil sampling is recommended to further evaluate the Property to host economic gold mineralization. The magnetic data should be interpreted on the north portion of the Property to help refine the east-west features. The SGH survey should be completed on the northwest trending magnetic features in the north portion of the claims and along a common claim border with Great Bear Resources Ltd.. The Prospecting should focus on the southwestern portion of the property to assess the potential structural features.

2.0 INTRODUCTION

D2 Gold Inc. contracted Precision GeoSurveys of Langley, British Columbia to complete a detailed Helicopter Airborne Gradient Magnetic Survey to cover the D2 Gold Property (Figure 1). The survey totalled ~2,508 line-km on north–south spaced lines at 50 metre centres, tie lines were flown at 500m spacing at an east-west heading. The survey was completed between September 22 and 25th, 2020. The survey was designed to be approximately perpendicular to the dominant strike of the known rocks and structures. The total exploration expenditure for the program was \$109,580.

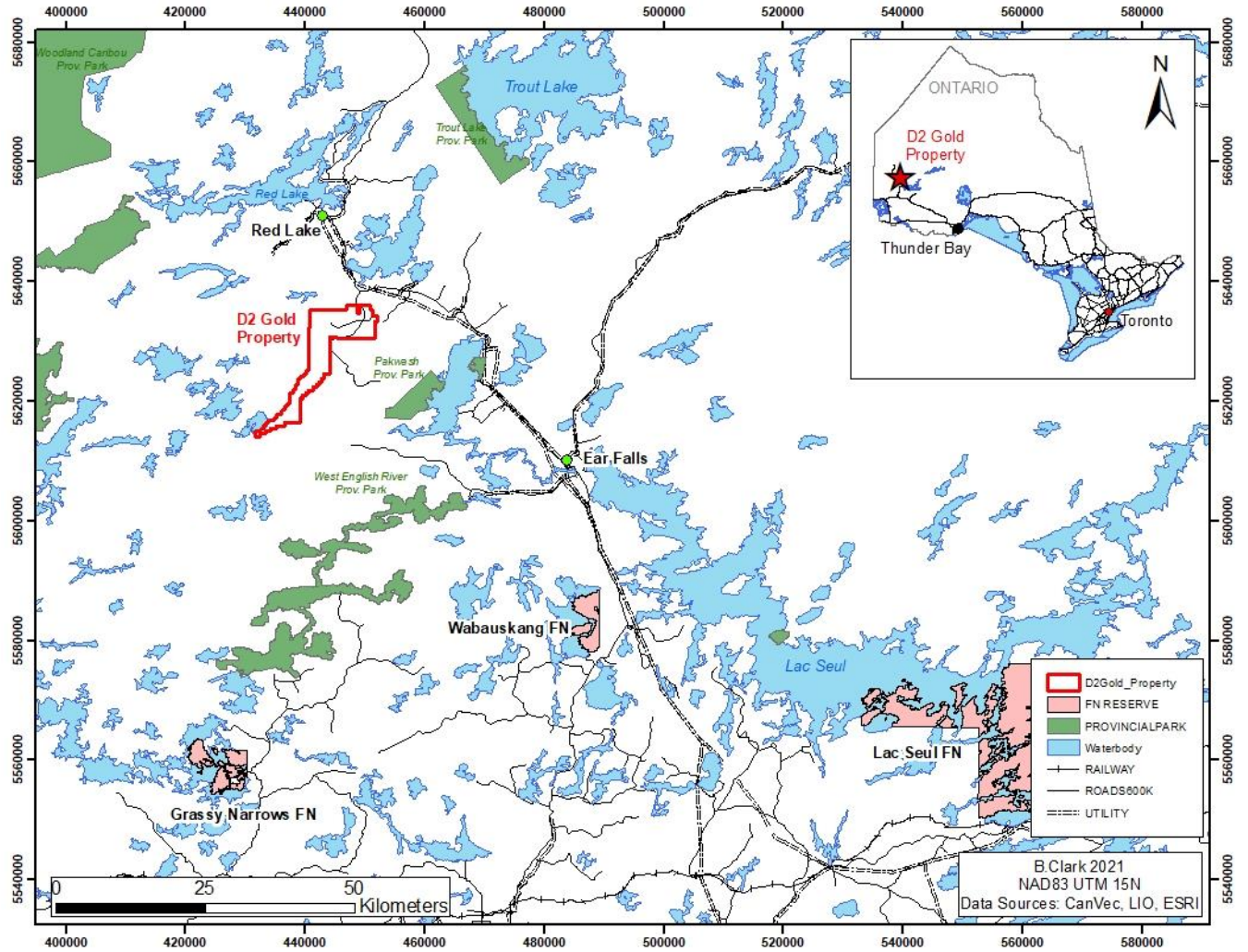


Figure 1: Project Location

4.0 PROPERTY DESCRIPTION AND LOCATION

D2's Property is located in the area of the Red Lake Mining Division in northwestern Ontario, approximately 30 – 50 km southwest of the community of Red Lake. The UTM co-ordinates for the approximate centre of the claim block are 442490E, 5626285 N (NAD 83, Zone 15).

Mining claims are legally defined by their cell position on the grid and coordinate location in the Mining Land Administration System ("MLAS") map viewer.

The Property consists of 523 cells under MLAS, for a total area of ~ 2597 hectares (Figure 2). The claims, areas and due dates are listed in Table 1. The claims are presently held in D2 Gold Inc. (subject to a 2% gross royalty).

The Government of Ontario requires expenditures of \$400 per year per cell for staked claims, prior to expiry, to keep the claims in good standing for the following year. The Assessment report describing the work done by the company must be submitted by the expiry date of the claims to which the work is to be applied. There are no boundary claims on the Property.

No mineral resources, reserves or mines existing prior to the mineralization described in this report are known by the Author to occur on the Property. There are no known environmental liabilities associated with the Property, and there are no other known factors or risks that may affect access, title, or the right or ability to perform work on the Property. The mining claims do not give the claim holder title to or interest in the surface rights on those claims, and as the land is crown land, legal access to the claims is available by public roads which cross the Property.

Table 1. D2 Property Claims

Township / Area	Tenure ID	Anniversary Date	Work Required
LONGLEGGED LAKE AREA	535011	2021-11-14	400
LONGLEGGED LAKE AREA	535010	2021-11-14	400
LONGLEGGED LAKE AREA	534988	2021-11-14	400
LONGLEGGED LAKE AREA	534987	2021-11-14	400
LONGLEGGED LAKE AREA	534986	2021-11-14	400
LONGLEGGED LAKE AREA	534985	2021-11-14	400
LONGLEGGED LAKE AREA	534984	2021-11-14	400
LONGLEGGED LAKE AREA	534983	2021-11-14	400
LONGLEGGED LAKE AREA	534982	2021-11-14	400
LONGLEGGED LAKE AREA	534981	2021-11-14	400
LONGLEGGED LAKE AREA	534980	2021-11-14	400
LONGLEGGED LAKE AREA	534979	2021-11-14	400
LONGLEGGED LAKE AREA	534978	2021-11-14	400
LONGLEGGED LAKE AREA	534977	2021-11-14	400
LONGLEGGED LAKE AREA	534976	2021-11-14	400
LONGLEGGED LAKE AREA	534975	2021-11-14	400
LONGLEGGED LAKE AREA	534974	2021-11-14	400
LONGLEGGED LAKE AREA	534973	2021-11-14	400
LONGLEGGED LAKE AREA	534972	2021-11-14	400
LONGLEGGED LAKE AREA	534971	2021-11-14	400
LONGLEGGED LAKE AREA	534970	2021-11-14	400
LONGLEGGED LAKE AREA	534969	2021-11-14	400
LONGLEGGED LAKE AREA	534968	2021-11-14	400
LONGLEGGED LAKE AREA	534967	2021-11-14	400
LONGLEGGED LAKE AREA	534966	2021-11-14	400
LONGLEGGED LAKE AREA	534965	2021-11-14	400
LONGLEGGED LAKE AREA	534964	2021-11-14	400
LONGLEGGED LAKE AREA	534963	2021-11-14	400
LONGLEGGED LAKE AREA	534962	2021-11-14	400
LONGLEGGED LAKE AREA	534961	2021-11-14	400
LONGLEGGED LAKE AREA	534960	2021-11-14	400
LONGLEGGED LAKE AREA	534959	2021-11-14	400
LONGLEGGED LAKE AREA	534958	2021-11-14	400
LONGLEGGED LAKE AREA	534957	2021-11-14	400
LONGLEGGED LAKE AREA	534956	2021-11-14	400
LONGLEGGED LAKE AREA	534955	2021-11-14	400
LONGLEGGED LAKE AREA	534954	2021-11-14	400
LONGLEGGED LAKE AREA	534953	2021-11-14	400

Township / Area	Tenure ID	Anniversary Date	Work Required
LONGLEGGED LAKE AREA	534952	2021-11-14	400
LONGLEGGED LAKE AREA	534951	2021-11-14	400
LONGLEGGED LAKE AREA	534950	2021-11-14	400
LONGLEGGED LAKE AREA	534949	2021-11-14	400
LONGLEGGED LAKE AREA	534948	2021-11-14	400
LONGLEGGED LAKE AREA	534947	2021-11-14	400
LONGLEGGED LAKE AREA	534946	2021-11-14	400
LONGLEGGED LAKE AREA	534945	2021-11-14	400
LONGLEGGED LAKE AREA	534944	2021-11-14	400
LONGLEGGED LAKE AREA	534943	2021-11-14	400
LONGLEGGED LAKE AREA	534942	2021-11-14	400
LONGLEGGED LAKE AREA	534941	2021-11-14	400
LONGLEGGED LAKE AREA	534940	2021-11-14	400
LONGLEGGED LAKE AREA	534939	2021-11-14	400
LONGLEGGED LAKE AREA	534938	2021-11-14	400
LONGLEGGED LAKE AREA	534937	2021-11-14	400
LONGLEGGED LAKE AREA	534936	2021-11-14	400
LONGLEGGED LAKE AREA	534935	2021-11-14	400
LONGLEGGED LAKE AREA	534934	2021-11-14	400
LONGLEGGED LAKE AREA	534933	2021-11-14	400
LONGLEGGED LAKE AREA	534932	2021-11-14	400
LONGLEGGED LAKE AREA	534931	2021-11-14	400
LONGLEGGED LAKE AREA	534930	2021-11-14	400
LONGLEGGED LAKE AREA	534929	2021-11-14	400
LONGLEGGED LAKE AREA	534928	2021-11-14	400
LONGLEGGED LAKE AREA	534927	2021-11-14	400
LONGLEGGED LAKE AREA	534926	2021-11-14	400
LONGLEGGED LAKE AREA	534925	2021-11-14	400
LONGLEGGED LAKE AREA	534924	2021-11-14	400
LONGLEGGED LAKE AREA	534923	2021-11-14	400
LONGLEGGED LAKE AREA	534922	2021-11-14	400
LONGLEGGED LAKE AREA	534921	2021-11-14	400
LONGLEGGED LAKE AREA	534920	2021-11-14	400
LONGLEGGED LAKE AREA	534919	2021-11-14	400
LONGLEGGED LAKE AREA	534918	2021-11-14	400
LONGLEGGED LAKE AREA	534917	2021-11-14	400
LONGLEGGED LAKE AREA	534916	2021-11-14	400
LONGLEGGED LAKE AREA	534915	2021-11-14	400
LONGLEGGED LAKE AREA	534914	2021-11-14	400
LONGLEGGED LAKE AREA	534913	2021-11-14	400

Township / Area	Tenure ID	Anniversary Date	Work Required
LONGLEGGED LAKE AREA	534912	2021-11-14	400
LONGLEGGED LAKE AREA	534911	2021-11-14	400
LONGLEGGED LAKE AREA	534910	2021-11-14	400
LONGLEGGED LAKE AREA	534909	2021-11-14	400
LONGLEGGED LAKE AREA	534908	2021-11-14	400
LONGLEGGED LAKE AREA	534907	2021-11-14	400
LONGLEGGED LAKE AREA	534906	2021-11-14	400
LONGLEGGED LAKE AREA	534905	2021-11-14	400
LONGLEGGED LAKE AREA	534904	2021-11-14	400
LONGLEGGED LAKE AREA	534903	2021-11-14	400
LONGLEGGED LAKE AREA	534902	2021-11-14	400
LONGLEGGED LAKE AREA	534901	2021-11-14	400
LONGLEGGED LAKE AREA	534900	2021-11-14	400
LONGLEGGED LAKE AREA	534899	2021-11-14	400
LONGLEGGED LAKE AREA	534898	2021-11-14	400
LONGLEGGED LAKE AREA	534897	2021-11-14	400
LONGLEGGED LAKE AREA	534896	2021-11-14	400
LONGLEGGED LAKE AREA	534895	2021-11-14	400
LONGLEGGED LAKE AREA	534894	2021-11-14	400
LONGLEGGED LAKE AREA	534893	2021-11-14	400
LONGLEGGED LAKE AREA	534892	2021-11-14	400
LONGLEGGED LAKE AREA	534891	2021-11-14	400
LONGLEGGED LAKE AREA	534890	2021-11-14	400
LONGLEGGED LAKE AREA	534889	2021-11-14	400
LONGLEGGED LAKE AREA	534888	2021-11-14	400
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534887	2021-11-14	400
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534886	2021-11-14	400
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534885	2021-11-14	400
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534884	2021-11-14	400
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534883	2021-11-14	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534882	2021-11-14	400
DEDEE LAKE AREA, LONGLEGGED LAKE AREA	534881	2021-11-14	400
DEDEE LAKE AREA	534880	2021-11-14	400
DEDEE LAKE AREA	534879	2021-11-14	400
DEDEE LAKE AREA	534878	2021-11-14	400
DEDEE LAKE AREA	534877	2021-11-14	400
DEDEE LAKE AREA	534876	2021-11-14	400
DEDEE LAKE AREA	534875	2021-11-14	400
DEDEE LAKE AREA	534874	2021-11-14	400
DEDEE LAKE AREA	534873	2021-11-14	400
DEDEE LAKE AREA	534872	2021-11-14	400
DEDEE LAKE AREA	534871	2021-11-14	400
DEDEE LAKE AREA	534870	2021-11-14	400
DEDEE LAKE AREA	534869	2021-11-14	400
DEDEE LAKE AREA	534868	2021-11-14	400
DEDEE LAKE AREA	534867	2021-11-14	400
DEDEE LAKE AREA	534866	2021-11-14	400
DEDEE LAKE AREA	534865	2021-11-14	400
DEDEE LAKE AREA	534864	2021-11-14	400
DEDEE LAKE AREA	534863	2021-11-14	400
DEDEE LAKE AREA	534862	2021-11-14	400
DEDEE LAKE AREA	534861	2021-11-14	400
DEDEE LAKE AREA	534860	2021-11-14	400
DEDEE LAKE AREA	534859	2021-11-14	400
DEDEE LAKE AREA	534858	2021-11-14	400
DEDEE LAKE AREA	534857	2021-11-14	400
DEDEE LAKE AREA	534856	2021-11-14	400
DEDEE LAKE AREA	534855	2021-11-14	400
DEDEE LAKE AREA	534854	2021-11-14	400
DEDEE LAKE AREA	534853	2021-11-14	400
DEDEE LAKE AREA	534852	2021-11-14	400
DEDEE LAKE AREA	534851	2021-11-14	400
DEDEE LAKE AREA	534850	2021-11-14	400
DEDEE LAKE AREA	534849	2021-11-14	400
DEDEE LAKE AREA	534848	2021-11-14	400
DEDEE LAKE AREA	534847	2021-11-14	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA	534846	2021-11-14	400
DEDEE LAKE AREA	534845	2021-11-14	400
DEDEE LAKE AREA	534844	2021-11-14	400
DEDEE LAKE AREA	534843	2021-11-14	400
DEDEE LAKE AREA	534842	2021-11-14	400
DEDEE LAKE AREA	534841	2021-11-14	400
DEDEE LAKE AREA	534840	2021-11-14	400
DEDEE LAKE AREA	534839	2021-11-14	400
DEDEE LAKE AREA	534836	2021-11-14	400
DEDEE LAKE AREA	534831	2021-11-14	400
DEDEE LAKE AREA	534828	2021-11-14	400
DEDEE LAKE AREA	534827	2021-11-14	400
DEDEE LAKE AREA	534824	2021-11-14	400
DEDEE LAKE AREA	534823	2021-11-14	400
DEDEE LAKE AREA	534818	2021-11-14	400
DEDEE LAKE AREA	534814	2021-11-14	400
DEDEE LAKE AREA	534813	2021-11-14	400
DEDEE LAKE AREA	530055	2021-08-28	400
DEDEE LAKE AREA	530054	2021-08-28	400
DEDEE LAKE AREA	530053	2021-08-28	400
DEDEE LAKE AREA	530052	2021-08-28	400
DEDEE LAKE AREA	530051	2021-08-28	400
DEDEE LAKE AREA	530050	2021-08-28	400
DEDEE LAKE AREA	530049	2021-08-28	400
DEDEE LAKE AREA	530048	2021-08-28	400
DEDEE LAKE AREA	530047	2021-08-28	400
DEDEE LAKE AREA	530046	2021-08-28	400
DEDEE LAKE AREA	530045	2021-08-28	400
DEDEE LAKE AREA	530044	2021-08-28	400
DEDEE LAKE AREA	530043	2021-08-28	400
DEDEE LAKE AREA	530042	2021-08-28	400
DEDEE LAKE AREA	530041	2021-08-28	400
DEDEE LAKE AREA	530040	2021-08-28	400
DEDEE LAKE AREA	530023	2021-08-28	400
DEDEE LAKE AREA	530022	2021-08-28	400
DEDEE LAKE AREA	530021	2021-08-28	400
DEDEE LAKE AREA	530020	2021-08-28	400
DEDEE LAKE AREA	530019	2021-08-28	400
DEDEE LAKE AREA	530018	2021-08-28	400
DEDEE LAKE AREA	530017	2021-08-28	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA	530016	2021-08-28	400
DEDEE LAKE AREA	530015	2021-08-28	400
DEDEE LAKE AREA	530014	2021-08-28	400
DEDEE LAKE AREA	530013	2021-08-28	400
DEDEE LAKE AREA	530012	2021-08-28	400
DEDEE LAKE AREA	530011	2021-08-28	400
DEDEE LAKE AREA	530010	2021-08-28	400
DEDEE LAKE AREA	530009	2021-08-28	400
DEDEE LAKE AREA	530008	2021-08-28	400
DEDEE LAKE AREA	530007	2021-08-28	400
DEDEE LAKE AREA	530006	2021-08-28	400
DEDEE LAKE AREA	530005	2021-08-28	400
DEDEE LAKE AREA	530004	2021-08-28	400
DEDEE LAKE AREA	530003	2021-08-28	400
DEDEE LAKE AREA	530002	2021-08-28	400
DEDEE LAKE AREA	530001	2021-08-28	400
DEDEE LAKE AREA	530000	2021-08-28	400
DEDEE LAKE AREA	529999	2021-08-28	400
DEDEE LAKE AREA	529998	2021-08-28	400
DEDEE LAKE AREA	529997	2021-08-28	400
DEDEE LAKE AREA	529996	2021-08-28	400
DEDEE LAKE AREA	529995	2021-08-28	400
DEDEE LAKE AREA	529994	2021-08-28	400
DEDEE LAKE AREA	529993	2021-08-28	400
DEDEE LAKE AREA	529992	2021-08-28	400
DEDEE LAKE AREA	529991	2021-08-28	400
DEDEE LAKE AREA	529990	2021-08-28	400
DEDEE LAKE AREA	529989	2021-08-28	400
DEDEE LAKE AREA	529988	2021-08-28	400
DEDEE LAKE AREA	529987	2021-08-28	400
DEDEE LAKE AREA	529986	2021-08-28	400
DEDEE LAKE AREA	529985	2021-08-28	400
DEDEE LAKE AREA	529984	2021-08-28	400
DEDEE LAKE AREA	529983	2021-08-28	400
DEDEE LAKE AREA	529982	2021-08-28	400
DEDEE LAKE AREA	529981	2021-08-28	400
DEDEE LAKE AREA	529980	2021-08-28	400
DEDEE LAKE AREA	529979	2021-08-28	400
DEDEE LAKE AREA	529978	2021-08-28	400
DEDEE LAKE AREA	529977	2021-08-28	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA	529976	2021-08-28	400
DEDEE LAKE AREA	529975	2021-08-28	400
DEDEE LAKE AREA	529974	2021-08-28	400
DEDEE LAKE AREA	529973	2021-08-28	400
DEDEE LAKE AREA	529972	2021-08-28	400
DEDEE LAKE AREA	529971	2021-08-28	400
DEDEE LAKE AREA	529970	2021-08-28	400
DEDEE LAKE AREA	529969	2021-08-28	400
DEDEE LAKE AREA	529968	2021-08-28	400
DEDEE LAKE AREA	529967	2021-08-28	400
DEDEE LAKE AREA	529966	2021-08-28	400
DEDEE LAKE AREA	529965	2021-08-28	400
DEDEE LAKE AREA	529964	2021-08-28	400
DEDEE LAKE AREA	529963	2021-08-28	400
DEDEE LAKE AREA	529962	2021-08-28	400
DEDEE LAKE AREA	529961	2021-08-28	400
DEDEE LAKE AREA	529960	2021-08-28	400
DEDEE LAKE AREA	529958	2021-08-28	400
DEDEE LAKE AREA	529957	2021-08-28	400
DEDEE LAKE AREA	529956	2021-08-28	400
DEDEE LAKE AREA	529955	2021-08-28	400
DEDEE LAKE AREA	529954	2021-08-28	400
DEDEE LAKE AREA	529953	2021-08-28	400
DEDEE LAKE AREA	529952	2021-08-28	400
DEDEE LAKE AREA	529951	2021-08-28	400
DEDEE LAKE AREA	529950	2021-08-28	400
DEDEE LAKE AREA	529949	2021-08-28	400
DEDEE LAKE AREA	529948	2021-08-28	400
DEDEE LAKE AREA	529947	2021-08-28	400
DEDEE LAKE AREA	529945	2021-08-28	400
DEDEE LAKE AREA	529944	2021-08-28	400
DEDEE LAKE AREA	529943	2021-08-28	400
DEDEE LAKE AREA	529942	2021-08-28	400
DEDEE LAKE AREA	529940	2021-08-28	400
DEDEE LAKE AREA	529939	2021-08-28	400
DEDEE LAKE AREA	529938	2021-08-28	400
DEDEE LAKE AREA	529937	2021-08-28	400
DEDEE LAKE AREA	529936	2021-08-28	400
DEDEE LAKE AREA	529935	2021-08-28	400
DEDEE LAKE AREA	529934	2021-08-28	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA	529933	2021-08-28	400
DEDEE LAKE AREA	529932	2021-08-28	400
DEDEE LAKE AREA	529931	2021-08-28	400
DEDEE LAKE AREA	529930	2021-08-28	400
DEDEE LAKE AREA	529929	2021-08-28	400
DEDEE LAKE AREA	529927	2021-08-28	400
DEDEE LAKE AREA	529926	2021-08-28	400
DEDEE LAKE AREA	529925	2021-08-28	400
DEDEE LAKE AREA	529924	2021-08-28	400
DEDEE LAKE AREA	529922	2021-08-28	400
DEDEE LAKE AREA	529921	2021-08-28	400
DEDEE LAKE AREA	529920	2021-08-28	400
DEDEE LAKE AREA	529919	2021-08-28	400
DEDEE LAKE AREA	529918	2021-08-28	400
DEDEE LAKE AREA	529917	2021-08-28	400
DEDEE LAKE AREA	529916	2021-08-28	400
DEDEE LAKE AREA	529915	2021-08-28	400
DEDEE LAKE AREA	529912	2021-08-28	400
DEDEE LAKE AREA	529910	2021-08-28	400
DEDEE LAKE AREA	529909	2021-08-28	400
DEDEE LAKE AREA	529908	2021-08-28	400
DEDEE LAKE AREA	529907	2021-08-28	400
DEDEE LAKE AREA	529906	2021-08-28	400
DEDEE LAKE AREA	529905	2021-08-28	400
DEDEE LAKE AREA	529904	2021-08-28	400
DEDEE LAKE AREA	529903	2021-08-28	400
DEDEE LAKE AREA	529898	2021-08-28	400
DEDEE LAKE AREA	529897	2021-08-28	400
DEDEE LAKE AREA	529896	2021-08-28	400
DEDEE LAKE AREA	529895	2021-08-28	400
DEDEE LAKE AREA	529894	2021-08-28	400
DEDEE LAKE AREA	529891	2021-08-28	400
DEDEE LAKE AREA	529890	2021-08-28	400
DEDEE LAKE AREA	529889	2021-08-28	400
DEDEE LAKE AREA	529888	2021-08-28	400
DEDEE LAKE AREA	529887	2021-08-28	400
DEDEE LAKE AREA	529886	2021-08-28	400
DEDEE LAKE AREA	529885	2021-08-28	400
DEDEE LAKE AREA	529884	2021-08-28	400
DEDEE LAKE AREA	529883	2021-08-28	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA	529882	2021-08-28	400
DEDEE LAKE AREA	529881	2021-08-28	400
DEDEE LAKE AREA	529880	2021-08-28	400
DEDEE LAKE AREA	529879	2021-08-28	400
DEDEE LAKE AREA	529878	2021-08-28	400
DEDEE LAKE AREA	529877	2021-08-28	400
DEDEE LAKE AREA	529876	2021-08-28	400
DEDEE LAKE AREA	529875	2021-08-28	400
DEDEE LAKE AREA	529873	2021-08-28	400
DEDEE LAKE AREA	529872	2021-08-28	400
DEDEE LAKE AREA	529871	2021-08-28	400
DEDEE LAKE AREA	529870	2021-08-28	400
DEDEE LAKE AREA	529869	2021-08-28	400
DEDEE LAKE AREA	529868	2021-08-28	400
DEDEE LAKE AREA	529867	2021-08-28	400
DEDEE LAKE AREA	529866	2021-08-28	400
DEDEE LAKE AREA	529864	2021-08-28	400
DEDEE LAKE AREA	529862	2021-08-28	400
DEDEE LAKE AREA	529861	2021-08-28	400
DEDEE LAKE AREA	529860	2021-08-28	400
DEDEE LAKE AREA	529858	2021-08-28	400
DEDEE LAKE AREA	529857	2021-08-28	400
DEDEE LAKE AREA	529856	2021-08-28	400
DEDEE LAKE AREA	529855	2021-08-28	400
DEDEE LAKE AREA	529853	2021-08-28	400
DEDEE LAKE AREA	529852	2021-08-28	400
DEDEE LAKE AREA	529851	2021-08-28	400
DEDEE LAKE AREA	529850	2021-08-28	400
DEDEE LAKE AREA	529849	2021-08-28	400
DEDEE LAKE AREA	529848	2021-08-28	400
DEDEE LAKE AREA	529846	2021-08-28	400
DEDEE LAKE AREA	529845	2021-08-28	400
DEDEE LAKE AREA	529844	2021-08-28	400
DEDEE LAKE AREA	529843	2021-08-28	400
DEDEE LAKE AREA	529842	2021-08-28	400
DEDEE LAKE AREA	529841	2021-08-28	400
DEDEE LAKE AREA	529840	2021-08-28	400
DEDEE LAKE AREA	529839	2021-08-28	400
DEDEE LAKE AREA	529836	2021-08-28	400
DEDEE LAKE AREA	529833	2021-08-28	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DEDEE LAKE AREA	529830	2021-08-28	400
DEDEE LAKE AREA	529829	2021-08-28	400
DEDEE LAKE AREA	529828	2021-08-28	400
DEDEE LAKE AREA	529825	2021-08-28	400
DEDEE LAKE AREA	529804	2021-08-28	400
DEDEE LAKE AREA	529801	2021-08-28	400
DEDEE LAKE AREA	529799	2021-08-28	400
DEDEE LAKE AREA	529798	2021-08-28	400
DEDEE LAKE AREA	529797	2021-08-28	400
DEDEE LAKE AREA	529796	2021-08-28	400
DEDEE LAKE AREA	529795	2021-08-28	400
DEDEE LAKE AREA	529792	2021-08-28	400
DEDEE LAKE AREA	529791	2021-08-28	400
DEDEE LAKE AREA	529790	2021-08-28	400
DEDEE LAKE AREA	529789	2021-08-28	400
DEDEE LAKE AREA	529786	2021-08-28	400
DEDEE LAKE AREA	529781	2021-08-28	400
DEDEE LAKE AREA	529780	2021-08-28	400
DEDEE LAKE AREA	529778	2021-08-28	400
DEDEE LAKE AREA	529777	2021-08-28	400
DEDEE LAKE AREA	529776	2021-08-28	400
DEDEE LAKE AREA	529775	2021-08-28	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529680	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529679	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529678	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529677	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529675	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529673	2021-08-27	400
DIXIE LAKE AREA	529671	2021-08-27	400
DIXIE LAKE AREA	529670	2021-08-27	400
DIXIE LAKE AREA	529669	2021-08-27	400
DIXIE LAKE AREA	529668	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529667	2021-08-27	400
DIXIE LAKE AREA	529665	2021-08-27	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DIXIE LAKE AREA	529664	2021-08-27	400
DIXIE LAKE AREA	529663	2021-08-27	400
DIXIE LAKE AREA	529660	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529659	2021-08-27	400
DIXIE LAKE AREA	529657	2021-08-27	400
DIXIE LAKE AREA	529656	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529655	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529654	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529653	2021-08-27	400
DIXIE LAKE AREA	529652	2021-08-27	400
DIXIE LAKE AREA	529651	2021-08-27	400
DIXIE LAKE AREA	529650	2021-08-27	400
DIXIE LAKE AREA	529649	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529647	2021-08-27	400
DIXIE LAKE AREA	529645	2021-08-27	400
DIXIE LAKE AREA	529644	2021-08-27	400
DIXIE LAKE AREA	529643	2021-08-27	400
DIXIE LAKE AREA	529642	2021-08-27	400
DIXIE LAKE AREA	529638	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529637	2021-08-27	400
DEDEE LAKE AREA	529636	2021-08-27	400
DIXIE LAKE AREA	529635	2021-08-27	400
DIXIE LAKE AREA	529634	2021-08-27	400
DIXIE LAKE AREA	529633	2021-08-27	400
DIXIE LAKE AREA	529632	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529631	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529630	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529629	2021-08-27	400
DEDEE LAKE AREA	529627	2021-08-27	400
DEDEE LAKE AREA	529626	2021-08-27	400
DEDEE LAKE AREA	529625	2021-08-27	400
DEDEE LAKE AREA	529623	2021-08-27	400

