ASSESSMENT REPORT

2013 DIAMOND DRILL PROGRAM
TURTLE TANK PROJECT

Kenora Mining Division, Ontario, Canada

NTS 052C/10, 052C/15, 052C/16

Centered at:
Latitude 48°45'10" North, Longitude 92°32'59" West
UTM NAD 83, Zone 15, 533092 mE, 5400062 mN

Bad Vermillion Lake Area G-2665
Little Turtle Lake Area G-2682
Bennett Lake Area G-2667

December 6, 2013

Prepared For:

Pathfinder Gold Incorporated

201 Hardisty Street,
Thunder Bay, ON
P7C 3G8

Pathfinder Gold Inc.

Prepared By:

TBT Engineering

1918 Yonge Street,
Thunder Bay, ON
P7E 6T9

TBT ENGINEERING
CONSULTING GROUP

Table of Contents

List of Figures

List of Tables

List of Appendices

TBT Engineering Limited 1918 Yonge St., Thunder Bay, ON P7E 6T9 807-624-5160

1 INTRODUCTION

This assessment report is prepared by TBT Engineering (TBTE) for Pathfinder Gold Incorporated (PGI), to detail the results of the 2013 diamond drill program completed on the Turtle Tank Property (Property). The diamond drill program was completed by TBTE between June 1st, and August 31st, 2013. A total of 226.12 metres was drilled in five diamond drillholes on the property. The drilling targeted the historical Gold Bug occurrence, a gold-bearing quartz vein discovery in the Alice A vein horizon. A total of 52 samples, including gold standards and silica blanks were submitted to Accurassay Laboratories in Thunder Bay, ON for fire assay and ICP-MS.

2 PROPERTY LOCATION, ACCESS AND LAND TENURE

The Turtle Tank Property is located in Northwestern Ontario, approximately 15km east of Mine Centre, ON (figure 1). The property is accessed by traveling 1.25 km north from HWY 11, along Manion Lake Road, then 1.5 km west along an old logging road (presently used as a seasonal snow mobile trail). The mineralized zone is adjacent to the seasonal trail. The property is at the junction of four map areas located in the Kenora mining division: Bad Vermillion Lake Area (G-2665), Little Turtle Lake Area (G-2682), Bennett Lake Area (G-2667), and the Wild Potato Lake Area (G-0565) (figure 2). It is composed of 22 contiguous mining claims, 126 claim units, for a total area of 2,016 hectares (table 1).

The property is under an option agreement whereby PGI can earn 100% interest in the property over a four year period, ending October 5, 2014, by incurring cash payments totaling CAD$75,000.00, issuing 100,000 PGI shares, and completing CAD$300,000.00 in exploration expenditures on the property. The option agreement is dated October 4, 2010, and is subject to an assumed 1% Net Smelter Royalty (NSR), of which ½ can be purchased at any time by PGI for CAD$1,000,000.00.

Figure 1 – Turtle Tank Regional Location Map

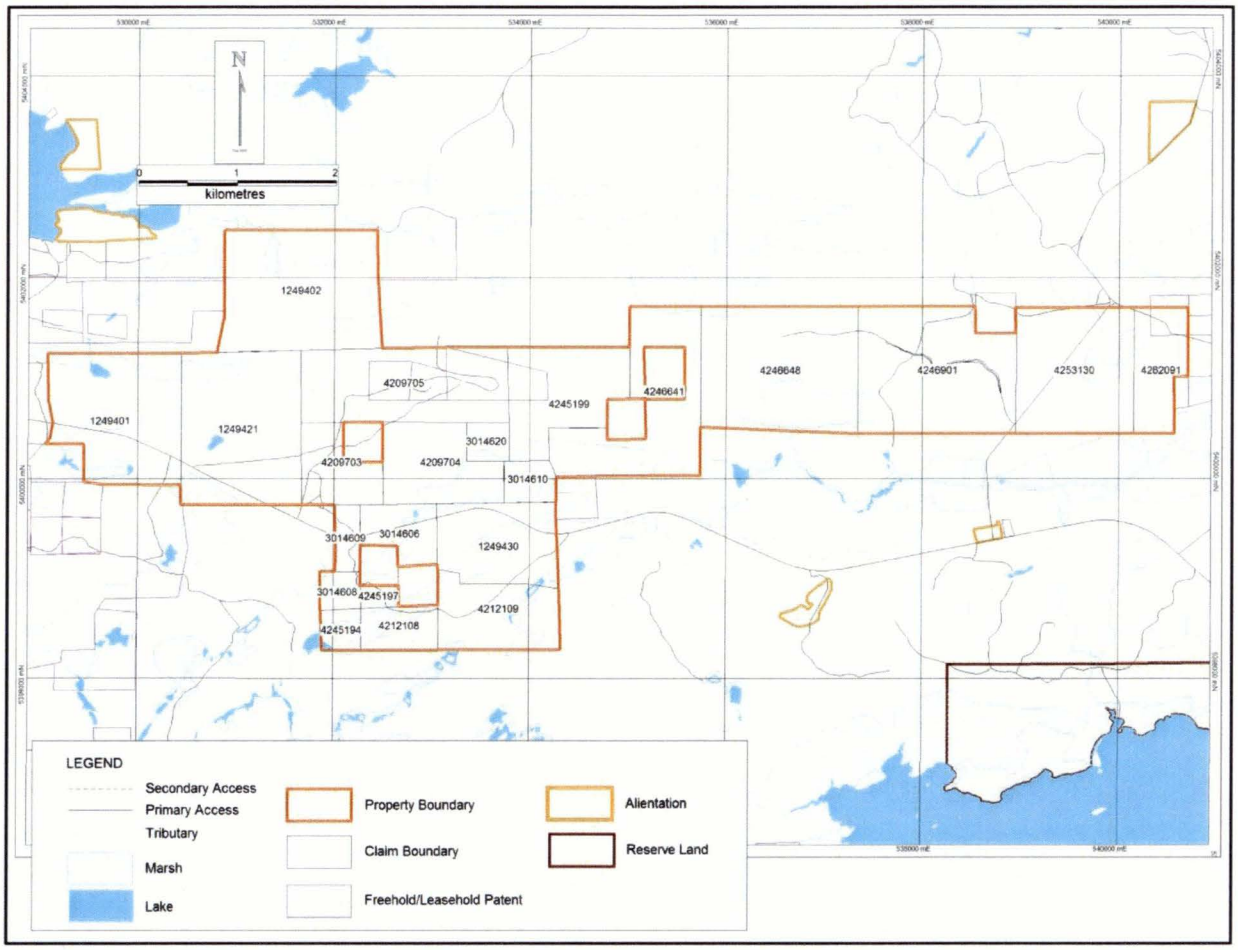


Figure 2 – Turtle Tank Property Claim Map

Table 1 – Turtle Tank Property Land Tenure

Claim	Township Area	Recording Date	Area (ha)	Units	Ownership
1249401	LITTLE TURTLE LAKE AREA	2002-Jan-17	192	12	100%
1249402	LITTLE TURTLE LAKE AREA	2002-Jan-17	192	12	100%
1249421	LITTLE TURTLE LAKE AREA	2002-Jan-17	192	12	100%
1249430	BAD VERMILION LAKE AREA	2002-Jan-17	112	7	100%
3014606	BAD VERMILION LAKE AREA	2003-Dec-18	48	3	100%
3014608	BAD VERMILION LAKE AREA	2003-May-02	16	1	100%
3014609	BAD VERMILION LAKE AREA	2003-May-02	32	2	100%
3014610	LITTLE TURTLE LAKE AREA	2003-May-02	32	2	100%
3014620	LITTLE TURTLE LAKE AREA	2005-Dec-19	16	1	100%
4209703	LITTLE TURTLE LAKE AREA	2006-Feb-07	48	3	100%
4209704	LITTLE TURTLE LAKE AREA	2006-Feb-07	80	5	100%

Claim	Township Area	Recording Date	Area (ha)	Units	Ownership
4209705	LITTLE TURTLE LAKE AREA	2006-Feb-07	160	10	100%
4212108	BAD VERMILION LAKE AREA	2006-Jul-17	32	2	100%
4212109	BAD VERMILION LAKE AREA	2006-Jul-17	96	6	100%
4245194	BAD VERMILION LAKE AREA	2011-Nov-24	16	1	100%
4245197	BAD VERMILION LAKE AREA	2011-Nov-24	16	1	100%
4245199	LITTLE TURTLE LAKE AREA	2010-Mar-05	112	7	100%
4246641	LITTLE TURTLE LAKE AREA	2011-Apr-04	128	8	100%
4246648	BENNETT LAKE AREA	2011-Apr-04	192	12	100%
4246901	BENNETT LAKE AREA	2011-Apr-04	192	12	100%
4253130	BENNETT LAKE AREA	2011-Apr-04	48	3	100%
4262091	BENNETT LAKE AREA	2011-Aug-09	64	4	100%

3 GEOLOGY

The Geology of the Mine Centre – Fort Frances area is described by Poulsen as a fault bound wedge of greenstone that is structurally discordant from both the Wabigoon Subprovince to the north, and the Quetico Subprovince to the south (2000). The wedge is bound to the north by the Quetico fault and to the south by the Rainy River – Seine River fault, both of which are east-west trending, steeply dipping dextral faults. Based on lithologic similarities, the Mine Centre – Fort Frances belt is considered part of the Wabigoon Subprovince. A metamorphic isograd splits the belt into amphibolite grade in the Fort Frances area and greenschist facies in the Mine Centre area, partitioned from Swell Bay in the southwest through Ottertail Lake in the northeast. Detailed geological mapping was completed by the OGS from 1980 to 1981 in the Mine Centre – Fort Frances area (M2525), and reported by Poulsen (2000).

