BC Geological Survey Coal Assessment Report 1002



COAL ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Line Creek Operations 2013 Exploration Report

TOTAL COST: \$2,537,000

AUTHOR(S): Torin Olver SIGNATURE(S): Torin Olver

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

Mine Permit C-129 1200003-201301 1200003-201303 13-1200003-0528

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):

YEAR OF WORK: 2013

PROJECT NAME: Line Creek Operations 2013 Exploration

COAL LICENSE(S) AND/OR LEASES ON WHICH PHYSICAL WORK WAS DONE:

District Lot 4588, Lot #1 Coal Lease #389284 Coal Lease #389291 Coal Lease #327701 Coal Lease #327699

COAL LICENSE(S) IN PROJECT AREA ON WHICH NO PHYSICAL WORK WAS DONE OVER THE CURRENT REPORTING PERIOD:

BC MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Fort Steele
NTS / BCGS: 82G15K 082G15J

LATITUDE: __49_____° ___57_____' ___N____"

OWNER(S): Teck Coal Limited

MAILING ADDRESS: Line Creek Operations PO BOX 2003 Sparwood, BC V0B 2G0

OPERATOR(S) [who paid for the work]:

Teck Coal Limited

MAILING ADDRESS:

Same as above.

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**):

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

WORK PROPOSED OVER THE NEXT YEAR (SPECIFY WHICH TENURE BLOCKS WILL SEE PHYSICAL WORK, IF KNOWN):

RATIONALE FOR NEXT YEAR'S PROGRAM

SUMMARY OF TYPES OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH TENURES
	(in metric units)	
GEOLOGICAL (scale, area)		
Ground, mapping		
Photo interpretation		
GEOPHYSICAL (line-kilometres)		
Ground (Specify types)		
Airborne (Specify types)		
Borehole	50 holes logged	
Gamma, Resistivity, Density	11,647.7 m	
Neutron	12,202.5 m	
Caliper	10,145.0 m	
Deviation	8,204.0 m	District Lot 4588, Lot #1 Coal Lease #389284, #389291, #418131
Dip	8,204.0 m	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Core / 76.2 mm	254.0 m	
Core / HQ3	1,138.0 m	
Non-core / RC	12,373.0 m	
SAMPLING AND ANALYSES		
Total Number of Samples		
Proximate	126	
Ultimate	66	
Petrographic	21	District Lot 4588, Lot #1
Vitrinite reflectance	21	Coal Lease #389284, #389291, #418131
Coking	0	
Wash tests	126	
PROSPECTING (scale/area)		
PREPARATORY/PHYSICAL		
Line/grid (km)	2.0 km of trail constructed	District Lot 4588, Lot #1 Coal Lease #389291, #418131
Trench (number, metres)	Constructed	,
Bulk sample(s)		

A portion of Section 3, all of Section 5, and Appendix C remain confidential under the terms of the Coal Act Regulation, and have been removed from the public version.

http://www.bclaws.ca/civix/document/id/complete/statreg/25 1 2004

Line Creek Operations

Summary Report

2013 Exploration Program



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Statements of Author's Academic and Professional Qualifications

CERTIFICATE OF QUALIFIED PERSON

Name: Torin Olver, P.Geo.

Company: Teck Coal Limited

Address: Line Creek Operations

P.O. Box 2003

15km North, Hwy 43

Sparwood, BC

V0B 2G0

I, Torin Olver, P.Geo, am employed as a Geologist, at Line Creek Operations. This certificate applies to the report titled "Line Creek Operations, Summary Report, 2013 Exploration Program". I graduated from the University of Alberta with a Bachelor of Science Degree specializing in Geology, 2007. I am a member of the Association of Professional Engineers and Geoscientists of Alberta (# 92285). From 2007 to 2010, I worked for Peace River Coal Inc. on the Roman Mountain and Horizon projects and various green field and brown field projects including the Trend Mine in Tumbler Ridge, BC. From 2010 to the present I have worked at Line Creek Operations for Teck Coal Limited in various mining and exploration roles. As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

Torin Olver, P.Geo.

1. General Geography and History

Line Creek Coal property is located approximately 25 km north east of Sparwood. It is accessed by driving 15 km north on highway 43, then 15 km east on the Line Creek Mine access road.