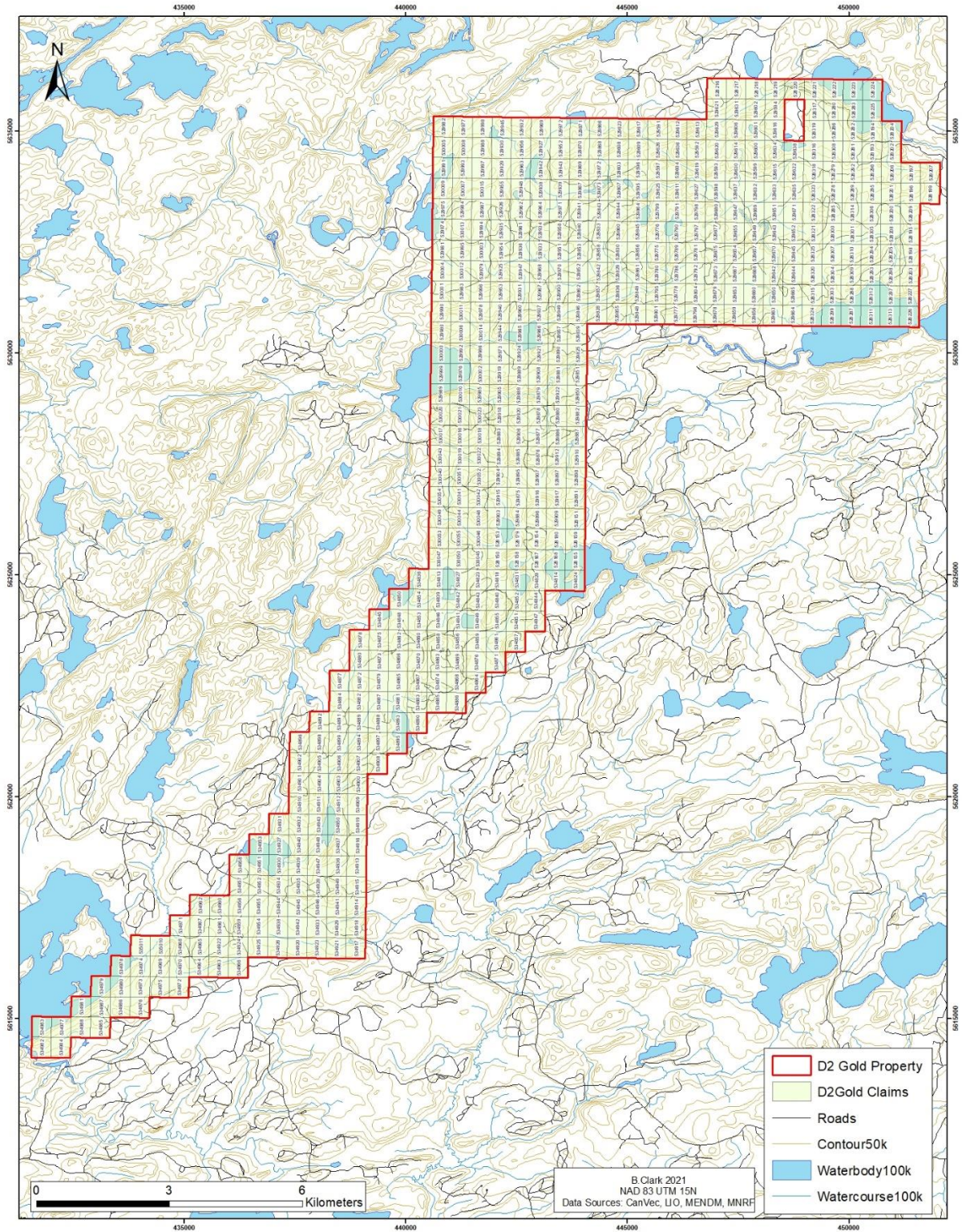
Township / Area	Tenure ID	Anniversary Date	Work Required
DIXIE LAKE AREA	529622	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529621	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529620	2021-08-27	400
DEDEE LAKE AREA	529619	2021-08-27	400
DEDEE LAKE AREA	529617	2021-08-27	400
DIXIE LAKE AREA	529616	2021-08-27	400
DIXIE LAKE AREA	529615	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529614	2021-08-27	400
DEDEE LAKE AREA	529613	2021-08-27	400
DEDEE LAKE AREA	529612	2021-08-27	400
DEDEE LAKE AREA	529611	2021-08-27	400
DEDEE LAKE AREA	529609	2021-08-27	400
DEDEE LAKE AREA	529608	2021-08-27	400
DEDEE LAKE AREA	529607	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529606	2021-08-27	400
DEDEE LAKE AREA	529604	2021-08-27	400
DEDEE LAKE AREA	529603	2021-08-27	400
DIXIE LAKE AREA	529602	2021-08-27	400
DIXIE LAKE AREA	529601	2021-08-27	400
DIXIE LAKE AREA	529600	2021-08-27	400
DIXIE LAKE AREA	529599	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529598	2021-08-27	400
DEDEE LAKE AREA	529597	2021-08-27	400
DEDEE LAKE AREA	529596	2021-08-27	400
DEDEE LAKE AREA	529595	2021-08-27	400
DIXIE LAKE AREA	529594	2021-08-27	400
DEDEE LAKE AREA,DIXIE LAKE AREA	529593	2021-08-27	400
DEDEE LAKE AREA	529592	2021-08-27	400
DEDEE LAKE AREA	529591	2021-08-27	400
DIXIE LAKE AREA	528325	2021-08-23	400
DIXIE LAKE AREA	528324	2021-08-23	400
DIXIE LAKE AREA	528323	2021-08-23	400
DIXIE LAKE AREA	528322	2021-08-23	400
DIXIE LAKE AREA	528321	2021-08-23	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DIXIE LAKE AREA	528320	2021-08-23	400
DIXIE LAKE AREA	528319	2021-08-23	400
DIXIE LAKE AREA	528318	2021-08-23	400
DIXIE LAKE AREA	528317	2021-08-23	400
DIXIE LAKE AREA	528316	2021-08-23	400
DIXIE LAKE AREA	528315	2021-08-23	400
DIXIE LAKE AREA	528314	2021-08-23	400
DIXIE LAKE AREA	528313	2021-08-23	400
DIXIE LAKE AREA	528312	2021-08-23	400
DIXIE LAKE AREA	528311	2021-08-23	400
DIXIE LAKE AREA	528310	2021-08-23	400
DIXIE LAKE AREA	528309	2021-08-23	400
DIXIE LAKE AREA	528308	2021-08-23	400
DIXIE LAKE AREA	528307	2021-08-23	400
DIXIE LAKE AREA	528306	2021-08-23	400
DIXIE LAKE AREA	528305	2021-08-23	400
DIXIE LAKE AREA	528304	2021-08-23	400
DIXIE LAKE AREA	528303	2021-08-23	400
DIXIE LAKE AREA	528301	2021-08-23	400
DIXIE LAKE AREA	528300	2021-08-23	400
DIXIE LAKE AREA	528299	2021-08-23	400
DIXIE LAKE AREA	528298	2021-08-23	400
DIXIE LAKE AREA	528297	2021-08-23	400
DIXIE LAKE AREA	528296	2021-08-23	400
DIXIE LAKE AREA	528295	2021-08-23	400
DIXIE LAKE AREA	528294	2021-08-23	400
DIXIE LAKE AREA	528293	2021-08-23	400
DIXIE LAKE AREA	528292	2021-08-23	400
DIXIE LAKE AREA	528289	2021-08-23	400
DIXIE LAKE AREA	528288	2021-08-23	400
DIXIE LAKE AREA	528287	2021-08-23	400
DIXIE LAKE AREA	528286	2021-08-23	400
DIXIE LAKE AREA	528285	2021-08-23	400
DIXIE LAKE AREA	528283	2021-08-23	400
DIXIE LAKE AREA	528282	2021-08-23	400
DIXIE LAKE AREA	528281	2021-08-23	400
DIXIE LAKE AREA	528280	2021-08-23	400
DIXIE LAKE AREA	528279	2021-08-23	400
DIXIE LAKE AREA	528278	2021-08-23	400
DIXIE LAKE AREA	528227	2021-08-23	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DIXIE LAKE AREA	528226	2021-08-23	400
DIXIE LAKE AREA	528225	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528224	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528223	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528222	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528221	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528220	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528219	2021-08-23	400
DIXIE LAKE AREA,SOUTH OF BYSHE AREA	528218	2021-08-23	400
DEDEE LAKE AREA,DIXIE LAKE AREA,FAULKENHAM LAKE AREA,SOUTH OF BYSHE AREA	528217	2021-08-23	400
DEDEE LAKE AREA,DIXIE LAKE AREA,FAULKENHAM LAKE AREA,SOUTH OF BYSHE AREA	528216	2021-08-23	400
DIXIE LAKE AREA	528209	2021-08-23	400
DIXIE LAKE AREA	528208	2021-08-23	400
DIXIE LAKE AREA	528207	2021-08-23	400
DIXIE LAKE AREA	528206	2021-08-23	400
DIXIE LAKE AREA	528205	2021-08-23	400
DIXIE LAKE AREA	528204	2021-08-23	400
DIXIE LAKE AREA	528203	2021-08-23	400
DIXIE LAKE AREA	528202	2021-08-23	400
DIXIE LAKE AREA	528201	2021-08-23	400
DIXIE LAKE AREA	528200	2021-08-23	400
DIXIE LAKE AREA	528199	2021-08-23	400
DIXIE LAKE AREA	528198	2021-08-23	400
DIXIE LAKE AREA	528197	2021-08-23	400
DIXIE LAKE AREA	528196	2021-08-23	400
DIXIE LAKE AREA	528195	2021-08-23	400

Township / Area	Tenure ID	Anniversary Date	Work Required
DIXIE LAKE AREA	528194	2021-08-23	400
DIXIE LAKE AREA	528193	2021-08-23	400
DEDEE LAKE AREA	528180	2021-08-23	400
DEDEE LAKE AREA	528179	2021-08-23	400
DEDEE LAKE AREA	528168	2021-08-23	400
DEDEE LAKE AREA	528167	2021-08-23	400
DEDEE LAKE AREA	528159	2021-08-23	400
DEDEE LAKE AREA	528158	2021-08-23	400
DEDEE LAKE AREA	528155	2021-08-23	400
DEDEE LAKE AREA	528154	2021-08-23	400
DEDEE LAKE AREA	528153	2021-08-23	400
DEDEE LAKE AREA	528151	2021-08-23	400
DEDEE LAKE AREA	528150	2021-08-23	400

Figure 2: D2 Property Claims



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Property is accessible by a series of logging roads and trails that depart westerly from Highway 105 near Era Falls and Red Lake. Floatplane and helicopter in the summer and by snowmobile or air in the winter allows access to the areas away from logging roads.

The town of Red Lake is accessed by the all-weather paved highway 105 that extends north for 175 km from the Trans-Canada Highway 17 at Vermilion Bay, Ontario to Red Lake. Red Lake airport is serviced by commercial scheduled air services from Thunder Bay, Ontario and Winnipeg, Manitoba.

The climate in the Red Lake area is described as warm-summer humid continental (climate type Dfb according to the Köppen climate classification system). Mean daily temperatures range from -18°C in January to +18°C in July. Annual precipitation averages 70 cm, mainly occurring as summer rain showers, and total annual precipitation includes approximately two metres of snow. Snow usually starts falling during late October and starts melting during March but is not normally fully melted until late April. Fieldwork and drilling are possible year-round on the property some swampy areas are more easily accessible in the winter when frozen.

Red Lake is a municipality with a population of 4,107 (2016 Census) and includes the smaller communities of Red Lake, Balmertown, Cochenour, Madsen, McKenzie Island and Starratt-Olsen, all of which are built around operating or former gold mines. Evolution Mining Limited currently operates the Red Lake Gold Mine that comprises the former Dickenson, Campbell and Cochenour mines. Since production commenced in 1949, the combined Red Lake Operation has produced more than 25M oz of gold at an average grade in excess of 20 g/t gold (<https://evolutionmining.com.au/red-lake/> accessed November 10, 2020).

Highway 105 connected Red Lake to the Trans-Canada Highway in 1946, opening up the area to logging and to hunting and fishing tourism as well as mining activity.

Gold mining is the area's primary economic activity. The Municipality of Red Lake offers a full range of services and supplies for mineral exploration and mining, including both skilled and unskilled labour, bulk fuels, freight, heavy equipment, groceries, hardware and mining supplies.

Timber extraction also contributes to the Red Lake economy.

The Property has gentle to moderate topographic relief with elevations ranging from 360 to just over 380 m. Topography is dominated by glacially outwash covered with jack pine and mature poplar trees. Bedrock exposure is limited as low ridges or exposures near rivers or creeks. Swamps, marshes, small streams, and small to moderate-size lakes are widespread. Glacial overburden depth is generally shallow, rarely exceeding

20m, and primarily consists of ablation till, minor basal till, minor outwash sand and gravel, and silty-clay glaciolacustrine sediments.

The elevation of Red Lake is 357 m asl and is in the Arctic watershed. Red Lake drains into the Chukuni River which flows initially south east into the English River, then west to the Winnipeg River, and north to the Nelson River before discharging into Hudson Bay.

Vegetation consists of thick second growth boreal forest composed of black spruce, jack pine, poplar, and birch.

6.0 HISTORY

The town of Red Lake was founded on gold discoveries made in 1925 by Ray and Lorne Howey and George McNeely. The discoveries led to a gold rush peaking in 1926 with a subsequent mining boom in the 1930s and 1940s that resulted in 12 producing gold mines. The Property spans a large block of ground south and east of the South Bay Mine (Cu, Zn) (past producer 1971 to 1981) of 1.45 million tons of ore grading 2.3% copper, 14.7% zinc and 120 g/t silver.

The Property has had limited historic exploration completed. Table 2 lists historic work and the percentage area covered of the Property.

Table 2. D2 Property Previous Exploration

AFRI_FID	YEAR	PERFORMED BY	AREA	WORK_DESCR	Coverage %
52K13SW0004	1984	Noranda Exploration Co	Deedee Lake Area	Airborne Magnetometer	21.69%
52K13SE0057	1969	Caravelle Mines Ltd	Dixie Lake Area	Airborne Electromagnetic, Airborne Magnetometer, Compilation and Interpretation - Airborne Geophysics, Compilation and Interpretation - Geology	9.71%
52K13NW0053	1985	Golden Terrace Resc Corp	Dixie Lake Area	Airborne Electromagnetic, Airborne Electromagnetic Very Low Frequency, Airborne Magnetometer	0.07%

Noranda Exploration Co. described the section of the magnetics that covered the area to the southwest of the present claim block. The description was on the Long Legged claim group the magnetics vary from 60250 to 60900 nts. The main features on the group are the two main mag highs. Other minor highs exist and there appears to be a northeast trending fault as defined by the mag low cutting through the center of the property.

The Caravelle Mines Ltd. coverage was only Airborne Electromagnetic and Magnetics in the very southeast of the corner of the claim block under Dixie Lake.

Golden Terrace Resources Corp. just touched the northern portion of the present claim block.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The Red Lake Greenstone Belt (RLGB) hosts one of the most prolific and highest-grade gold camps in Canada, with historical production of more than 25 million ounces of gold. The majority of production has come from four mines: Campbell; Red Lake; Cochenour-Willans; and Madsen. There has been additional production from ten smaller mines (Andrews et al, 1986).

Recent exploration completed by Great Bear Resources Ltd. on their Dixie Project southeast of the Town of Red Lake, which is located adjacent to D2 Gold's Property, has encountered a gold mineralized environment not previously identified in the RLGB.

7.1 Regional Geology

The Property lies within the Red Lake greenstone belt of the Uchi Subprovince of the Archean Superior Province of the Canadian Shield (Figure 3). The most comprehensive geology description of the belt is provided by Sanborn-Barrie et al. (2001; 2004), compilations of Geological Survey of Canada (Open File 4256), and the Ontario Geological Survey (Preliminary Map P3460). It is briefly summarized here.

Red Lake greenstone belt has 300 MY history of tectono-magmatic deformation with episodes of magmatism, sedimentation and intense hydrothermal activity (Sanborn-Barrie et al., 2001). The rocks of Red Lake (east trending) and Birch-Confederation (north trending) greenstone belts, two coherent belts comprising Uchi Subprovince, are interpreted to have evolved by eruption and deposition of volcanic sedimentary sequences on the active continental margin (the North Caribou Terrane, 3.0 to 2.7 Ga), followed by subduction related arc volcanism (Figure 3). Continental collision with Winnipeg River terrain at 2.71-2.7 Ga led to subsequent crust thickening and metamorphism (Stott and Corfu, 1991; Sanborn-Barrie et al. 2000, 2001). Both greenstone belts in the Red Lake District are dominated by the Balmer and Confederation Lake assemblages (Sanborn-Barrie et al., 2004).

- Balmer assemblage (2989-2964 Ma) – tholeiitic and komatiitic basalt, with minor felsic volcanic rocks, iron formation and fine-grained clastic meta-sediments. Assemblage is the host to majority of Red Lake's lode gold deposits.
- The Woman Assemblage (2858 Ma) is also primarily an Fe-tholeiitic sequence of mafic volcanic strata, with minor interbeds of banded chemical sediments and pyritic siltstones and shales. This assemblage is unconformable or Para conformable on the Balmer assemblage and occurs along the western edge of the Birch-Uchi Belt stratigraphically above the Balmer Assemblage.
- The Confederation Lake Assemblage (2750-2700Ma) is by far the most aerially extensive assemblage in the belt. It comprises an assemblage of intermediate to felsic flows and pyroclastic strata, which are unconformably overlain by conglomeratic to argillaceous rift-related sediments. The Confederation Lake Assemblage also has minor interbeds or banded iron formation.

