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<b>Ministry of Energy, Mines &amp; Petroleum Resources</b> Mining & Minerals Division BC Geological Survey				Assessment Report Title Page and Summary
TYPE OF REPORT [type of survey(s)]: Geological mapping / Photo in	terpreta	tion	TOTAL COST	: \$1,260.00
AUTHOR(S): Case Lewis, P.Geo		_ SIGNATURE(S) _	an	
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A				YEAR OF WORK: 2016
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):	561291	3 - 2016/Aug/0	4	
PROPERTY NAME: Mayner's Fortune				
CLAIM NAME(S) (on which the work was done): 1037762, 1037752				
COMMODITIES SOUGHT: Limestone				
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 1031 124				
MINING DIVISION: Skeena	N <sup>-</sup>	<b>-s/вссs</b> : <u>103</u>  04	7	
LATITUDE: <u>54</u> ° <u>24</u> ' <u>50</u> " LONGITUDE: <u>-128</u>	° <u>38</u>	3'45"	(at centre of wor	k)
OWNER(S): 1) KIESMAN, MARCY MARIE	_ 2)		·	·
MAILING ADDRESS: 248-515 West Pender Street				
Vancouver, BC V6B 6H5				
OPERATOR(S) [who paid for the work]: 1) Durango Resources Inc.	_ 2)			
MAILING ADDRESS: 248-515 West Pender Street				
Vancouver, BC V6B 6H5				
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure limestone, sedimentary, granodiorite, diorite, hornblende, hornfe				raphitic, argillite,
carbonate				

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping 225.85 hectares		1037762, 1037752	\$1260
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
		_	
Induced Polarization		_	
Radiometric		_	
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil		_	
Silt		_	
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying		_	
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/t		_	
Trench (metres)		_	
[Indexerverind dev. (metree)			
		_	
			\$1260

BC Geological Survey Assessment Report 36203

Report to:



Durango Resources Inc.

# Report on geological mapping, sampling and map compilation on the Mayner's Fortune property, northwestern British Columbia, Canada

Effective Date: July 28, 2016

Prepared by:

Case Lewis, P.Geo.

Pyral Consulting

Vancouver, BC, Canada

Rev.01-07.28.2016

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# SUMMARY

This report covers (1) the results of a mapping and sampling campaign, and; (2) a historical data map compilation and property summary report on the Mayner's Fortune limestone property in northwest British Columbia.

Five limestone beds have been historically mapped on Durango's property. Of these mapped carbonate units, the third carbonate belt has been historically reported to carry some pure limestone of probably large extent and the fifth carbonate belt is thick but impure. Both of these units are relatively under-explored and appear to be the most prospective units on the property. (Haman, 1966; Bottoms, 1967)

Using the historical map compilation as a guide, recent mapping of historically reported areas has confirmed the existence of at least one broad, continuous limestone unit on the Property. Results of the mapping campaign are summarized in Section 4.

At this stage, it is not possible to form any conclusions on the Property, however it is recommended, in order to generate an optimal interpretation of the underlying geology, to carry out a drilling program composed of a sequence of short holes across the historically mapped and geologically inferred areas.

# **1.0 INTRODUCTION**

Pyral Consulting ("the Consultants" or "Pyral Consulting") was retained by Durango Resources Inc. ("Durango" or the "Company") to prepare a summary of a sampling and mapping campaign carried out on the property in July 2016 as well as a historical data map compilation (the "Report") on the Mayner's Fortune Property in northern British Columbia.

Case Lewis, P.Geo. is responsible for the contents of this Report. In completing the report, the Consultants held discussions with management in Vancouver, BC, and reviewed historical data pertaining to the property. The purpose of this report is (1) summarize a recent sampling and mapping campaign carried out on the property and; (2) to generate a map compilation consisting of georeferenced historical data on the Durango Resources Inc. Mayner's Fortune property for use in comparison to recent mapping.

