Ministry of Energy, Mines & Petroleum Resources Mining & Minerals Division BC Geological Survey	
TYPE OF REPORT [type of survey(s)]: Geochemical and Prospecting	
AUTHOR(S): J. T. Shearer, M.Sc. P.Geo.	SIGNATURE
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):	(
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):	5654996
, 1999 - Marine Marine, Malaka Marine, kasa ng mang mpang m Marine Marine Marine Marine Marine Mpang	
PROPERTY NAME: Dot Mordenite	
PROPERTY NAME: Dot Mordenite CLAIM NAME(S) (on which the work was done): Mordenite 571373	
CLAIM NAME(S) (on which the work was done): Mordenite 571373	
CLAIM NAME(S) (on which the work was done): Mordenite 571373	NTS/BCGS: 921/(
CLAIM NAME(S) (on which the work was done): Mordenite 571373 COMMODITIES SOUGHT: Zeolites MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:	NTS/BCGS: <u>921/;</u> 03 '50



Title Page and Summary

TOTAL COST: \$4,300.00

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):		0		YEAR OF WORK: 2017
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5				
PROPERTY NAME: Dot Mordenite		- -		
CLAIM NAME(S) (on which the work was done): Mordenite 571373	22			
			and see the second second second	
COMMODITIES SOUGHT: Zeolites				
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:	- Survey		n Marine a Marine Marine ya mana manaka da ak	***
MINING DIVISION: Kamloops		NTS/BCGS: 921/3E (921.0	025)	
LATITUDE: 50 ° 14 '38 " LONGITUDE: 121	•	<u>03 '50 </u> " (at	centre of work)	
OWNER(S):				
1) J. T. Shearer	2) .	eta altera era di sema esta basar deber a terre cide a casa dat más. Manta e aras	an a	
MAILING ADDRESS:	-	een oor for een dig al defracter oor for the state or either a for the state of the state of the state of the s		
Port Coquitlam, BC V3C 2Z1				
OPERATOR(S) [who paid for the work]:				
1) Same as above	2)			
MAILING ADDRESS:		mine a strandard day initial a substrate that a strandard a st		
Same as above			****	
PROPERTY GEOLOGY KEVMORDS (lithology, and stratigraphy, structure)	alta	ration minoralization size a	and attitudo):	
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, Altered zeolite bearing (mordenite) tuffs of the Cretaceous Spend			inu attituue).	
Sampled for trace elements				
	in in			denne and diverse diverse a success with
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT RE	POI	RT NUMBERS:	den er sterne en ser ser sterne er ser ser ser ser ser ser ser ser ser	

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			
mb at the test of the			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	ante a parante antifat e construint la construint au participation de la construint de la construint de la cons		
Electromagnetic			
Induced Polarization			and the second
	-		Nagara para a para a para da kana da pana ana kana da kana da kana da kana da kana da kana kan
			We for the second se
A *			and an and the second
GEOCHEMICAL (number of samples analysed for)			
Soll	10-11		
Silt	13 soil	571373 + 1049677	1000
Rock	3 rock	571373 + 10496 77	3300
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			en ante de la faire de la companya d
Topographic/Photogrammetric (scale, area)	×.		
Legal surveys (scale, area)			
Road, local access (kilometres)/	trail		
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$4,300.00

# GEOCHEMICAL and PROSPECTING REPORT on the DOT MORDENITE PROJECT NTS 92I/3E (92I.025) Latitude 50°14'38"/Longitude 121°03'50W Nicola River Area near DOT Station (between Spences Bridge and Merritt) Event # 5654996

for

Homegold Resources Ltd. Unit 5 – 2330 Tyner Street, Port Coquitlam, BC V3C 2Z1 Phone: 604-944-6102

BC Geological Survey Assessment Report 36885

by

J. T. Shearer, M.Sc., P.Geo. (BC & Ontario) Industrial Mineral Geologist

July 3, 2017

Fieldwork completed between February 1, 2017 and July 3, 2017

## **TABLE of CONTENTS**

Pa	ige
SUMMARYi	iii
INTRODUCTION	1
LOCATION and ACCESS	3
CLAIM STATUS	6
HISTORY	8
GEOLOGY1	.2
EXPLORATION 2017 1	.5
CONCLUSIONS and RECOMMENDATIONS1	.6
COST ESTIMATE for FUTURE WORK11	.7
REFERENCES	.8
APPENDICES	
Appendix I Statement of Qualifications2	20
Appendix II Statement of Costs2	21
Appendix III Assay Certificates2	22
Appendix IV Sample Descriptions2	23

## LIST of ILLUSTRATIONS

		Page
FIGURE 1	Location Map	2
FIGURE 2	Google Sample Locations	5
FIGURE 3	Claim Map	7
FIGURE 4	Mordenite – Photo of Outcrop	9
FIGURE 5	Garmin Waypoints	10
FIGURE 5a	Garmin Waypoints Detail	11
FIGURE 6	Geology of Claims	13
FIGURE 7	Sample Locations – Mordenite Locality	14

## LIST of TABLES

		Page
TABLE I	List of Claims	6

\_

\_

#### SUMMARY

The Dot Mordenite Property (DOT-DK Claims) comprises one claim (totalling 3 cells), acquired to cover a series of volcanoclastic sub-basins which are favourable for zeolite formation. The claims cover ground originally staked in 2003. Previous work in the area covered by the property outlined zones of alteration and anomalous geochemistry typical of an industrial zeolite system. The property is centred on Manning Creek, lies 34 km east-southeast of Spences Bridge, British Columbia and is well served by roads and power. The claims are about midway between Spences Bridge and Merritt.

High grade gold intersected by diamond drilling on the nearby Skoonka Creek Claims by Strongbow in late 2005 illustrated the gold potential of the Belt. Strongbow's Skoonka Creek gold property represents a new gold discovery in southwestern BC. An initial drilling completed in October 2005 on the JJ prospect returned high grade gold values including 20.2 g/t gold over 12.8 metres, 26.8 g/t Au over 3.31 metres and 7.5 g/t Au over 4.1 metres. Mineralization has been traced over a strike length of 350m and remains open to the east and west as well as to depth.

Previous work on a portion of the area covered by the Dot Mordenite property indicates that some areas are underlain by intermediate and felsic volcanic and volcanoclastic rocks which are correlated with the Spences Bridge Group rocks of Cretaceous age.

In south central British Columbia, Lower Cretaceous rocks such as the Spences Bridge Group contain industrial zeolites. In the volcanic rocks, zeolite amygdules, joint fillings and matrix replacements are widespread. Restricted to the lenses of waterlain felsic tuff and tuffaceous sediments, such as the Dot Member between Spences Bridge and Merritt (on the DOT-DK Claims), massive zeolitization has produced industrial zeolites (Read, 1995). Cycles of crystal-lithic tuff grading up through several metres to zeolitized ash were deposited in a lacustrine environment. The assemblage of mordenite-analcime-quartz suggests that Na-rich waters, perhaps developed in a playa lake setting, were responsible for the zeolitization. Because most of the Lower Cretaceous rocks have undergone P-T conditions exceeding those suited to the development of industrial zeolites, the difficulty lies in defining felsic tuff-rich search areas that have undergone low P-T conditions. Previous sampling in 2008 returned values up to 72.6 mcg/100g Cation Exchange Capacity (CEC). Sampling in 2012 returned low values in trace elements.