At least 3 phases of regional deformation affected the area resulting in the widespread development of folds, axial planar fabrics, and ductile shear zones. D1 deformation involved NW-SE shortening, the development of NE to N-striking folds and faults. Evidence for this D1 event is best preserved in the southern part of the belt in the Confederation Lakes area. D2 deformation involved NE-SW to N-S shortening and the development of ~E-W to WNWSE striking regional folds, faults and fabrics. This event is manifested to varying degrees throughout the belt from the Casummit Lake area in the north to the Slate Lake area in the south. D3 deformation appears to have involved renewed E-W shortening and is restricted to the northern part of the belt in the Mink Lake/Casummit Lake area. This shortening event resulted in the buckling of the regional S2 foliation into N-S folds. This event was accompanied by N-S striking S3 crenulation cleavage and ENE plunging F3 fold development.

The RLGB records a volcanic history that spans 300 Ma and is represented by seven volcano-sedimentary assemblages (Sanborn-Barrie et al, 2001). From oldest to youngest these include:

1. The Balmer Assemblage (2.99-2.97 Ga), that is the host to the majority of current and past-producing gold mines, consists of submarine tholeiitic and komatiitic flows, ultramafic intrusive rocks, and intercalated calc-alkaline felsic volcanic rocks, fine-grained clastic rocks and iron-formation.
2. The Ball Assemblage (2.94–2.92 Ga) is comprised of calc-alkalic basalt, andesite, dacite, and rhyolite intercalated with minor komatiite and komatiitic basalt flows, conglomerate, quartzite, and locally stromatolitic marble.
3. The Slate Bay Assemblage (<2.93 Ga) is a dominantly clastic assemblage that disconformably overlies the Balmer Assemblage. The Slate Bay Assemblage is composed of feldspathic wacke interbedded with lithic wacke, argillite, and lenses of conglomerate, and compositionally mature conglomerate, grit, and quartzose arenite. Quartz-rich rocks contain clasts of vein quartz, felsic volcanic rocks, and fuchsite material indicating derivation from felsic and ultramafic sources.
4. The Bruce Channel Assemblage (2.89 Ga) comprises intermediate volcanoclastic fragmental rocks locally overlain by a sequence of chert-pebble conglomerate, wacke, siltstone, and quartz-magnetite iron-formation.
5. The Trout Bay assemblage (approximately 2.85 Ga) consists of basalt overlain by clastic rocks, intermediate tuff and chert-magnetite iron-formation.
6. The Huston assemblage (<2.89 Ga and >2.74 Ga) consists of a regionally extensive unit of polymictic conglomerate, locally associated with wacke and argillite, that marks an angular unconformity between Mesoproterozoic and Neoproterozoic strata.
7. The uppermost stratigraphic package, the Confederation assemblage (2.75 – 2.73 Ga), consists of calc-alkaline and tholeiitic felsic, intermediate, and mafic volcanic rocks, which locally exhibit volcanogenic-massive-sulphide-style alteration and mineralisation.

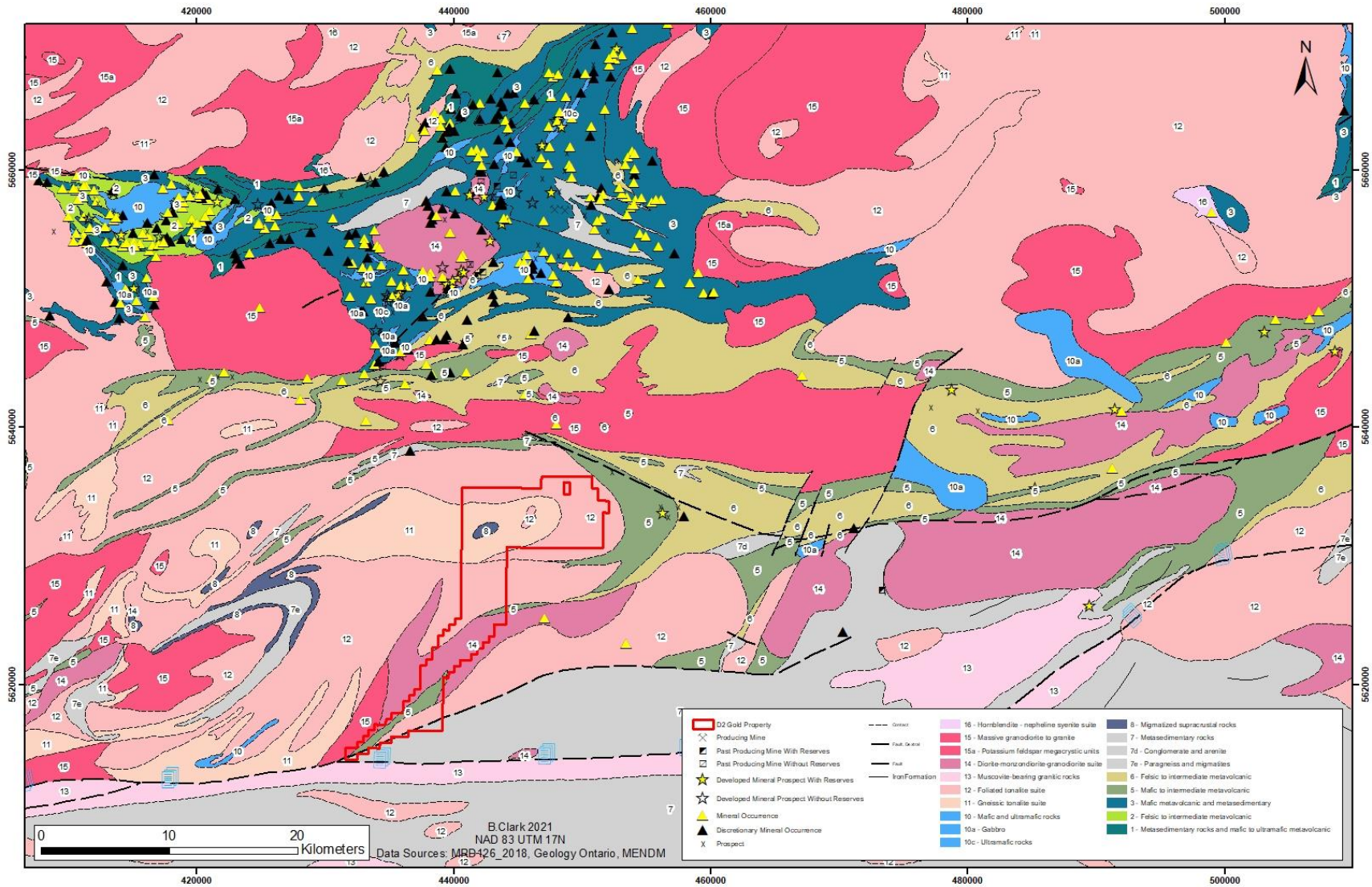
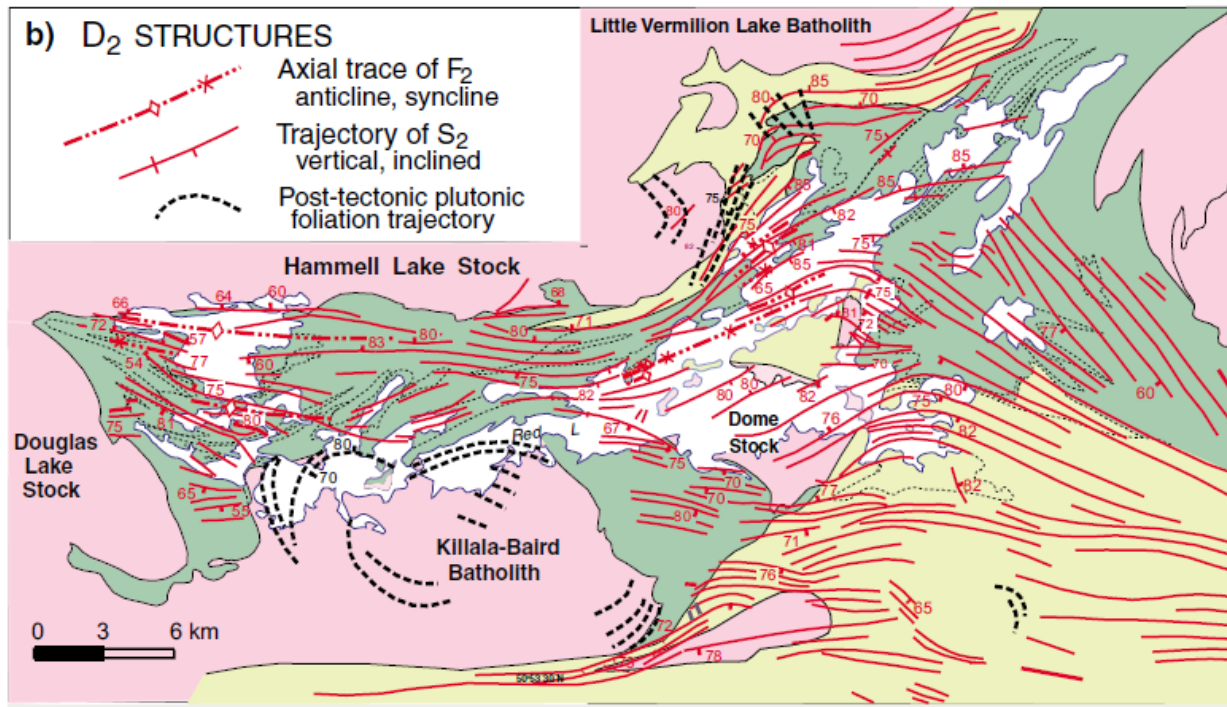


Figure 5: Regional Geology

Felsic plutons that are syn-volcanic with Confederation metavolcanic rocks intrude all the major assemblages. The weakly to moderately foliated Dome stock (2.72 Ga), which occupies the core of the RLGB, provides a minimum age for timing of the last penetrative deformation event (Sanborn-Barrie et al, 2001). Post tectonic batholiths were intruded along the margins of the RLGB ca 2.70 Ga.

Regionally, the rocks which comprise the RLGB have undergone poly-phase deformation. This involved an early non-penetrative deformation (D0), which uplifted pre-Confederation and Huston age rocks, and at least two episodes of post-Confederation-age ductile deformation (D1 and D2) reflected in folds and fabrics of low to moderate finite strain (Sanborn-Barrie et al., 2001). The main penetrative structures recognized throughout the Red Lake belt are attributed to D2 deformation (Figure 6). These include sets of northeast-striking, moderately to steeply plunging F2 folds.

Figure 6: D2 Structures in the Red Lake Greenstone Belt

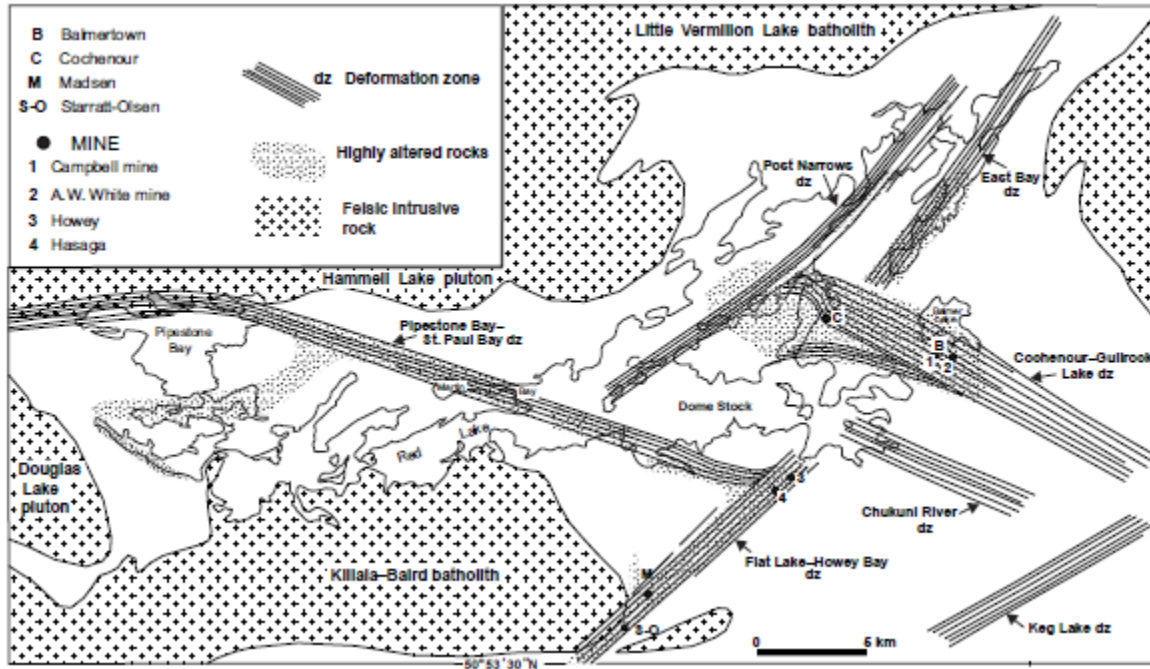


Source Sanborn Barrie et al. (2001)

Overall strain in the RLGB is low, but local high strain zones occur, typically in areas of strong alteration with locally associated gold mineralisation. Although D2 structures are dominantly east- to northeast-striking, a corridor of variably strained rock with a dominant east-southeast strike extends from Cochenour through the Balmertown area. This heterogenous strain corridor hosts the major gold deposits of the Red Lake camp and is marked by moderately developed ductile L-S fabrics with a consistent planar orientation. The most significant gold mineralisation is generally associated with intense quartz-carbonate alteration within and proximal to areas of high strain (shear zones).

Andrews et al. (1986) identified several major shear or deformation zones within which major gold deposits of the camp occur (Figure 7). The Property is interpreted to be located within the southern portions of the Chukuni River Deformation Zone

Figure 7: Deformation Zones in the Red Lake Greenstone Belt



Source Sanborn Barrie et al. (2001)

7.2 Local and Property Geology

The geology of the Property is mostly defined from geophysics (Figure 8).

The Property is 50% underlain by foliated tonalite dominantly in the north. There is an ellipsoid of migmatized supracrustal rocks within the foliated tonalites. The southern western tail of the Property is interpreted to be underlain by a northeast trending mafic to intermediate volcanics encompassed in a diorite-monzodiorite-granodiorite suite.

Magnetic features defined by the recent detailed airborne magnetics indicate that there are east west trending features in the north half of the Property with a distinctive northeast -southwest feature in the southwestern tail of the Property.

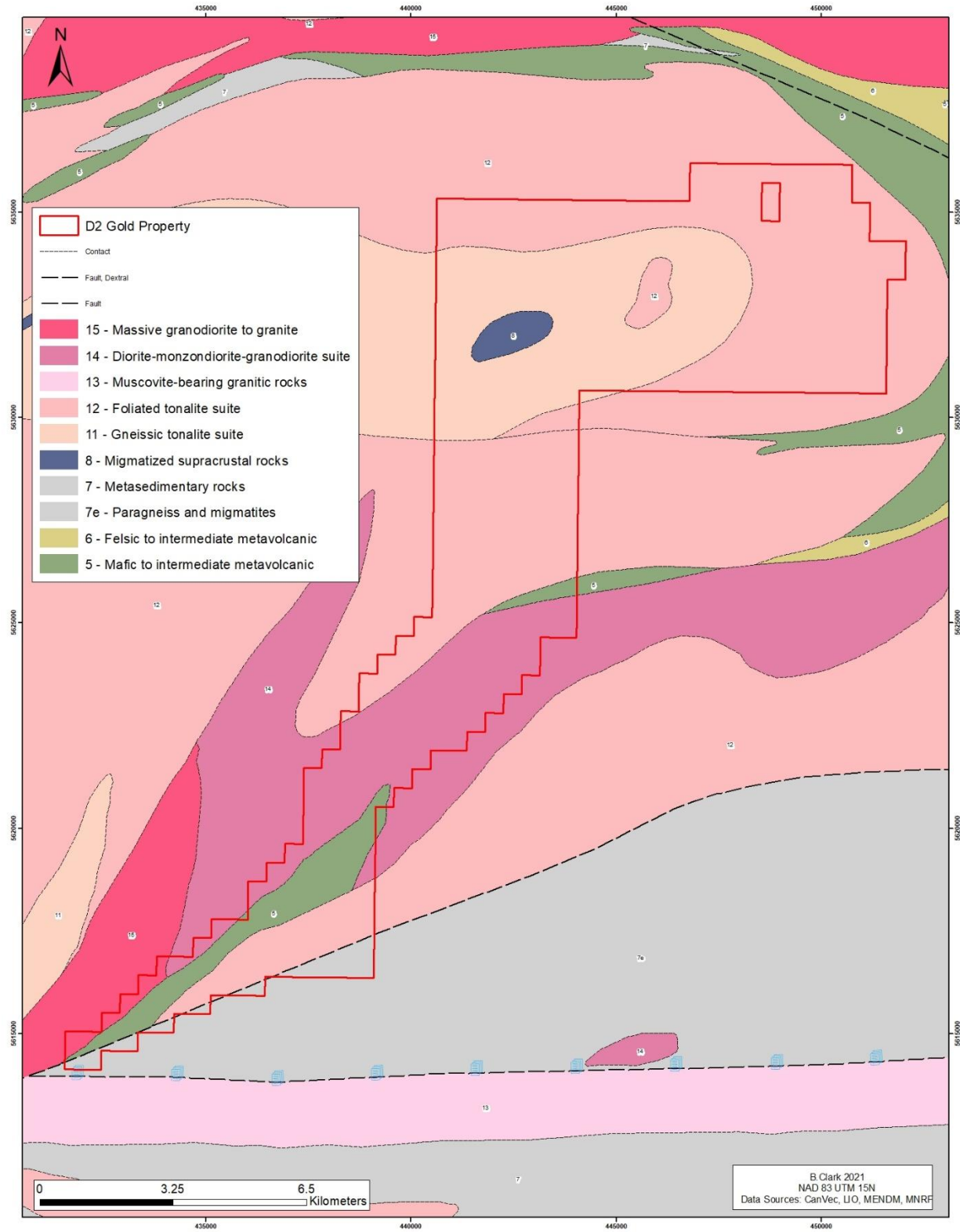


Figure 8: D2 Property Geology

7.3 Mineralization

As of the writing of this Report, there is no record of any gold or sulphide mineralization being found on the Property, although this could be due in part to the fact that previous work suggests there is very little outcrop.

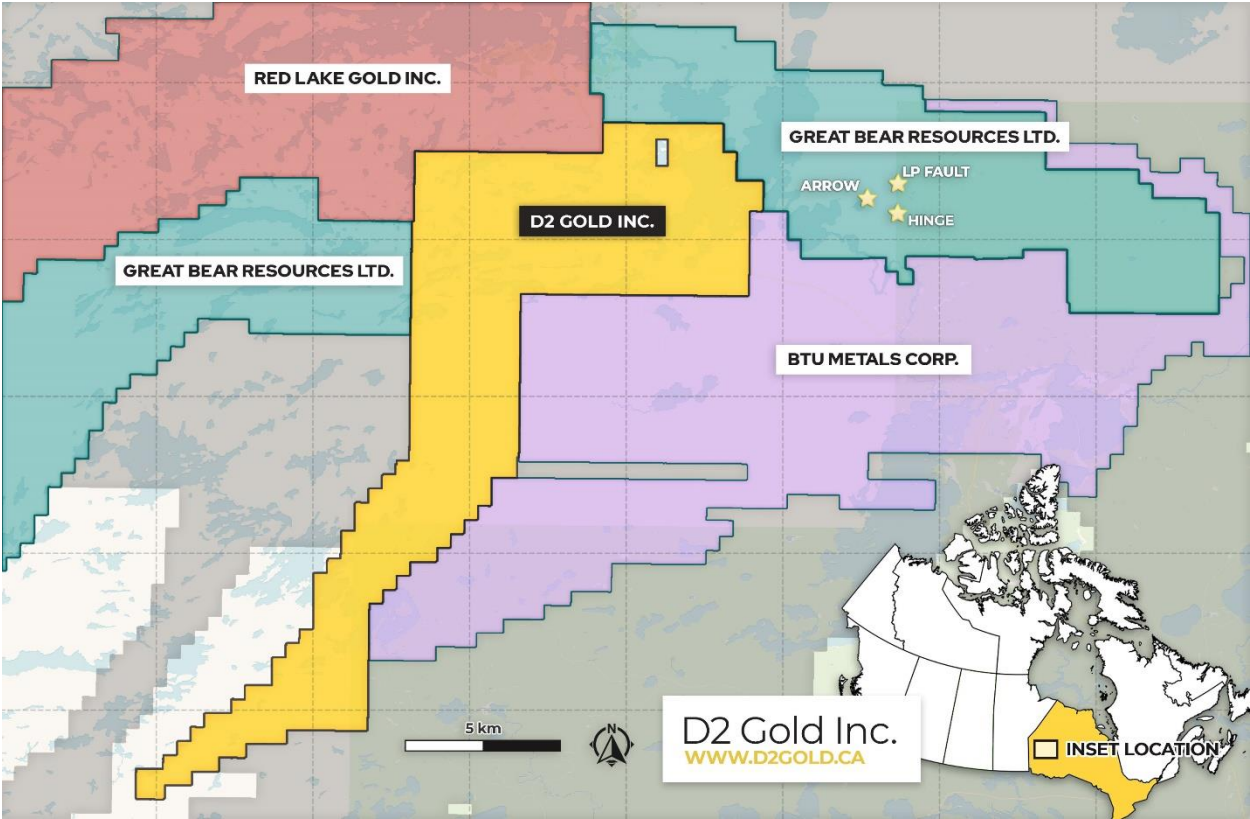
The dominate target is gold mineralization similar to that located on the adjacent Great Bear Resources Property (Figure 9). A newly discovered gold trend named the LP Fault Zone is described by Adamova (2020):

“.....a style of mineralization not observed in other parts of the Red Lake Greenstone Belt. The zone is associated with a high degree of deformation, widespread alteration, and transposition of primary textures as well as a complete flattening of stratigraphy.

A wide zone of high strain and increased metamorphic grade defines the area of mineralization for the LP Fault Zone. This strain zone is very continuous for over 4 km and is slightly oblique to stratigraphy, intersecting multiple lithologies including the porphyritic felsic volcanic, metasediment 2, felsic volcanic 2, and metasediment 3. The deformation zone is up to 500 m wide. The higher-grade gold mineralization appears to be controlled by the intersection of this strain zone and the metasediment 2 unit. Ongoing LP Fault drilling has demonstrated that most of the greater than 5 g/t gold intercepts and nearly all of the greater than 10 g/t gold intercepts drilled along the LP Fault to-date occur within 50 to 100 m of the metasedimentary/felsic volcanic contact (Figure 33). Gangue mineralization is variable across the zone and locally ranges from 0% to any amount of the following: 1-15% disseminated pyrite, 1-10% arsenopyrite (blebby and matted), 1-5% red and yellow sphalerite, 1-5% pyrrhotite, 1-5% chalcopyrite, 1-5% galena, and 1-3% scheelite.

At least three gold mineralizing events have been recognized, including foliation parallel free gold in host rock, transposed quartz veins, and a later gold event with visible gold in quartz veins that are slightly oblique to foliation.”

Figure 9: D2 Property Adjacent Great Bear Resources



8.0 DEPOSIT TYPES

Exploration on the Property is focused on identifying and delineating Archean-aged orogenic gold deposits (Groves et al., 1998). Following Kerrich et al. (2000), orogenic gold deposits are typically associated with crustal-scale fault structures, although the most abundant gold mineralization is hosted by lower-order splays from these major structures. Deposition of gold is generally syn-kinematic, syn- to post-peak metamorphism and is largely restricted to the brittle-ductile transition zone. However, deposition over a much broader range of 200–650°C and 1–5 kbar has been demonstrated. Host rocks are highly variable, but typically include mafic and ultramafic volcanic rocks, banded iron formation, sedimentary rocks and rarely granitoids. Alteration mineral assemblages are dominated by quartz, carbonate, mica, albite, chlorite, pyrite, scheelite and tourmaline, although there is much inter-deposit variation.

