

Overburden Sampling with hand auger

Assessment Report Bristol Township Property Big Red Diamond Corporation



Kevin Cool August 2006

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Introduction

In the month of August 2006, Big Red Diamond Corporation contracted True North Mineral Laboratories / Actlabs – Timmins to sample the Bristol Township Property. Seventeen (17) hand auger samples were retrieved (KC-356 to KC-372).

The intent of the sampling program was to test the dispersion of gold and gold-related minerals found in local till covering the property. Although some of the samples contained clay silt as well as glaciofluvial material, it was observed through microscope study that the majority of the recovered heavy mineral concentrates consisted of more angular till material.

Gold-related minerals such as pyrite were identified through microscope observation only. To allow more positive identification of actual Gold, **heavy mineral concentrates** were sent for fire assay with atomic absorption follow-up, to Actlabs main facility in Ancaster, Ontario. Gold assays for all seventeen (17) samples are included in the current report.

Although other methods of analysis were preferred by the client (Big Red Diamond Corporation), such as the specialized Heavy Mineral Concentrate analysis now offered by Actlabs, using thermal irradiation, time constraints due to assessment work deadline steered the decision to go with the more conventional fire assay with atomic absorption follow-up.

Property Description

The Bristol Township Property covered by this report consists of eight (8) contiguous mining claims that straddle the Godfrey / Bristol Township line, Porcupine Mining Division, namely;

| Godfrey | Bristol |
|---------|---------|
| 3019596 | 3017690 |
| 3019595 | 3019567 |
| 3017689 | 3019566 |
| | 3019568 |
| | 3011972 |

Refer to *Figure 1* (Location and Access Map) and *Figure 2* (Sample Location Map) for more detailed property and claim locations.

Access

The property was accessed from Timmins, along Hwy 101 West, then approximately 10 kilometers West along Malette Road. Good ATV trails were found to exist on portions of the property South of Malette Road (Bristol portion). Poor quality ATV trails were partly

used on the North part of the property (Godfrey portion) but some walking was required due to the condition of the old trails.

Refer to *Figure 1* (Location and Access Map) and *Figure 2* (Sample Location Map) for more detailed access information.

Work Program

The fieldwork consisted of overburden sampling using high quality, Australian-made hand auger equipment (Dormer brand). The heavy-duty auger system includes 1 metre aluminium rod extensions as well as a slide hammer to aid in pulling the auger bit. Two special tools (stone chopper and star drill) can be used with the slide hammer in order to penetrate or remove boulders. The auger gear is shown on the photo on the cover of this report.

Seventeen (17) till samples were taken on the property (see *figure 2* for sample location map, *Appendix V* for field logs and *Appendix VI* for a table showing sample coordinates). The samples consist of local till that is coarse, varying in colour from darker brown to tan. Sample field weights can be found in *Appendix I*.

A 2- person crew utilized 2 4x4 ATVs to haul equipment and samples to and from the sample sites. Hand auger was used to penetrate organic layers and deeper into the till to collect between 1.5 and 6.1 kg samples. Samples were labelled and bagged in the field and transported to True North Mineral Laboratories for processing. All field work was carried out during the 5 day period from August 12th to August 16th, 2006.



4x4 ATV on Bristol Property





Methodology

Field

The intent of collecting local till samples by hand auger was to identify areas within the property that might have elevated levels of gold or gold-related minerals. Elevated levels of such minerals, if found in local till, might indicate the presence of a bedrock source nearby.

Material Handling

Handling of sample material was carried out by True North Mineral Laboratories / Actlabs – Timmins on a contract basis for Big Red Diamond Corporation. A general description of material handling prior to analysis can be found in *Appendix V*.

Key sample weights and vial reference numbers for vials containing heavy mineral concentrates (sent to Actlabs in Ancaster Ontario for assay) can be found in *Appendix I*.

All seventeen samples were washed and sorted and a heavy mineral concentrate was produced from the <20>40 fraction of each of the seventeen samples. Where greater quantities of this size fraction were recovered after sorting, a maximum of 300 grams was sent for heavy mineral separation. In such cases, a sample splitter was utilized in order to properly split the dried fraction prior to heavy mineral separation.

The resulting heavy mineral concentrates were observed using binocular microscope, with the intent of identifying and picking metallic mineral grains and more specifically in this case, gold or gold-related minerals. During this process, other interesting mineral grains, such as kimberlite indicator minerals were also picked. All picked mineral grains were then photographed. Photos can be seen in *Appendix III*.