Burnt Ridge North is located in the Fording River Valley and is flanked by Grace Creek to the west and Dry Creek to the east. The ridge has been explored for coal resources since the late 1960's. Early exploration included drilling, adits were driven into coal seams for bulk sampling, three test pits were constructed for bulk samples and surface exposures were mapped.

All Line Creek Operations are located within District Lot 4588, Lot #1. The active mining areas at Line Creek Operations are in Coal License # (C.L.) 389284 (Coal Lease #4), 389291 (Coal Lease #10), 418131, 336958, 336959, 336960, 327812, and Freehold land district lot 4588, Lot #1. These holdings cover 4819 hectares of land. The Phase II pits, Burnt Ridge North and Mt. Michael, are located in C.L. 418131, 327699, 327701, 327809, 327812, 327813, 328008 and 328009 which cover an area of 1420 hectares. Table 1 – Line Creek Operations Tenures provides a summary of leases and licenses.

Reference:

- i) Figure 1 Line Creek Operations Location Map 2013.pdf
- ii) Figure 2 Line Creek Operations Property Lease Map 2013.pdf

Table 1 - Line Creek Operations Tenures

Table	<u>e 1 – Line Creek</u>	Opera	110112	renu	11 62			
Code	Parties	Jurisdiction	Туре	Status	Grant Date	Official Area Value	Official Area Unit	Project
327719	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	10/28/1986	130	На	Line Creek Operation, BC
		British						
327810	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327811	TECK COAL LIMITED (100.0000%)	Columbia	CLI (BC)	Active	3/13/1986	130	На	Line Creek Operation, BC
327978	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327990	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327991	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327992	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327993	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
		British						
327995	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	па	Line Creek Operation, BC
327996	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327997	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327998	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
327999	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
328000	TECK COAL LIMITED (100.0000%)	Columbia British	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
328001	TECK COAL LIMITED (100.0000%)	Columbia	CLI (BC)	Active	3/13/1986	65	На	Line Creek Operation, BC
328002	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
328003	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
328004	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
328005	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
328006	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	130	На	Line Creek Operation, BC
328007	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	130	На	Line Creek Operation, BC
328012	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	10/16/1986	130	На	Line Creek Operation, BC
328013	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	10/16/1986	130	На	Line Creek Operation, BC
328014	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	10/16/1986	130	На	Line Creek Operation, BC
328674	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	3/13/1986	259	На	Line Creek Operation, BC
336958	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	6/15/1995	259	На	Line Creek Operation, BC
336959	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	6/15/1995	182	На	Line Creek Operation, BC
336960	TECK COAL LIMITED (100.0000%)	British Columbia	CLI (BC)	Active	6/15/1995	129	На	Line Creek Operation, BC
389284	TECK COAL LIMITED (100.0000%)	British Columbia	CLE (BC)	Active	6/30/1981	3,238.00	На	Line Creek Operation, BC
389291	TECK COAL LIMITED (100.0000%)	British Columbia	CLE (BC)	Active	10/1/1991	782	На	Line Creek Operation, BC
418131	TECK COAL LIMITED (100.0000%)	British Columbia	CLE (BC)	Active	10/28/2013	1,402.00	На	Line Creek Operation, BC

2. Geology

i) Stratigraphy

The general stratigraphy at Line Creek Operations is summarized in Table 1 below.

Table 2 - Regional Stratigraphy

Period	Litho-Stratigraphic Units		Stratigraphic Units	Principle Rock Types		
Recent				Colluvium		
Quaternary				Clay, silt, sand, gravel, cobbles		
Lower Cretaceous		В	lairmore Group	Massive bedded sandstones and		
				conglomerates		
	Elk Formation		Elk Formation	Sandstone, siltstone, shale, mudstones,		
	K	<		chert pebble conglomerate, minor coal		
	0			Sandstone, siltstone, shale, mudstones,		
	0			thick coal seams		
	Т	T Moose Mountain		Medium to coarse-grained quartz-chert		
Lower	Е	ΜF	Member	sandstone		
Cretaceous	Ν	0 0				
to	Α	RR				
Upper	Υ	R M				
Jurassic		ΙΑ	Weary Ridge	Fine to coarse-grained, slight ferruginous		
	G	ST	Member	quartz-chert sandstone		
	R	SI				
	0	ΕO				
	U	ΥN				
	Р					
Jurassic		F	ernie Formation	Shale, siltstone, fine-grained sandstone		
Triassic		Spra	y River Formation	Sandy shale, shale quartzite		
	F	Rocky	Mountain Formation	Quartzite		
Mississippian			Rundle Group	Limestone		