Dubé et al. (2004) have documented that the main stage of Red Lake gold mineralization postdates volcanism of the Balmer assemblage at 2990 to 2960 Ma and is contemporaneous with emplacement of the ca. 2718 Ma Dome and McKenzie stocks. The <2747 Ma conglomerate from the Huston assemblage in the Red Lake mine occurs at an important interface between Mesoarchean and Neoarchean strata and highlights the proximity of the Campbell-Red Lake deposit to a folded regional unconformity, supporting the empirical, spatial and possible genetic relationship between large gold deposits and regional unconformities in the district. They propose that areas of high potential for gold exploration in Red Lake occur in rocks within 500 m to 1 km of the unconformity.

Parker (2000) describes the Red Lake greenstone belt has been affected by a large-scale (10's of kilometres) hydrothermal alteration system, resulting in approximately contemporaneous strong to intense, distal calcite carbonatization that affects rocks of all ages, and less extensive (kilometre), proximal, strong to intense ferroan-dolomite and potassic alteration, found in almost all areas hosting gold mineralization.

9.0 EXPLORATION

D2 Gold Inc. contracted Precision GeoSurveys of Langley, B.C. to complete a detailed Helicopter Airborne Gradient Magnetic Survey to cover the Property (Walker 2020). The survey totalled ~2508 km on north – south spaced lines at 50 metre centres. The survey was completed between September 22 and 25th, 2020. The survey was designed to be approximately perpendicular to the dominant strike of the known rocks and structures.

The digital data were represented as grids as listed below:

- Actual Flight Lines (FL)
- Digital Terrain Model (DTM)
- Total Magnetic Intensity with Actual Flight Lines (TMI_wFL)
- Total Magnetic Intensity (TMI)
- Residual Magnetic Intensity (RMI)

- In-Line Gradient (ILG)
- Cross-Line Gradient (XLG)
- Vertical Gradient (VG)
- Horizontal Gradient (HG)
- Gradient Enhanced Total Magnetic Intensity (TMIge)
- Gradient Enhanced Residual Magnetic Intensity (RMIge)
- Gradient Enhanced Reduced to Magnetic Pole (RTPge) of RMIge

The total magnetic intensity data collected is presented in Figure 10.

The total exploration expenditure for the program was \$109,580.

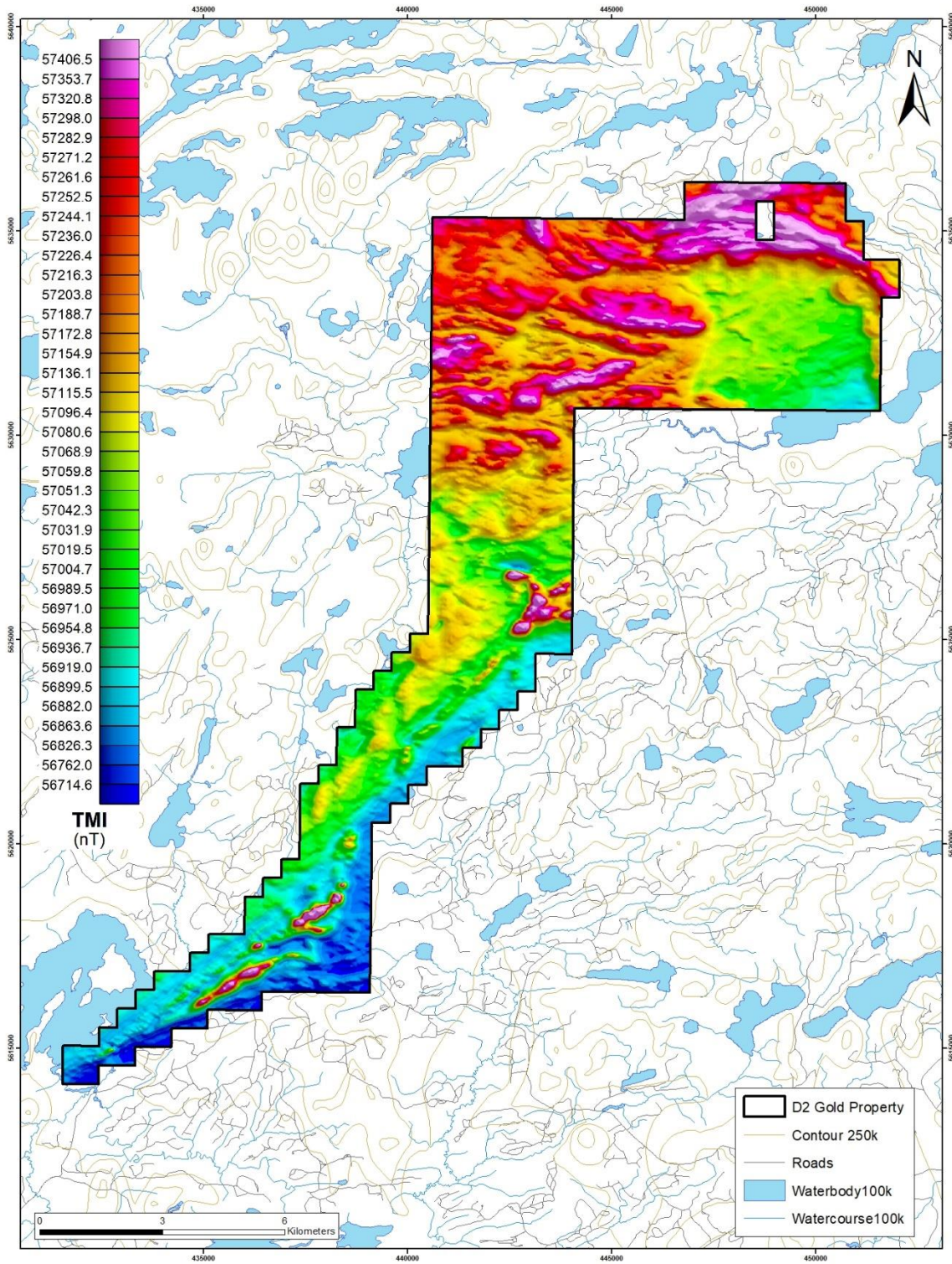


Figure 10: Total Magnetic Intensity

10.0 INTERPRETATION AND CONCLUSIONS

The Property has not been explored on the ground and most of the geological interpretation is from widely-spaced government magnetic surveys and regional mapping. D2 Gold has completed a detailed magnetic survey that has successfully and importantly defined specific magnetic features otherwise not interpreted or visible in the less detailed, lower-quality government surveys.

In the north portion of the Property, distinctive east-west features can be seen that had previously be interpreted as foliated tonalite but are potentially mafic-intermediate lenses. In the southwest claim area of the Property, there is a defined magnetic low that probably represents a structural corridor.

11.0 RECOMMENDATIONS

Future exploration programs on the Property should comprise of magnetic interpretation, prospecting and sampling and Soil Gas Hydrocarbon (SGH) soil sampling is recommended to further evaluate D2's Gold's Property and its corresponding potential to host economic gold mineralization. The magnetic data should be interpreted on the north portion of the Property to help refine the east west features. The SGH survey should be completed on the northwest trending magnetic features in the north portion of the claims and along the common claim boundary with neighbouring Great Bear Resources Ltd. The prospecting should focus on the southwestern portion of the Property to assess the potential structural features.

12.0 REFERENCES

- Adamova, A., 2020, Technical Report on the Dixie Property, Red Lake, Ontario for Great Bear Resources Ltd.
- Andrews, A.J., Hugon, H., Durocher, M., Corfu, F., and Lavigne, M., 1986, The anatomy of a gold-bearing greenstone belt: Red Lake, northwestern Ontario, in Proceedings of Gold '86, an International Symposium on the Geology of Gold Deposits, (ed.) A.J. Macdonald, Konsult International Inc., Toronto, Ontario, p. 3-22.
- Dickson, Ellsworth, (2002): A Brief History of Red Lake, *in* Resource World Magazine (November/December, 2002)
- Dube, B., Gosselin, P., Mercier-Langevin, P., Hannington, M., and Galley, A., 2007. Gold-rich volcanogenic massive sulphide deposits. *In* Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods, Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 75-94.
- Dube, B., Williamson, K., McNicoll, V., Malo, M., Skulski, T., Twomey, T., Sanborn-Barrie, M., 2004, Timing of Gold Mineralization in the Red Lake gold camp, northwestern Ontario, Canada: new constraints from U-Pb geochronology at the Goldcorp High-grade Zone, Red Lake Mine and at the Madsen Mine, Economic Geology, Vol. 99, pp. 1611-1641.
- Hurst, M.E., 1935, Gold Deposits in the Vicinity of Red Lake, Forty-fourth Annual Report of the Ontario Department of Mines, Vol. XLIV, Part VI, 1935,
- Horwood, H.C., 1940, Geology and Mineral Deposits of the Red Lake Area, Forty-ninth Annual Report of the Ontario Department of Mines, Vol. XLIX, Part II, 1940, 230 p.
- Parker, J.R., 2000, Gold mineralization and wall rock alteration in the Red Lake greenstone belt: a regional perspective; in Summary of Field Work and Other Activities 2000, Ontario Geological Survey, Open File Report 6032, p.22-1 to 22-27.
- Sanborn-Barrie, M., Skulski, T., and Parker, J., 2001 Three Hundred Million Years of Tectonic History Recorded by the Red Lake Greenstone Belt, Ontario; Geological Survey of Canada, Current Research 2001-C19, 30 p.
- Walker, S., 2020, Airborne Geophysical Survey Report, D2 Gold Inc., Red Lake, Ontario, D2 Gold Inc.

13.0 CERTIFICATE OF QUALIFICATIONS

Brent Clark
941 Cobalt Crescent
Thunder Bay, Ontario
Canada, P7B 5Z4
Telephone: 807-622-3284, Fax: 807-622-4156
Email: brent@clarkexploration.com

CERTIFICATE OF QUALIFIED PERSON

I, Brent Clark, P. Geo. (#3188), do hereby certify that:

1. I am a consulting geologist with an office at 941 Cobalt Crescent, Thunder Bay, Ontario.
2. I graduated with the degree of Honours Bachelor of Earth Science (Geology) from Carleton University, Ottawa, Ontario in 2014. I have worked on gold projects in Northwestern Ontario, and Australia.
3. "Assessment Report" refers to the report titled "Assessment Report on the D2 Gold Property, Red Lake Mining Division, Northwestern Ontario" dated June 14, 2021.
4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#3188).
5. I have worked as a Geologist since my graduation from university.
6. I am the author of this report and responsible for all sections of the Assessment Report.
7. As of the date of this certificate, and to the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to be disclosed to make the Assessment Report not misleading.

Dated this 14th day of June 2021.

"Brent Clark"

AIRBORNE GEOPHYSICAL SURVEY REPORT



D2 Gold Survey Block
Red Lake, Ontario
D2 Gold Inc.

Precision GeoSurveys Inc.
www.precisiongeosurveys.com
Hangar 42 Langley Airport
21330 - 56th Ave., Langley, BC
Canada V2Y 0E5
604-484-9402
Shawn Walker, M.Sc., P.Geo.
October 2020
Job# 20118

Table of Contents

Table of Contents	i
1.0 Introduction	1
1.1 Survey Area	1
1.2 Survey Specifications	3
2.0 Geophysical Data	3
2.1 Magnetic Data	4
3.0 Aircraft and Equipment	4
3.1 Aircraft	4
3.2 Geophysical Equipment.....	4
3.2.1 Triaxial Gradiometer.....	5
3.2.2 IMPAC.....	6
3.2.3 Magnetometer	8
3.2.4 Fluxgate Magnetometer.....	8
3.2.5 Magnetic Base Station.....	8
3.2.6 Laser Altimeter	9
3.2.7 Pilot Guidance Unit.....	10
3.2.8 GPS Navigation System	10
4.0 Survey Operations	11
4.1 Operations Base and Crew.....	11
4.2 Magnetic Base Station Specifications.....	11
4.3 Field Processing and Quality Control	13
5.0 Data Acquisition Equipment Checks	14
5.1 Lag Test	14
5.2 Heading Correction Test	15
6.0 Data Processing	15
6.1 Position Corrections	17
6.1.1 Lag Correction	17
6.2 Flight Height and Digital Terrain Model.....	17
6.3 Magnetic Processing	17
6.3.1 Temporal Variation Correction	18
6.3.2 Leveling and Micro-leveling	18
6.3.3 IGRF Removal	18
6.4 Magnetic Gradient.....	19
6.4.1 Horizontal Gradients	19
6.4.1.1 Gain Correction	20
6.4.1.2 Offset Correction.....	20
6.4.1.3 Total Horizontal Gradient.....	20
6.4.2 Vertical Gradient.....	21
6.4.3 Gradient Enhanced Magnetic Intensity.....	21
6.4.4 Gradient Enhanced Reduction to Magnetic Pole	21

7.0 Deliverables 22

7.1 Digital Data 22

7.1.1 Grids 22

7.2 KMZ 23

7.3 Maps 23

7.4 Report 23

8.0 Conclusions and Recommendations 24

List of Figures

Figure 1: D2 Gold survey located in western Ontario.....	1
Figure 2: D2 Gold survey block (black) south of Red Lake, Ontario.....	2
Figure 3: Plan View – D2 Gold survey block.....	2
Figure 4: Terrain View – D2 Gold survey block.....	3
Figure 5: Survey helicopter equipped with geophysical equipment.....	5
Figure 6: Schematic diagram of magnetic gradiometer system.....	6
Figure 7: IMPAC data acquisition system.....	7
Figure 8: AGIS operator display.....	7
Figure 9: View of CS-3 cesium vapor magnetometers.....	8
Figure 10: Billingsley TFM100G2 triaxial fluxgate magnetometer.....	8
Figure 11: GEM GSM-19T proton precession magnetometer.....	9
Figure 12: Opti-Logic RS800 Rangefinder laser altimeter.....	9
Figure 13: PGU screen displaying navigation information.....	10
Figure 14: Hemisphere R330 GPS receiver.....	11
Figure 15: GEM 5 and GEM 6 magnetic base stations.....	12
Figure 16: GEM 5 (left) and GEM 6 (right) magnetic base stations at Polar Point Resort.....	12
Figure 17: Histogram showing survey bird elevation vertically above ground.....	13
Figure 18: Histogram showing magnetic sample density.....	14
Figure 19: Histogram showing cross track error of survey bird.....	14
Figure 20: Magnetic data processing flow.....	16

List of Tables

Table 1: Survey flight line specifications.....	3
Table 2: Magnetometer details.....	6
Table 3: List of survey crew members.....	11
Table 4: Magnetic base station locations.....	12
Table 5: Contract survey specifications.....	13
Table 6: Survey lag correction values.....	15
Table 7: Heading error test data.....	15
Table 8: Geometric sensor relationship used to calculate magnetic gradients.....	19

List of Appendices

Appendix A: Polygon Coordinates
Appendix B: Equipment Specifications
Appendix C: Digital File Descriptions

List of D2 Gold Survey Block Plates (Scale 1:50,000)

Plate 1: D2 Gold – Actual Flight Lines (FL)

Plate 2: D2 Gold – Digital Terrain Model (DTM)

Plate 3: D2 Gold – Total Magnetic Intensity with Actual Flight Lines (TMI_wFL)

Plate 4: D2 Gold – Total Magnetic Intensity (TMI)

Plate 5: D2 Gold – Residual Magnetic Intensity (RMI)

Plate 6: D2 Gold – In-Line Gradient (ILG)

Plate 7: D2 Gold – Cross-Line Gradient (XLG)

Plate 8: D2 Gold – Vertical Gradient (VG)

Plate 9: D2 Gold – Horizontal Gradient (HG)

Plate 10: D2 Gold – Gradient Enhanced Total Magnetic Intensity (TMIge)

Plate 11: D2 Gold – Gradient Enhanced Residual Magnetic Intensity (RMIge)

Plate 12: D2 Gold – Gradient Enhanced Reduced to Magnetic Pole (RTPge) of RMIge

1.0 Introduction

This report outlines the geophysical survey operations and data processing procedures taken during the high resolution helicopter-borne aeromagnetic survey flown over the D2 Gold survey block for D2 Gold Inc. The survey block is located in western Ontario (Figure 1) and was flown from September 22 to September 25, 2020.



Figure 1: D2 Gold survey located in western Ontario.

1.1 Survey Area

The D2 Gold survey block is centered approximately 20 km south of Red Lake, Ontario (Figure 2).

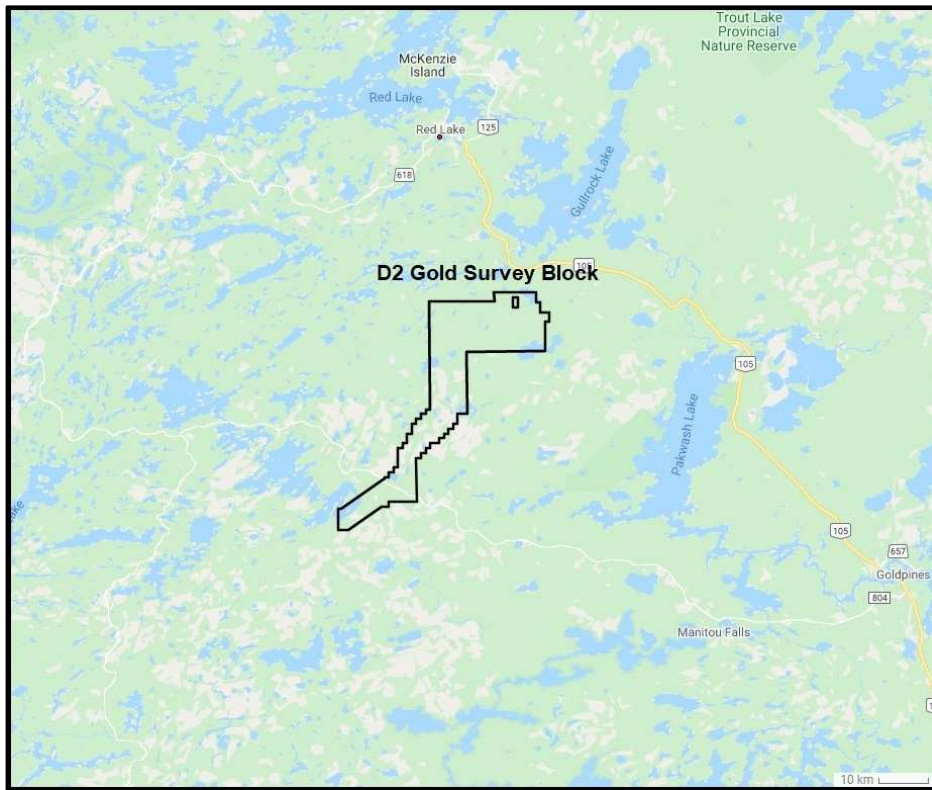


Figure 2: D2 Gold survey block (black) south of Red Lake, Ontario.

The survey was flown at 50 m line spacing at a heading of 000°/180° normal to dominant geological structures; tie lines were flown at 500 m spacing at a heading of 090°/270° (Figures 3 and 4).

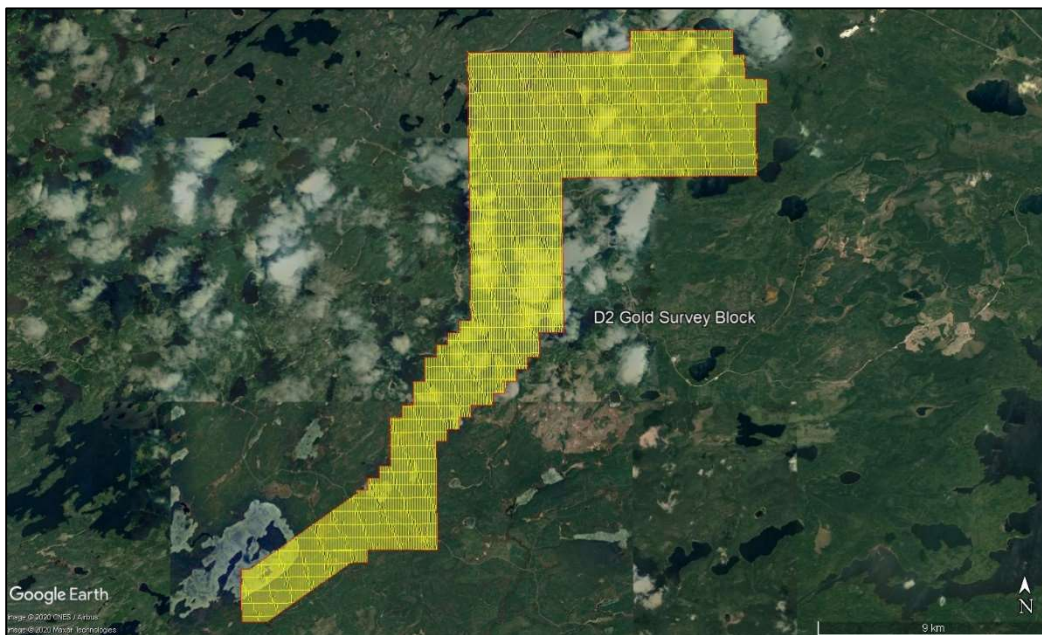


Figure 3: Plan View – D2 Gold survey block with actual flight lines in yellow and survey block boundary in red.

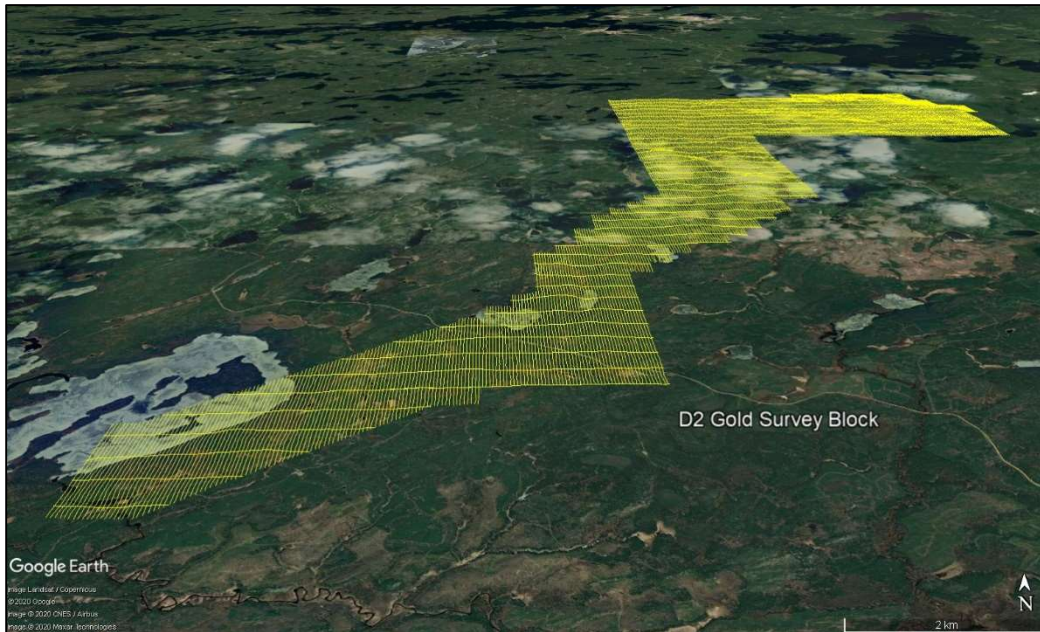


Figure 4: Terrain View – D2 Gold survey block with actual flight lines displayed in yellow.

1.2 Survey Specifications

The geodetic system used for the geophysical survey was WGS 84 in UTM Zone 15N. A total of 2508.3 line km was flown over a total area of 114.0 km² (Table 1). The total actual distance flown exceed the total planned line km by 18.3 km to retain data from flight lines flown outside the margins of the survey block for survey efficiency. Polygon coordinates for the D2 Gold survey block are specified in Appendix A.