The stratigraphy of the Mine Centre – Fort Frances belt has been subdivided into three groups: Keewatin Group metavolcanics, Couchiching Group metasedimentary schist and Seine Group conglomerate-bearing metasediments. Keewatin Group stratigraphy consists of occasionally pillowed, mafic flows overlain by intermediate andesite to dacite flows and tuffs. In the Mine Centre area this unit commonly exhibits an autoclastic chlorite breccia texture and is overlain by a relatively thick sequence of rhyolite to dacite flows, tuffs and fragmental rocks. Ultramafic rocks occur in the Fort Frances area where they are strongly magnetic tremolite schist, commonly containing angular to subrounded, fine grain clasts up 5 cm in diameter (Poulsen, 2000). Iron formation and other chemical metasedimentary units occur intercalated throughout the belt, commonly associated with mafic and ultramafic metavolcanic rocks. These rocks have been intruded by the Grassy Portage and Seine Bay – Bad Vermillion metamorphosed gabbro sills and related granodiorite and trondjhemite.

The Couchiching Group metasediments are composed of predominantly greenschist facies, with occasional amphibolite facies, sandstone and mudstone. These rocks are restricted to the Quetico Subprovince and are restricted to areas south of the Rainy Lake – Seine River fault.

Rare occurrences are found north of this fault at Rice Bay, and along the amphibolite/greenstone isograd that transects Swell Bay through Ottertail Lake.

The Seine Group metasediments exhibit a broad transition from poorly sorted conglomerate to sorted conglomerate, conglomerate with intercalated sandstone, and finally pebbly sandstone and trough-cross bedded sandstone (Poulsen, 2000). Wood has interpreted this unit to be an alluvial fan merging to a braided fluvial terrine (1980). Volumetrically minor amounts of the Seine Group metasediments are found at Rice Bay; the Shoal Lake area hosts the majority of this group. This group lies in angular unconformity with both the Keewatin metavolcanics and Bad Vermillion Sill.

The Ottertail Lake stock is the most prolific example of un-metamorphosed rocks in the area. Poulsen describes these rocks as late to post tectonic, Algoman granites that range in composition from diorite to granite. These intrusions form discrete, discordant plutons that are elliptical to irregular in plan.

Faulting and late stage dykes are prominent in the area. The two major faults, previously discussed, are the Quetico fault and the Rainy Lake – Seine River fault. These fault trends are prominent on regional magnetic maps, and locally the fault zones include deformed equivalents of most rocks in the area. Texturally, the Quetico fault includes schists, mylonites, cataclastites and psuedotachylites; the Rainy Lake – Seine River fault includes chloritic schists, phyllites and phyllonites. Along the Quetico fault, protolith determination can be deduced, along the Rainy Lake – Seine River fault it is not obvious. Dykes include northwesterly striking Proterozoic diabase, biotitic lamprophyre and quartz feldspar porphyry.

4 MINERALIZATION

The Mine Centre – Fort Frances area has undergone significant exploration efforts since the first gold discovery and subsequent production between 1890 and 1902. During this time, production was focused in Mine Centre and Atikokan, achieving ~25,000 oz Au and ~3,000 oz Ag production; artisanal mining by current standards. The Fort Frances – Mine Centre area is host to four distinct mineralization styles, summarized by Poulsen (2000). These include magmatic iron-titanium oxide, magmatic Cu-Ni-PGE mineralization, volcanogenic stratiform Zn-Pb and Zn-Cu mineralization, and structurally controlled gold and molybdenum mineralization, host in quartz-sulphide veins.

Between 1900 and 1945 numerous iron formations were outlined in the region, with the only significant iron ore production coming from the Steep Rock Iron Mines between 1945 and 1979. Currently in the Mine Centre area, a significant iron-titanium deposit at Bad Vermillion Lake is being outlined by Numax Resources Incorporated (NUMAX). The iron-titanium is host within the northward facing Seine Bay-Bad Vermillion Sill. The sill is thought to represent two separate, layered mafic intrusions; compositional variation ranges from basal melanogabbro units to gabbro and then anorthosite. The Grassy Portage sill, which lies closer to Fort Frances, shows a southward facing sequence of layered melanogabbro to anorthosite. Though lacking the iron-titanium content of the Bad Vermillion Sill, the Grassy Portage intrusion is host to the North Rock copper (and PGE) deposit, evaluated with a two compartment shaft by North Rock Mining Company between 1970 and 1973. A bulk sample was excavated and Bergman prepared a non NI 43-101 compliant resource estimate in 1973 that includes 1.02 M tons at 1.17% Cu and 0.27 M tons at 2.08% Cu to a vertical depth of 91 metres. Subsequent work on the intrusion by Metalcorp Limited (Metalcorp), between 2005 and 2008, identified the first ever platinum mineralization on the property. Assay values returned 6.63 g/t Pt over 0.40 metres, and 7.09 g/t Pt over 0.80 metres from holes NR-05-02 and NR-05-05 respectively.

Stratiform, volcanic hosted base metal occurrences are prolific in the area, generally restricted to a 25 km long felsic volcanic belt that stretches from Fort Frances to Mine Center. Poulsen (2000) has categorized four primary styles of exhalative mineralization: Gagne Lake type, Port Arthur Copper type, Pocket Pond type, and sulphide facies iron formation. Despite economic grades of zinc, lead and copper, economically viable resources have not been outlined, resulting in no historic production.

Gagne Lake type - narrow zinc-lead sulphide lenses are overlain by chert and underlain by sulphide bearing lapilli tuff horizons.

Port Arthur Copper type - manifest by wide zones of low grade, 1-20 cm wide seams of massive copper-zinc mineralization intercalated with chlorite schist, which exhibits an amygdaloidal texture, and is brecciated in the Mine Centre area.

Pocket Pond type - mineralization consists of zinc-copper mineralization host in a pyrite bearing black shale, thought to represent a deformed mafic horizon that is ubiquitously overlain by magnetite chert iron formation.

Sulphide Facies Iron Formation - generally restricted to the Fort Frances area, mineralization consists of massive pyrite-pyrrhotite lenses with occasional chalcopyrite, adjacent to chert-magnetite iron formation.

Gold mining in the Mine Centre area commenced in 1893 and saw sporadic production until the 1930's at the Foley, Olive and Golden Star mines. Gold bearing, polymetallic quartz veins are also abundant throughout the area and occasionally contain visible gold, with grades up to 0.5 oz/t Au over narrow widths (0.10 – 2.00 m) and limited strike lengths. Associated sulphide mineralization consists of pyrite, sphalerite, galena, chalcopyrite and electrum (gold-silver alloy). Poulsen notes that gold bearing veins are restricted to the greenschist side, and molybdenum bearing veins to the amphibolite side, of the Swell Bay – Ottertail Lake isograd. Of the 81 documented gold-bearing quartz veins in the area, 57% are host in tonalite to trondjhemite and 20% in felsic to intermediate volcanic rocks. Generally, the veins are related to discrete shear zones and occupy first order dilations (figure 3). Second order veins are foliation-normal, third order veins are foliation-parallel (Poulsen, 2000).

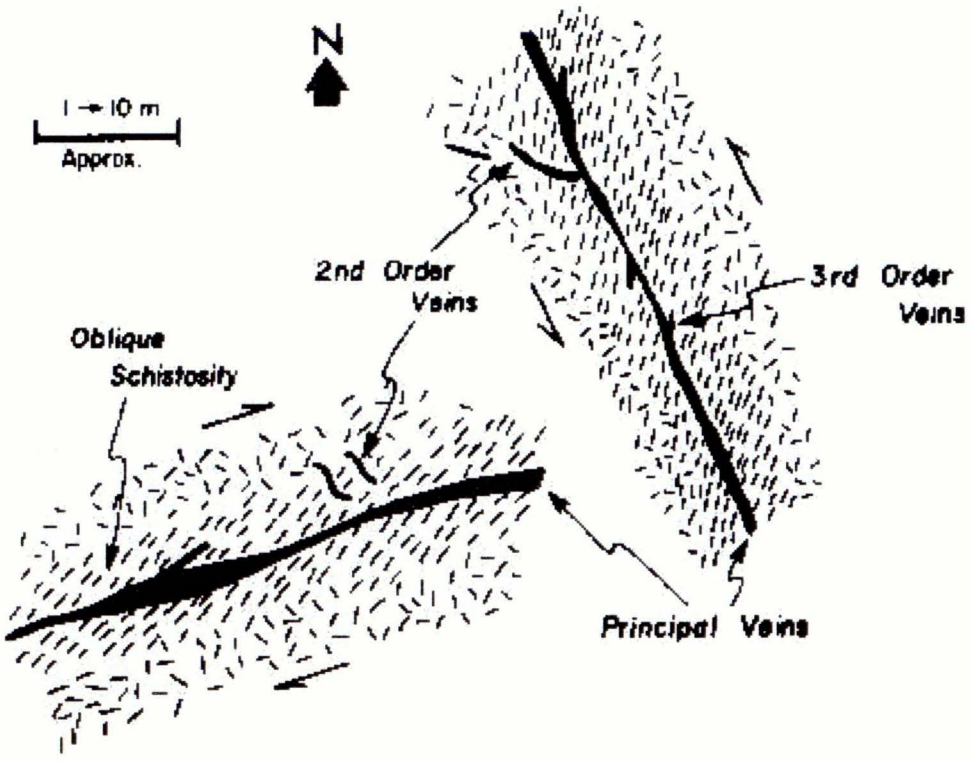


Figure 3 – Principal vein orientations in the Mine Centre Area, taken from Poulsen (2000).

Historic gold production in the area totaled 17,146 oz Au from 39,324 tons at an average grade of 0.44 oz/t Au from the three mines (table 2). Graham noted that at both the Golden Star and Foley mines, the production veins strike northwesterly; at the Olive Mine production was from an east-west striking vein system (1983). The lateral limitations, narrow width and lens-like nature of the quartz veins made it difficult to mine the veins to depth and supply adequate mill feed.