The Mayner's Fortune limestone property is located in the Skeena Mining Division approximately 7.5 kilometres south west of Terrace, British Columbia and 4 kilometres west of Lakelse Lake on Lakelse River. The Property is bordered to the east by Mount Herman Provincial Park. The Property is located adjacent to the CNR railway line running between Terrace and Kitimat. The Property is also adjacent to the east of the Mayner's Fortune BC MINFILE occurrence.

The area of interest at Durango's Mayner's Fortune property consists of a 1400-metre thick metasedimentary sequence hosting five sub-parallel N to NE-striking limestone units of variable thickness.

The westernmost unit in the sequence, referred to as the Mayner's Fortune occurrence (also historically referred to as Unit #1) occurs directly to the west of Durango's Mayner's Fortune claim block (Haman, 1966). The occurrence is 30 metres thick lying adjacent to the CNR railway line, striking 040 degrees and dipping 25 degrees southeast. The unit has been mapped along strike for 108 metres with an average height of 30 metres measured from the level of the CNR tracks, and is suspected to continue beneath this level as well (Haman, 1966).

Five additional limestone beds have been historically mapped on Durango's property, labelled Units #2 through #6. Of the five carbonate units mapped on the property, the third carbonate belt has been historically reported to carry some pure limestone of probably large extent and the fifth carbonate belt is thick but impure. Both of these units are relatively under-explored and appear to be the most prospective units on the property. (Haman, 1966; Bottoms, 1967)

The Lucky Fortune BC MINFILE occurrence lies near the southern end of the mapped section of Unit #5. The Lucky Fortune occurrence is reported to be comprised of Paleozoic sediments consisting of limestone, quartzite, and shale are intruded by diorite and later granodiorite of the Cretaceous to Tertiary Coast Plutonic Complex. The sediments are altered to skarn composed of

epidote and garnet with disseminated and patchy chalcopyrite, molybdenite and magnetite (BC MINFILE 103I 124).

### **Recent Work**

This most recent mapping and sampling campaign covered the southeastern portion of Limestone Unit #5, near the Lucky Fortune BC MINFILE occurrence. The historical map compilation was used as a guide for recent mapping activity on the claim.

# 2.0 PROPERTY DESCRIPTION AND LOCATION

The Property is defined by a series of mineral titles which are 100% held by Durango Resources.

The Property is located in the NTS Map Sheet 103I07, centered at approximately 523,440 mE and 6,029,450 mN (UTM Zone 9N; North American Datum (NAD) 83) 12 kilometres south of the town of Terrace, BC, and is comprised of 3 contiguous map-designated claims totalling 318.99 hectares. The claims will expire between August 4, 2016 and July 30, 2017.

The Property is easily accessible by road by following Queensway Dr (Beam Station Rd) south from the town of Terrace for approximately 9 kilometres, then turning right onto Matson Rd, then following a short length of unpaved road to the Property.

Property location is shown in Figure 2.1.



FIGURE 2.1 PROJECT LOCATION MAP.

### 3.0 GEOLOGICAL SETTING AND MINERALIZATION

### 3.1 REGIONAL GEOLOGY

#### From Haman, 1966:

The claim block is located centrally within the Kalum-Kitimat Pleistocene Valley, near the west flank of the Herman Mtn. intrusive complex, Paleozoic strata are the main component of the rocks and intrusives are less dominant. The regional structure of grain is approximately north - south to north 10° east and indicates north trending folds and some thrust faults dipping east.

The reason for forming this regional north trending valley is herein interpreted to be structural. In the Lakelse Lake area the valley is bordered toward west and east by large intrusive bodies. The rocks within the valley consist mainly of Paleozoic strata or Mesozoic strata in the Kitimat area. An isolated major intrusive complex is present between Herman Mtn. and Lakelse Lake and is topographically indicated by mountains protruding above the Pleistocene valley floor.

Regional geology is shown in Figure 3.1.