Si values are more variable with a range between 14.7% and 28.07% Si. Rock samples DOT 415, 427 and 428 have Si values of 16.79%, 17.33% and 19.46% Si. Adjacent soil samples are significantly higher and are up to 28.07% Si.

Ca content is very variable and range from a low of 2.28% Ca to a high of 21.31% Ca. The majority of samples are below 5% Ca.

Iron content is relatively uniform. Fe values range from 2.5% Fe to 6.2%Fe with one outlier of 9.5% Fe in a welded tuff.

All 2017 samples should be sent for determination of CEC (Cation Exchange Capacity).

It is recommended that an additional program of detailed geological mapping and rock sampling be carried out to define geological controls on the alteration and mineralization. Excavator trenching is warranted along the zeolite exposure. Contingent on favourable results, the program can be expanded, as drill targets are identified. Phase I is budgeted at \$165,000 and success contingent Phase II is projected at \$250,000.

Respectfully submitted,

Shearen

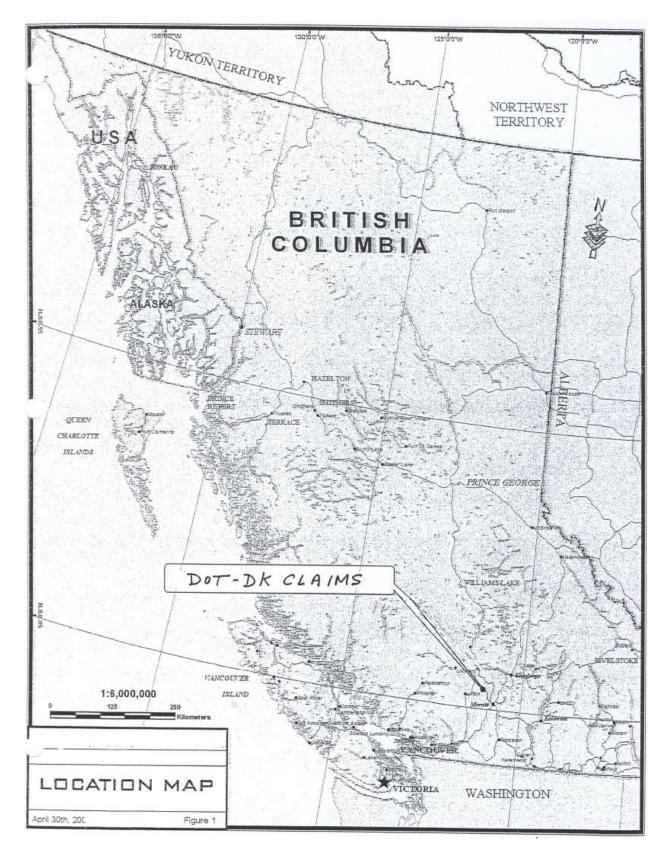
J. T. Shearer, M.Sc., P.Geo. July 3, 2017

## INTRODUCTION

This Report is a summary of available data documenting the zeolite potential of the area and to document the work program completed in 2017. The purpose of the report is to summarize the setting of the DOT-DK Property southeast of Spences Bridge, British Columbia, to summarize the results of past exploration in the area (now covered by the property) and to propose a program of exploration on the property which is to be carried out during 2018.

Attention has focussed on a new belt of newly discovered gold showings. Strongbow's/Almaden Skoonka Creek gold property represents a new gold discovery in southwestern BC. . An initial drilling completed in October 2005 on the JJ prospect returned high grade gold values including 20.2 g/t gold over 12.8 metres, 26.8 g/t Au over 3.31 metres and 7.5 g/t Au over 4.1 metres. Mineralization has been traced over a strike length of 350m and remains open to the east and west as well as to depth.

In south central British Columbia, Lower Cretaceous rocks such as the Spences Bridge Group contain industrial zeolites. In the volcanic rocks, zeolite amygdules, joint fillings and matrix replacements are widespread. Restricted to the lenses of waterlain felsic tuff and tuffaceous sediments, such as the Dot Member between Spences Bridge and Merritt (on the DOT-DK Claims), massive zeolitization has produced industrial zeolites (Read, 1995 private report) Cycles of crystal-lithic tuff grading up through several metres to zeolitized ash were deposited in a lacustrine environment. The assemblage of mordenite-analcime-quartz suggests that Na-rich waters, perhaps developed in a playa lake setting, were responsible for the zeolitization. Because most of the Lower Cretaceous rocks have undergone P-T conditions exceeding those suited to the development of industrial zeolites, the difficulty lies in defining felsic tuff-rich search areas that have undergone low P-T conditions.



#### Figure 1 Location Map

## **LOCATION and ACCESS**

The Dot Mordenite Property adjoins Indian Reserve No. 9 to the north and lies 3 miles north of the Dot Railroad Station on the old C.P.R. Merritt-Spence's Bridge Line. All-weather logging roads to the property branches off the Merritt-Spence's Bridge highway.

The Dot Mordenite Property is in rolling hill country lying above the steep slopes and cliffs of Cretaceous volcanics bordering the southwest side of the Nicola River and to the west of the Promontory Hills summit. Elevations range from 3,000 feet to 4,400 feet with gentle slopes to the south and west. The property is covered by lodgepole pine, yellow pine and Douglas fir. In general underbrush is scarce but dense growths of young trees and windfall along streams is common.

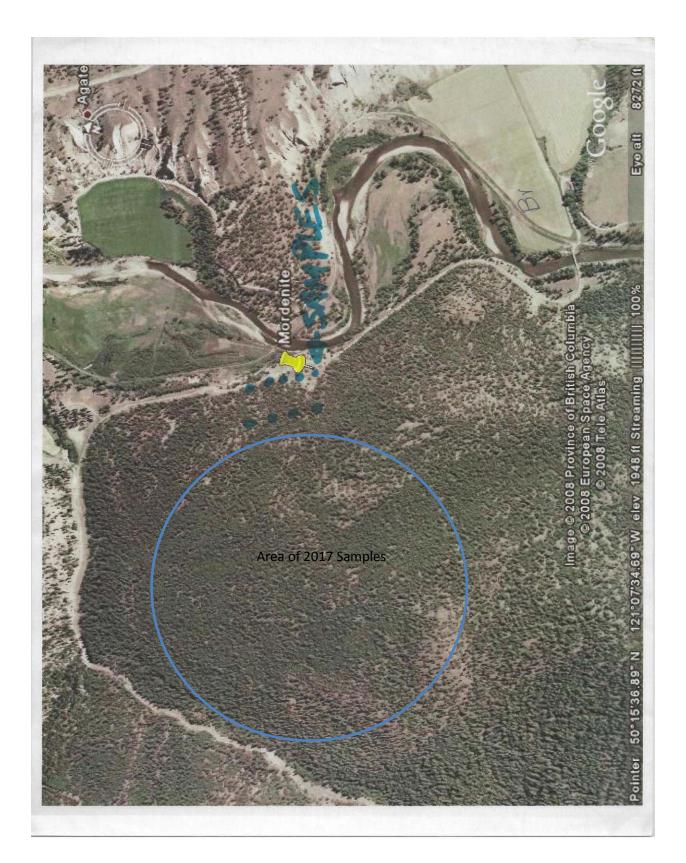


Figure 2 Google Sample Locations

## **CLAIM STATUS**

The claims are listed in Table 1 and shown on Figure 2.