Economic coal occurs in the Mist Mountain Formation of the Jurassic-Cretaceous Kootenay Group. The formation abruptly and conformably overlies the Morrissey Formation. It averages 500 to 600 metres in thickness and contains from 4 to 30 metre plus seams. There is approximately 60m of cumulative mineable coal thickness within the Mist Mountain Formation. Seams range in rank from high to low-volatile bituminous. The Elk Formation overlies the Mist Mountain Formation at the top of the Kootenay Group. Its characteristics are similar to those of the Mist Mountain, but lack coal seams of potential economic thickness, and contain sapropelic coals in addition to humic coals. Lithologies in the Mist Mountain Formation form a Markov chain. The data confirms a general fining-upward sequence typical of fluvial-alluvial depositional systems. The coal-forming environment is

believed to have been relatively isolated from sources of clastic material. In terms of statistical sequence modeling, the lower half of the Mist Mountain Formation is not significantly different from the upper half.

Three coalfields lie within the Mist Mountain Formation in southeastern BC: Elk Valley Coalfield, Flathead Coalfield and the Crowsnest Coalfield. There are three mines in the Elk Valley Coalfield. In the south, the Line Creek mine produces medium-volatile hard coking coal and lesser amounts of thermal coal. In the northern part of the coalfield, the Greenhills and Fording River mines produce medium and high-volatile coking coal from a large number of seams through a thick Mist Mountain Formation section.

ii) Structure

The major structure of the Elk Valley coalfield is the Alexander Creek syncline. Overall, it has a north-northwest trend and no net plunge. Locally its plunge is sub horizontal to gentle. It is generally asymmetric, open, and has an upright to steeply inclined axial plane. Thrust faults, including the Ewin Pass fault, are more common on the east limb than on the west. Other major structures in the coalfield are the Greenhills syncline, (Greenhills Operation) which is separated from the Alexander Creek syncline to the east by the west-dipping Erickson normal fault, and the Bourgeau thrust fault, which marks the western boundary of the northern part of the coalfield.

The Line Creek Operations property is affected by two main structural features, the Ewin Pass Thrust Fault and the Alexander Creek Syncline. The Line Creek Operations development is on the western limb of the Alexander Creek Syncline, on the opposite side of Line Creek from Horseshoe Ridge. The surface topography follows the geological structure with some dip slopes on the synclinal limbs. The Horseshoe Ridge, Saddle and Mt. Michael projects are located on the eastern limb of the Alexander Creek Syncline. The Ewin Pass Thrust fault has created a repeat of the coal bearing Kootenay Group strata. The Ewin Pass Thrust and sequences of the lower plates outcrop along the steep east facing slopes and dip westward under the uppermost plate (hanging wall). The northerly plunging Alexander Creek Syncline dominates the upper plate structures and is mined in the NLC pit. Dry Creek is the surface expression of the synclinal axis with coal licenses on the west limb (Burnt Ridge). The west facing slopes of the MSW pit, MSW pit extension and Mt Michael projects are the surface expression of the east limb of this syncline. The HSR pit and the Saddle exploration zone are on the lower plate (foot wall) of the Ewin Pass fault.

The geology at the Line Creek Operations is classified as complex as per the Geological Survey of Canada Paper 88-21 "A Standardized Coal Resource/Reserve Reporting System for Canada". There are many faults at the Line Creek Operations that vary in the amount of displacement. Some of these faulted areas are associated with folds, over turned coal seams and other deformations.

A plan map using the Line Creek Operations mine grid coordinate system displays mapped lithology and structure, including coal seam outcrop.

3. 2013 Exploration Project

i) Objectives

The objective of the 2013 exploration program was to increase the reserves in the Burnt Ridge North, Burnt Ridge Extension and Mt. Michael areas to a proven category, to gain valuable geotechnical information along the west side of North Line Creek Extension and Mt. Michael, to verify depth and extent of oxidation in Burnt Ridge North and to improve structural interpretation in the North Line Creek Extension and Mine Services Area Extension pits.

ii) Summary of Work Done

Five reverse circulation boreholes were completed in Burnt Ridge North for a total of 1,559 m of drilling. Existing exploration trail was used to access four new drill pads which accounted for 0.22 ha of disturbance.