FIGURE 3.1. REGIONAL GEOLOGY

#### 3.2 LOCAL GEOLOGY

#### From Haman, 1966:

There are a few isolated biotite-granodiorite intrusives of light grey to pinkish in colour. Most of the stratigraphically lowest rocks are of the medium to dark green variety. More basic hornblende granodiorite to diorite variety and occur near Paleozoic hornfels and greenstones. These medium to coarsely grained rocks are indicating relatively wide contact zones characterized by migmatisation and their contacts with sedimentary rocks are presently thought much less prospective than the contacts of biotite-granodiorite. At stratigraphic higher levels are hornfels and greenstone usually fine grained and dark bluish grey. The thickness may be in the order of a few hundred feet but may also be considerably less, probably because of structural thinning. Apparently overlying the greenstones are graphitic argillites and limestones. A well exposed section was measured along the railroad. **Figure 3.2** shows local geology as georeferenced historical data from Haman, 1966.



FIGURE 3.2. HISTORICAL PROPERTY GEOLOGY (HISTORICAL DATA COMPILATION)

# 4.0 SUMMARY OF WORK PERFORMED

The following work was carried out on the Property:

- 1. Geological survey including mapping and sampling;
- 2. Historical data compilation.

Work carried out on the ground included prospecting and basic lithological mapping as well as a short sampling campaign. In addition to this, historical work was compiled alongside present data in order to augment future work.

### Sampling and Mapping Campaign

The sampling and mapping campaign was carried out during a short field visit in July 2016. The campaign covered the south and eastern parts of the property, focusing primarily on the historically mapped Limestone Unit #5. Data were obtained from each mapped point, including bedding and lithology. The results from the program are shown in the following maps and tables.

Limestone bedding orientations were found to agree with historical mapping in the area and measurements were generally consistent across the entire mapped area, suggesting minimal deformation effecting the unit. Strike ranges from  $355^{\circ}$  to  $010^{\circ}$ , while dip typically ranges from  $055^{\circ}$  to  $060^{\circ}$ . The units appeared to be composed of pure limestone material.

Porphyritic diorite intrusions were observed primarily on the eastern side of the mapped area, with crystal sizes ranging up to 1cm. These units intrude roughly parallel to the limestone bedding, with a strike of 355-360°. Dip was not identified due to lack of outcrop exposure in measured areas.

Several gabbroic intrusions were identified cross-cutting the limestone unit in several places. These dikes were observed to be 5 to 15 metres in thickness, inferred to be up to 25-30 metres in some locations. The dikes to the west tend to have an attitude of approximately  $128^{\circ}/48^{\circ}$  while the dike mapped to the east have a strike and dip of about  $095^{\circ}/42^{\circ}$ .

A single ~3m felsite dike was found to cross-cut the limestone unit, parallel to the gabbro dikes.

New geological mapping from the July 2016 survey is shown in **Figure 4.1**.



FIGURE 4.1. GEOLOGICAL MAPPING CONDUCTED DURING THE MOST RECENT SURVEY

#### **TABLE 4.1. SCHEDULE OF EXPENSES**

Date	Amount	Description
July 12 2016	\$550	geologist site visit
July 13 2016	\$550	geologist data interpretation
July 12 2016	\$ 55	fuel
July 12 2016	\$ 45	meals

\$1200.00

#### **Historical Data Compilation**

The historical data compilation was carried out using data from the following reports:

Bottoms, K. (1967). Report on the Lady Luck, Mayner's Fortune and Lucky Fortune mineral claim groups, Terrace area, BC. Cree Lake Mining Limited (NPL).

Haman, P. (1966). Geology of the terrace area, British Columbia. Lady Luck and Mayner's Fortune claim groups. Cree Lake Mining Ltd. (NPL).

These historical reports primarily consisted of property-wide geological mapping campaigns. The printed map accompaniments were digitized and georeferenced, then converted to vector format by overlay tracing. The resulting geology map layer can be seen in **Figure 3.2**.

# 5.0 INTERPRETATION AND CONCLUSIONS

Of the five carbonate units mapped on the property, the third carbonate belt has been historically reported to carry "some pure limestone of probably large extent" and the fifth carbonate belt is thick but impure (Haman, 1966). Both of these units are relatively underexplored and appear to be the most prospective units on the property.