			TADLE I					
Tenure #	Name	Area (ha)	Date Located	Current Anniversary	Registered			
				Date	Owner			
571373	DOT Mordenite	61.97	December 6, 2007	July 6, 2021	J. Shearer			
1049677	DOT 77	103.27	January 31, 2017	July 5, 2020	J. Shearer			
Total ha 165.24								

TABLE 1

\* with application of assessment work documented in this report.

Under the present status of mineral claims in British Columbia, the consideration of industrial minerals requires careful designation of the product end use. An industrial mineral is a rock or naturally occurring substance that can be mined and processed for its unique qualities and used for industrial purposes (as defined in the *Mineral Tenure Act*). It does not include "Quarry Resources". Quarry Resources includes earth, soil, marl, peat, sand and gravel, and rock, rip-rap and stone products that are used for construction purposes (as defined in the *Land Act*). Construction means the use of rock or other natural substances for roads, buildings, berms, breakwaters, runways, rip-rap and fills and includes crushed rock. Dimension stone means any rock or stone product that is cut or split on two or more sides, but does not include crushed rock.

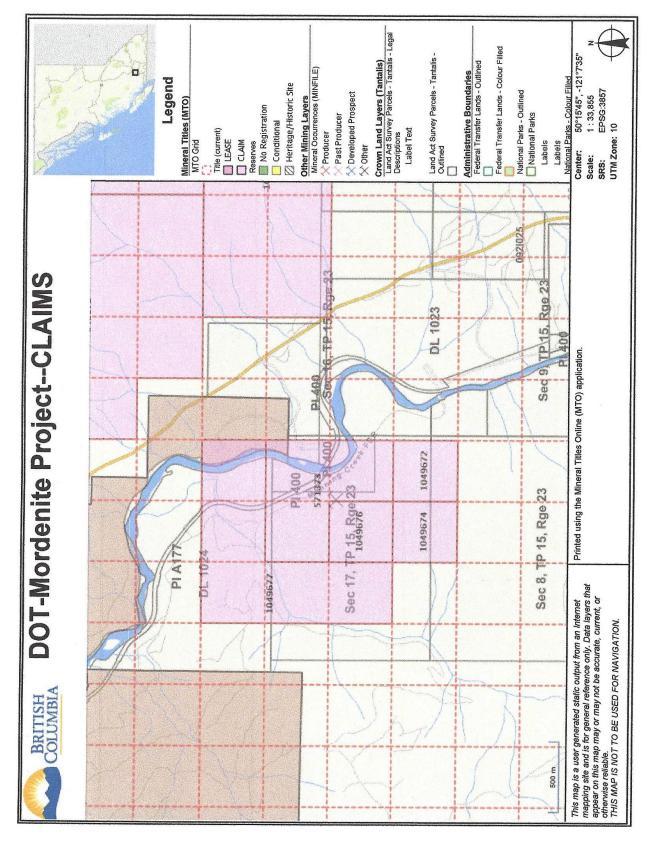


Figure 3 Claim Map

## HISTORY

Previous documented work in the general area (Menzies, 1958) concentrated on copper exploration. The Craigmont deposit is located only 8km to the southeast. The Nicola-Guichon Creek Intrusive contact is known to strike in a northwesterly direction across the Gordon Creek Area. The exploration target was limy horizons present in the Nicola volcanics and that their spatial relationship to the Guichon Creek batholith might give rise to the favourable mineralizing conditions.

The earlier work done by Highland Valley Mining Corporations, Ltd. exposed small quantities of chalcopyrite mineralization in Nicola volcanics.

Work by Menzies (1958) observed that parts of the claims are underlain by a massive reddish lava of the Spences Bridge Group. Much of this rock is vesicular and in places contains considerable magnetite. Copper minerals and other sulphides are apparently absent. No bedding planes were positively identified in this rock but attitudes of joints and schistosity were mapped. Rocks probably belonging to the sedimentary facies of the Spences Bridge Group were exposed in a trench on the W.P. No. 116 claims. They are sandstones and mudstones with some very thin and irregular interbedded coal seams. The total exposed thickness is 70 feet with bedding planes striking northeasterly and dipping about 45° to the southeast.

#### GEOCHEMISTRY

Rock descriptions of the material sampled in 2012 are contained in the 2012 report. Assay values were done at the AGAT Lab in Burnaby. Grinding completed by IPL Labs in Richmond since Cation Exchange Capacity (CEC) is usually performed on soils. Units are mcg/100g.

The location of the zeolite occurrence known by hearsay was located by discussions with the discoverer who defined the zone by X-ray diffraction. It is the only known occurrence of massive mordenite in the Province.

Dehydrated zeolite can absorb other liquids such as ammonia, alcohol and hydrogen sulfide. This mineral is of value primarily because of its ability to extract contaminants from other materials in an efficient, environmentally friendly, and cost effective manner. Depending on the planned end-use it is not normally necessary to process or refine ore of grades in excess of 100 CEC since it can perform its beneficial function while diluted within the natural matrix of aluminum silicate rock in which it resides.

Assays up to 72.6 mcg/100g Cation Exchange Capacity were identified from samples collected in 2008 from the mordenite-bearing beds.

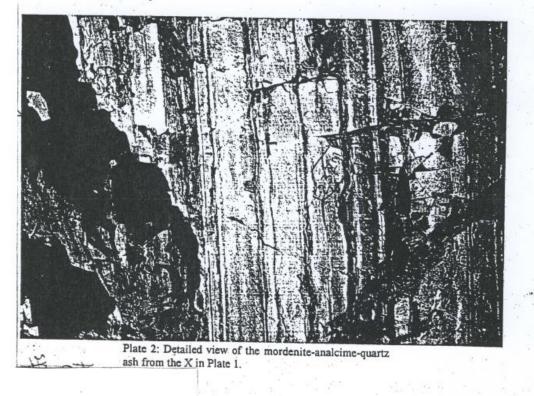
#### **EXPLORATION 2012**

The 2012 program consisted of testing the trace element content of the mordenite bearing tuffs by prospecting and soil sampling as shown on Figure 7. Assay results are contained in Appendix III.

Results indicate that all trace elements are very low.



Plate 1: Exposure of the Dot Member showing four cycles of crudely layered lapilli tuff grading up to well bedded mordenite ash of the Lower Cretaceous Spences Bridge Group.