Survey Block	Area (km ²)	Line Type	No. of Lines Planned	No. of Lines Completed	Line Spacing (m)	Line Orientation (UTM grid)	Survey Height (m)	Total Planned Line km	Total Actual km Flown
D2 Gold	114.0	Survey	410	410	50	000°/180°	40	2261	2275.8
		Tie	45	45	500	090°/270°	40	229	232.5
		Total:	455	455				40	2490

Table 1: Survey flight line specifications.

2.0 Geophysical Data

Geophysical data are collected in a variety of ways and are used for many purposes including aiding in the determination of geology, mineral deposits, oil and gas deposits, geotechnical investigations, contaminated land sites, and UXO (unexploded ordnance) detection.

For the purposes of this survey, airborne magnetic data were collected to serve in geological mapping and exploration for mineral deposits.

2.1 Magnetic Data

Magnetic surveying is the most common airborne geophysical technology used for both mineral and hydrocarbon exploration. Aeromagnetic surveys measure and record the total intensity of the magnetic field at the magnetometer sensor, which is a combination of the desired magnetic field generated in the Earth as well as small variations due to temporal effects of the constantly varying solar wind and the magnetic field of the survey aircraft. By subtracting the temporal, regional, and aircraft effects, the resulting aeromagnetic maps show the spatial distribution and relative abundance of magnetic minerals - most commonly the iron oxide mineral magnetite - in the upper levels of Earth's crust, which in turn are related to lithology, structure, and alteration of bedrock. Survey specifications, instrumentation, and interpretation procedures depend on the objectives of the survey. Magnetic surveys are typically performed for:

- Geological Mapping - to aid in mapping lithology, structure, and alteration.
- Depth to Basement Mapping - for exploration in sedimentary basins or mineralization associated with the basement surface.

3.0 Aircraft and Equipment

All geophysical and subsidiary equipment were carefully installed on an aircraft by Precision GeoSurveys to collect gradient magnetic data.

3.1 Aircraft

Precision GeoSurveys flew the survey using a Bell 206 Jet Ranger helicopter, registration C-FZHK, at a nominal height of 40 m AGL.

3.2 Geophysical Equipment

The survey aircraft (Figure 5) was equipped with a slung tri-axial magnetic gradient bird-type system, data acquisition system, laser altimeter, barometer, pilot guidance unit (PGU), and GPS navigation systems. In addition, two magnetic base stations were used to record temporal magnetic variations.

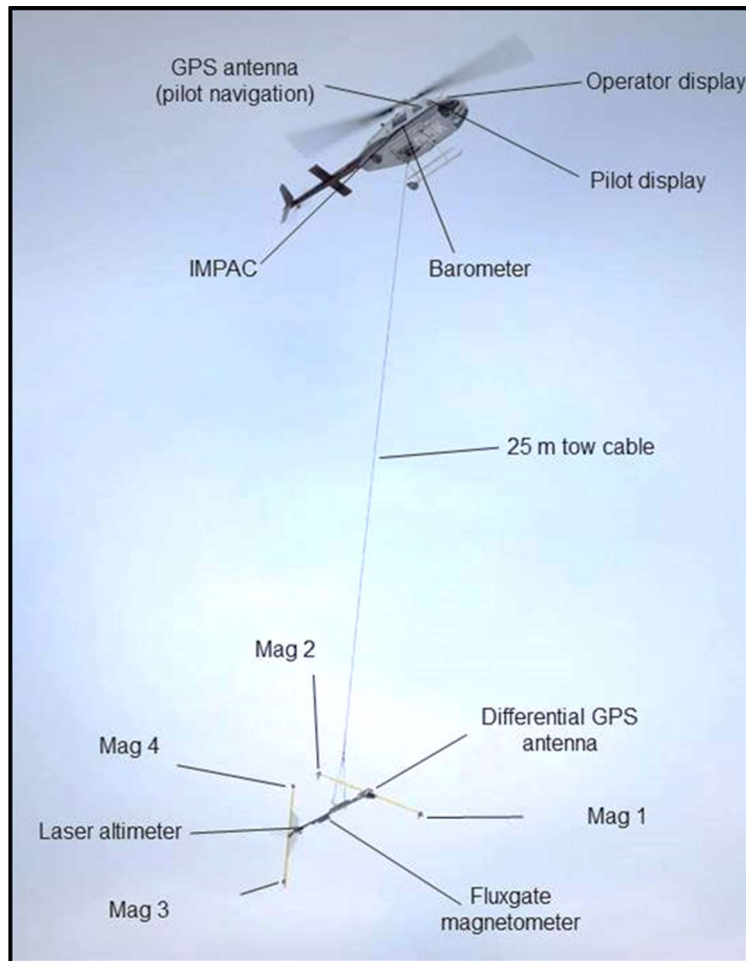


Figure 5: Survey helicopter equipped with geophysical equipment and the tri-axial magnetic gradient bird-type configuration slung 25 m below the helicopter.

3.2.1 Triaxial Gradiometer

The primary geophysical technology used on this survey was a slung magnetic gradiometer, custom designed and manufactured by Precision GeoSurveys. The gradiometer bird is constructed completely from non-magnetic and non-conductive materials and provides the required sensor separation for triaxial gradient measurements in stable flight, while incorporating a laser altimeter, fluxgate magnetometer, and a GPS antenna. It is attached to the helicopter by a 25 m long tow cable that eliminates magnetic interference from the aircraft and holds the weight of the system. A shear pin is used as a safety weak link. Magnetic, laser altimeter, attitude, and GPS data are transmitted to the helicopter by wires routed along the tow cable. By design, this gradiometer separates the electronic equipment from the magnetic sensors to allow for cleaner data collection unaffected by electronic noise. The bird weighs approximately 80 kg and can be disassembled into multiple components for ease of transport.

In total, the gradiometer (Figure 6) contains four Scintrex CS-3 cesium vapor magnetic sensors (Table 2) individually measuring the total magnetic intensity at their respective positions. The unique arrangement of the sensors allows direct measurement of the geomagnetic field in the X (cross-line) gradient axis with the two forward sensors (Mag 1 and Mag 2) and the Z (vertical) gradient axis with the two aft sensors (Mag 3 and Mag 4).

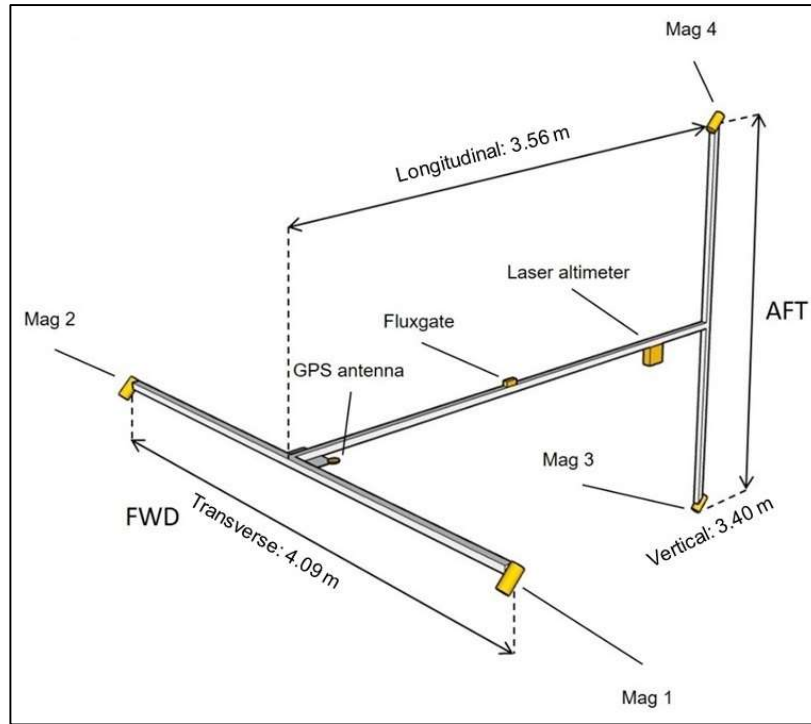


Figure 6: Schematic diagram of magnetic gradiometer system showing triaxial sensor separations. Not to scale.

Position	Location	Model	Serial Number
Mag 1	Forward left	Scintrex CS-3	0706248
Mag 2	Forward right	Scintrex CS-3	0612211
Mag 3	Aft lower	Scintrex CS-3	2008597
Mag 4	Aft upper	Scintrex CS-3	0711285

Table 2: Magnetometer details.

3.2.2 IMPAC

The Integrated Multi-Parameter Acquisition Console (IMPAC) (Figure 7), manufactured by Nuvia Dynamics Inc. (previously Pico Envirotec Inc.), is the main computer used in integrated data recording, data synchronizing, providing real-time quality control data for the geophysical operator display, and the generation of navigation information for the pilot and operator display systems.



Figure 7: IMPAC data acquisition system.

IMPAC uses the Microsoft Windows operating system and geophysical parameters are based on Nuvia's Airborne Geophysical Information System (AGIS) software. Depending on survey specifications, information such as magnetic field, electromagnetic response, total gamma count, counts of various radioelements (K, U, Th, etc.), cosmic radiation, barometric pressure, atmospheric humidity, temperature, aircraft attitude, navigation parameters, and GPS status can all be monitored on the AGIS on-board display (Figure 8).

While in flight, raw magnetic response, magnetic fourth difference, compensated and uncompensated data, radiometric spectra, aircraft position, survey altitude, cross track error, and other parameters are recorded and can be viewed by the geophysical operator for immediate QC (quality control). Additional software allows for post or real time magnetic compensation and radiometric calibration.

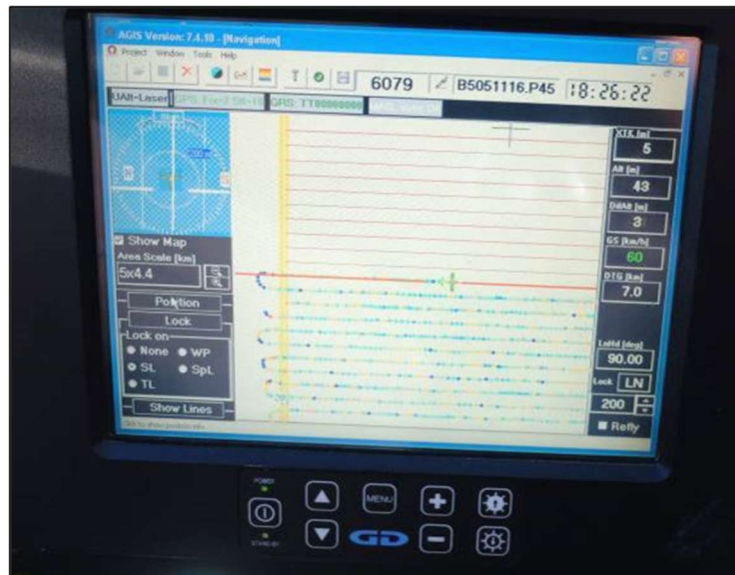


Figure 8: AGIS operator display showing real time flight line recording and navigation parameters. Additional windows display real-time geophysical data to operator.

3.2.3 Magnetometer

The survey was flown with four Scintrex CS-3 split-beam cesium vapor magnetometers (Figure 9) mounted in a non-magnetic and non-conductive slung bird-type configuration. The magnetometers were orientated at 45 degrees with respect to the horizontal to couple with local magnetic field at the D2 Gold survey block.



Figure 9: View of CS-3 cesium vapor magnetometers.

3.2.4 Fluxgate Magnetometer

As the gradient bird flies along a survey line, small attitude changes (pitch, roll, and yaw) are recorded by a triaxial fluxgate magnetometer (Figure 10). The fluxgate consists of three magnetic sensors, X, Y, and Z, operating independently and simultaneously. Each sensor has an analog output corresponding to the component of the ambient magnetic field along its axis. Response of the sensors is proportional to the cosine of the angle between the applied field and the sensor's sensitive axis.

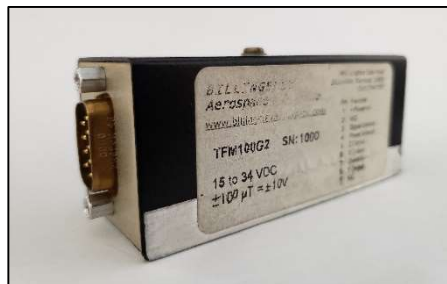


Figure 10: Billingsley TFM100G2 triaxial fluxgate magnetometer.

3.2.5 Magnetic Base Station

Temporal variations of Earth's magnetic field, particularly diurnal, were monitored and recorded by two GEM GSM-19T base station magnetometers. They were operated at all times while

airborne data were being collected. The base stations were located in an area with low magnetic gradient, away from electric power transmission lines and moving ferrous objects, such as motor vehicles, that could affect the survey data integrity.

The GEM GSM-19T magnetometer (Figure 11) with integrated GPS time synchronization uses proton precession technology with absolute accuracy of ± 0.20 nT and sensitivity of 0.15 nT at 1 Hz. Base station magnetic data were recorded on internal solid-state memory and downloaded onto a field laptop computer using a serial cable and GEMLink 5.4 software. Profile plots of the base station readings were generated, updated, and reviewed at the end of each survey day.



Figure 11: GEM GSM-19T proton precession magnetometer.

3.2.6 Laser Altimeter

Terrain clearance is measured by an Opti-Logic RS800 Rangefinder laser altimeter (Figure 12) attached to the aft end of the gradient bird. The RS800 laser is a time-of-flight sensor that measures distance by a rapidly modulated and collimated laser beam that creates a dot on the target surface. The maximum range of the laser altimeter is 700 m off natural surfaces with accuracy of ± 1 m on 1 x 1 m diffuse target with 50% ($\pm 20\%$) reflectivity. Within the sensor unit, reflected signal light is collected by the lens and focused onto a photodiode. Through serial communications and digital outputs, ground clearance data are transmitted to an RS-232 compatible port and recorded and displayed by the AGIS and PGU at 10 Hz in meters.

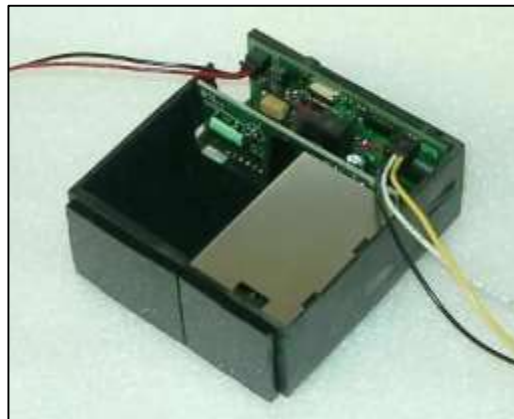


Figure 12: Opti-Logic RS800 Rangefinder laser altimeter.

3.2.7 Pilot Guidance Unit

Steering and elevation (ground clearance) information is continuously provided to the pilot by the Pilot Guidance Unit (PGU). The graphical display is mounted on top of the aircraft's instrument panel, remotely from the data acquisition system. The PGU is the primary navigation aid (Figure 13) to assist the pilot in keeping the aircraft on the planned flight path, heading, speed, and at the desired ground clearance.

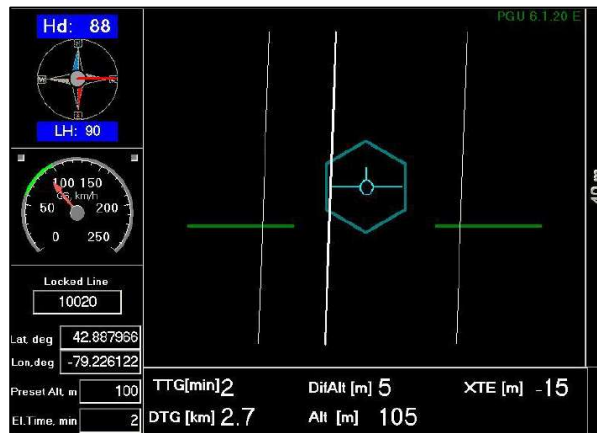


Figure 13: PGU screen displaying navigation information.

PGU information is displayed on a full VGA 600 x 800 pixel 7 inch (17.8 cm) LCD display. The CPU for the PGU is contained in a PC-104 console and uses Microsoft Windows operating system control, with input from the GPS antenna on the aircraft, laser altimeter, and AGIS.

3.2.8 GPS Navigation System

A Hemisphere R120 GPS receiver and a Novatel GPS antenna on the aircraft integrated with the AGIS navigation system and pilot display (PGU) provide accurate navigational information and control. A Hemisphere R330 GPS receiver (Figure 14) located in the helicopter and a Novatel GPS antenna located on the triaxial magnetic gradient bird airframe, provide accurate position data for the bird independent of pilot navigation. The R330 GPS receiver supports fast updates and outputs messages at a rate of up to 20 Hz (20 times per second); delivering sub-meter positioning accuracy in three dimensions. It supports GNSS (GPS/GLONASS) L1 and L2 signals.

The receiver supports differential correction methods including L-Band, RTK, SBAS, and Beacon. The R120 employs innovative Hemisphere GPS Eclipse SureTrack technology, which allows it to model the phase on satellites that the airborne unit is currently tracking. With SureTrack technology, dropouts are reduced and speed of the signal reacquisitions is increased; enhancing accurate positioning when base corrections are not available.



Figure 14: Hemisphere R330 GPS receiver.

4.0 Survey Operations

The survey was flown from September 22 to September 25, 2020 in late fall conditions; cool, low overcast, and light precipitation. The experience of the pilot ensured that the data quality objectives were met, and that the safety of the flight crew was never compromised given the potential risks involved in airborne geophysical surveying. Field processing and quality control checks were performed daily.

4.1 Operations Base and Crew

The base of operation for the D2 Gold survey was at Poplar Point Resort, north of the survey block.

The Precision geophysical crew consisted of three members (Table 3):

Crew Member	Position
Colin Pelton	Helicopter survey pilot
Jonathan Passiniemi	Geophysical operator and electronics technician
Shawn Walker, M.Sc., P.Geol.	Geophysicist – data processor, mapping, and reporting (off-site)

Table 3: List of survey crew members.

4.2 Magnetic Base Station Specifications

Changes in the Earth's magnetic field over time, such as diurnal variations, magnetic pulsations, and geomagnetic storms, were measured and recorded by two stationary GEM GSM-19T proton precession magnetometers. The magnetic base stations were installed in an area (Table 4; Figures 15 and 16) of low magnetic noise away from metallic items such as ferromagnetic objects, vehicles, and power lines that could affect the base stations and ultimately the survey data.

Station Name	Easting/Northing	Latitude/Longitude	Datum/Projection
GEM 5 S/N 1094678	446257 m E 5641970 m N	93° 45' 52.94" W 51° 55' 36.70" N	WGS 84, Zone 15N
GEM 6 S/N 5087249	446251 m E 5641970 m N	93° 45' 53.24" W 51° 55' 36.70" N	WGS 84, Zone 15N

Table 4: Magnetic base station locations.

Magnetic readings were reviewed at regular intervals to ensure that no airborne data were collected during periods of high magnetic activity (greater than 10 nT change per minute).



Figure 15: GEM 5 and GEM 6 magnetic base stations located north of D2 Gold survey block.



Figure 16: GEM 5 (left) and GEM 6 (right) magnetic base stations at Polar Point Resort.

4.3 Field Processing and Quality Control

Survey data were transferred from the aircraft's data acquisition system onto a USB memory stick and copied onto a field data processing laptop. The raw data files in PEI binary data format were converted into Geosoft GDB database format. Using Geosoft Oasis Montaj 9.8, the data were inspected to ensure compliance with contract specifications (Table 5; Figures 17 to 19).

Parameter	Specification	Tolerance
Position	Line Spacing	Flight line deviation within 8 m L/R from ideal flight path. No exceedance for more than 1 km.
	Height	Nominal flight height of 40 m above ground level (AGL) with tolerance of ± 10 m. No exceedance for more than 1 km, provided deviation is not due to tall trees, topography, mitigation of wildlife/livestock harassment, cultural features, or other obstacles beyond the pilot's control.
	GPS	GPS signals from four or more satellites must be received at all times, except where signal loss is due to topography. No exceedance for more than 1 km.
Magnetics	Temporal/Diurnal Variations	Non-linear temporal magnetic variations within 10 nT of a linear chord of length 5 minutes.
	Normalized 4 th Difference	Magnetic data within 0.05 nT peak to peak. No exceedance for distances greater than 1 km or more, provided noise is not due to geological or cultural features.

Table 5: Contract survey specifications.

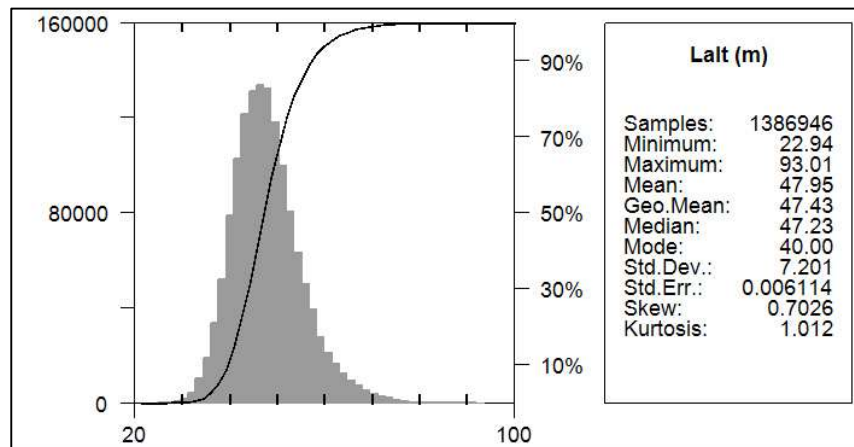


Figure 17: Histogram showing survey bird elevation vertically above ground.

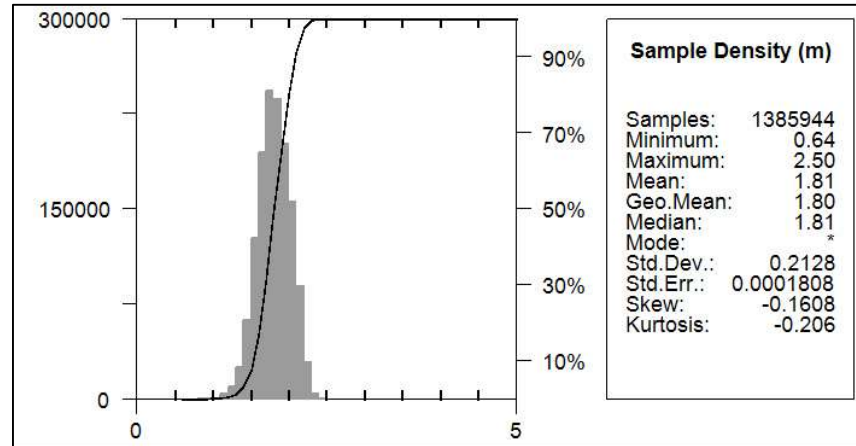


Figure 18: Histogram showing magnetic sample density. Horizontal distance in meters between adjacent measurement locations; magnetic sample frequency 20 Hz.

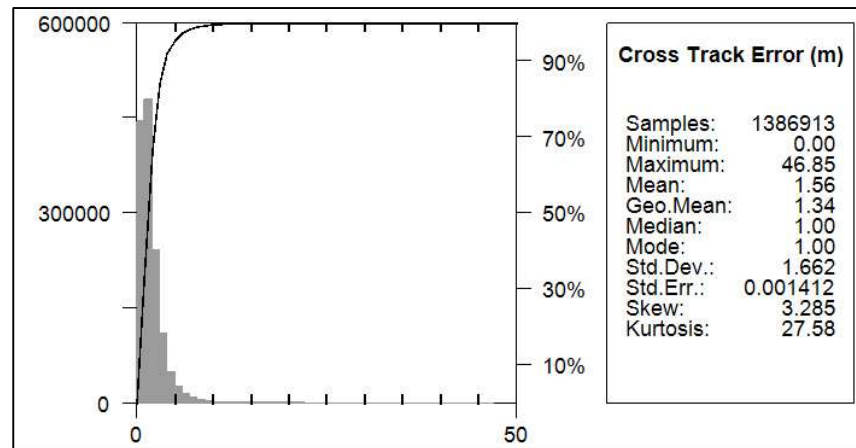


Figure 19: Histogram showing cross track error of survey bird.