A total of fourteen boreholes were drilled on Mt. Michael in 2013. Four of these boreholes provided a total of 1,138 m of 61.1 mm HQ core and the remaining ten boreholes were drilled using a reverse circulation drill for a total of 3,621 m. New exploration trail constructed accounted for 1.6 ha of disturbance over 2.0 km of trail approximately 8.0 m in width and fourteen new drill sites were constructed totaling 1.26 ha of disturbance.

In-pit drilling accounted for the majority of work completed at Line Creek Operations in 2013 and was composed of seven reverse circulation boreholes in Burnt Ridge South, three reverse circulation boreholes in Mine Services Area Extension and twenty-one reverse circulation boreholes in North Line Creek Extension. Total metres drilled for these three pits were 2,087 m, 539 m and 3,429 m, respectively. Four boreholes in North Line Creek Extension recovered 76.2 mm core in select intervals using a modified coring system for the reverse circulation drill rig. The total amount of core collected from North Line Creek extension in holes NX1301, NX1303, NX1304 and NX1312 is 254 m.

The total metres drilled at Line Creek Operations in 2013 was 12,373 m of which reverse circulation drilling made up 10,981 m, 76.2 mm reverse circulation core made up 254 m and 61.1 mm HQ core made up 1,138 m.

Reverse circulation rotary drilling was performed by Foraco with one Ingersol Rand TH-100A drill rig and one Schramm truck mounted drill rig. Diamond drilling services were also provided by Foraco with one VD-8000 skid mounted diamond drill. Geophysical logging was performed by Century Wireline Services. Gamma, neutron, open-hole density,

slim-line density and borehole deviation were logged through the drill pipe on all boreholes. In addition dipmeter analysis was performed on select boreholes.

A total of ten vibrating wire piezometers were installed in six boreholes in the Mt. Michael and North Line Creek Extension areas. Teck Coal Limited staff provided direction for piezometer installations and collection of information is on-going. Piezometer installation details can be found in Appendix E – Core Logs.

Core was logged by Teck Coal Limited personnel in conjunction with contractor SRK Consulting. Core is stored at the Teck Coal Limited core storage facility in Sparwood, BC. All geotechnical information was collected and processed by Thomas Beingessner E.I.T. (APEGBC). Core information was collected by Jason Kindrat P.Geo. (APEGA), Danny Guiver CET (ASET), Torin Olver P.Geo. (APEGA), and SRK Consulting. Core logs were processed by Torin Olver P. Geo. (APEGA).

Reference:

i) Appendix E – Core Logs

Coal seams intersected in reverse circulation boreholes were sampled at half metre intervals called plys and sent to the Line Creek Operations Lab. Raw ash, FSI and Light Transmittance analysis were performed on ply samples. Ply samples were grouped together to create composite samples to most accurately reflect seam quality data. Current mining practices, geophysical log signatures and ply sample analysis were the main pieces of information used to generate composite samples from plys and determine core sample intervals. Lab analysis determined Ash, VM, RM, Sulfur, Phosphorous, FSI, LT and FC for composite samples and core samples at specific gravities ranging from 1.40 to 1.70 S.G. Raw and clean proximate analysis and rheological analysis was performed by Loring Laboratories Ltd. (Calgary, AB). David E. Pearson and Associates (Victoria, BC) performed all petrographic analysis.

As of November 23, 2015 complete composite sample analysis and core sample analysis for the 2013 Line Creek Operations exploration program are still outstanding due to budget constraints. Completed analysis has been included in this report. No further analysis of 2013 samples is anticipated.

Access to drill site and road locations in the Burnt Ridge North and Mt. Michael areas were laid out by Silenus Resource Management Inc. (Cranbrook, BC). Drill site and road construction in the Burnt Ridge North and Mt. Michael areas was completed by Seaman Mining Ltd (Blairmore, AB). Logging was completed by Trucut Logging (Sparwood, BC). Drill site preparation for Burnt Ridge South, Mine Services Extension and North Line Creek

Extension was provided by Line Creek Operations surveyors and equipment operators. Line Creek Operations surveyors provided collar pickup for all boreholes.

Borehole locations are available in Figure 4 – Line Creek Operations Collar Location Map 2013.pdf and in Appendix A – Hole Collar Survey.xlsx.