## Ner

Figure 4 Mordenite – Photo of Outcrop

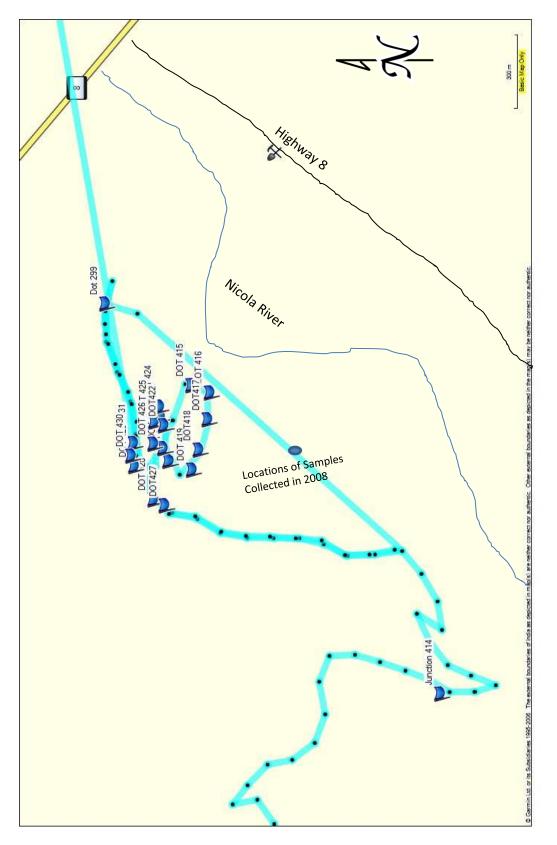


Figure 5 Garmin Waypoints

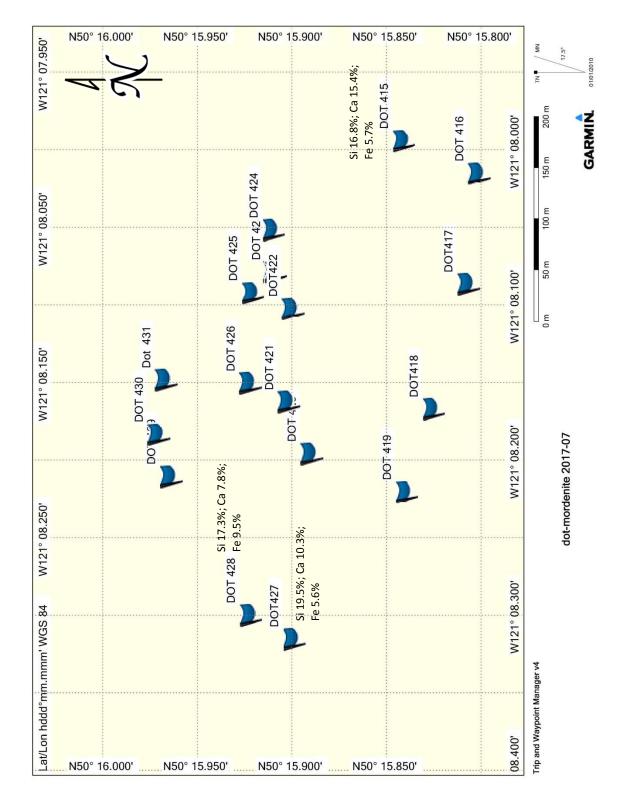


Figure 5a Waypoints and Assay Results

## GEOLOGY

A geological map of the Gordon-Manning Creek and surrounding area is shown in Figure 3. Despite the apparently comprehensive nature of the map, it is based upon mapping carried out by Duffell and McTaggart (1952) and Trettin (1961); smaller studies by Mortimer (1987) and Read (1988a, 1988b, 1990) have augmented the broader regional mapping. The area was compiled as part of the Geological Survey of Canada's Terrane Assemblage Map by Monger and Journeay (1994).

The Spences Bridge Group is a thick series of lavas and pyroclastics with minor amounts of tuffaceous conglomerate, sandstone, and waterlain tuff at the base of the group. Flow lines are commonly well developed in the lavas and serve to distinguish it from the Kingsvale flows. The Spences Bridge Group borders most of the northeastern side of the Nicola River Valley from Canford to Spenses Bridge and also occurs in a small area south of the Nicola River. It overlies the rocks of the Nicola Group and Guichon Creek batholith.

Although regionally developed, zeolitized rocks in British Columbia were known through the investigations of Surdam, widespread industrial zeolites were unknown in the province until 1974 (Read and Eisbacher, 1974). Groundwater causes dissolution of glass shards and their replacement by industrial zeolites at inferred temperature and pressure values not exceeding 65°C and 15-40 megapascals over an area of 4,000 km.

In south-central British Columbia, Lower Cretaceous rocks, such as the Spences Bridge Group, contain industrial zeolites. In the volcanic rocks, zeolite amygdules, joint fillings and matrix replacements are widespread. Restricted to the lenses of waterlain felsic tuff and tuffaceous sediments, such as the Dot Member between Spences Bridge and Merritt on the DOT-DK claims, massive zeolitization has produced industrial zeolites (Read, 1995). Cycles of crystal-lithic tuff grading through several metres to zeolitized ash were deposited in a lacustrine environment. The assemblage of mordenite-analcime-quartz suggests that Na-Rich waters, perhaps developed in a playa lake setting, were responsible fro the zeolitization. Because most of the Lower Cretaceous rocks have undergone P-T conditions exceeding those suited to the development of industrial zeolites, the difficulty lies in defining felsic tuff-rich search areas that have undergone low P-T conditions.

Table of Formations Occurring on the DOT-DK Claims				
Kingsvale Group (redefined as Spences Bridge)	(Volcanics)	Lower Cretaceous		
-conformable contact-				
Kingsvale Group (now known to be Spences Bridge)	(Sediment/volcanoclastic)	Lower Cretaceous		
-unconformity-	(DOT Member)			
Spences Bridge Group	(Volcanics)	Lower Cretaceous		
-erosional contact-				
Guichon Creek Batholith		Lower Jurassic		
-intrusive contact-				
Nicola Group		Upper Triassic		

The Kingsvale Group consists of two parts, a series of sedimentary rocks at the base and a series of volcanic rocks conformably above. These rocks are arkose, grit, mudstone, conglomerate, argillite, andesite, basalt, agglomerate, tuff and breccia. Basal sedimentary beds are not always present. The Kingsvale Group is unconformably above the Nicola Group, the Guichon Creek batholith and the Spences

Bridge Group. It borders the south and southwest side of the Nicola River Valley west of Merritt and underlies a small area on the eastern slope of Promontory Hills.

The Spences Bridge Group was previously not considered prospective for epithermal deposits, until the successful drill in late 2005 by Strongbow discovered a promising intersection of 12.8m averaging 20.02g/tonne gold.

Regional structural geology in the area is not well defined. Brittle faults cross the property, with two prominent strike direction, parallel (northwesterly) and crudely perpendicular (northeasterly) to the structural grain of the Canadian Cordillera. Normal movement is apparent on several of the faults by the lateral juxtaposition of the Cretaceous volcanic rocks against older rocks.