5.0 Data Acquisition Equipment Checks

Equipment tests were conducted at the start of the survey to ensure compliance with contract specifications and to deliver high quality airborne geophysical data. A lag test was conducted for both the laser altimeter and magnetometers. For the airborne magnetometers, a heading error test was flown.

5.1 Lag Test

A lag test was performed to determine the difference in time the digital reading was recorded for the magnetometer and laser altimeter with the position fix time that the fiducial of the reading was obtained by the GPS system resulting from a combination of system lag and different locations of the various sensors and the GPS antenna. The test was flown in the four orthogonal

survey headings over an identifiable magnetic anomaly at survey speed and height. The resulting data (Table 6) were used to correct for time and position.

Instrument	Source	Lag Fiducial	Correction (sec)
Mag 1	Logging equipment	42	2.1
Mag 2	Logging equipment	42	2.1
Mag 3	Logging equipment	42	2.1
Mag 4	Logging equipment	42	2.1
Laser	Sharp gully	6	0.6

Table 6: Survey lag correction values.

5.2 Heading Correction Test

To determine heading errors and other offsets, a cloverleaf pattern flight test was conducted at high altitude. The cloverleaf test was flown in the same orthogonal headings as the survey and tie lines (000°/090°/180°/270° in the case of this survey) at >2500 m AGL in an area with low magnetic gradient. For all four directions the gradient bird must pass over the same mid-point, at the same elevation, with the bird flown straight and level. The difference in magnetic values obtained in reciprocal headings is the heading error. Results of the test flight are summarized in Table 7.

Heading	Mag 1 Correction (nT)	Mag 2 Correction (nT)	Mag 3 Correction (nT)	Mag 4 Correction (nT)
000°	-2.27	-2.86	-2.90	-3.09
090°	1.21	1.50	1.39	1.53
180°	2.19	1.90	1.84	1.98
270°	-1.13	-0.54	-0.33	-0.42
Total:	0.00	0.00	0.00	0.00

Table 7: Heading error test data.

6.0 Data Processing

After all data were collected, several procedures were undertaken to ensure that the data met a high standard of quality. All magnetic data recorded by the AGIS were converted into Geosoft or ASCII file formats using Nuvia Dynamics software. Further processing (Figure 20) was carried out using Geosoft Oasis Montaj 9.8 geophysical processing software along with proprietary processing algorithms.

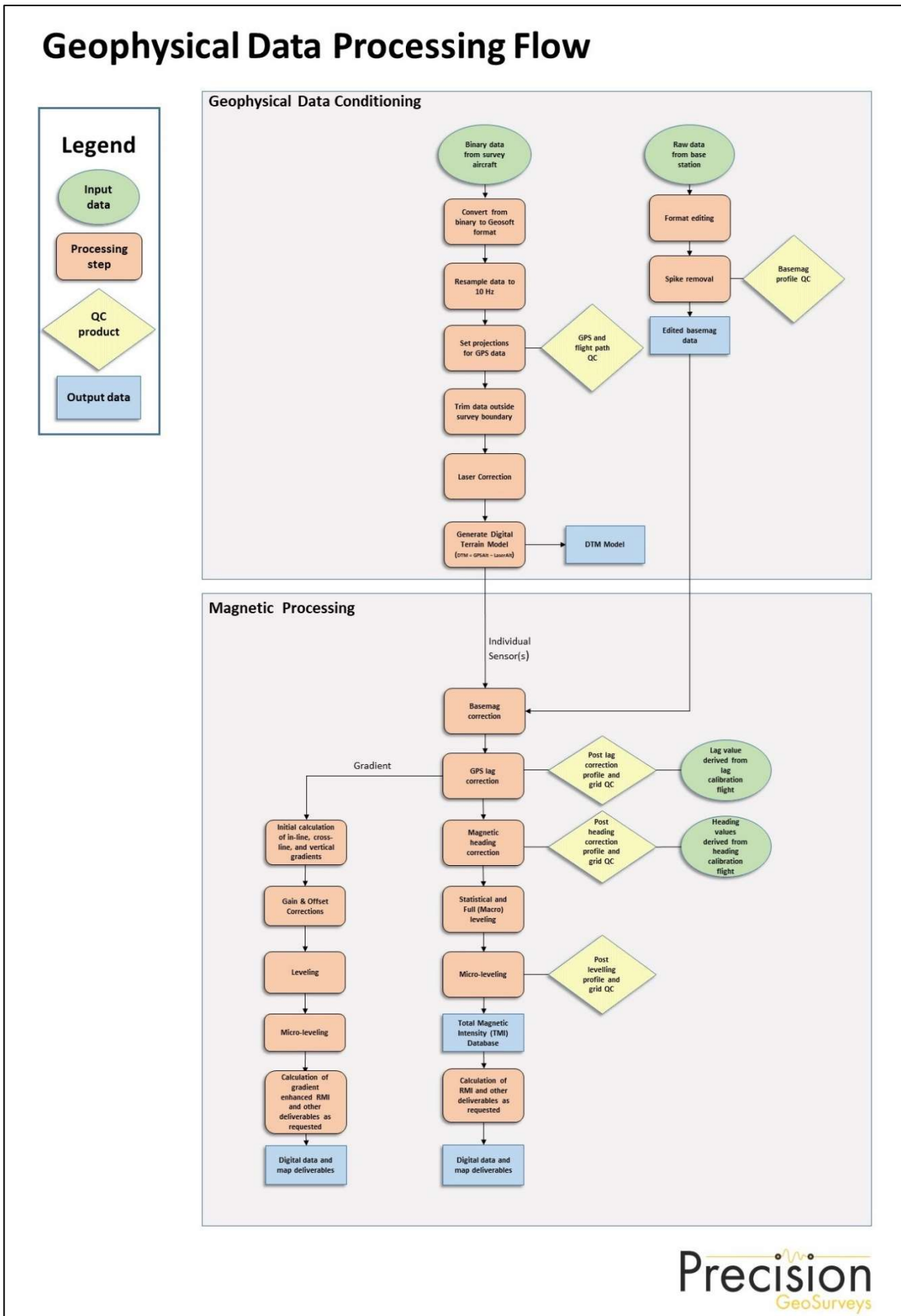


Figure 20: Magnetic data processing flow.

6.1 Position Corrections

In order to collect high resolution geophysical data, the location at which the data were collected and recorded must be accurate.

6.1.1 Lag Correction

A correction for lag error was applied to the geophysical data recorded at each individual sensor to compensate for the combination of lag in the recording system and the sensing instrument flying in a different location from the GPS antenna, as determined during the lag test. Validity of the lag corrections was confirmed by the absence of grid corrugations in adjoining reciprocal lines.

6.2 Flight Height and Digital Terrain Model

Laser altimeters are unable to provide valid data over glassy water or fog which dissipate the laser so that a “zero” reading is obtained. In these cases, estimates of correct height are inserted manually. Dense vegetation generates high frequency variations from leaf and branch reflections. A Rolling Statistics filter is applied to the lag corrected (0.6 seconds lag) laser altimeter data to remove vegetation clutter followed by a Low Pass filter to smooth out the laser altimeter profile to eliminate isolated high frequency noise and generate a surface closely corresponding to the actual ground profile.

A Digital Terrain Model (DTM) channel was calculated by subtracting the processed laser altimeter data from the filtered GPS altimeter data defined by the WGS 84 ellipsoidal height. DTM accuracy is affected by the geometric relationship between the GPS antenna and the laser altimeter as well as flight attitude of the aircraft, slope of the ground, sample density, and satellite geometry.

6.3 Magnetic Processing

Magnetic data from each individual sensor were corrected for temporal variations (including diurnal) and lag. The data were examined for magnetic noise and spikes, which were removed as required. Survey and tie line data of the resulting total magnetic field were leveled and the background magnetic field, International Geomagnetic Reference Field (IGRF) of the Earth, removed. Measurement of the magnetic gradient in the X, Y, and Z axes were used to calculate the in-line, cross-line, and vertical gradients.

6.3.1 Temporal Variation Correction

The intensity of Earth's magnetic field varies with location and time. The time variable, known as diurnal or more correctly temporal variation, is removed from the recorded airborne data to provide the desired magnetic field at a specified location. Magnetic data from base station GEM 6 were used for correcting the airborne magnetic survey data, and GEM 5 data were retained for backup. The data were edited, plotted, and merged into a Geosoft database (.GDB) on a daily basis.

Base station measurements were averaged to establish a magnetic reference datum of 57529.86 nT. Magnetic deviations relative to the reference datum were used to calculate the observed variations of the Earth's magnetic field over time. The airborne magnetic data were then corrected for temporal variations by subtracting the base station deviations from the data collected on the aircraft, effectively removing the effects of diurnal and other temporal variations.

6.3.2 Leveling and Micro-leveling

The initial Total Magnetic Intensity (TMI) data is the average of Mag 1 and Mag 2. The initial TMI from survey and tie lines were then used to level the entire survey dataset. Two types of leveling were applied to the corrected data: conventional leveling and micro-leveling. There were two components to conventional leveling: statistical leveling to level tie lines and full leveling to level survey lines. The statistical leveling method corrected the SL/TL intersection errors that follow a specific pattern or trend. Through the error channel, an algorithm calculated a least-squares trend line and derived a trend error curve, which was then added to the channel to be leveled. The second component was full leveling. This adjusted the magnetic value of the survey lines so that all lines matched the trended tie lines at each intersection point.

Following statistical leveling, micro-leveling was applied to the corrected conventional leveled data. This iterative grid-based process removed low amplitude components of flight line noise that still remained in the data after tie line and survey line leveling and resulted in fully leveled TMI data.

6.3.3 IGRF Removal

The International Geomagnetic Reference Field (IGRF) model is the empirical representation of Earth's dynamic magnetic field (main core field without external sources) collected and disseminated from satellite data and from magnetic observatories around the world. The IGRF has historically been revised and updated every five years by a group of modellers associated with the International Association of Geomagnetism and Aeronomy (IAGA).

The initial unlevelled Residual Magnetic Intensity (RMI) was calculated by taking the difference between the 13th generation IGRF (IGRF-13, released in December 2019) and the non-levelled Total Magnetic Intensity (TMI) to create a more valid model of individual near-surface magnetic anomalies. This model is independent of time to allow for other magnetic data (previous or future) to be more easily incorporated into each survey database.

6.4 Magnetic Gradient

When magnetic values are obtained simultaneously from two or more sensors at a fixed separation, gradient of the magnetic field can be measured. Dividing the difference in magnetic values between the sensors by the distance between the sensors yields the magnetic gradient. The units are commonly reported as nT/m and, by convention, positive magnetic polarity is defined as to the north and east, and negative to the south and west. For vertical gradient, positive is defined as downwards. The sensors and the separations that were used to determine the various gradients are listed in Table 8.

Direction	Sensors	Separation (m)
Lateral (X)	Mag 1 and Mag 2	4.09
Longitudinal (Y)	Mag 1 and Mag 2	4.09
Vertical (Z)	Mag 3 and Mag 4	3.40

Table 8: Geometric sensor relationship used to calculate magnetic gradients. Total magnetic intensity (TMI) was determined as the average of Mag 1 and Mag 2, and successive values of the TMI were used to determine the longitudinal gradient.

Because the magnetic field gradient varies more rapidly than total field strength, magnetic gradient provides higher spatial resolution, especially for shallow sources that are smaller than the survey line spacing or linear sources that are parallel to flight lines. Magnetic gradients, as compared to total magnetic intensities, have the additional benefits of being less sensitive to temporal variations and aircraft/sensor movement errors.

6.4.1 Horizontal Gradients

Horizontal magnetic gradients were determined in the in-line (Y axis) and cross-line (X axis) directions. Mag 1 (left) and Mag 2 (right) were used for both directions so that elevations were consistent in both axes. Gradients were calculated with respect to the magnetometer array with units provided as nT/m.

In-line gradient (ILG) is determined from successive average magnetic values of Mag 1 and Mag 2 referenced to the distance between data points in accordance with the following formula:

$$ILG = \frac{a(i+1) - a(i-1)}{d(i+1) + d(i-1)}$$

where: a is the average total magnetic intensity of Mag 1 and Mag 2
 d is the distance between measurements
 i is the record number for the location

Cross-line gradient (XLG) was measured directly by dividing the difference between Mag 2 and Mag 1 by the sensor separation in accordance with the following formula:

$$XLG = \frac{\text{Mag 2} - \text{Mag 1}}{d_x}$$

where: d_x is the transverse sensor separation, 4.09 m

6.4.1.1 Gain Correction

Gain corrections were applied to the initial cross-line gradient. Overall, Mag 1 and Mag 2 should produce the same total magnetic field. If the ratio of the TMI between the sensors does not equal one, a gain correction needs to be applied to account for instrument error and asymmetric magnetic fields. The mean of the ratio between the TMI values for Mag 1 and Mag 2 for each line was calculated and applied to each Mag 2 value along the line. The cross line gradient was then re-calculated from the gain-corrected Mag 2 values.

6.4.1.2 Offset Correction

After correcting for gain in the cross-line gradient, offset corrections were applied. Offsets were determined by subtracting the first difference of the gain-corrected cross-line gradient from the gain-corrected gradient to reduce line-to-line errors (striping) in the gradient grid. The resulting data were then micro-leveled to remove any remaining striping.

6.4.1.3 Total Horizontal Gradient

Total Horizontal Gradient (HG) is the magnitude of the combined in-line and cross-line gradients. It is used to estimate contact locations of magnetic bodies at shallow depths, reveal anomaly textures, and highlight anomaly-pattern discontinuities.

Horizontal Gradient (HG) is calculated as:

$$HG(x, y) = \sqrt{ILG^2 + XLG^2}$$

where: ILG is the in-line gradient
 XLG is the cross-line gradient

6.4.2 Vertical Gradient

Vertical gradient (Z axis) is useful for enhancing shorter wavelength signals; therefore, edges of magnetic anomalies are highlighted, and deep geologic sources in the data are suppressed.

Vertical gradient is determined directly with respect to the magnetometer array of Mag 3 (lower) and Mag 4 (upper) with units provided as nT/m as follows:

$$\text{Vertical Gradient} = \frac{\text{Mag 3} - \text{Mag 4}}{d_x}$$

where: d_x is the vertical sensor separation, 3.40 m

6.4.3 Gradient Enhanced Magnetic Intensity

In-line, cross-line, and vertical gradients are combined to create an enhanced residual magnetic intensity (RMIge). However, the combined enhanced residual magnetic intensity does not contain the long wavelength signals that are well retained in the single sensor and in this case the average of all four magnetometers residual magnetic intensity data. Therefore, the missing long wavelengths can be extracted by taking the difference of the two versions of the residual magnetic intensity and calculating the trend. The isolated long wavelengths were then added back to the enhanced residual magnetic intensity and the resulting grid was micro-leveled.

The enhanced Total Magnetic Intensity (TMIge) was then calculated by adding the IGRF to the enhanced Residual Magnetic Intensity.

6.4.4 Gradient Enhanced Reduction to Magnetic Pole

Gradient enhanced Reduced to Magnetic Pole (RTPge) data were computed from the leveled enhanced Residual Magnetic Intensity (RMIge) data. The RTP filter was applied in the Fourier domain and migrates the observed magnetic inclination and declination field to what the field would look like at the north magnetic pole.

Inclination and declination were calculated by using the “Date” channel. The derived values were used in the following formula:

$$RTP(\theta) = \frac{[\sin(I) - I \cdot \cos(I) \cdot \cos(D - \theta)]^2}{[\sin^2(I_a) + \cos^2(I_a) \cdot \cos^2(D - \theta)] \cdot [\sin^2(I) + \cos^2(I) \cdot \cos^2(D - \theta)]}$$

where: I is geomagnetic inclination in ° from horizontal

D is geomagnetic declination in ° azimuth from magnetic north

I_a is the inclination for amplitude correction (never less than I). Default is +/- 20°. If $|I_a|$ is specified to be less than $|I|$, it is set to I

7.0 **Deliverables**

D2 Gold survey block data are presented as digital databases, maps, and a logistics report.

7.1 **Digital Data**

Digital files have been provided in two formats, the first is a .GDB file for use in Geosoft Oasis Montaj and the second format is a text (.XYZ) file. Full descriptions of the digital data and contents are included in the report (Appendix B).

The digital data were represented as grids as listed below:

- Digital Terrain Model (DTM)
- Total Magnetic Intensity (TMI)
- Residual Magnetic Intensity (RMI) – removal of IGRF from TMI
- In-Line Gradient (ILG)
- Cross-Line Gradient (XLG)
- Vertical Gradient (VG)
- Horizontal Gradient (HG) – total magnitude of the horizontal gradients (in-line and cross-line)
- Gradient enhanced Total Magnetic Intensity (TMIge) – addition of IGRF to RMIge
- Gradient enhanced Residual Magnetic Intensity (RMIge)
- Gradient enhanced Reduced to Magnetic Pole (RTPge) – reduced to magnetic pole of RMIge

7.1.1 **Grids**

Digital data were gridded and displayed using the following Geosoft parameters:

- Gridding method: minimum curvature
- Grid cell size: 12.5 m
- Low-pass desampling factor: 2
- Tolerance: 0.001
- % pass tolerance: 99.99
- Maximum iterations: 100

All magnetic grids were drawn with a histogram-equalized colour shade; sun illumination inclination at 45° and declination at 045°. DTM grid was drawn with a linear topographic colour.

7.2 KMZ

Gridded digital data were exported into .KMZ files which can be displayed using Google Earth. The grids can be draped onto topography and rendered to give a 3D view.

7.3 Maps

Digital maps were created for the D2 Gold survey block. The following map products were prepared:

Overview Maps (colour images with elevation contour lines and topographic features):

- Actual flight lines, with survey block boundary
- DTM

Magnetic Maps (colour images with elevation contour lines):

- TMI, with actual flight lines and topographic features
- TMI
- RMI
- ILG
- XLG
- VG
- HG

Gradient Enhanced Magnetic Maps (colour images with elevation contour lines):

- TMIge
- RMIge
- RTPge

All survey maps were prepared in WGS 84 and UTM Zone 15N.

7.4 Report

A pdf copy of the logistics report is included along with digital data and maps. The report provides information on the data acquisition procedures, data processing, and presentation of the D2 Gold survey block data.

8.0 Conclusions and Recommendations

The D2 Gold survey resulted in the collection of 2508.3 line km of high resolution gradient magnetic data over one survey block. The data have been processed and plotted on maps as a representation of the magnetic features of the survey area.

Processing of geophysical data, including the calculation of derivatives, can generate false features as the signal-to-noise ratio decreases. In addition, false features can appear near the edges of a survey block where gridding algorithms are unable to properly calculate grids, such as in “edge effects,” or where flight height between adjacent flight lines varied due to cultural obstacles or steep terrain. Therefore, subtle geophysical features in derivative-enhanced map products or near the survey margins must be evaluated with discretion.

The airborne geophysical data were acquired to map the geophysical characteristics of the survey area, which are in turn related to the distribution and concentration of magnetic minerals and radioactive elements in the Earth. Geophysical data are rarely a direct indication of mineral deposits and therefore interpretation and careful integration with existing and new geological, geochemical, and other geophysical data are recommended to maximize value from the survey investment.

Respectfully submitted,
Precision GeoSurveys Inc.

Shawn Walker, P.Geo.
October 2020

Appendix A
Polygon Coordinates

D2 Gold – WGS 84 Zone 15N

Latitude (deg N)	Longitude (deg W)	Easting (m)	Northing (m)
50.86755	93.84542	440509	5635437
50.86756	93.75654	446763	5635370
50.87500	93.75666	446763	5636197
50.87535	93.70000	450750	5636197
50.86666	93.70000	450741	5635231
50.86667	93.69375	451181	5635227
50.85833	93.69375	451172	5634300
50.85833	93.68125	452052	5634292
50.85000	93.68125	452043	5633366
50.85000	93.68750	451603	5633370
50.82500	93.68714	451603	5630590
50.82433	93.79374	444094	5630590
50.77084	93.79283	444094	5624642
50.77083	93.80625	443148	5624651
50.76250	93.80611	443148	5623724
50.76250	93.81250	442697	5623729
50.75833	93.81250	442692	5623266
50.75834	93.81875	442251	5623271
50.75416	93.81875	442246	5622807
50.75416	93.82500	441805	5622812
50.75000	93.82500	441800	5622349
50.75000	93.83125	441359	5622354
50.74584	93.83125	441354	5621891
50.74584	93.84375	440472	5621901
50.74166	93.84375	440467	5621437
50.74166	93.85000	440026	5621442
50.73750	93.85001	440020	5620979
50.73750	93.85625	439579	5620984
50.73334	93.85625	439574	5620521
50.73333	93.86250	439133	5620526
50.69584	93.86181	439133	5616356
50.69584	93.90000	436436	5616388
50.69166	93.90000	436430	5615924
50.69139	93.90921	435779	5615902
50.67088	93.95490	432523	5613662
50.67090	93.96878	431542	5613676
50.68912	93.96915	431542	5615703
50.68916	93.96437	431880	5615703

D2 Gold – WGS 84 Zone 15N (continued)

Latitude (deg N)	Longitude (deg W)	Easting (m)	Northing (m)
50.71553	93.90589	436047	5618583
50.71667	93.90625	436023	5618710
50.71667	93.90000	436464	5618704
50.72083	93.90000	436470	5619167
50.72083	93.89375	436911	5619162
50.72500	93.89376	436916	5619625
50.72500	93.88749	437358	5619620
50.74166	93.88750	437380	5621473
50.74167	93.88125	437821	5621468
50.74583	93.88125	437826	5621931
50.74583	93.87500	438267	5621926
50.75417	93.87500	438278	5622853
50.75417	93.86875	438719	5622848
50.76250	93.86875	438730	5623774
50.76250	93.86250	439171	5623769
50.76666	93.86250	439176	5624232
50.76666	93.85625	439617	5624227
50.77084	93.85625	439622	5624691
50.77084	93.85000	440063	5624686
50.77500	93.85000	440068	5625149
50.77500	93.84375	440509	5625144

Appendix B

Equipment Specifications

- GEM GSM-19T Proton Precession Magnetometer (Magnetic Base Station)
- Hemisphere R120 GPS Receiver
- Hemisphere R330 GPS Receiver
- Opti-Logic RS800 Rangefinder Laser Altimeter
- Scintrex CS-3 Survey Magnetometer
- Billingsley TFM100G2 Ultra Miniature Triaxial Fluxgate Magnetometer
- Nuvia Dynamics IMPAC data recorder system (for navigation and geophysical data acquisition)

GEM GSM-19T Proton Precession Magnetometer (Magnetic Base Station)

Sensitivity	0.15 nT @ 1 Hz
Resolution	0.01 nT (gamma), magnetic field and gradient
Absolute Accuracy	±0.2 nT @ 1 Hz
Operating Range	20,000 nT to 120,000 nT
Gradient Tolerance	Over 7,000 nT/m
Operating Ranges	Temperature: -40°C to +50°C Battery Voltage: 10.0 V minimum to 15 V maximum Humidity: up to 90% relative, non-condensing
Storage Temperature	-50°C to +50°C
Dimensions	Console: 223 x 69 x 40 mm Sensor Staff: 4 x 450 mm sections Sensor: 170 x 71 mm dia. Weight: console 2.1 kg, sensor and staff assembly 2.2 kg
Integrated GPS	Yes

Hemisphere R120 GPS Receiver Specifications

GPS Sensor	Receiver Type	L1, C/A code, with carrier phase smoothing (Patented COAST technology during differential signal outage)
	Channels	12-channel, parallel tracking (10-channel when tracking SBAS)
	Update Rate	Up to 20 Hz position
	Cold Start Time	<60 s
	SBAS Tracking	2-channel, parallel tracking
	Horizontal Accuracy	<0.02 m 95% confidence (RTK ¹ , 2) <0.28 m 95% confidence (L-Dif 1, 2) <0.6 m 95% confidence (DGPS 1,3) <2.5 m 95% confidence (autonomous, no SA1)
	Differential Options	SBAS, Autonomous, External RTCM, RTK, OmniSTAR (HP/XP)
Beacon Sensor Specifications	Channels	2-channel, parallel tracking
	Frequency Range	283.5 to 325 kHz
	MSK Bit Rates	50, 100, and 200 bps
L-Band Sensor	Channels	Single channel
	Frequency Range	1530 MHz to 1560 MHz
	Satellite Selection	Manual or Automatic (based on location)
	Startup and Satellite Reacquisition Time	15 seconds typical
Communications	Serial Ports	2 full duplex RS232C
	Baud Rates	4800 – 115200
	USB Ports	1 Communications
	Correction I/O Protocol	RTCM SC-104
	Data I/O Protocol	NMEA 0183
	Timing Output	1 PPS (HCMOS, active high, rising edge sync, 10 kΩ, 10 pF load)
	Raw Data	Proprietary binary (RINEX utility available)
Environmental	Operating Temperature	-30°C to +70°C
	Storage Temperature	-40°C to +85°C
	Humidity	95% non-condensing
Power GPS Sensor	Input Voltage Range	8 to 36 VDC
	Power Consumption	3 Watts
	Current Consumption	< 250 mA @ 12 VDC
	Antenna Voltage Output	5.0 VDC

¹Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activity.