During the recent mapping campaign, focus was oriented towards the fifth carbonate belt. The results from this survey support the results from historical work and appear to be quite encouraging in terms of the existence of widespread limestone belts on the property. Limestone beds were found to strike in a northerly direction, in the  $355^{\circ}$  to  $010^{\circ}$  range, while dip typically ranges from  $055^{\circ}$  to  $060^{\circ}$ .

A swarm of previously unidentified gabbroic dikes, along with a minor felsite dike, crosscut the limestone beds roughly perpendicular to bedding orientation with an east-southeast strike and moderate dip of approximately  $42^{\circ}$  to  $48^{\circ}$ .

# **6.0 Recommendations**

The Consultants recommend an initial diamond drilling campaign of approximately 2,000 metres of drilling in 15-20 short drill holes across the established limestone units with the goal of identifying the extent of the limestone units and potentially generating a near-surface resource on the property. Because of the continuous nature of limestone bedding, particularly on this property, drill hole spacing may be expanded if the units are found to be relatively consistent below surface. An approximate budget for this phase is shown in **Table 6.1.** 

Item	Quantity	Cost per unit	Total
Diamond Drilling	2,000 m	\$125/m	\$250,000
Excavator for trenching + labour	15 days	\$750/day	\$11,250
Assay costs	2000 units	\$30/unit	\$60,000
Project Geologist	25 days	\$750/day	\$18,750
Geologist	25 days	\$550/day	\$13,750
Geotechnicians	25 days x 2 persons	\$400/day	\$20,000
Mobilization / Travel Costs / Mileage		\$30,000	\$30,000
Food and lodging	25 days x 7 persons	\$200	\$35,000
Reporting, interpretation, and filing of assessment reports		\$8,000	\$8,000
Subtotal			\$446,750
15% budget contingency			\$67,012
Totals			\$513,762

### TABLE 6.1. ESTIMATED BUDGET FOR EXPLORATION PROGRAM (EXCLUDING TAX)

Dated in the City of Vancouver, in the Province of British Columbia this 28<sup>th</sup> day of July, 2016. Respectfully submitted,

\_\_\_\_\_

Case Lewis P.Geo.

# 7.0 CERTIFICATE OF QUALIFIED PERSON

CASE LEWIS, P.GEO.

I, Case Lewis, resident at #142 – 757 West Hastings St, Vancouver, BC, Canada hereby certify that:

- I am a geologist affiliated with Pyral Consulting, with a business address at #142 757 West Hastings St, Vancouver, BC, Canada V6C 1A1.
- The report to which this certificate applies is entitled: Durango Resources Inc. Report on geological mapping, sampling and map compilation on the Mayner's Fortune property, northwestern British Columbia, Canada.
- I am a graduate of the University of Alberta with a Bachelor of Science Degree (Specialization Geology). I have practiced my profession continuously since 2007. I am a member in good standing and registered Professional Geologist (P.Geo.) with the Association of Professional Geoscientists of Ontario (member #2444) and a registered Professional Geologist (P.Geo.) with the Ordre de Geologues du Quebec (member #1904). My relevant experience is eight years' professional practise as a consulting geologist working in mineral exploration.
- I was formerly a director on two publicly traded TSX-V listed mineral exploration companies and I currently act as QP and technical advisor for several other mineral exploration companies.
- I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- I have no prior involvement with the Property that is the subject of the Report.
- As of the date of this certificate, to the best of my knowledge, information and belief, the sections of the Report that I am responsible for contain all of the scientific and technical information that is required to be disclosed to make the Report not misleading.

Signed and dated this 28<sup>th</sup> day of July, 2016 at Vancouver, British Columbia, Canada.

Case Lewis, P.Geo. Professional Geologist Pyral Consulting

# 8.0 References

### BC MINFILE. (2016). LUCKY FORTUNE (MINFILE No 103I 124).

- Bottoms, K. (1967). Report on the Lady Luck, Mayner's Fortune and Lucky Fortune mineral claim groups, Terrace area, BC. Cree Lake Mining Limited (NPL).
- Haman, P. (1966). Geology of the terrace area, British Columbia. Lady Luck and Mayner's Fortune claim groups. Cree Lake Mining Ltd. (NPL).