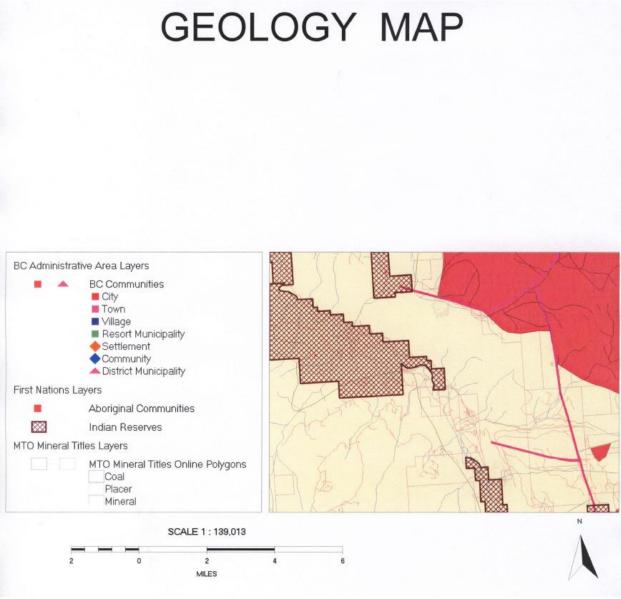


Figure 6 Geology of Claims

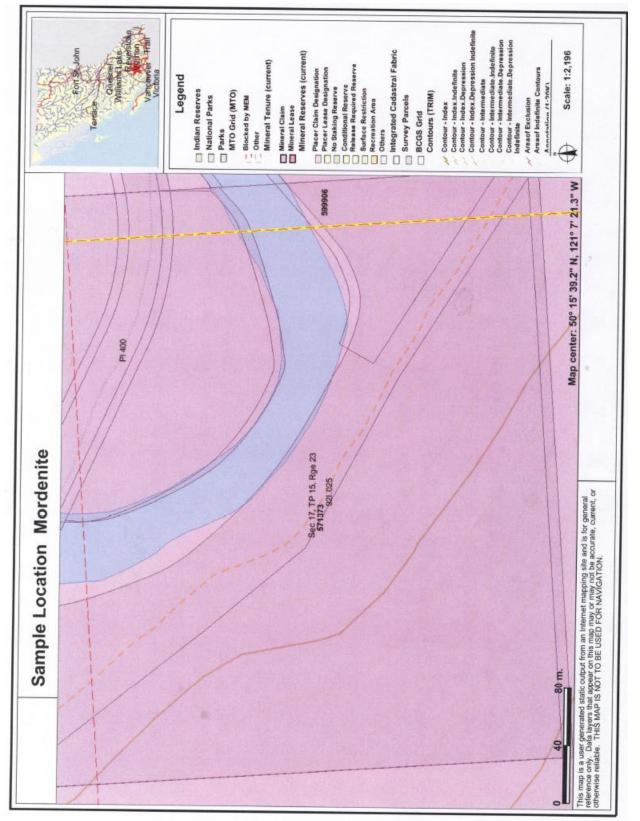


Figure 7 Location Mordenite Locality Sampled in 2008

### **EXPLORATION 2017**

Work in 2017 focussed on the upland area northwest of the exposures of zeolitic rocks on the main access road.

Assays were conducted by using an XRF Unit factory calibrated (Cert No. 0154-0557-1) on October 30, 2013, Instrument #540557 Type Olympus DPO-2000 Delta Premium. The instrument was calibrated using Alloy Certified reference materials by ARM1 and NIS5 standards. Only certified operators were employed and that were experienced in XRF assay procedures. Read times were 120 seconds or greater.

Assays are shown in Appendix III and on Figure 5.

Sample descriptions and soil sampling methods are contained in Appendix IV.

Results show that Al values are relatively uniform which range from 3.76% to 9.44% with most Al values between 8.24% and 9.44% Al.

Si values are more variable with a range between 14.7% and 28.07% Si. Rock samples DOT 415, 427 and 428 have Si values of 16.79%, 17.33% and 19.46% Si. Adjacent soil samples are significantly higher and are up to 28.07% Si.

Ca content is very variable and range from a low of 2.28% Ca to a high of 21.31% Ca. The majority of samples are below 5% Ca.

Iron content is relatively uniform. Fe values range from 2.5% Fe to 6.2%Fe with one outlier of 9.5% Fe in a welded tuff.

All 2017 samples should be sent for determination of CEC (Cation Exchange Capacity).

## **CONCLUSIONS and RECOMMENDATIONS**

The Dot Mordenite Project, centred around Manning Creek in south-central British Columbia, represents a potentially large belt of underexplored, poorly understood volcanic rocks, of Cretaceous Spences Bridge Group which contains industrial concentrations of zeolites and similar in structure, alteration and mineralization to those hosting the newly discovered Skoonka Creek Zones of Strongbow. Anomalous precious metal values are associated with later stage silica flooding/stockwork veinlets which cut felsic volcanic rocks. The altered volcanic system which contains this system extends over several kilometres. A methodical approach of detailed structural mapping and sampling, would define the geological controls on the existing anomalies. Prospecting and systematic sampling of all altered beds might well define new areas of prospective zeolite development.

The previous focus in 2012 on the property was to define trace element content of the zeolitized zones with high "cation exchange capacity" (CEC). All trace elements were low.

A Phase II program consisting of prospecting and soil sampling was carried out during mid 2017. The purpose of the fieldwork was be to re-establish a grid in the central area of the property and re-sample certain areas, predominantly those locations from which samples were anomalous as well as to expand the sampling to other altered zones. Coincident with the sampling, a programme of geological mapping will prioritize location of alteration, rock units and structures controlling or channelling the mineralizing fluids and upon establishing the limits of the zeolite development. The budget for Phase II is estimated at \$165,000 as follows:

Si values are more variable with a range between 14.7% and 28.07% Si. Rock samples DOT 415, 427 and 428 have Si values of 16.79%, 17.33% and 19.46% Si. Adjacent soil samples are significantly higher and are up to 28.07% Si.

Ca content is very variable and range from a low of 2.28% Ca to a high of 21.31% Ca. The majority of samples are below 5% Ca.

Iron content is relatively uniform. Fe values range from 2.5% Fe to 6.2%Fe with one outlier of 9.5% Fe in a welded tuff.

All 2017 samples should be sent for determination of CEC (Cation Exchange Capacity).