² Up to 5 km baseline length.

³ Depends also on baseline length.

Hemisphere R330 GPS Receiver

GPS Sensor	Receiver Type	L1 and L2 RTK with carrier phase	
	Channels	12 L1CA GPS 12 L1P GPS 12 L2P GPS 12 L2C GPS 12 L1 GLONASS (with subscription code) 12 L2 GLONASS (with subscription code) 3 SBAS or 3 additional L1CA GPS	
	Update Rate	10 Hz standard, 20 Hz available	
	Cold Start Time	<60 s	
	Warm Start Time 1	30 s (valid ephemeris)	
	Warm Start Time 2	30 s (almanac and RTC)	
	Hot Start Time	10 s typical (valid ephemeris and RTC)	
	Reacquisition	<1 s	
	Differential Options	SBAS, Autonomous, External RTCM, RTK, OmniSTAR (HP/XP)	
	Horizontal Accuracy		RMS (67%)
RTK ^{1,2}		10 mm + 1 ppm	20 mm + 2 ppm
OmniSTAR HP ^{1,3}		0.1 m	0.2 m
SBAS (WAAS) ¹		0.3 m	0.6 m
Autonomous, no SA ¹		1.2 m	2.5 m
L-Band Sensor	Channel	Single channel	
	Frequency Range	1530 MHz to 1560 MHz	
	Satellite Selection	Manual or Automatic (based on location)	
	Startup and Satellite Reacquisition Time	15 seconds typical	
Communications	Serial Ports	2 full duplex RS232	
	Baud Rates	4800 – 115200	
	USB Ports	1 Communications, 1 Flash Drive data storage	
	Correction I/O Protocol	Hemisphere GPS proprietary, RTCM v2.3 (DGPS), RTCM v3 (RTK), CMR, CMR+NMEA 0183, Hemisphere GPS binary	
	Timing Output	1 PPS (HCMOS, active high, rising edge sync, 10 kΩ, 10 pF load)	
	Event Marker Input	HCMOS, active low, falling edge sync, 10 kΩ	
Environmental	Operating Temperature	-40°C to +70°C	
	Storage Temperature	-40°C to +85°C	
	Humidity	95% non-condensing	
Power GPS Sensor	Input Voltage Range	8 to 36 VDC	
	Consumption, RTK	<3.5 W (0.30 A @ 12 VDC typical)	
	Consumption, OmniSTAR	<4.3 W (0.36 A @ 12 VDC typical)	

¹Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activity.² Depends also on baseline length.³ Requires a subscription from OmniSTAR.

Opti-Logic RS800 Rangefinder Laser Altimeter

Accuracy	±1 m on 1x1 m ² diffuse target with 50% reflectivity, up to 700 m
Resolution	0.2 m
Communication Protocol	RS232-8, N, 1 ASCII characters
Baud Rate	19200
Data Raw Counts	~200 Hz
Data Calibrated Range	~10 Hz
Data Rate	~200 Hz raw counts for un-calibrated operation; ~10 Hz for calibrated operation (averaging algorithm seeks 8 good readings)
Calibrated Range Units	Feet, Meters, Yards
Laser	Class I (eye-safe), 905 nm ± 10 nm
Power	7 - 9 VDC conditioned required, current draw at full power (~ 1.8 W)
Laser Wavelength	RS100 905 nm ± 10 nm
Laser Divergence	Vertical axis – 3.5 mrad half-angle divergence; Horizontal axis – 1 mrad half-angle divergence; (approximate beam “footprint” at 100 m is 35 cm x 5 cm)
Dimensions	32 x 78 x 84 mm (lens face cross section is 32 x 78 mm)
Weight	<227 g (8 oz)
Casing	RS100/RS400/RS800 units are supplied as OEM modules consisting of an open chassis containing optics and circuit boards. Custom housings can be designed and built on request.

Scintrex CS-3 Magnetometer

Operating Principal	Self-oscillating split-beam Cesium Vapor (non-radioactive ¹³³ Cs)
Operating Range	15,000 nT to 105,000 nT
Gradient Tolerance	40,000 nT/m
Operating Zones	15° to 75° and 105° to 165°
Hemisphere Switching	a) Automatic b) Electronic control actuated by the control voltage levels (TTL/CMOS) c) Manual
Sensitivity	0.0006 nT $\sqrt{\text{Hz}}$ rms
Noise Envelope	Typically 0.002 nT peak to peak, 0.1 to 1 Hz bandwidth
Heading Error	± 0.20 nT (inside the optical axis to the field direction angle range 15° to 75° and 105° to 165°)
Absolute Accuracy	<2.5 nT throughout range
Output	a) Continuous signal at the Larmor frequency which is proportional to the magnetic field (proportionality constant 3.49857 Hz/nT) sine wave signal amplitude modulated on the power supply voltage b) Square wave signal at the I/O connector, TTL/CMOS compatible
Information Bandwidth	Only limited by the magnetometer processor used
Sensor Head	Diameter: 63 mm (2.5") Length: 160 mm (6.3") Weight: 1.15 kg (2.6 lb)
Sensor Electronics	Diameter: 63 mm (2.5") Length: 350 mm (13.8") Weight: 1.5 kg (3.3 lb)
Cable, Sensor to Sensor Electronics	3 m (9' 8"), lengths up to 5 m (16' 4") available
Operating Temperature	-40°C to +50°C
Humidity	Up to 100%, splash proof
Supply Power	24 to 35 VDC
Supply Current	Approx. 1.5 A at start up, decreasing to 0.5 A at 20°C
Power Up Time	Less than 15 minutes at -30°C

Billingsley TFM100G2 Ultra Miniature Triaxial Fluxgate Magnetometer

Axial Alignment	Orthogonality better than $\pm 1^\circ$
Input Voltage Options	15 to 34 VDC @ 30 mA
Field Measurement Range Options	$\pm 100 \mu\text{T} = \pm 10 \text{ V}$
Accuracy	$\pm 0.75\%$ of full scale (0.5% typical)
Linearity	$\pm 0.015\%$ of full scale
Sensitivity	100 $\mu\text{V/nT}$
Scale Factor Temperature Shift	0.007% full scale/ $^\circ\text{C}$
Noise	$\leq 12 \text{ pT rms}/\sqrt{\text{Hz}}$ @ 1 Hz
Output Ripple	3 mV peak to peak @ 2 nd harmonic
Analog Output at Zero Field	$\pm 0.025 \text{ V}$
Zero Shift with Temperature	$\pm 0.6 \text{ nT}/^\circ\text{C}$
Susceptibility to Perming	$\pm 8 \text{ nT}$ shift with $\pm 5 \text{ Gs}$ applied
Output Impedance	$332 \Omega \pm 5\%$
Frequency Response	3 dB @ $> 500 \text{ Hz}$ (to $> 4 \text{ kHz}$ wide band)
Over Load Recovery	$\pm 5 \text{ Gs}$ slew $< 2 \text{ ms}$
Random Vibration	$> 20 \text{ G rms}$ 20 Hz to 2 kHz
Temperature Range	-55°C to $+85^\circ\text{C}$
Acceleration	$> 60 \text{ G}$
Weight	100 g
Size	3.51 cm x 3.23 cm x 8.26 cm
Connector	Chassis mounted 9 pin male "D" type

Nuvia Dynamics IMPAC data recorder system

(for navigation and geophysical data acquisition)

Functions	Integrated Multi-Parameter Airborne Console (IMPAC) with integrated dual Global Positioning System Receiver (GPS) and all necessary navigation guidance software. Inputs for geophysical sensors - portable gamma ray spectrometer GRS-10/AGRS, MMS4/MMS8 Magnetometer, Totem 2A EM, A/D converter, temperature/humidity probe, barometric pressure probe, and laser/radar altimeter. Output for the multi-parameter PGU (Pilot Guidance Unit)
Display	Monitor display 600 x 800 pixels; customized keypad and operator keyboard. Multi-screen options for real-time viewing of all data inputs, fiducial points, flight line tracking, and GPS channels by operator
Navigation	Pilot/operator navigation guidance. Software supports preplanned survey flight plan, along survey lines, way-points, preplanned drape profile surfaces
Data Sampling	Sensor dependent
Data Synchronization	Synchronized to GPS position. Supports dual GPS
Data File	PEI Binary data format
Storage	80 GB
Software	PEIView: Allows fast data verification and conversion of PEI binary data to Geosoft GBN or ASCII formats PEIConv: For survey preparation, calibration and conversion of maps, and survey plot after data acquisition PEIComp: For calculation of magnetic compensation coefficients AGRS/GRS10 Calibration: High voltage adjustment, linearity correction coefficients calculation, and communication test support AGIS: Real time data acquisition and navigation system. Displays chart/spectrum view in real-time for fast data Quality Control (QC)
Electrical	Multiple ethernet connections, RS232 serial ports, USB ports, and 16-bit differential analog input channels. It can support up to 4 magnetometer sensors
Power Requirement	24 VDC

Appendix C

Digital File Descriptions

- Magnetic Database Descriptions
- Geosoft Grid Descriptions
- Map Descriptions

Magnetic Database:

Abbreviations used in the GDB/XYZ files listed below:

CHANNEL	UNITS	DESCRIPTION
X_WGS84	m	UTM Easting – WGS84 Zone 15N
Y_WGS84	m	UTM Northing – WGS84 Zone 15N
Lat_deg	Decimal degree	Latitude – WGS84
Lon_deg	Decimal degree	Longitude – WGS84
Date	yyyy/mm/dd	Dates of the survey flight(s) – Local
FLT		Flight Line numbers
LineNo		Line numbers
STL		Number of satellite(s)
GPSfix		1 = non-differential 2 = WAAS/SBAS differential
Heading	degree	Heading of the aircraft
GPStime	HH:MM:SS	GPS time (UTC)
Geos_m	m	Geoidal separation
XTE_m	m	Cross track error
Galt	m	GPS height – WGS84 Zone 15N (ASL)
Lalt	m	Laser altimeter readings (AGL)
DTM	m	Digital Terrain Model
Sample_Density	m	Horizontal distance in meters between adjacent measurement locations; sample frequency is 10 Hz
Speed_km_hr	km/hr	Ground speed of aircraft in km/hr
basemag	nT	Base station temporal variation data
IGRF	nT	International Geomagnetic Reference Field, IGRF-13
Declin	Decimal degree	Calculated declination of magnetic field
Inclin	Decimal degree	Calculated inclination of magnetic field
Mag1_Head	nT	Mag 1 – Diurnal, lag, and heading corrected
Mag2_Head	nT	Mag 2 – Diurnal, lag, and heading corrected
Mag3_Head	nT	Mag 3 – Diurnal, lag, and heading corrected
Mag4_Head	nT	Mag 4 - Diurnal, lag, and heading corrected
TMI	nT	Total Magnetic Intensity (average of Mag 1 and Mag 2)
RMI	nT	Residual Magnetic Intensity (average of Mag 1 and Mag 2)
ILG	nT/m	In-Line Gradient (Mag 1 and Mag 2)
XLG	nT/m	Cross-Line Gradient (Mag 1 and Mag 2)
VG	nT/m	Vertical Gradient (Mag 3 and Mag 4)
HG	nT/m	Total horizontal gradient (in-line and cross-line)
TMIge	nT	Gradient enhanced Total Magnetic Intensity
RMIge	nT	Gradient enhanced Residual Magnetic Intensity

Grids:

D2 Gold Survey Block, WGS 84 Datum, Zone 15N, cell size at 12.5 m

FILE NAME	DESCRIPTION
20118_D2_Gold_DTM_12.5m.grd	Digital Terrain Model gridded at 12.5 m cell size
20118_D2_Gold_TMI_12.5m.grd	Total Magnetic Intensity gridded at 12.5 m cell size
20118_D2_Gold_RMI_12.5m.grd	Residual Magnetic Intensity gridded at 12.5 m cell size
20118_D2_Gold_ILG_12.5m.grd	Measured In-Line Gradient (Mag 1 and Mag 2) gridded at 12.5 m cell size
20118_D2_Gold_XLG_12.5m.grd	Measured Cross-Line Gradient (Mag 1 and Mag 2) gridded at 12.5 m cell size
20118_D2_Gold_VG_12.5m.grd	Measured Vertical Gradient (Mag 3 and Mag 4) gridded at 12.5 m cell size
20118_D2_Gold_HG_12.5m.grd	Total Horizontal Gradient (in-line and cross-line) gridded at 12.5 m cell size
20118_D2_Gold_TMIge_12.5m.grd	Gradient enhanced Total Magnetic Intensity (in-line, cross-line, and vertical gradients) gridded at 12.5 m cell size
20118_D2_Gold_RMIge_12.5m.grd	Gradient enhanced Residual Magnetic Intensity (in-line, cross-line, and vertical gradients) gridded at 12.5 m cell size
20118_D2_Gold_RTPge_12.5m.grd	Gradient enhanced Reduced to Magnetic Pole of RMIge gridded at 12.5 m cell size

Maps:

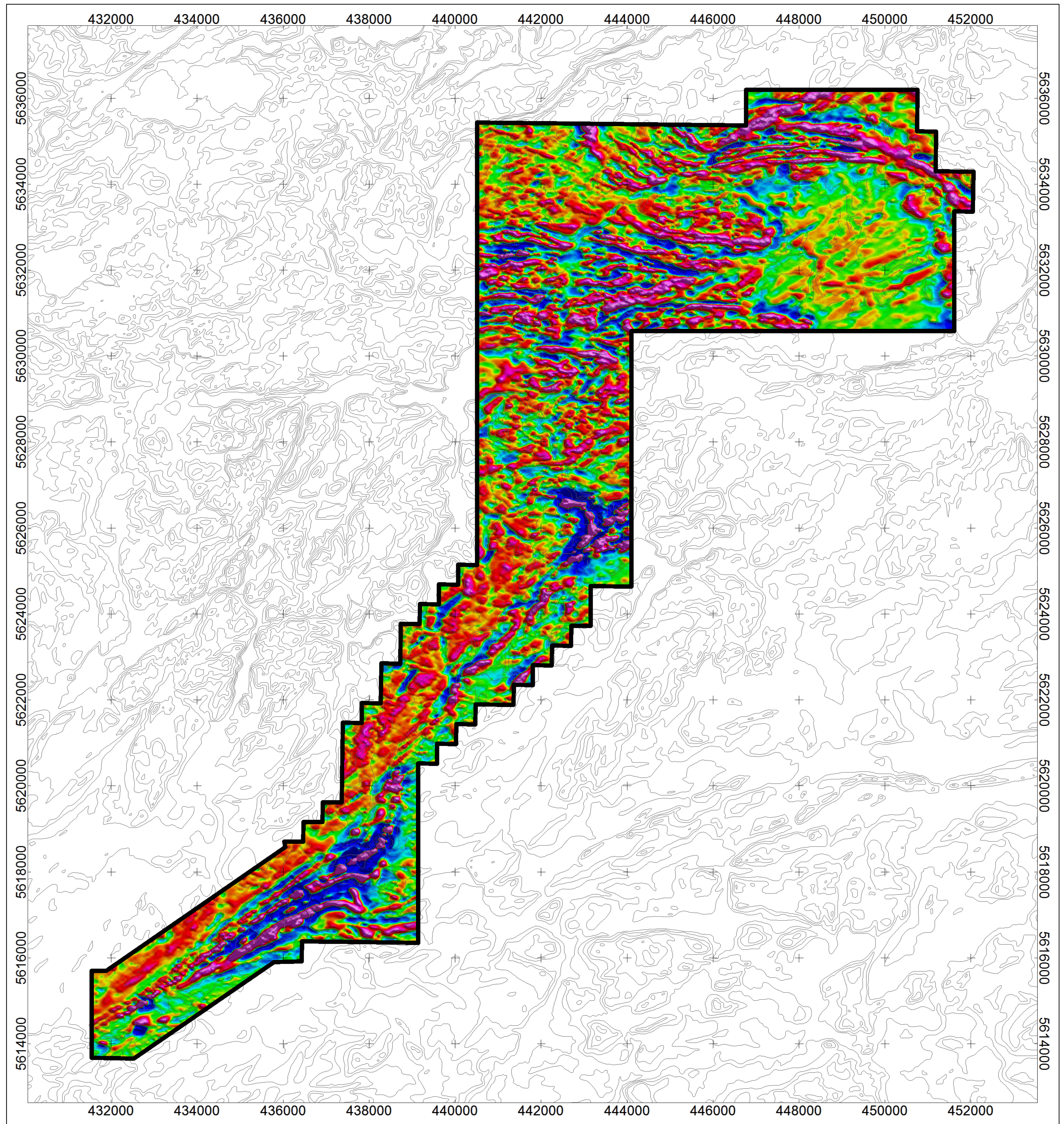
D2 Gold Survey Block, WGS 84 Datum, Zone 15N (jpegs, pdfs, and georeferenced pdf)

Plate Number	Plate Name	FILE NAME	DESCRIPTION
1	FL	20118_D2_Gold_ActualFlight Lines	Plotted actual flown flight lines
2	DTM	20118_D2_Gold_DTM_12.5 m	Digital Terrain Model gridded at 12.5 m cell size
3	TMI_wFL	20118_D2_Gold_TMI_wFL_12.5m	Total Magnetic Intensity gridded at 12.5 m cell size with actual flown flight lines
4	TMI	20118_D2_Gold_TMI_12.5m	Total Magnetic Intensity gridded at 12.5 m cell size
5	RMI	20118_D2_Gold_RMI_12.5m	Residual Magnetic Intensity gridded at 12.5 m cell size
6	ILG	20118_D2_Gold_ILG_12.5m	In-Line Gradient gridded at 12.5 m cell size
7	XLG	20118_D2_Gold_XLG_12.5m	Cross-Line Gradient gridded at 12.5 m cell size
8	VG	20118_D2_Gold_VG_12.5m	Vertical Gradient gridded at 12.5 m cell size
9	HG	20118_D2_Gold_HG_12.5m	Horizontal Gradient gridded at 12.5 m cell size
10	TMIge	20118_D2_Gold_TMIge_12.5 m	Gradient enhanced Total Magnetic Intensity gridded at 12.5 m cell size
11	RMIge	20118_D2_Gold_RMIge_12.5m	Gradient enhanced Residual Magnetic Intensity gridded at 12.5 m cell size
12	RTPge	20118_D2_Gold_RTPge_12.5m	Gradient enhanced Reduced to Magnetic Pole of RMIge gridded at 12.5 m cell size

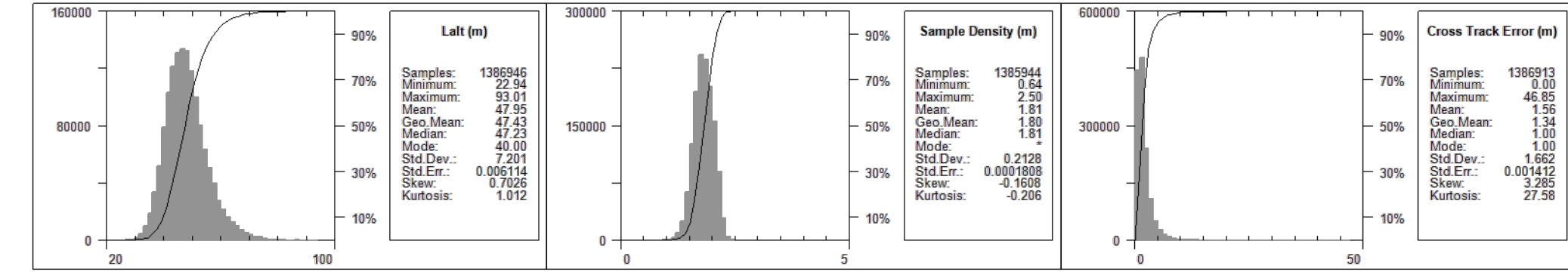
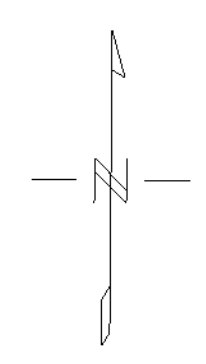
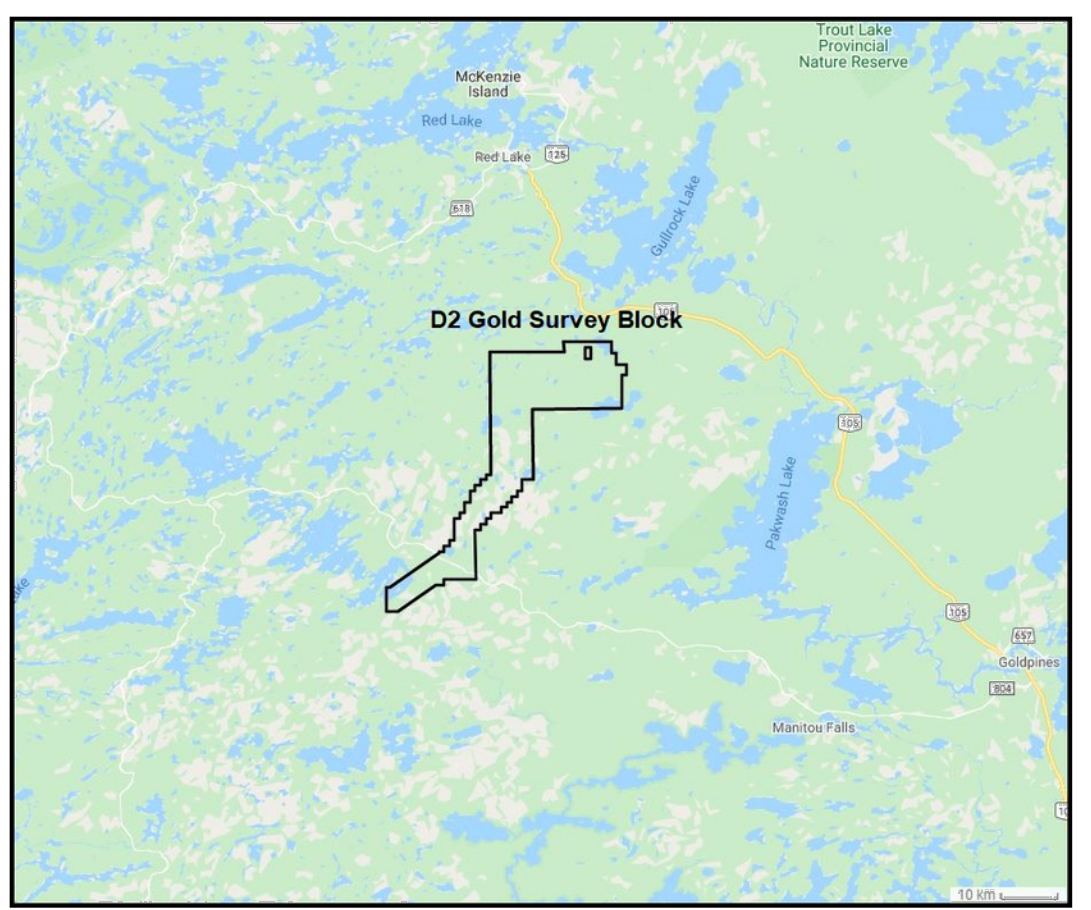
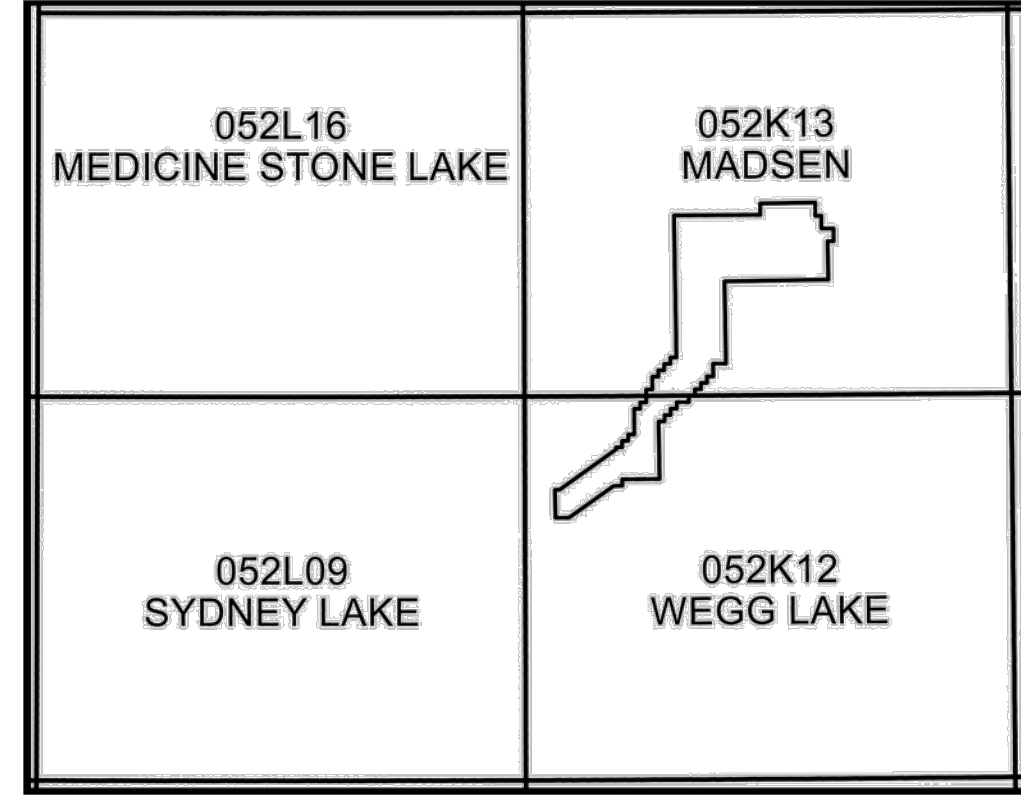
Plates