Table 2 – Gold Production Summary – Mine Centre Area (from Graham, 1983)

MINE	TONS MILLED	PRODUCTION OZ GOLD	RECOVERED GRADE OZ/TON	HOST	SHAFT DEPTH
Golden Star	19,345	10,758	0.56	Metavolcanics	532'
Olive	9,424	3,572	0.38	Metasediment	251'
Foley	10,555	2,816	0.27	Granite	750'
TOTAL	39,324	17,146	0.44		

5 DIAMOND DRILL PROGRAM

In May of 2013, TBTE was engaged by PGI to complete five NQ size diamond drillholes between June 1st and August 31st, 2013. A total of 226.12 metres was drilled in five diamond drillholes on the property (table 3). The drilling targeted the historical Gold Bug occurrence area, a gold-bearing quartz vein discovery in the Alice A vein horizon. Downhole surveys were not taken and the holes are assumed straight. The core was logged at TBTE's facilities on Harold St. in Thunder Bay, ON. The core was split using a diamond saw and sampled by Pathfinder Gold staff. The core is stored at Bending Lake's office on Hardisty St, in Thunder Bay, Ontario.

Table 3 – Diamond Drill Collar Table – 2013 Program

Hole_ID	UTM_mE_83_15	UTM_mN_83_15	Elevation_m	Azimuth	Dip	Depth (m)
TT-13-001	537777.0	5401288.0	367.0	180	-45	39.37
TT-13-002	537777.0	5401288.0	367.0	180	-75	68.80
TT-13-003	537801.9	5401278.1	366.0	180	-45	40.75
TT-13-004	537750.6	5401302.3	367.0	180	-45	55.85
TT-13-005	537773.5	5401277.5	367.0	200	-50	21.35

The drillholes were drilled to the south, perpendicular to the east-west trending, north dipping stratigraphy. Drilling primarily encountered sandstone, commonly referred to as greywacke, with minor quartz eye porphyry and a narrow (<1m wide) mudstone horizon, possibly a marker bed (figure 4). Hole TT-13-004 was collared further to the north, and intersected a mafic to intermediate, chlorite tuff horizon. All rocks have a moderate to strong foliation trending east-west and dip to the north. The vein intersected strikes east-west and dips steeply to the north (135°/70° by right hand rule).

The vein exposure on surface is characteristic of a dilational, foliation parallel vein of type 3A as described by Poulsen, and in figure 3 of this report (2000). It was thought the vein had a rake to the north-northeast; however drilling suggests it may rake to the north-northwest. The lensed, sigmoidal shape of the vein supports observations that the veins are formed within a right hand wrench zone and dextral displacement is expected.

The vein is a white and sometimes red quartz vein, occasionally sugary, with locally developed light green-yellow sericite + chlorite alteration lamina. The red colouration of the vein is due to ankerite and hematite alteration within the vein. Mineralization consists of ankerite + specular hematite + pyrite + pyrrhotite as iron bearing phases. Sphalerite + galena + chalcopyrite occur as blebby sulphide, associated with the iron bearing phases described above. Visible gold was observed with specular hematite, and has a refractory appearance, though it is unknown which, if any, sulphide minerals are associated with the gold.

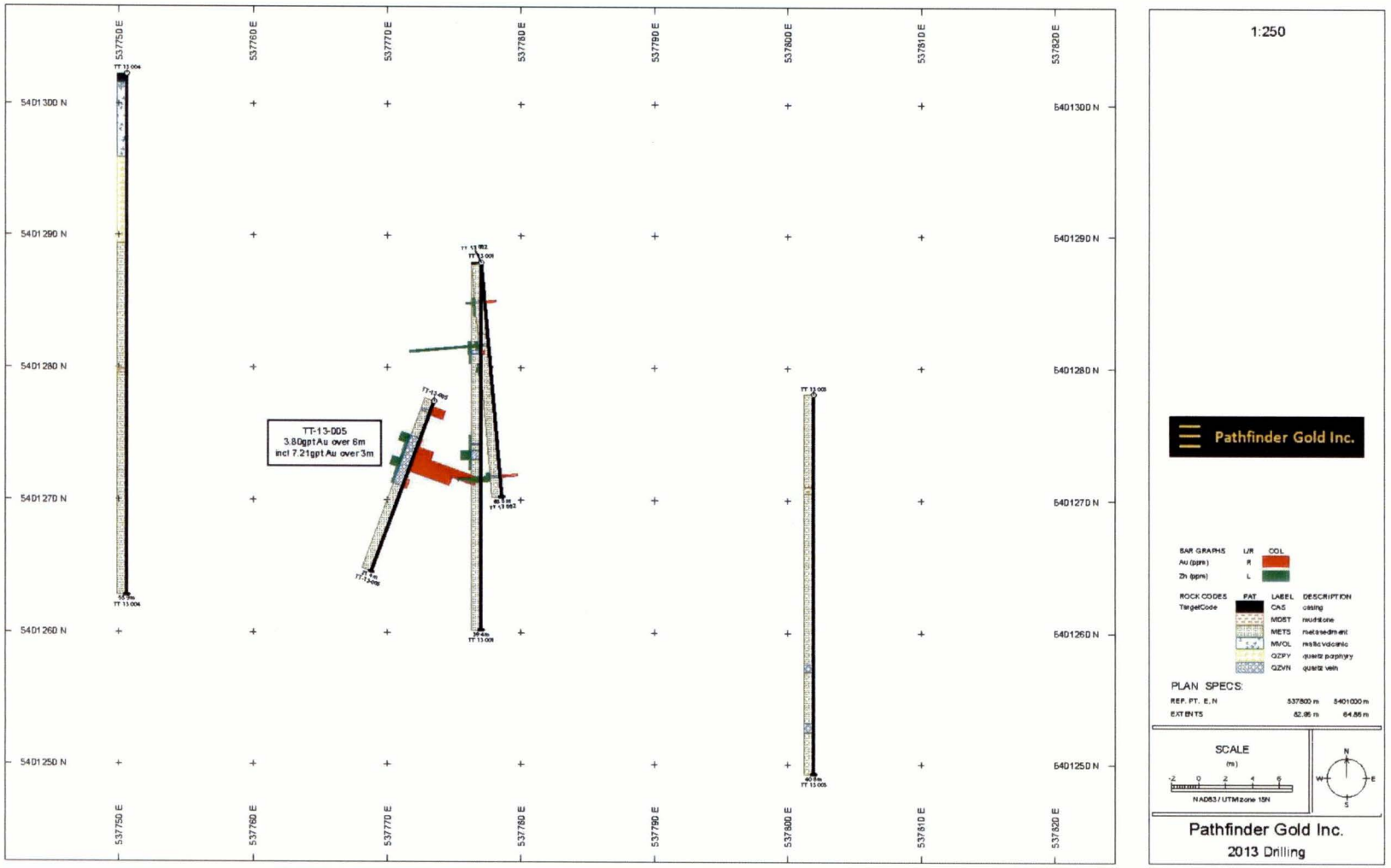


Figure 4 – Diamond drill plan, 2013 DDH Program.

6 ASSAYS

A total of 52 samples, including gold standards and silica blanks were submitted to Accurassay Laboratories in Thunder Bay, ON for fire assay and ICP-MS. A powder standard was followed by a blank to ensure minimal instrumentation error was observed. The blank was also a powder, and though checked the crushing process, is not as reliable as a rock blank.

Both standards, OREAS 207 and 208 passed, but were on the high side of two standard deviations. The blank following OREAS 207 failed, returning 0.006 ppm and not the expected below detection (<0.005). Though the blank failed, the elevated result probably has negligible effect on the batch results, as evidenced by the standards passing.

Significant intersections are summarized in table 4 and highlight the polymetallic nature of the targeted vein. With every gold-bearing vein intersection, there are some silver associations, and almost always a zinc association. There isn't a linear correlation between gold and zine, however based on visual estimate of the shear zone, where gold assays are negligible such as 20.15-21.15 m in TT-13-001 and 23.95-24.50 m in TT-13-002, corresponding zinc values of 282 ppm and 1002 ppm respectively.

Table 4 – Diamond Drill Significant Intersections – 2013 Program

Hole_ID	From	To	Interval	Au_g/t	Ag_g/t	Cu_ppm	Zn_ppm
TT-13-001	9.45	9.85	0.40	0.21	<1	6	30
TT-13-001	20.15	21.15	1.00	0.01	<1	15	282
TT-13-002	11.30	11.80	0.50	0.97	1.0	83	116
TT-13-002	23.95	24.50	0.55	0.08	1.1	157	1002
TT-13-002	30.50	31.00	0.50	0.18	<1	3	58
TT-13-002	62.45	64.00	1.55	1.12	1.7	111	680
TT-13-003	34.25	37.25	3.00	0.07	N/A	N/A	N/A
TT-13-004	No Significant Intercepts						
TT-13-005	0.00	12.70	12.70	1.99	0.6	191	62
including	0.70	1.70	1.00	2.37	N/A	N/A	N/A
and	4.70	10.70	6.00	3.80	1.2	405	131
including	5.70	8.70	3.00	7.21	2.3	723	134

7 CONCLUSIONS AND RECOMMENDATIONS

Exploration in the Mine Center area has continued through the decades since the first gold production in 1893. Production continued sporadically until the 1930's, made difficult by narrow, laterally discontinuous veins that lack vein density and vertical/lateral continuity to sufficiently outline larger tonnage operations, despite the high grade nature of the known occurrences.

Geology underlying the property consists of felsic and intermediate flows, part of the panel of felsic rocks that extend from Swell Bay to the eastern edge of the property. In addition to gold bearing quartz veins, this horizon hosts stratabound, exhalative, volcanogenic mineralization including Zn-Pb-Cu mineralization and sulphide facies iron formations (lean iron formation). The potential for VMS style mineralization on the property should not be overlooked; particularly for Port Arthur Copper type. A review of known geophysical EM conductors should be completed.