## COST ESTIMATE for FUTURE WORK

expansion of anomalous zon	consist of more detailed mapping, sa es, and Excavator trenching followed t is set at \$250,000 as follows.		
Senior Geologist	21 days @ \$600/day	\$	12,600.00
Geotechnician	21 days @ \$400/day	Ŧ	8,400.00
Geotechnician		6,300.00	
Labour		5,250.00	
Subtotal	\$	32,550.00	
Management Fee, WCB, Office and C	\$	3,255.00	
Equipment Rental			
(2) 4x4 Trucks	42 days @ \$75/day	\$	3,150.00
(2) 4-Trax	42 days @ \$50/day		2,100.00
Camp @ \$3000/month			3,000.00
(2) PIMA Geophysics Instrument @ \$	5500/month		4,000.00
Subtotal		\$	12,250.00
Total		\$	48,055.00
GST			2,883.30
Geophysics		\$	30,000.00
Excavator Trail Building			15,000.00
Excavator Trenching			10,000.00
Petrographic Work			5,000.00
Food and Fuel, Mob/Demob			3,000.00
Assays	500 samples @ \$40/sample		24,000.00
Field Supplies (pickets, tags, sample			3,000.00
Preparation and Report Writing			15,000.00
Contingency @ 10%			9,000.00
Subtotal		\$	114,000.00
<b>Phase II Total</b> Budget: Phase IV Contingent on Diamond Dril	ling and Excavator Trenching	\$	164,938.30
Diamond drilling (2000m @ \$75/m a	ll in)	\$	150,000.00
Geological Mapping			30,000.00
Assays			14,000.00
Support, Camp, Supplies			30,000.00
Contingency			25,000.00
TOTAL Phase III		\$	250,000.00

#### REFERENCES

British Columbia Survey Branch, 1999-2003:

The Map Place. www.em.gov.bc.ca/Mining/Geolsurv/MapPlace.

British Columbia Geological Survey Branch and the Geological Survey of Canada, 1982-1994: British Columbia Regional Geochemical Survey Program, NTS 921 – Ashcroft, BC: RGS 40.

Cockfield, W. E., 1948:

Geology and Mineral Deposits of Nicola Map Area, British Columbia; Geological Survey of Canada, Memoir 249.

Duffell, S. and McTaggart, K. C., 1952: Ashcroft Map Area, British Columbia (92I/NW). Geological Survey of Canada Memoir 262.

Menzies, M., 1958a:

Geophysical Report on the Gordon Creek Property, 9pp, Assessment Report 243, Noranda Exploration.

#### 1958b:

Geological Report on the Gordon Creek Property, 10pp, Noranda Exploration, Assessment Report 245.

Monger, J. W. H., and Journeay, J. M., 1994:

Guide to the Geology and Tectonic Evolution of the Southern Coast mountains. Geological Survey of Canada Open File 2490, 77p.

Mortimer, N. 1987:

Geological Map of the Pavillion Map Area, British Columbia. Geological Map of Part of NTS92I/13. British Columbia Geological survey Branch Open File 1987-18.

#### Panteleyev, A., 1988:

A Canadian Cordilleran Model for Epithermal Gold-Silver Deposits. *In:* Roberts, R. G. and Sheahan, P.A. (eds.) Ore Deposit Models. Geoscience Canada Reprint Series 3, pp. 31-43.

1992:

Copper-Gold-Silver Deposits Transitional, Between Subvolcanic Porphyry and Epithermal Environments. *In:* Geological Fieldwork, 1991, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1992-1, pp. 231-234.

Preto, V. A., 1979:

Geology of the Nicola Group between Merritt and Princeton. British Columbia Ministry of Energy, Mines and Petroleum Resources Bulletin 69.

Read, P. B., 1988a:

Tertiary Stratigraphy and Industrial Minerals; Fraser River, Lytton to Gang Ranch. British Columbia Geological Survey Branch Open File 1988-29a.

1988b:

Tertiary Stratigraphy and Industrial Minerals, Fraser River, Lytton to Gang Ranch. British Columbia Geological Survey branch Open file 1933-2b.

#### 1990:

Cretaceous and Tertiary Stratigraphy and Industrial Minerals, Hat Creek, Southern B.C. British Columbia Geological Survey branch Open File 1990-23.

#### 1995:

Geological Report on the Top Claims, Private Report for Western Canada Clay

Read and Eisbacher, 1974:

Zeolites in British Columbia, Geological Survey of Canada

Rice, H. M. A., 1947:

Geology and Mineral Deposits of the Princeton Map Area, British Columbia, Geological Survey of Canada, Memoir 243.

#### Shearer, J. T., 2009

Prospecting Report on the Dot Mordenite Project, March 1, 2009

#### 2012:

Geochemical Report on the Dot Mordenite Project, for Homegold Resources Ltd., July 12, 2012

#### 2014:

Airphoto Interpretation Report on the Dot Mordenite Project, for Homegold Resources Ltd., February 18, 2014

#### Tremaine, C., 1957:

Geophysical Report on the WP Claims, Highland Valley Minerals, 11pp, Assessment Report 190.

#### Trettin, H. P., 1961:

Geology of the Fraser River Valley between Lillooet and Big Bar Creek. British Columbia Geological Survey Branch Bulletin B44.

#### White, W. H., Thompson, R. M., McTaggart, K. C., 1958:

The geology and Mineral Deposits of Highland Valley, BC: CIM Transactions Vol. LX, 1957 PP 273-289.

Appendix I

## **Statement of Qualifications**

July 3, 2017

#### Appendix I

#### STATEMENT OF QUALIFICATIONS

I, Johan T. Shearer of 3572 Hamilton Street, in the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

- 1. I graduated in Honours Geology (B.Sc., 1973) from the University of British Columbia and the University of London, Imperial College, (M.Sc. 1977).
- 2. I have practiced my profession as an Exploration Geologist continuously since graduation and have been employed by such mining companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd. I am presently employed by Homegold Resources Ltd.
- I am a fellow of the Geological Association of Canada (Fellow No. F439). I am also a member of the Canadian Institute of Mining and Metallurgy, and the Geological Society of London. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo., Member Number 19,279) and an elected fellow of the Society of Economic Geologists (SEG) Fellow #723766.
- 4. I am an independent consulting geologist employed since December 1986 by Homegold Resources Ltd. at Unit #5 2330 Tyner Street, Port Coquitlam, British Columbia.
- 5. I am the author of the report entitled "Geochemical and Prospecting Report on the Dot Mordenite Project, Manning Creek Area, July 3, 2017".
- 6. I visited the property June 15 +16, 2017 and collected samples for assay. I am familiar with the regional geology and geology of nearby properties. I have become familiar with the previous work conducted on the Gordon-Dot Mordenites Property by examining in detail the available reports, plans and sections, and have discussed previous work with persons knowledgeable of the area.

Dated at Port Coquitlam, British Columbia, this 3<sup>rd</sup> day of July 2017.