D2 Gold Survey Block Scale 1:50,000

- Plate 1: D2 Gold – Actual Flight Lines (FL)
- Plate 2: D2 Gold – Digital Terrain Model (DTM)
- Plate 3: D2 Gold – Total Magnetic Intensity with Actual Flight Lines (TMI_wFL)
- Plate 4: D2 Gold – Total Magnetic Intensity (TMI)
- Plate 5: D2 Gold – Residual Magnetic Intensity (RMI)
- Plate 6: D2 Gold – In-Line Gradient (ILG)
- Plate 7: D2 Gold – Cross-Line Gradient (XLG)
- Plate 8: D2 Gold – Vertical Gradient (VG)
- Plate 9: D2 Gold – Horizontal Gradient (HG)
- Plate 10: D2 Gold – Gradient Enhanced Total Magnetic Intensity (TMIge)
- Plate 11: D2 Gold – Gradient Enhanced Residual Magnetic Intensity (RMIge)
- Plate 12: D2 Gold – Gradient Enhanced Reduced to Magnetic Pole (RTPge) of RMIge



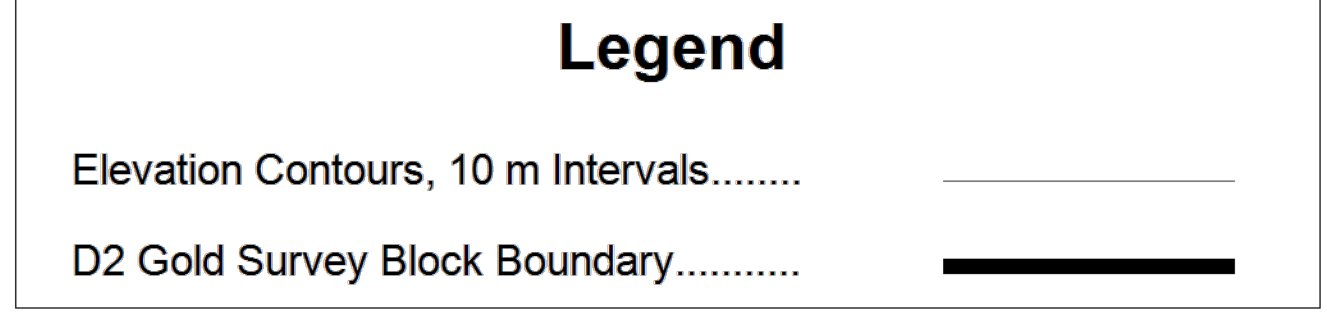
National Topographic System



MAP PROJECTION
 Projection: Universal Transverse Mercator Zone 15N
 Datum: WGS 84
 Local Datum Transform: World

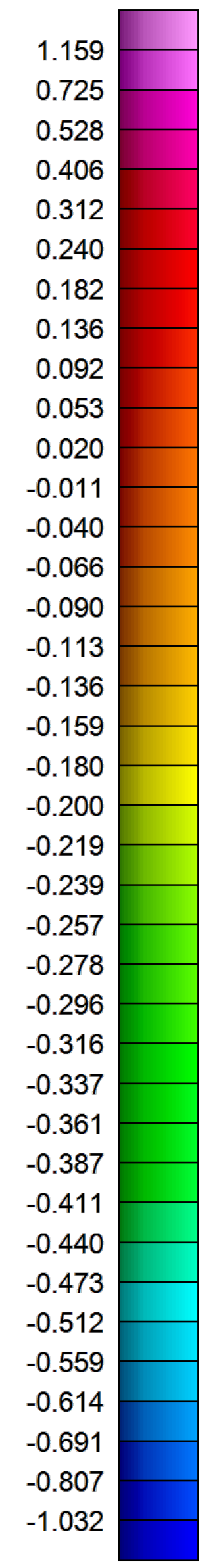
D2 GOLD SURVEY SPECIFICATIONS
 Survey Dates: September 22 to September 25, 2020
 Survey Base: Red Lake, ON
 Aircraft Type: Bell 206 Jet Ranger helicopter
 Registration: C-FZHK
 Survey Technology: Gradient magnetic survey
 Mean Flight Height: 47.9 meters
 Survey Line Spacing: 50 meters
 Survey Line Direction: 000°/180°
 Tie Line Spacing: 500 meters
 Tie Line Direction: 090°/270°

AIRBORNE SURVEY SYSTEM
 Magnetometer Sensors: 4 x Scintrex CS-3 Cesium
 Configuration: Triaxial magnetic gradient bird (X, Y, and Z axes)
 Sample Rate: 20 Hz
 Sensitivity: 0.0006 nT \sqrt{Hz} rms

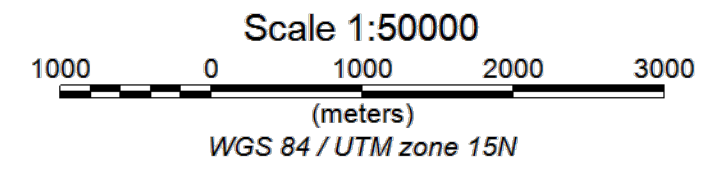


DATA REFERENCE
 The Vertical Gradient (VG) is the difference between Mag 3 and Mag 4 divided by the sensor separation. Refer to report for details. The TMI is represented as a grid and drawn with a histogram-equalized color shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
 National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
 URL <http://ftp.geogratis.gc.ca/pub/nrcan_mcan/vector/ntdb_bndt/>[2007]

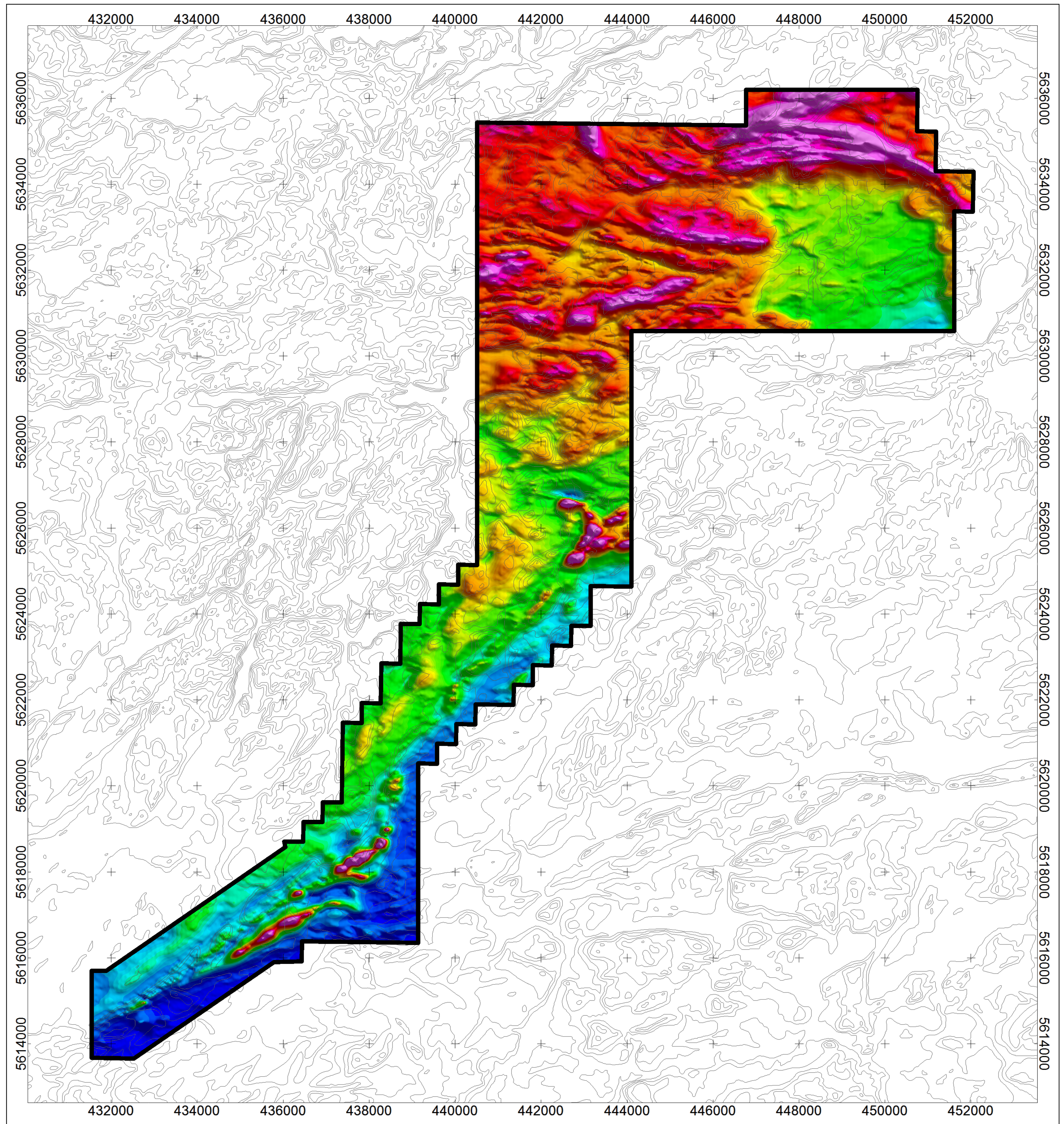


VG
(nT/m)

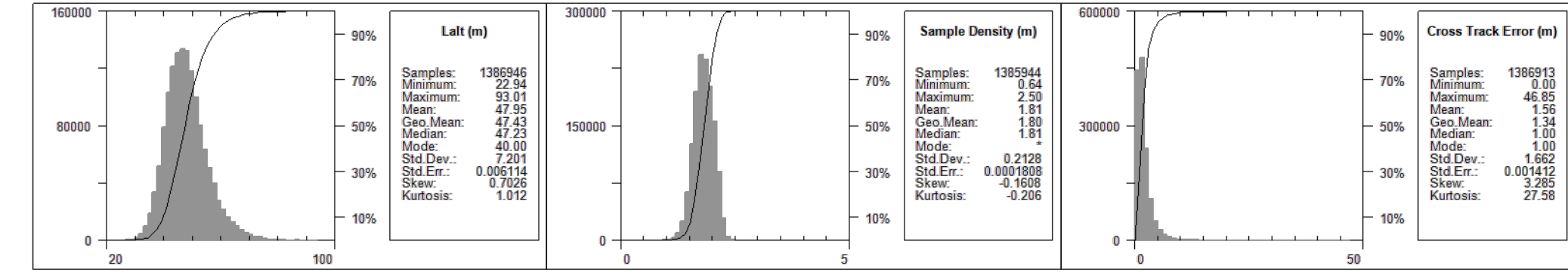
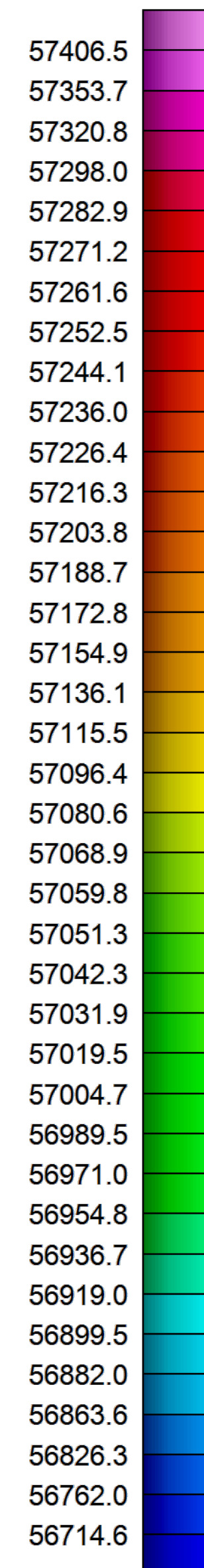
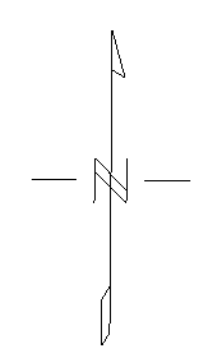
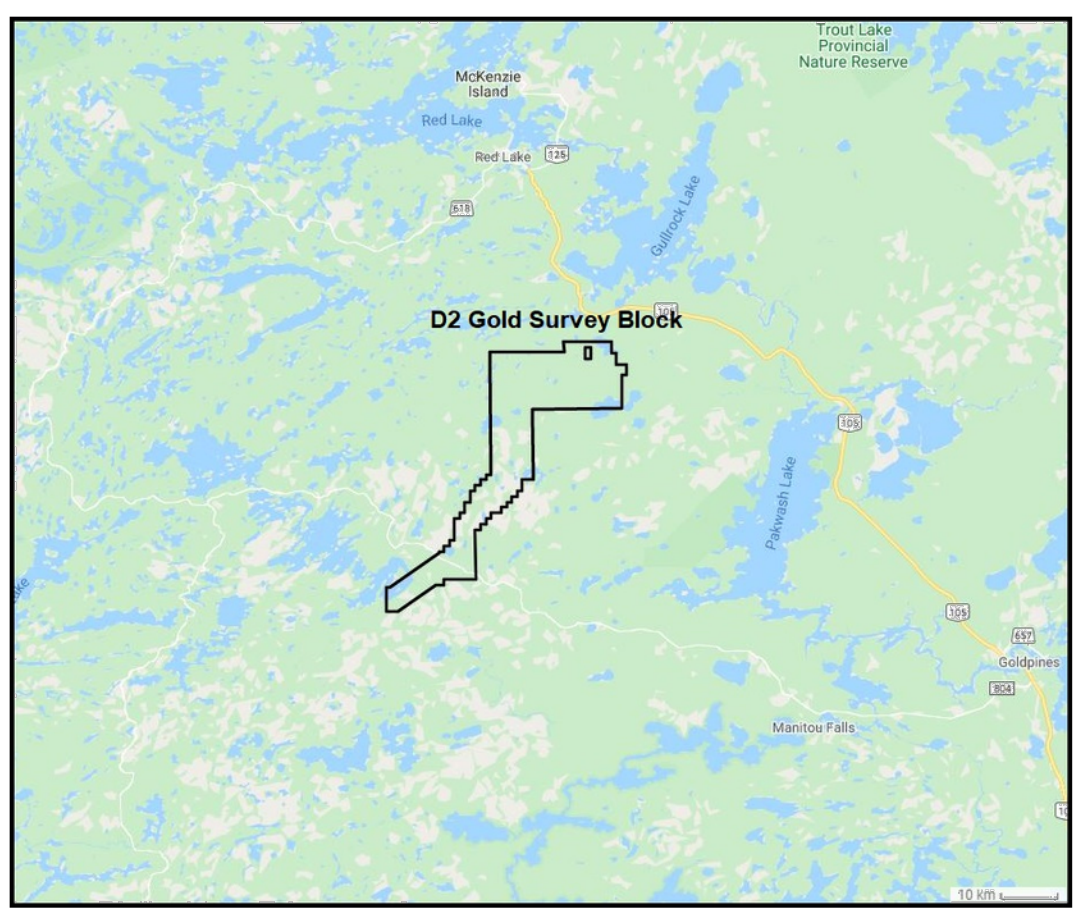
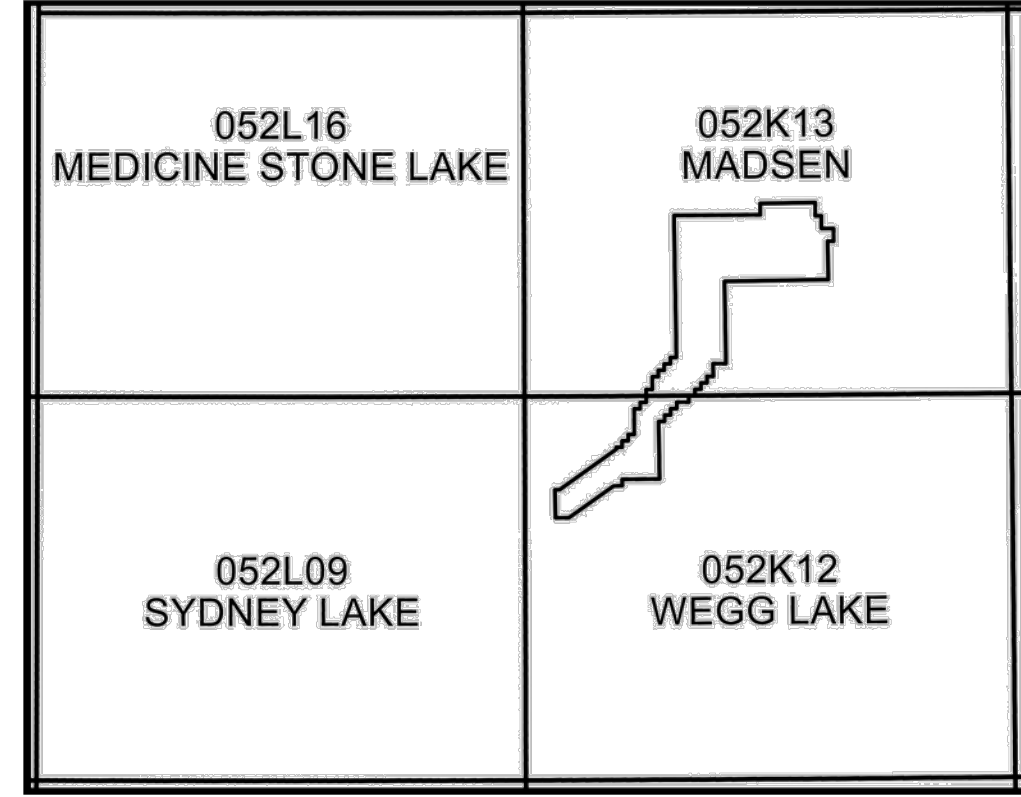


D2 Gold Inc.
 D2 Gold Survey Block
 Magnetic Map
 Vertical Gradient





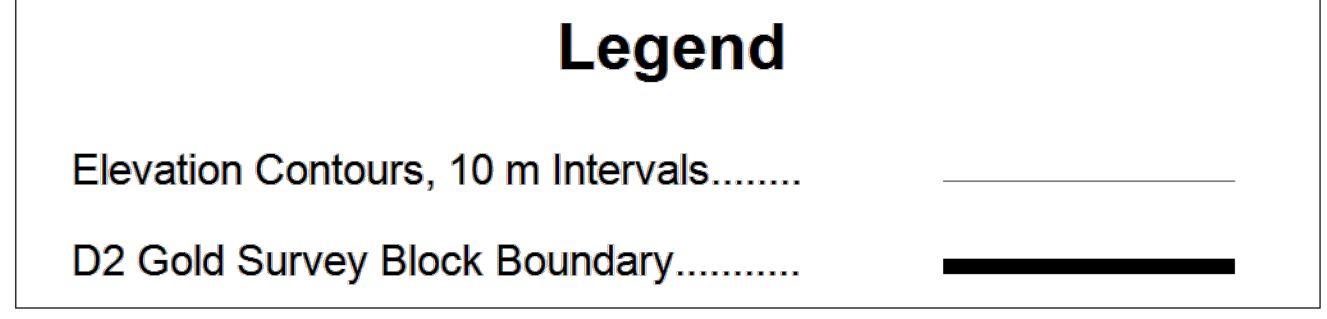
National Topographic System



MAP PROJECTION
 Projection: Universal Transverse Mercator Zone 15N
 Datum: WGS 84
 Local Datum Transform: World

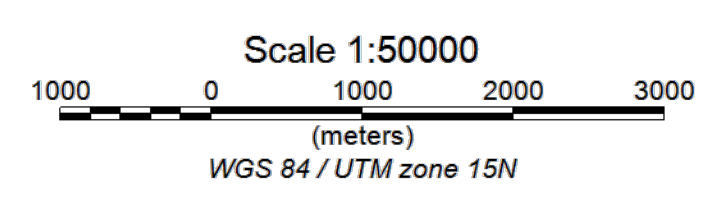
D2 GOLD SURVEY SPECIFICATIONS
 Survey Dates: September 22 to September 25, 2020
 Survey Base: Red Lake, ON
 Aircraft Type: Bell 206 Jet Ranger helicopter
 Registration: C-FZHK
 Survey Technology: Gradient magnetic survey
 Mean Flight Height: 47.9 meters
 Survey Line Spacing: 50 meters
 Survey Line Direction: 000°/180°
 Tie Line Spacing: 500 meters
 Tie Line Direction: 090°/270°

AIRBORNE SURVEY SYSTEM
 Magnetometer Sensors: 4 x Scintrex CS-3 Cesium
 Configuration: Triaxial magnetic gradient bird (X, Y, and Z axes)
 Sample Rate: 20 Hz
 Sensitivity: 0.0006 nT \sqrt{Hz} rms



DATA REFERENCE
 Magnetic data have been corrected for temporal variations and lag. Data from Mag 1 and Mag 2 were averaged and leveled to generate the Total Magnetic Intensity (TMI). Refer to report for details. The TMI is represented as a grid and drawn with a histogram-equalized color shade; sun illumination inclination at 45° and declination at 045°.

TOPOGRAPHIC REFERENCE
 National Topographic Data Base (NTDB), Canada. Ottawa, ON: Government of Canada, Natural Resources Canada, Center for Topographic Information.
 URL <http://ftp.geogratis.gc.ca/pub/nrcan_mcan/vector/ntdb_bndt/>[2007]



D2 Gold Inc.

**D2 Gold Survey Block
 Magnetic Map
 Total Magnetic Intensity**