The current drill program targeted the historic Gold Bug occurrence with five diamond drill holes designed to test the lateral continuity and down dip extent of the vein. A total of 226.12 metres of diamond drilling was completed and 48 core samples were submitted for assay. The first four holes were planned to test the main vein at a 15m and 30m downdip stepout. Holes TT-13-003 and TT-13-004 were planned to test lateral extents of the vein structure to the east and west respectively. A fifth hole, TT-13-005 was drilled based on results of TT-13-001 & 002 to test the vein at surface. Assay highlights include 1.99 g/t Au over 12.70 metres in hole TT-13-005, including a 6.00 metre vein intercept that returned 3.80 g/t Au.

Gold exploration on the property should focus on identifying mechanical (i.e. felsic units and lithologic contacts) and chemical traps (i.e. iron formation or sulphide horizons). The thick sequences of rhyolite in close proximity to the major Quetico fault is an excellent host for dilatant vein mineralization, such as that observed in this drill program. A prospecting and, in areas with thick overburden, soil sampling program should be completed on east-west and northwest trending topographically recessive areas to identify gold, silver, zinc, copper or arsenic anomalies. An area beneath claims 4245199 and 4246641 is of particular interest for a soil geochemical survey, where a northwest trending Keweenawan age diabase transects the felsic to intermediate volcanic pile.

8 REFERENCES

Ennis, G.F., 1975. Report on the Stellar Gold Mine Property, Kenora Mining Division, Mine Centre Area, Ontario, 15p.

Graham, R.J., 1983. Report on the results of Geological and Geophysical work for Central Crude Ltd. on their 26 claim gold property near Bad Vermillion Lake, Kenora Mining Division, Ontario, 48 p.

Poulsen, K. H., 1983. Structural setting of vein-type gold mineralization in the Mine Centre-Fort Frances Area: Implications for the Wabigoon Subprovince; in the Geology of Gold in Ontario, edited by A.C. Colvine, Ontario Geological Survey, Miscellaneous Paper 110, 278p.

Poulsen, K.H., 1984. The Geological Setting of Mineralization in the Mine Centre – Fort Frances Area, District of Rainy River; Ontario Geological Survey Open File Report 5512, 126p.

Poulsen, K.H., 2000. Geological setting of mineralization in the Mine Centre – Fort Frances area; Ontario Geological Survey, Mineral Deposits Circular 29, 78p.

Poulsen, K.H., 2000. Precambrian Geology and Mineral Occurrences, Mine Centre – Fort Frances area; Ontario Geological Survey, Map 2525, Scale 1:50,000.

Whiterly, K.E., 2006. Report on Processing and Analysis of a Dighem EM & Magnetic Survey, Mine Centre – Bad Vermillion Lake Property, Fort Frances Area, Ontario, Q-Gold Resources Ltd., 67p.

Robert, F., Brommecker, R., Bourne, B.T., Dobak, P.J., McEwan, C.J., Rowe, R.R., Zhou, X., 2007. Models and Exploration Methods for Major Gold Deposit Types, Ore Deposits and Exploration Technology, Paper 48, 21p.

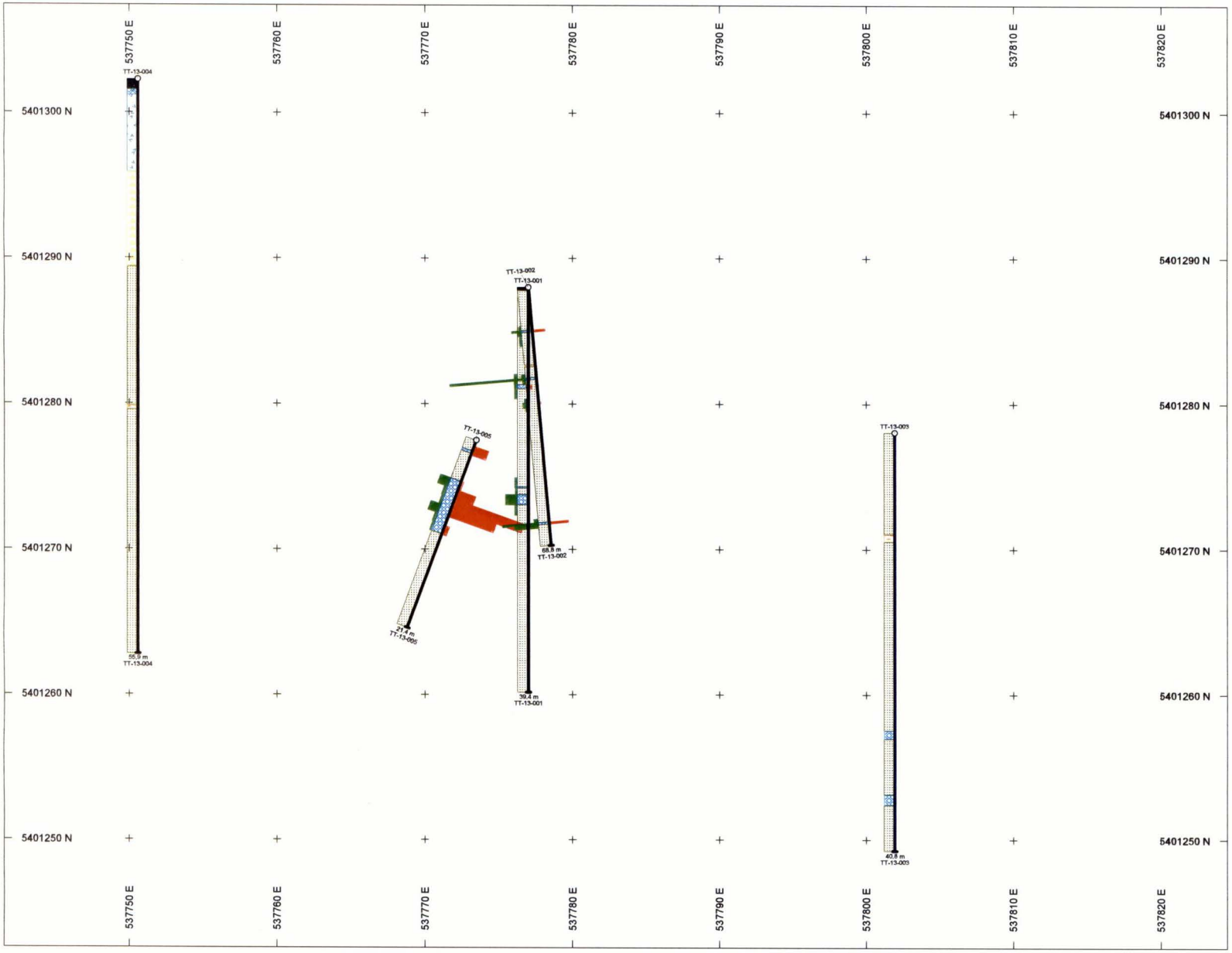
APPENDIX A

Date From	Date To	Work Performed	Crew	Days
May-14-13	June-13-13	Client Meetings, data review, geo-referencing, drillhole planning	Geologist	6
June-17-13	June-21-13	Site reconaissance, drillhole spotting, logistics	Geologist & Field Assistant	4
July-08-13	July-11-13	Diamond Drilling	Acker Drill Rig	4
July-19-13	July-23-13	Diamond Drilling	Acker Drill Rig	5
August-06-13	August-27-13	Core logging, data entry	Geologist	9
August-21-13	August-27-13	Core splitting	Technician	7
November-18-13	December-06-13	Assessment Report Writing	Geologist	12

Budget

Item	Cost	13% HST	**Total**	Details
Logistics	$9,660.34	$0.00	**$9,660.34**	Fuel, food, accomodation, supplies
Drill Rental x 2 crew	$37,675.00	$4,897.75	**$42,572.75**	Acker Drill Rig includes mobilization
Geologist & Field Assistant	$16,085.00	$2,091.05	**$18,176.05**	Data review, geo-referencing, field reconaissance
Core Logging	$5,500.00	$715.00	**$6,215.00**	core logging
Reporting	$5,000.00	$650.00	**$5,650.00**	assessment report writing, GIS, revisions
Assays	$1,777.60	$231.09	**$2,008.69**	
TOTAL	$75,697.95	$8,584.89	**$84,282.83**	

APPENDIX B



1:250

Pathfinder Gold Inc.

BAR GRAPHS	L/R	COL
Au (ppm)	R	
Zn (ppm)	L	

ROCK CODES TargetCode	PAT	LABEL	DESCRIPTION
		CAS	casing
		MDST	mudstone
		METS	metasediment
		MVOL	mafic volcanic
		QZPY	quartz porphyry
		QZVN	quartz vein