**Respectfully Submitted** 

J.T. Shearer, M.Sc., F.G.A.C., P.Geo. July 3, 2017

**Appendix II** 

## **Statement of Costs**

July 3, 2017

## Appendix II

## **STATEMENT of COSTS**

## **MANNING CREEK AREA**

## DOT MORDENITE CLAIMS

Wages		Total not incl. HST
J. T. Shearer, M.Sc., P.Geo (BC & Ont.), Geologist		
2 days @ \$700/day, June 15 + 16, 2017		\$ 1,400.00
D. Delisle, Prospector		
2 days @ \$350/day, July 13 + 14, 2017	_	700.00
	Subtotal	\$ 2,100.00
Expenses		
Transportation:		
Truck 1, Fully equipped 4x4, 2 days @ \$120/day		240.00
Truck 2, Fully equipped 4x4, 2 days @ \$120/day		240.00
Fuel		280.00
Hotel, 2 man days		210.00
Meals & Food		160.00
Assays (XRF) and Certified Operator		500.00
Report Preparation		1,400.00
Word Processing and Reproduction		350.00
	Subtotal	\$ 3,380.00
	Total	\$ 5,480.00
Event # 565/1996		

Event #	5654996
Date Filed	July 3, 2017
Work Filed	\$4,300.00
PAC Filed	\$1,820.28
Total Filed	\$ 6,120.28

**Appendix III** 

**Assay Results** 

July 3, 2017

Mordenite

DOT 415-431

Sample	Mg	Mg +/-	Al	Al +/- S	Si	Si +/-	Р	P +/-	S	S +/-	Cl	Cl +/-	К	К +/-	Са	Ca +/-	Ti	Ti +/-	V
DOT 415	ND		5.44	0.07	16.79	0.1	0.6632	0.0248	0.2336	0.0035	ND		1.9142	0.0122	15.44	0.09	0.3707	0.0208	0.0396
DOT 416	0.95	0.22	9.35	0.08	26.67	0.15	0.4031	0.0226	0.1367	0.0033	ND		0.7386	0.0059	5.8146	0.0323	0.5144	0.022	0.0349
DOT 417	ND		6.47	0.07	18.75	0.11	0.7263	0.0214	0.205	0.0033	ND		0.7618	0.0058	4.7775	0.0282	0.3972	0.0186	0.0383
DOT 418	ND		8.61	0.08	28.07	0.14	0.1456	0.0194	0.141	0.0032	ND		0.9596	0.0067	3.144	0.0174	0.5284	0.0216	0.0381
DOT 419	0.92	0.21	9.63	0.08	26.33	0.14	0.1997	0.0197	0.1591	0.0033	ND		0.9236	0.0068	3.8454	0.0221	0.5924	0.0224	0.0421
DOT 420	ND		8.16	0.08	22.11	0.12	0.1714	0.018	0.1292	0.003	ND		0.8284	0.0061	3.505	0.0204	0.5234	0.0206	0.0335
DOT 421	0.86	0.21	9.06	0.08	24.83	0.14	0.3378	0.0203	0.1562	0.0033	ND		0.7222	0.0059	3.6921	0.0219	0.5415	0.0217	0.0533
DOT 422A	2.35	0.24	3.76	0.06	10.86	0.07	0.9719	0.0247	0.145	0.0027	ND		0.3314	0.0033	21.31	0.13	0.2349	0.0172	ND
DOT 422	1.11	0.21	8.64	0.08	25.4	0.15	ND		0.1501	0.0032	ND		0.7203	0.0059	3.5461	0.0213	0.5318	0.0216	0.0487
DOT 423	1.13	0.21	8.41	0.08	23.63	0.14	0.5963	0.0216	0.1372	0.0031	ND		0.783	0.0061	4.0963	0.0242	0.4588	0.0201	0.0407
DOT 424	ND		5.14	0.06	14.7	0.09	0.6994	0.0217	0.1093	0.0026	ND		0.5519	0.0046	10.36	0.06	0.3869	0.0188	0.0363
DOT 425	0.71	0.21	8.66	0.08	23.67	0.14	0.2564	0.019	0.151	0.0031	ND		0.8373	0.0064	3.809	0.0228	0.5556	0.0214	0.0517
DOT 426	3.71	0.24	8.24	0.08	19.69	0.12	0.597	0.0246	0.1594	0.0032	ND		0.5316	0.0049	12.36	0.07	0.5942	0.024	0.0437
DOT 427	1.67	0.27	7.39	0.08	19.46	0.13	0.3755	0.0242	0.1494	0.0035	ND		0.3065	0.0042	10.27	0.07	0.4576	0.0228	0.0312
DOT 428	2.58	0.29	7.02	0.08	17.33	0.12	2.6772	0.0377	0.1407	0.0034	ND		0.2445	0.0039	7.75	0.05	0.9035	0.0273	ND
DOT 429	2.41	0.21	8.93	0.08	25.46	0.14	0.4331	0.0209	0.1819	0.0033	ND		0.8411	0.0062	5.1022	0.0279	0.5643	0.0215	0.0391
DOT 430	1.39	0.21	9.25	0.09	23	0.14	0.4302	0.0204	0.1369	0.0032	ND		0.7365	0.0061	2.8208	0.018	0.5062	0.0212	0.0452
DOT 431	0.72	0.19	9.44	0.08	25.83	0.14	ND		0.1335	0.0031	ND		0.9259	0.0068	2.2758	0.0143	0.5123	0.0209	0.0631

	Cr	Crit	Mn	Mari	<b>F</b> o		~~ (	Co. 1	NI:	NI: . /	<b>C</b> 11	C	70	70.1/	٨	Ac. 1/	6.0	50 J /	Dh
V +/-		Cr +/-		Mn +/-		Fe +/- (		C0 +/-		Ni +/-		/	Zn	,		As +/-		Se +/-	
0.0084	ND		0.3547	0.0088	5.7082	0.0425	٧D		ND		0.003	0.0008	0.0067	0.0006	0.0018	0.0004	ND		0.0078
0.0082	ND		0.0651	0.0041	3.8068	0.0295	١D		0.0047	0.0009	0.0039	0.0007	0.0043	0.0005	0.001	0.0003	ND		0.0026
0.0073	ND		0.1118	0.0047	4.2854	0.0322	١D		0.0037	0.0008	0.0035	0.0007	0.0095	0.0006	ND		ND		0.0037
0.008	0.0125	0.0035	0.0874	0.0045	4.3572	0.0309 1	٧D		0.004	0.0009	0.0042	0.0007	0.0111	0.0007	ND		ND		0.0037
0.0081	0.0125	0.0035	0.0578	0.0039	5.228	0.0368	١D		0.0073	0.001	0.0058	0.0008	0.0087	0.0006	0.001	0.0003	ND		0.003
0.0075	0.0182	0.0035	0.079	0.0042	4.865	0.0346	٧D		0.0037	0.0008	0.0043	0.0007	0.0064	0.0006	ND		ND		0.0032
0.0083	0.0143	0.0036	0.0627	0.004	4.6657	0.0345	١D		0.0052	0.0009	0.005	0.0008	0.0056	0.0005	0.0015	0.0003	ND		0.003
	ND		0.0574	0.0039	2.4808	0.0231	١D		0.0031	0.0008	0.0048	0.0007	0.0049	0.0005	0.0009	0.0003	ND		0.0019
0.0082	0.0196	0.0037	0.0588	0.004	4.977	0.0364	١D		0.0074	0.001	0.0078	0.0009	0.008	0.0006	ND		ND		0.0032
0.0077	0.0113	0.0033	0.07	0.0041	4.7701	0.0349	١D		0.006	0.0009	0.0091	0.0009	0.0073	0.0006	0.0011	0.0003	ND		0.0032
0.0074	ND		0.064	0.0039	4.333	0.0334 1	١D		0.005	0.0009	0.0065	0.0008	0.0062	0.0005	0.0009	0.0003	ND		0.0031
0.0081	0.0185	0.0036	0.0834	0.0044	5.1884	0.0374 1	١D		0.0077	0.001	0.0076	0.0008	0.008	0.0006	ND		ND		0.0026
0.0089	0.0173	0.004	0.0981	0.0051	6.1578	0.0449	١D		0.0123	0.0012	0.0072	0.0009	0.0073	0.0007	0.0017	0.0004	ND		0.0021
0.0087	0.0133	0.004	0.0763	0.0048	5.5924	0.0457	٧D		0.0111	0.0012	0.0113	0.0011	0.0058	0.0006	0.0012	0.0003	ND		0.0019
	0.0198	0.0039	0.083	0.0049	9.5	0.07	٧D		0.0097	0.0013	0.0076	0.001	0.0069	0.0007	ND		ND		0.0024
0.0079	0.0197	0.0036	0.089	0.0045	5.6643	0.0383 1	١D		0.008	0.001	0.0056	0.0008	0.0083	0.0006	0.0012	0.0003	ND		0.003
0.008	0.0139	0.0035	0.0943	0.0047	5.4529	0.0401	١D		0.0044	0.0009	0.007	0.0009	0.0076	0.0006	0.0011	0.0003	ND		0.0037
0.0083	0.0169	0.0036	0.0682	0.0041	5.2805	0.0373 1	١D		0.0064	0.001	0.006	0.0008	0.0084	0.0006	ND		ND		0.0043