The following table shows borehole locations with respect to Coal Lease and District Lot boundaries:

Table 2 - Line Creek Operations 2013 Borehole locations

Coal Lease / District Lot	Boreholes
District Lot #4588	BN1301, BN1302, BN1305, BN1306, BN1307, BR1301,
	BR1302, BR1303, BR1304, BR1306, BR1307
Coal Lease #389284	BR1305, NX1301, NX1303, NX1304, NX1305, NX1306,
	NX1307, NX1308, NX1309, NX1310, NX1311, NX1312,
	NX1313, NX1314, NX1315, NX1316, NX1317, NX1323,
	NX1324, NX1325, NX1327, NX1328, MX1302, MX1304,
	MX1305
Coal Lease #389291	MM1301, MM1302, MM1303, MM1304, MM1305, MM1306,
	MM1307, MM1308, MM1309
Coal Lease #418131	MM1310, MM1311, MM1312, MM1313, MM1314

iii) Results

An increase in measured and indicated resources , primarily from model changes due to 2012 and 2013 drilling was achieved in the year end Line Creek Operations Resource and Reserve report. The majority of this increase was in the Burnt Ridge North area. Also from the 2012 drill program, it became apparent that BRN had some substantially deeper oxidized zones than originally modeled. Using ply sample results from 2010 and 2012, an oxide surface was created and used to code oxide into the model for this area.

The standard of coding 5m of bloom and 14m of oxide remains the same for the rest of the LCOW model.

Due to poor ground conditions we were not able to perform optical televiewing. Thus geotechnical information concerning faulting in Burnt Ridge North was not collected.

Lab analyses of clean coal will be added to the seam's qualities in the database. Seam qualities increase the knowledge of the coal's marketability and assist long term mine planning in the region.

Reference:

ii) Appendix B – Sample Analysis

4. Conclusion

The 2013 exploration program has successfully increased borehole density in the Burnt Ridge North, Mt. Michael, Burnt Ridge Extension, Mine Services Area Extension and North Line Creek Extension areas. Initial ply sample results from Burnt Ridge North have verified levels of oxidation at depth in analysis obtained from 2010 and 2012 drilling. Further drilling is recommended to verify Burnt Ridge Extension seam quality and further refine oxidation boundaries in Burnt Ridge North. Piezometer installations and geotechnical logging have improved current pit shell design and are essential to planning out the Phase II portion of the Line Creek Operations.