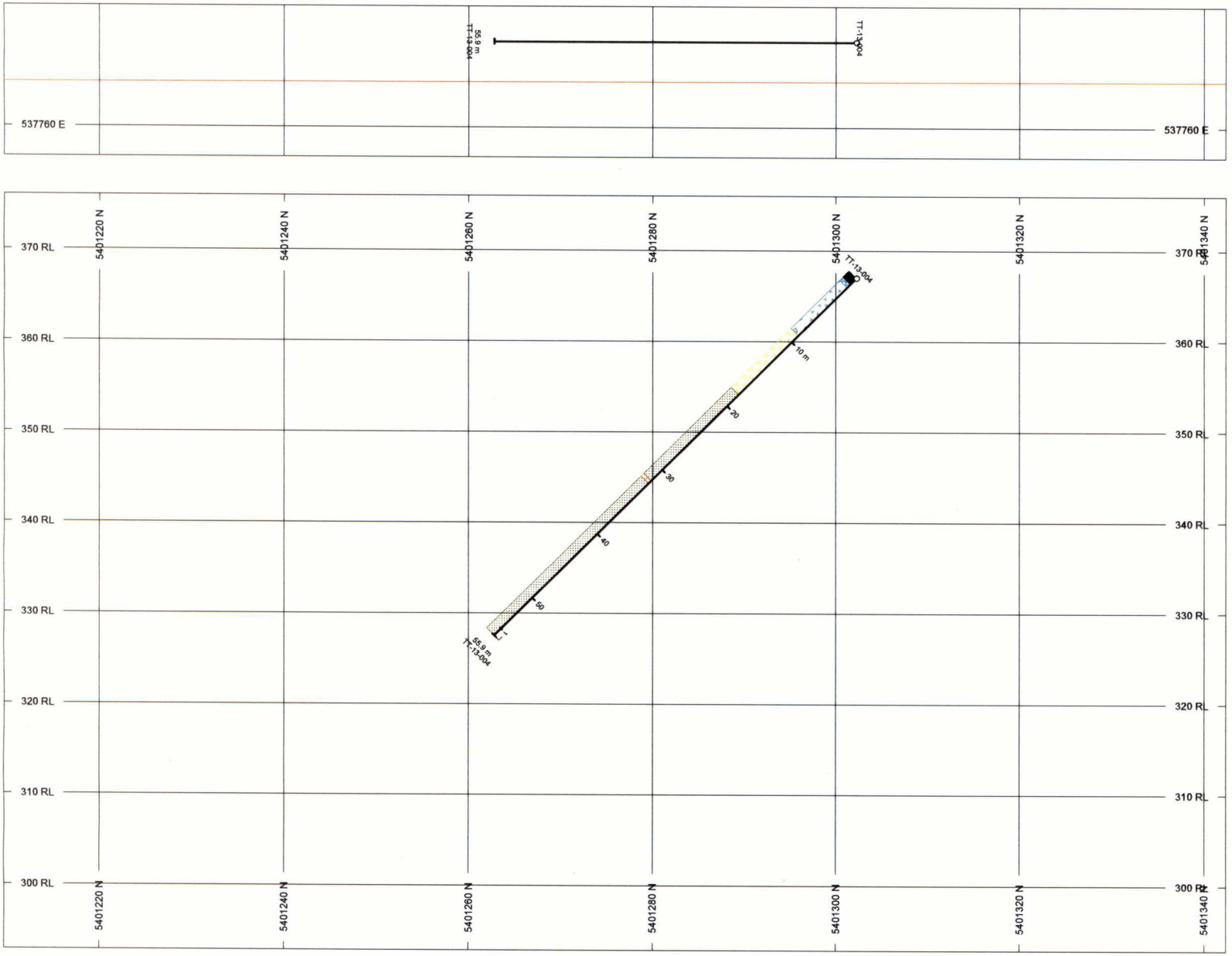
PLAN SPECS:

REF. PT. E, N	537800 m	5401000 m
EXTENTS	82,96 m	64,86 m

SCALE
(m)
-2 0 2 4 6
NAD83 / UTM zone 15N

N
W E
S

Pathfinder Gold Inc.
2013 Drilling



1:400

Coordinate System: NAD 1983 UTM Zone 15N
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -93.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

Pathfinder Gold Inc.

BAR GRAPHS	L/R	COL
Au (ppm)	R	
Zn (ppm)	L	

ROCK CODES TargetCode	PAT	LABEL	DESCRIPTION
		CAS	casing
		MDST	mudstone
		METS	metasediment
		MVOL	mafic volcanic
		QZPY	quartz porphyry
		QZVN	quartz vein

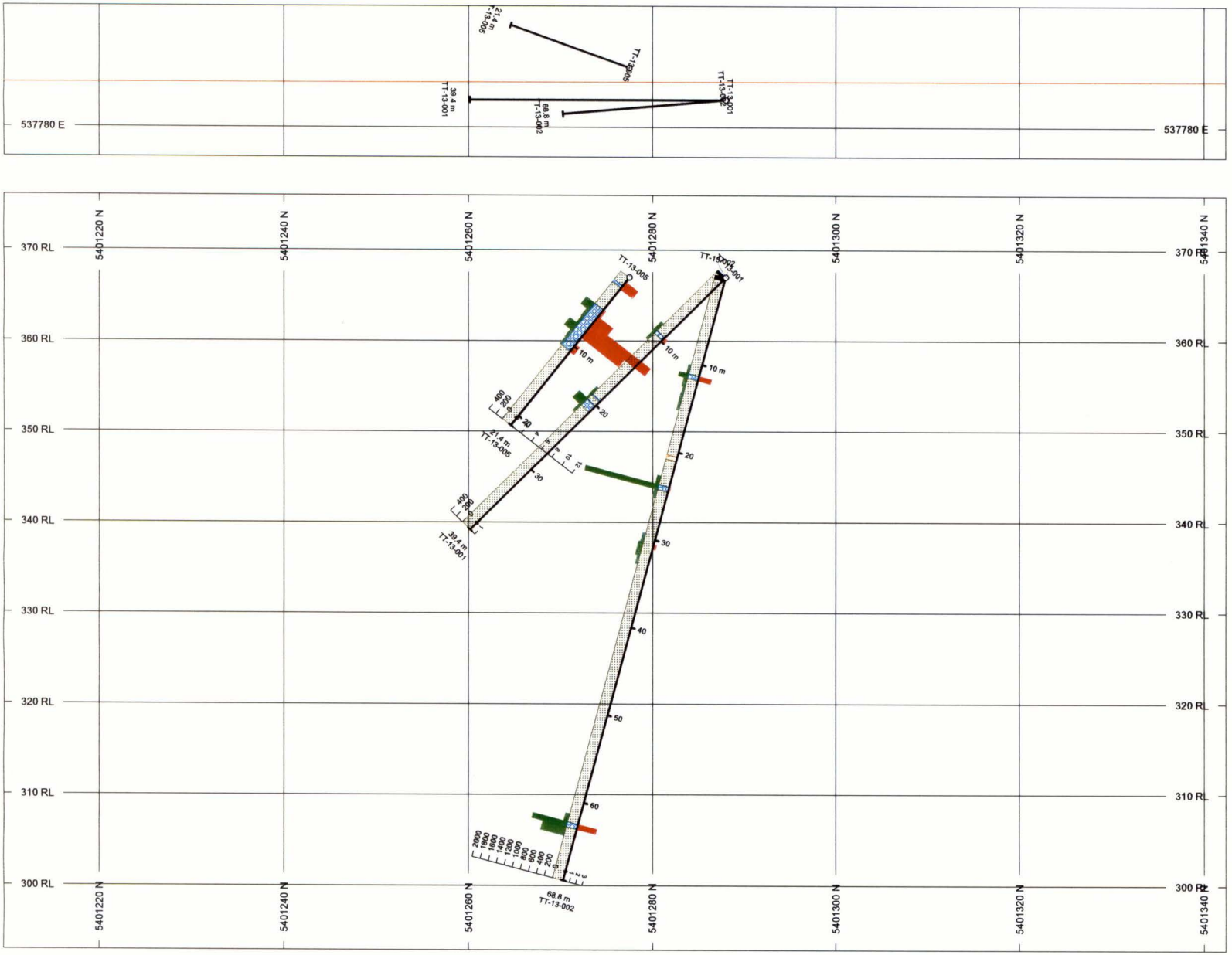
SECTION SPECS:

REF. PT. E, N	537755 m	5401276 m
EXTENTS	132.7 m	83.13 m
SECTION TOP, BOT	376 m	292.9 m
TOLERANCE +/-	10 m	

SCALE
(m)
-2 0 2 4 6 8 10 12
NAD83 / UTM zone 15N

AZIMUTH = 0°
N
W E
S

Pathfinder Gold Inc.
2013 Drilling



1:400

Coordinate System: NAD 1983 UTM Zone 15N
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -93.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

Pathfinder Gold Inc.

BAR GRAPHS	L/R	COL
Au (ppm)	R	
Zn (ppm)	L	

ROCK CODES TargetCode	PAT	LABEL	DESCRIPTION
		CAS	casing
		MDST	mudstone
		METS	metasediment
		QZVN	quartz vein

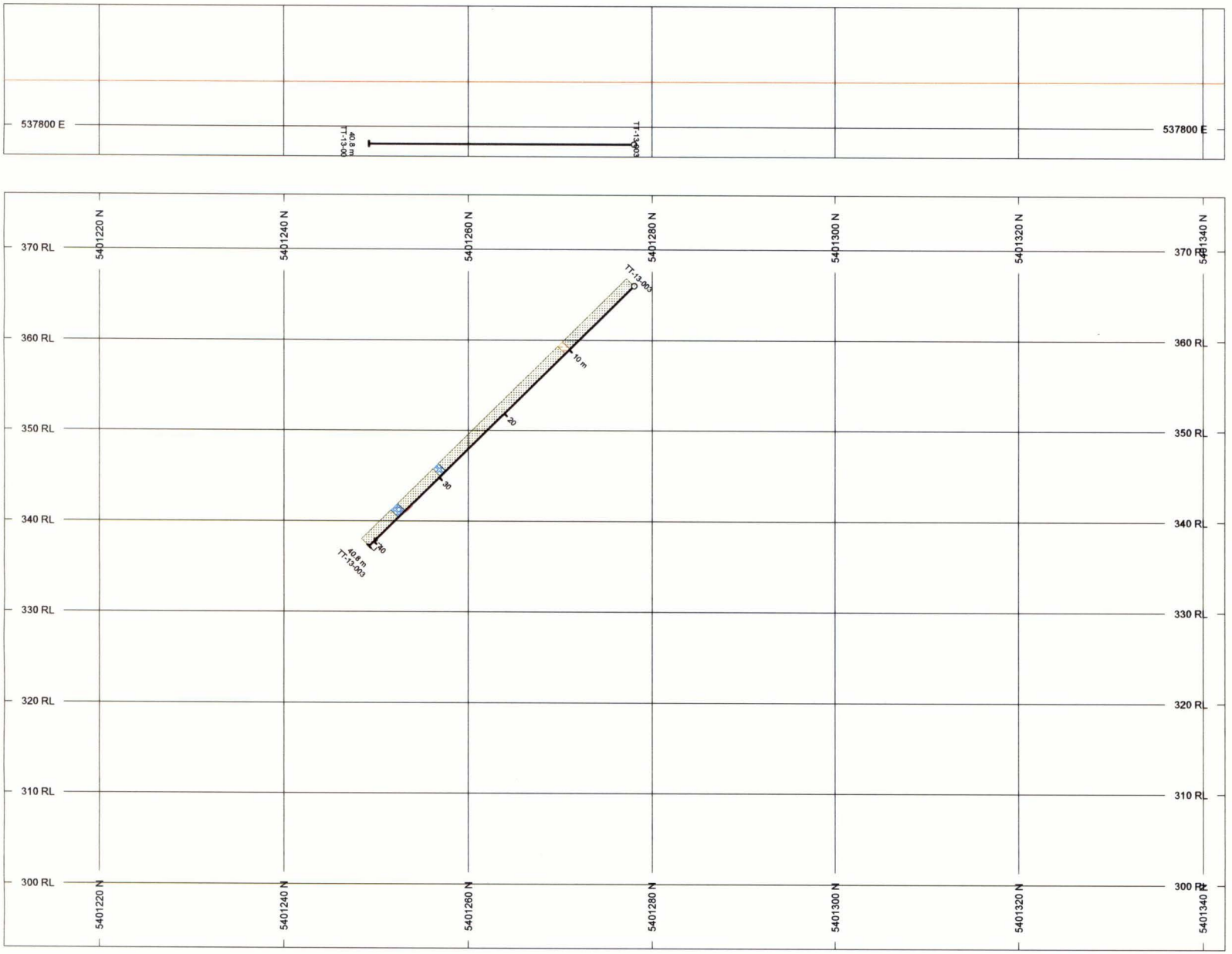
SECTION SPECS:

REF. PT. E, N	537775 m	5401276 m
EXTENTS	132.7 m	83.13 m
SECTION TOP, BOT	376 m	292.9 m
TOLERANCE +/-	10 m	

SCALE
(m)
-2 0 2 4 6 8 10 12
NAD83 / UTM zone 15N

AZIMUTH = 0°
N
W E
S

Pathfinder Gold Inc.
2013 Drilling



1:400

Coordinate System: NAD 1983 UTM Zone 15N
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -93.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

Pathfinder Gold Inc.

BAR GRAPHS	L/R	COL
Au (ppm)	R	
Zn (ppm)	L	

ROCK CODES TargetCode	PAT	LABEL	DESCRIPTION
		MDST	mudstone
		METS	metasediment
		QZVN	quartz vein

SECTION SPECS:

REF. PT. E, N	537795 m	5401276 m
EXTENTS	132.7 m	83.13 m
SECTION TOP, BOT	376 m	292.9 m
TOLERANCE +/-	10 m	

SCALE
(m)
-2 0 2 4 6 8 10 12
NAD83 / UTM zone 15N

AZIMUTH = 0°
N
W E
S

Pathfinder Gold Inc.

2013 Drilling

APPENDIX C

Pathfinder Gold Corp.

DIAMOND DRILL LOG

DDH Number	TT-13-001
Project	**13-054**
Length	39.37 metres
Started	08/07/2013
Completed	10/07/2013
Easting	537777
Northing	5401288
Elevation	367

TESTS

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
Collar	180	-45						

Logged By	**J Arnold**
Claim #(s)	4246901
Target(s)	Gold Bug Vein
Contractor	TBT Engineering
Comments	Drilled in feet and converted to meters.

From	To	Description	Sample Number	From	To	Interval	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm	Pd ppm
0.00	0.30	Casing										
0.30	9.45	Greywacke, light grey to buff brown with irregular 3-5mm wide dark green chlorite seams randomly throughout (<5%).	236177	8.45	9.45	1.00	0.01	<1	10.00	81.00	17.00	0.01
			236178	9.45	9.85	0.40	0.53	<1	15.00	76.00	60.00	0.01
9.45	9.85	Quartz Vein. Bull white and locally sugary quartz vein, occasionally has yellow-green sericite + chlorite +	236179	9.85	10.85	1.00	0.01	<1	4.00	66.00	23.00	0.02
		fuchsite laminations. Sharp upper and lower contacts ~50 DTCA (degrees to core axis).										
9.85	14.10	Greywacke, light grey to buff brown with irregular 3-5mm wide dark green chlorite seams randomly throughout (<5%).										
14.10	19.40	Greywacke, increased foliation and abundant silica flooding and veinlets <1cm wide as a stockwork. Locally										
		disseminated pyrite + sphalerite + galena up to 1%.										
			236183	18.50	19.50	1.00	<0.005	<1	14.00	60.00	16.00	0.02
19.40	19.50	Quartz vein, dark grey translucent, 10cm wide with sharp contacts. Minor red hematite staining along contact, trace	236184	19.50	20.15	0.65	0.01	<1	4.00	48.00	3.00	0.01
		pyrite + sphalerite + galena.	236185	20.15	21.15	1.00	0.01	<1	15.00	282.00	167.00	0.02
19.50	21.15	Greywacke, increased foliation and abundant silica flooding and veinlets <1cm wide as a stockwork. Locally	236186	21.15	22.15	1.00	<0.005	<1	4.00	63.00	23.00	0.02
		disseminated pyrite + sphalerite + galena up to 1%.										
21.15	26.10	Greywacke, light grey to buff brown with irregular 3-5mm wide dark green chlorite seams randomly throughout (<5%).										
		Trace disseminate py + sph + gal										
26.10	39.37	Greywacke, light grey to buff brown with irregular 3-5mm wide dark green chlorite seams randomly throughout (<5%).										
		Markasite locally forms along joint planes.										
		EOH @ 39.37										

Pathfinder Gold Corp.

DIAMOND DRILL LOG

DDH Number	TT-13-002
Project	**13-054**
Length	68.80 metres
Started	08/07/2013
Completed	10/07/2013
Easting	537777
Northing	5401288
Elevation	367

TESTS

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
Collar	180	-75						

Logged By	**J Arnold**
Claim #(s)	4246901
Target(s)	Gold Bug Vein
Contractor	TBT Engineering
Comments	Drilled in feet and converted to meters.

From	To	Description	Sample Number	From	To	Interval	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm	Pd ppm
0.00	0.45	Casing										
0.45	11.30	Greywacke, light grey to buff brown, moderately sericitzed, with irregular 3-5mm wide dark green chlorite seams	236151	10.30	11.30	1.00	<0.005	<1	3	56	20	0.010
		Occassional quartz phenocrysts up to 5mm in diameter. Possibly Rhyolite.	236152	11.30	11.80	0.50	1.949	2	165	232	269	<0.01
			236153	11.80	12.80	1.00	<0.005	<1	8	87	18	0.010
11.30	11.80	Quartz Vein. Red quartz vein, trace-1% py + sph + gal. Vein has a psuedo-breccia texture where bull white sugary	236154	12.80	13.45	0.65	<0.005	<1	3	51	<1	0.012
		quartz has a light green sericite matrix.	236155	13.45	14.45	1.00	<0.005	<1	45	63	9	0.014
			236156	14.45	15.45	1.00	<0.005	<1	10	61	14	0.012
11.80	20.55	Greywacke, light grey to buff brown, moderately sericite altered with red quartz veinlets from 13.45-14.45										
			236157	22.95	23.95	1.00	<0.005	<1	21	88	51	0.014
20.55	21.00	Mudstone. Dark grey brown, finely banded mudstone. Sharp upper and lower contacts.	236158	23.95	24.50	0.55	0.151	2	286	1821	1391	0.012
			236159	24.50	25.50	1.00	<0.005	<1	5	75	13	0.014
21.00	23.95	Greywacke, light grey to buff brown, with irregular 3-5mm wide dark green chlorite seams										
			236164	29.50	30.50	1.00	0.057	<1	12	70	35	0.014
23.95	24.50	Quartz vein zone consists of 2-5cm wide translucent quartz floods and stringers that host 2-3% galena + sphalerite.	236165	30.50	31.00	0.50	0.361	<1	6	115	48	0.010
			236166	31.00	32.00	1.00	0.006	<1	13	111	17	0.012
24.50	62.45	Greywacke, light grey to buff brown, with local 30cm side intervals of increased silica flooding and trace pyrite + sphalerite.	236167	32.00	33.00	1.00	0.015	<1	8	56	16	0.017
62.45	63.00	Quartz vein. On discreet 5cm wide vein at 62.45, hosts 3-5% sph + gal + py + cpy. Quartz stockwork for rest of interval.	236170	61.55	62.45	0.90	0.009	<1	45	97	52	<0.01
			236171	62.45	63.00	0.55	2.954	3	236	859	37	0.014
63.00	68.80	Greywacke, light grey to buff brown.	236172	63.00	64.00	1.00	0.111	1	42	581	547	0.013
		EOH @ 68.80										

Pathfinder Gold Corp.

DIAMOND DRILL LOG

DDH Number	TT-13-003
Project	**13-054**
Length	40.75 metres
Started	08/07/2013
Completed	10/07/2013
Easting	537802
Northing	5401278
Elevation	366

TESTS

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
Collar	180	-45						

Logged By	**J Arnold**
Claim #(s)	4246901
Target(s)	Gold Bug Vein - Eastern extension
Contractor	TBT Engineering
Comments	Drilled in feet and converted to meters.

From	To	Description	Sample Number	From	To	Interval	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm	Pd ppm
0.00	9.90	Greywacke, light grey to buff brown, local pervasive green-yellow sericite alteration. Collared into bedrock, no casing.										
9.90	10.60	Mudstone. Dark grey-green, well bedded with sharp upper and lower contacts.										
10.60	29.00	Greywacke, light grey to buff brown, rare green-yellow sericite alteration. Between 17.50-29.0 deformation intensity increases, marked by quartz flooding and stringer stockworks with trace sulphides.										
			236214	28.00	29.00	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
29.00	29.80	Quartz Vein. 5-10% ankerite, 1-2% sph + gal + py + cpy.	236215	29.00	29.80	0.80	0.02	N/A	N/A	N/A	N/A	N/A
			236216	29.80	30.80	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
29.80	32.25	Greywacke, light grey to buff brown, rare green-yellow sericite alteration.										
32.25	36.25	Greywacke, 2 quartz-ankerite veins ~10cm wide with 1-2% gal + py + cpy between 35.25 and 36.25.	236217	34.25	35.25	1.00	0.13	N/A	N/A	N/A	N/A	N/A
			236218	35.25	35.75	0.50	0.06	N/A	N/A	N/A	N/A	N/A
			236219	35.75	36.25	0.50	<0.005	N/A	N/A	N/A	N/A	N/A
			236220	36.25	37.25	1.00	0.04	N/A	N/A	N/A	N/A	N/A
36.25	40.75	Greywacke, moderately sericite altered with <5% quartz-ankerite veinlets (<1cm wide) and stringers.										
		EOH @ 40.75										

Pathfinder Gold Corp.