Rb +/-	Sr	Sr +/-	Y	Y +/-	Zr	Zr +/-	Мо	Mo +/-	Ag	Ag +/-	Cd	Cd +/-	Sn	Sn +/-	Sb	Sb +/-	W	W +/-	Hg	Hg +/-
0.0003	0.0173	0.0003	0.0037	0.0002	0.0254	0.0004	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0583	0.0006	0.0018	0.0002	0.0143	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0416	0.0005	0.0018	0.0002	0.0142	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0469	0.0005	0.0013	0.0002	0.0143	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0577	0.0006	0.0022	0.0002	0.0149	0.0004	ND		ND		ND		ND		ND		ND		0.0019	0.0004
0.0002	0.0534	0.0006	0.0018	0.0002	0.0153	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0582	0.0006	0.0019	0.0002	0.0135	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0001	0.0387	0.0005	0.0009	0.0001	0.006	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.052	0.0006	0.0022	0.0002	0.0148	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0452	0.0005	0.0019	0.0002	0.0119	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0444	0.0005	0.0013	0.0002	0.0098	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.055	0.0006	0.0021	0.0002	0.0148	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0616	0.0007	0.0027	0.0002	0.0152	0.0004	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0547	0.0007	0.0023	0.0002	0.0144	0.0004	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0433	0.0006	0.0026	0.0002	0.0212	0.0005	0.0008	0.0002	ND		ND		ND		ND		ND		ND	
0.0002	0.047	0.0005	0.0023	0.0002	0.0147	0.0003	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0485	0.0006	0.0024	0.0002	0.0151	0.0004	ND		ND		ND		ND		ND		ND		ND	
0.0002	0.0492	0.0006	0.0019	0.0002	0.0158	0.0004	ND		ND		ND		ND		ND		ND		ND	

Pb	Pb +/-	Bi	Bi +/-	Th	Th +/-	U	U +/-	LE	LE +/-
0.0055	0.0005	ND		ND		ND		52.97	0.24
0.005	0.0004	ND		ND		ND		51.42	0.25
0.0047	0.0004	ND		ND		ND		63.39	0.2
0.0053	0.0004	ND		ND		ND		53.81	0.22
0.0043	0.0004	ND		ND		ND		51.96	0.25
0.0044	0.0004	ND		ND		ND		59.49	0.22
0.0035	0.0004	ND		ND		ND		54.91	0.25
0.0027	0.0003	ND		ND		ND		57.43	0.26
0.0043	0.0004	ND		ND		ND		54.7	0.26
0.0036	0.0004	ND		ND		ND		55.78	0.25
0.0042	0.0004	ND		ND		ND		63.53	0.2
0.0043	0.0004	ND		ND		ND		55.9	0.25
0.0043	0.0004	ND		ND		ND		47.68	0.28
0.004	0.0004	ND		0.0025	0.0007	ND		54.1	0.3
0.0048	0.0005	ND		ND		ND		51.65	0.32
0.0043	0.0004	ND		ND		ND		50.17	0.25
0.0041	0.0004	ND		ND		ND		56.03	0.26
0.0042	0.0004	ND		ND		ND		54.64	0.25

Appendix IV

Sample Descriptions

July 3, 2017

## Sample Descriptions

Date July 13 2017

## DOT Property

Sample Number	GPS UTM	Elevation (m)	Description
Dot 415	10 U 633047 5569652	592	Float (30 cmx 20cm x 10 cm) Compact dirty brown platey tuff with veins of magnetite. Angular, 2 small opal-like inclusions (3 cm).
Dot 416	10 U 633024 5569578	602	Soil Sample; 1 m deep, light tan colored, coarse material well rounded average size 5 cm to 1 cm. coarse rock is banded pink feldspar, epidote, granite with epidote banding and vesular basalt.
Dot 417	10 U 632939 5569586	599	Soil Sample 30 cm deep, light brown, average size of coarse material- less than 2 cm
Dot 418	10 U 632842 5569618	579	Soil Sample 25 cm deep, coarse material - less than 2 cm.
Dot 419	10 U 632778 5569643	557	Soil Sample 25 cm light brown coarse material averages 2 cm or less. One piece 8x4x3 Volcanic sub rounded speckled with zeolite?
Dot 420	10 U 632805 5569737	544	Soil Sample 20 cm deep, light brown, coarse material less than 2 cm.
Dot 421	10 U 632844 5569760	632	Soil Sample 70 cm deep, light brown coarse material as large as 3 cm. Mostly soil
Dot 422	10 U 632916 5569758	547	Soil Sample -45 cm deep, white ash color, no clasts.
Dot 422A	10 U 632916 5569758	547	Soil Sample- 55 cm deep, light brown color almost white.
Dot 423	10 U 632943 5569775	542	Soil Sample- 40 cm deep, light brown to brown
Dot 424	10 U 632975 5569778	544	Soil Sample- 75 cm deep, light brown, coarse material average size 2 cm and less.
Dot 425	10 U 632927 5569797	522	Soil Sample - 25 cm deep, Brown color 5 cm and smaller coarse material
Dot 426	10 U 632857 5569798	528	Soil Sample - 30 cm, light brown, alluvial material poorly sorted, generally very rounded

Dot 427	10 U 632663 5569750	648	basaltic float, crumbly grey to light grey, infilled veining reacts to acid, much of the rock is made up of these calc- rich veins.
Dot 428	10 U 632680 5569793	642	Welded tuff float, grey with calc clasts, some black 0.5 specs in matrix of the rock
Dot 429	10 U 633294 5570004	628	Soil Sample light brown, 15 cm deep
Dot 430	10 U 632816 5569887	551	Soil sample light brown, 15 cm deep
Dot 431	10 U 632858 5569880	617	Soil Sample - light brown 20 cm deep