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Exploration Work type	Comment	Days			Totals
Personnel (Name) * / Position	Field Days (list actual days)	Days	Rate	Subtotal*	
Torin Olver	Estimated	110	\$300.00	\$33,000.00	
Thomas Beingessner	Estimated	45	\$300.00	\$13,500.00	
Danny Guiver	Estimated	5	\$300.00	\$1,500.00	
Jason Kindrat	Estimated	5	\$300.00		
Consultants	Estimated	1	\$15,000.00		
Consultants	Estimated	1			
				\$194,500.00	\$194,500.00
Office Studies	List Personnel (note - Office o	nly, do no	t include field	l days	-
Literature search			\$0.00	\$0.00	
Database compilation	Torin Olver	15.0	\$300.00	\$4,500.00	
Computer modelling	Katie Guille	3.0	\$300.00	\$900.00	
Reprocessing of data	Torin Olver	5.0	\$300.00	\$1,500.00	
General research			\$0.00	\$0.00	
Report preparation	Torin Olver	10.0	\$300.00	\$3,000.00	
Other (specify)	Sample Bags		\$17,250.00		
```				\$27,150.00	\$27,150.00
Airborne Exploration Surveys	Line Kilometres / Enter total invoiced	d amount			
Aeromagnetics			\$0.00	\$0.00	
Radiometrics			\$0.00	\$0.00	
Electromagnetics			\$0.00	\$0.00	
Gravity			\$0.00	\$0.00	
Digital terrain modelling			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
o mor (oposmy)	1		<b>40.00</b>	\$0.00	\$0.00
Remote Sensing	Area in Hectares / Enter total invoiced	d amount or	list personnel	70.00	75.55
Aerial photography			\$0.00	\$0.00	
LANDSAT			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
			, , ,	\$0.00	\$0.00
Ground Exploration Surveys	Area in Hectares/List Personnel				·
Geological mapping					
Regional		note: ex	penditures here	,	
Reconnaissance			be captured in P		
Prospect			penditures abov		
Underground	Define by length and width	,			
Trenches	Define by length and width			\$0.00	\$0.00
The state of the s	pomio 2) iongarana maan			40.00	+5.55
Ground geophysics	Line Kilometres / Enter total amount	invoiced list	personnel		
Radiometrics					
Magnetics					
Gravity					
Digital terrain modelling					
Electromagnetics	note: expenditures for your crew	in the field			
SP/AP/EP	should be captured above in Person				
IP	field expenditures above				
AMT/CSAMT	,				
Resistivity					
Complex resistivity					
Seismic reflection					
Seismic refraction					
Well logging	~ 23.88 line km			\$186,500.00	
Geophysical interpretation	25.00 1110 1411			\$100,000.00	
Petrophysics	+				
Other (specify)					
Carlot (Specify)			 	\$186,500.00	\$186,500.00
Geochemical Surveying	Number of Samples	No.	Rate	Subtotal	ψ100,000.00
2000 monitor our voying				- www.u.	

Drill (cuttings, core, etc.)			\$0.00	\$0.00	
Stream sediment			\$0.00	\$0.00	
Soil	note: This is for assays or		\$0.00	\$0.00	
Rock	laboratory costs	1.0		\$175,000.00	
Water	laboratory costs	1.0	\$173,000.00	\$0.00	
Biogeochemistry			\$0.00	\$0.00	
Whole rock			\$0.00	\$0.00	
		1.0		\$6,300.00	
Petrology		1.0	·		
Other (specify)			\$0.00	\$0.00	¢101 200 00
Duillin a		NI -	Dete	\$181,300.00	\$181,300.00
Drilling	No. of Holes, Size of Core and Metres	No.	Rate	Subtotal	
Diamond	1,392m of (HQ3+76.2mm) in 8 hole				
Reverse circulation (RC)	10,981m of RC drilling in 42 holes	1.0	\$1,173,000.00		
Rotary air blast (RAB)			\$0.00	\$0.00	
Other (specify)	Geotechnical Logging/Supplies	1.0	\$21,500.00		
				\$1,515,500.00	\$1,515,500.00
Other Operations	Clarify	No.	Rate	Subtotal	
Trenching			\$0.00	\$0.00	
Bulk sampling			\$0.00	\$0.00	
Underground development			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
•				\$0.00	\$0.00
Reclamation	Clarify	No.	Rate	Subtotal	
After drilling	,		\$0.00	\$0.00	
Monitoring			\$0.00	\$0.00	
Other (specify)	Danger Tree Falling	1.0			
Ctrici (specify)		1.0	\$6,766.66	ψ0/100.00	
Transportation		No.	Rate	Subtotal	
•					
Airfare			\$0.00	\$0.00	
Taxi			\$0.00	\$0.00	
truck rental			\$0.00	\$0.00	
kilometers			\$0.00	\$0.00	
ATV			\$0.00	\$0.00	
fuel			\$0.00	\$0.00	
Helicopter (hours)			\$0.00	\$0.00	
Fuel (litres/hour)			\$0.00	\$0.00	
Other	Road Construction		\$432,000.00	\$432,000.00	
Other	Road Construction		\$432,000.00	\$432,000.00	\$432,000.00
Accommodation & Food	Rates per day			\$432,000.00	\$432,000.00
Hotel	Rates per day		\$0.00	\$0.00	
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Camp				¢0.00	
Camp	day rate or actual costs enecify		\$0.00	\$0.00	
Camp Meals	day rate or actual costs-specify			\$0.00	<b>#0.00</b>
Meals	day rate or actual costs-specify		\$0.00		\$0.00
Meals  Miscellaneous	day rate or actual costs-specify		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00
Meals  Miscellaneous Telephone	day rate or actual costs-specify		\$0.00	\$0.00	\$0.00
Meals  Miscellaneous	day rate or actual costs-specify		\$0.00 \$0.00	\$0.00 \$0.00 \$0.00	
Meals  Miscellaneous  Telephone Other (Specify)	day rate or actual costs-specify		\$0.00 \$0.00	\$0.00 \$0.00	
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals Field Gear (Specify)	day rate or actual costs-specify		\$0.00 \$0.00	\$0.00 \$0.00 \$0.00	
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals Field Gear (Specify) Other (Specify)	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals Field Gear (Specify)	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals Field Gear (Specify) Other (Specify)	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals Field Gear (Specify) Other (Specify)	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00
Meals  Miscellaneous Telephone Other (Specify)  Equipment Rentals Field Gear (Specify) Other (Specify)	day rate or actual costs-specify		\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00

TOTAL Expenditures		\$2,536,950.00



