DIAMOND DRILL LOG

DDH Number	TT-13-004
Project	**13-054**
Length	55.85 metres
Started	08/07/2013
Completed	10/07/2013
Easting	537750
Northing	5401302
Elevation	367

TESTS

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
Collar	180	-45						

Logged By	**J Arnold**
Claim #(s)	4246901
Target(s)	Gold Bug Vein - Western extension
Contractor	TBT Engineering
Comments	Drilled in feet and converted to meters.

From	To	Description	Sample Number	From	To	Interval	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm	Pd ppm
0.00	1.00	Casing										
1.00	9.00	Andesitic lapilli tuff. Dark green, banded ~60 DTCA, pervasive, <1mm laths of beige leucoxene throughout. <1% pyrite cubes 1-2mm equant throughout. From 1.0-1.5 m depth there is a 20cm rusty, hematized quartz vein, locally vuggy with no sulphides.										
9.00	18.20	Quartz porphyry unit. Quartz + ankerite phyric andesite tuff. Medium grey-green with 10-15% subrounded 3-5 mm quartz + ankerite phenocrysts. Foliation/banding ~60 DTCA.										
18.20	31.70	Greywacke, light grey to buff brown, rare green-yellow sericite alteration. Tectonized with 5%, <1cm wide quartz carbonate stringers and veinlets throughout.										
31.70	32.10	Mudstone layer. Well banded, dark brownish-green, bedded ~60 DTCA.										
32.10	45.50	Greywacke, light grey to buff brown, rare green-yellow sericite alteration. Tectonized with 5%, <1cm wide quartz carbonate stringers and veinlets throughout.										
45.50	45.60	Quartz vein with moderate ankerite and 2-3% sph + gal + py.	236194	44.00	45.00	1.00	0.01	N/A	N/A	N/A	N/A	N/A
			236195	45.00	46.00	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
			236198	46.00	47.00	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
45.60	55.85	Greywacke, light grey to buff brown, rare green-yellow sericite alteration. Tectonized with 5%, <1cm wide quartz carbonate stringers and veinlets throughout. EOH @ 55.85										

Pathfinder Gold Corp.

DIAMOND DRILL LOG

DDH Number	TT-13-005
Project	**13-054**
Length	21.35 metres
Started	08/07/2013
Completed	10/07/2013
Easting	537773
Northing	5401277
Elevation	367

TESTS

Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
Collar	200	-50						

Logged By	**J Arnold**
Claim #(s)	4246901
Target(s)	Gold Bug Vein
Contractor	TBT Engineering
Comments	Drilled in feet and converted to meters.

From	To	Description	Sample Number	From	To	Interval	Au ppm	Ag ppm	Cu ppm	Zn ppm	Pb ppm	Pd ppm
0.00	1.25	Quartz Porphyry. Mediuum green chlorite altered quartz porphyry. No Casing, cored directly into bedrock.	236201	0.00	0.70	0.70	<0.005	N/A	N/A	N/A	N/A	N/A
			236202	0.70	1.70	1.00	2.371	N/A	N/A	N/A	N/A	N/A
1.25	1.52	Quartz vein. Sharp upper and lower contacts. 3-5% disseminated sph + gal + py + cpy.	236203	1.70	2.70	1.00	0.016	N/A	N/A	N/A	N/A	N/A
			236204	2.70	3.70	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
1.52	4.70	Greywacke. Light green with pervasive yellow-green sericite alteration throughout. Local chlorite alteration associated	236205	3.70	4.70	1.00	0.052	N/A	N/A	N/A	N/A	N/A
		with shearing and quartz-ankerite stockwork.	236206	4.70	5.70	1.00	0.369	<1	213	260	18	<0.01
			236207	5.70	6.70	1.00	2.910	<1	60	79	8	<0.01
4.70	10.70	Quartz vein. Sharp upper and lower contacts. 3-5% disseminated sph + gal + py + cpy, locally up to 10% over short intervals.	236208	6.70	7.70	1.00	11.370	1	237	63	7	<0.01
		Bull white and hematite altered red vein. Occasional <5% chloritized inclusions. At 7.85m depth specular hematite noted.	236209	7.70	8.70	1.00	7.336	6	1872	259	40	<0.01
			236210	8.70	9.70	1.00	0.116	<1	6	70	<1	<0.01
			236211	9.70	10.70	1.00	0.719	<1	44	52	14	<0.01
10.70	21.35	Greywacke, light grey to buff brown, decreasing green-yellow sericite alteration downhole from vein contact.	236212	10.70	11.70	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
		carbonate stringers and veinlets throughout. 11.28-11.70 silica flooding and quartz stringers, trace sulphides.	236213	11.70	12.70	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
		19.45-21.35 quartz flooding and stringers with trace sph + gal + py + cpy.	236199	19.45	20.45	1.00	<0.005	N/A	N/A	N/A	N/A	N/A
			236200	20.45	21.35	0.90	<0.005	N/A	N/A	N/A	N/A	N/A
		EOH @ 21.35										

APPENDIX D

TBT Engineering Limited 1918 Yonge St., Thunder Bay, ON P7E 6T9 807-624-5160

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Monday, September 23, 2013

Preliminary Analysis

TBT Engineering
1918 Yonge Street
Thunder Bay, On, Can
P7E6T9
Ph#: (807) 632-2514
Email: jarnold@tbte.ca

Date Received: 09/10/2013
Date Completed: 09/23/2013
Job #: 201341922
Reference: 9703
Sample #: 25

Acc #	Client ID	Au ppm	Pt ppm	Pd ppm	Rh ppm
134544	236151	<0.005	<0.015	0.010	
134545	236152	1.949	<0.015	<0.01	
134546	236153	<0.005	0.017	0.010	
134547	236154	<0.005	0.033	0.012	
134548	236155	<0.005	0.035	0.014	
134549	236156	<0.005	0.043	0.012	
134550	236157	<0.005	<0.015	0.014	
134551	236158	0.151	0.035	0.012	
134552	236159	<0.005	0.037	0.014	
134553	236164	0.057	0.065	0.014	
134554 Dup	236164	0.035	<0.015	<0.01	
134555	236165	0.361	<0.015	0.010	
134556	236166	0.006	0.023	0.012	
134557	236167	0.015	<0.015	0.017	
134558	236168	3.560	0.026	0.017	
134559	236169	0.006	0.021	0.013	
134560	236170	0.009	0.023	<0.01	
134561	236171	2.954	<0.015	0.014	
134562	236172	0.111	<0.015	0.013	
134563	236177	0.011	0.020	0.013	
134564	236178	0.533	0.022	0.012	
134565 Dup	236178	0.495	0.040	0.017	
134566	236179	0.006	0.041	0.019	
134567	236183	<0.005	<0.015	0.015	
134568	236184	0.006	<0.015	0.013	
134569	236185	0.014	<0.015	0.016	
134570	236186	<0.005	0.042	0.017	

PROCEDURE CODES: ALP1, ALPG1, ALMA1

Certified By: Dr. David Brown, VP Quality

The results included on this report relate only to the items tested.
The Certificate of Analysis should not be reproduced except in full, without the written approval of the laboratory.

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Tuesday, September 24, 2013

Final Certificate

TBT Engineering
1918 Yonge Street
Thunder Bay, On, Can
P7E6T9
Ph#: (807) 632-2514
Email: jarnold@tbte.ca

Date Received: 09/10/2013
Date Completed: 09/23/2013
Job #: 201341922
Reference: 9703
Sample #: 25

Acc #	Client ID	Au ppm	Pt ppm	Pd ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
134544	236151	<0.005	<0.015	0.010	<1	4.45	11	403	2	<1	0.55	<4	2	24	3	1.61	<0.01	17	0.68	192	3	24	<100	20	5	32	<10	58	953	<2	4	<10	76	56
134545	236152	1.949	<0.015	<0.01	2	2.46	6	247	2	<1	0.27	<4	1	35	165	1.13	<0.01	9	0.50	134	2	23	<100	269	<5	23	<10	54	641	<2	3	<10	47	232
134546	236153	<0.005	0.017	0.010	<1	4.06	4	403	2	<1	0.54	<4	1	21	8	1.68	<0.01	13	0.64	205	2	19	<100	18	5	25	<10	63	882	<2	3	<10	85	87
134547	236154	<0.005	0.033	0.012	<1	3.48	8	321	2	<1	0.45	<4	1	29	3	1.47	<0.01	7	0.57	180	2	21	<100	<1	<5	28	<10	61	789	<2	3	<10	75	51
134548	236155	<0.005	0.035	0.014	<1	4.40	9	409	2	<1	0.51	<4	2	35	45	1.69	<0.01	10	0.61	194	3	24	<100	9	<5	24	<10	64	924	<2	4	<10	79	63
134549	236156	<0.005	0.043	0.012	<1	3.66	3	377	2	<1	0.52	<4	<1	27	10	1.65	<0.01	9	0.61	193	3	25	<100	14	<5	31	<10	61	856	<2	3	<10	81	61
134550	236157	<0.005	<0.015	0.014	<1	4.17	4	378	2	<1	0.59	<4	2	42	21	1.60	<0.01	11	0.56	196	5	30	<100	51	5	20	<10	72	923	<2	4	<10	68	88
134551	236158	0.151	0.035	0.012	2	3.91	150	316	2	3	1.13	12	2	31	286	2.14	0.03	13	0.65	316	5	26	<100	1391	<5	30	14	92	870	<2	3	22	72	1821
134552	236159	<0.005	0.037	0.014	<1	4.38	9	348	2	<1	0.39	<4	<1	31	5	1.76	<0.01	12	0.56	216	4	22	<100	13	<5	27	<10	70	921	<2	4	<10	89	75
134553	236164	0.057	0.065	0.014	<1	3.46	8	379	2	<1	0.20	<4	<1	35	12	1.45	<0.01	11	0.46	164	4	27	<100	35	<5	28	<10	59	834	<2	4	<10	66	70
134554D	236164	0.035	<0.015	<0.01	<1	3.76	<2	396	2	4	0.23	<4	1	36	12	1.48	<0.01	11	0.47	168	3	24	<100	38	<5	22	<10	61	859	<2	3	<10	66	68
134555	236165	0.361	<0.015	0.010	<1	2.86	7	277	2	<1	0.64	<4	<1	52	6	1.55	<0.01	8	0.51	250	6	34	<100	48	<5	19	<10	75	731	<2	4	<10	56	115
134556	236166	0.006	0.023	0.012	<1	3.79	5	368	2	<1	0.29	<4	2	37	13	1.61	<0.01	9	0.50	210	6	29	<100	17	5	27	<10	63	841	<2	4	<10	67	111
134557	236167	0.015	<0.015	0.017	<1	3.56	4	390	2	<1	0.16	<4	<1	29	8	1.58	<0.01	7	0.48	179	3	24	<100	16	<5	18	<10	59	871	<2	4	<10	84	56
134558	236168	3.560	0.026	0.017	<1	3.48	1884	544	<2	14	4.05	6	30	129	162	12.39	0.55	11	2.63	4945	<1	88	2547	12	<5	<5	<10	255	4451	<2	138	<10	25	135
134559	236169	0.006	0.021	0.013	<1	7.45	27	<1	<2	<1	0.05	<4	<1	44	5	0.80	0.09	23	0.30	173	9	58	<100	3	<5	37	<10	98	268	<2	6	<10	8	13
134560	236170	0.009	0.023	<0.01	<1	3.87	5	329	2	<1	0.24	<4	1	23	45	1.53	0.02	5	0.51	159	2	21	<100	52	<5	20	<10	54	887	<2	4	<10	67	97
134561	236171	2.954	<0.015	0.014	3	3.78	3	320	2	<1	0.41	6	<1	27	236	1.52	0.10	5	0.55	174	2	21	<100	37	<5	30	<10	58	876	<2	4	<10	61	859
134562	236172	0.111	<0.015	0.013	1	3.93	6	323	2	<1	0.39	4	<1	30	42	1.52	<0.01	7	0.53	183	2	27	<100	547	<5	28	<10	58	883	<2	4	<10	73	581
134563	236177	0.011	0.020	0.013	<1	4.37	4	386	3	<1	0.53	<4	2	31	10	1.89	<0.01	13	0.68	217	2	28	<100	17	5	32	<10	58	979	<2	4	<10	87	81

PROCEDURE CODES: ALP1, ALPG1, ALMA1

Certified By: Dr. David Brown, VP Quality

-1537-09/24/2013 12:13 PM

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Tuesday, September 24, 2013

Final Certificate

TBT Engineering
1918 Yonge Street
Thunder Bay, On, Can
P7E6T9
Ph#: (807) 632-2514
Email: jarnold@tbte.ca

Date Received: 09/10/2013
Date Completed: 09/23/2013
Job #: 201341922
Reference: 9703
Sample #: 25

Acc #	Client ID	Au ppm	Pt ppm	Pd ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
134564	236178	0.533	0.022	0.012	<1	3.28	5	307	2	<1	0.43	<4	<1	27	15	1.42	<0.01	7	0.57	152	<1	21	<100	60	<5	18	<10	57	742	<2	3	<10	61	76
134565D	236178	0.495	0.040	0.017	<1	3.35	6	311	2	<1	0.44	<4	1	30	16	1.43	<0.01	9	0.58	154	1	19	<100	65	<5	16	<10	57	745	<2	3	<10	62	80
134566	236179	0.006	0.041	0.019	<1	4.33	6	384	2	<1	0.60	<4	2	30	4	1.67	0.17	13	0.65	185	4	27	<100	23	<5	32	<10	63	864	<2	4	<10	78	66
134567	236183	<0.005	<0.015	0.015	<1	3.34	4	306	2	<1	0.39	<4	1	38	14	1.59	<0.01	9	0.53	216	3	30	<100	16	<5	27	<10	63	790	<2	4	<10	59	60
134568	236184	0.006	<0.015	0.013	<1	3.96	9	411	3	5	0.42	<4	1	26	4	1.77	<0.01	9	0.59	233	2	22	<100	3	<5	20	<10	64	883	<2	3	<10	74	48
134569	236185	0.014	<0.015	0.016	<1	3.31	<2	326	2	<1	0.57	<4	<1	36	15	1.51	<0.01	8	0.56	206	4	26	<100	167	<5	17	<10	68	807	<2	4	<10	57	282
134570	236186	<0.005	0.042	0.017	<1	3.90	5	335	2	<1	0.22	<4	<1	29	4	1.64	<0.01	9	0.52	199	3	24	<100	23	<5	27	<10	62	865	<2	3	<10	78	63

PROCEDURE CODES: ALP1, ALPG1, ALMA1

Certified By: Dr. David Brown, VP Quality

-1537-09/24/2013 12:13 PM

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Friday, December 13, 2013

Final Certificate

TBT Engineering
1918 Yonge Street
Thunder Bay, On, Can
P7E6T9
Ph#: (807) 632-2514
Email: jarnold@tbte.ca

Date Received: 09/10/2013
Date Completed: 09/17/2013
Job #: 201341921
Reference: 9703
Sample #: 27

Acc #	Client ID	Au ppm	Pt ppm	Pd ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
134515	236194	0.006	0.030	<0.01																																	
134516	236195	<0.005	0.036	<0.01																																	
134517	236196	9.572	0.028	0.011																																	
134518	236197	<0.005	0.087	<0.01																																	
134519	236198	<0.005	0.085	<0.01																																	
134520	236199	<0.005	0.089	<0.01																																	
134521	236200	<0.005	0.062	<0.01																																	
134522	236201	<0.005	0.106	<0.01																																	
134523	236202	2.371	0.075	<0.01																																	
134524	236203	0.016	<0.015	<0.01																																	
134525D	236203	0.022	<0.015	<0.01																																	
134526	236204	<0.005	<0.015	<0.01																																	
134527	236205	0.052	<0.015	<0.01																																	
134528	236206	0.369	<0.015	<0.01	<1	0.09	6	25	14	<2	<1	0.10	<4	<1	50	213	0.34	0.06	<1	0.03	<100	8	0.01	59	<100	18	<5	<5	<0.01	<10	<3	<100	<2	2	<10	3	260
134529	236207	2.910	0.031	<0.01	<1	0.06	11	27	11	<2	9	0.09	<4	<1	25	60	0.22	0.05	4	0.02	<100	5	<0.01	29	<100	8	<5	<5	<0.01	<10	3	<100	<2	<2	<10	2	79
134530	236208	11.370	<0.015	<0.01	1	0.01	7	33	1	<2	<1	0.01	<4	<1	49	237	0.22	<0.01	<1	<0.01	<100	7	<0.01	49	<100	7	<5	<5	<0.01	<10	<3	<100	<2	2	<10	<2	63
134531	236209	7.336	0.041	<0.01	6	0.13	13	42	21	<2	<1	0.18	<4	3	59	1872	0.65	0.10	<1	0.05	<100	11	0.02	60	<100	40	<5	<5	<0.01	<10	5	<100	<2	2	<10	5	259
134532	236210	0.116	0.058	<0.01	<1	<0.01	11	30	<1	<2	17	<0.01	<4	<1	28	6	0.12	<0.01	<1	<0.01	<100	5	<0.01	31	<100	<1	<5	<5	<0.01	<10	<3	<100	<2	<2	<10	<2	70
134533	236211	0.719	<0.015	<0.01	<1	0.13	9	45	23	<2	<1	0.14	<4	<1	89	44	0.81	0.11	<1	0.05	<100	16	0.02	118	<100	14	<5	<5	<0.01	<10	4	<100	<2	5	<10	4	52
134534	236212	<0.005	<0.015	<0.01																																	

PROCEDURE CODES: ALP1, ALPG1, ALAR1

Certified By: Dr. David Brown, VP Quality

-1537-12/13/2013 11:31 AM

ACCURASSAY LABORATORIES
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5
Tel: (807) 626-1630
Fax: (807) 622-7571
www.accurassay.com
assay@accurassay.com

Friday, December 13, 2013

Final Certificate

TBT Engineering
1918 Yonge Street
Thunder Bay, On, Can
P7E6T9
Ph#: (807) 632-2514
Email: jarnold@tbte.ca

Date Received: 09/10/2013
Date Completed: 09/17/2013
Job #: 201341921
Reference: 9703
Sample #: 27

Acc #	Client ID	Au ppm	Pt ppm	Pd ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
134535	236213	<0.005	0.021	<0.01																																
134536D	236213	<0.005	0.031	<0.01																																
134537	236214	<0.005	<0.015	<0.01																																
134538	236215	0.020	<0.015	<0.01																																
134539	236216	<0.005	0.021	<0.01																																
134540	236217	0.134	0.018	<0.01																																
134541	236218	0.064	<0.015	<0.01																																
134542	236219	<0.005	0.016	<0.01																																
134543	236220	0.041	<0.015	<0.01																																

PROCEDURE CODES: ALP1, ALPG1, ALAR1

Certified By: Dr. David Brown, VP Quality

-1537-12/13/2013 11:31 AM