Any of the picked **metallic mineral grains** were then placed back into the full concentrate, as the concentrates were destined for fire assay with atomic absorption follow-up. This was done with the understanding that the visually identified metallic grains might very well contain the most significant portion of possible gold that might be found through the assay process. Non-metallic grains such as the kimberlite indicators picked, were not included in the concentrates sent for assay and remain on file at True North Mineral Laboratories in Timmins, Ontario.

Results

Visual Observation

No visible gold was observed in any of the 17 heavy mineral concentrates during microscope observation. Gold-related minerals, such as pyrite, and other metallic mineral grains were observed in the following samples:

| KC-368 |
|--------|
| KC-369 |
| KC-370 |
| KC-371 |
| KC-372 |
| |
| |

In many cases the gold-related or metallic grains consisted of conglomerate mineral grains that could contain traces of gold. Examples of the conglomerate grains can be seen in the upper right of the photo of KC-363 and the upper left of KC-367 as well as in other photographs contained in *Appendix III*. The microscope observation work supported the decision to send all 17 concentrates for analysis.

Analysis

Out of the seventeen (17) samples sent for fire assay with atomic absorption follow-up, fourteen (14) resulted in gold values less than 5ppb. Three (3) of them resulted in slightly higher gold values of 14ppb (KC-358 represented by vial #3441), 6ppb (KC-367 represented by vial #3450) and 7ppb (KC-371 represented by vial #3454).

Figure 3 is an interpretive map (contour lines) with the bulk of the <5ppb samples (14 samples) used as a background with the slightly better samples (3) highlighted with a bold symbol as well as the contour lines present for emphasis. More elevated gold values, when found in mineral grain concentrates taken from local till material, can often imply similar gold values for a slightly larger area surrounding the immediate sample point. Therefore the contour method is intended to highlight to some reasonable degree a **possible** area, or pocket of till that is more likely to contain higher gold values than the other areas tested. This is one interpretation of the overall sample program results. Such a map could be used as a guide for more detailed till sampling.

The final assay report and certificate from Activation Laboratories (Actlabs) is found in *Appendix VII*.





Recommendations

There is an area central to the property that has higher gold values than the outlying areas (as highlighted in *Figure 3*). Outlying parts of the property, such as the Northeast and Southeast sections were not sampled during the current program. No effort has yet been made to correlate the current sample results to any available airborne (or ground based) geophysical survey.

Additional till sampling could be carried out on the un-sampled parts of the property. The current sample results or the recommended (completed) sample program could be correlated to any available geophysical information to see if the slightly elevated gold values coincide in any way with available geophysical information.

Depending on the detail of available airborne geophysics, a ground-based geophysical program could be carried out. This effort would be more valuable if it is done in conjunction with further till sampling.

Although good quality hand auger equipment was utilized for the current program, most of the auger holes ended in till that had too many stones to allow deep penetration (refer to field logs for auger hole depths). It may be worthwhile to use a power auger for future till sampling instead of hand auger.

The till samples retrieved during this program help to shed light on local mineralization. However it is felt that more can be gained in the future if greater depths can be reached by power auger, particularly if future sampling is viewed along with geophysical information.

More sensitive analytical methods could be applied to the remaining material retained from the same seventeen (17) samples. The current program saw the <20>40 fraction analyzed (consumed) by fire assay with atomic absorption follow-up. The remaining sample fractions (including the finer, <40>70 fraction – which makes up a greater part of the full sample) could be utilized without further field work. This work could be carried out prior to the above recommendations.

True North Mineral Laboratories Inc.

Appendix I

| Meaning |
|--|
| -mineral grains with specific gravity >2.85g/ml |
| -mineral grains with specific gravity <2.85g/ml |
| -grams |
| -Heavy Mineral Separation |
| -Remaining Non-Magnetic after concentrate (after picking) |
| -1.7mm (>12) |
| -0.85mm (<12>20) |
| -0.43mm (<20>40) |
| -0.21mm (<40>70) |
| |

| | | | | | | True North Mi | neral Laborate | ories Inc. | | | | |
|------------|-----------------|---------------------|-------------------|-----------------|----------------------|-----------------|-------------------|--------------------------|-------------------------------|---------------------------------------|--|-----------------------------|
| | | | | | | 4 | Appendix I | | | | ······································ | |
| | | <u></u> | | | | Project | t: Bristol Proper | ty | | <u> </u> | | |
| Sample No. | Field Weight | Selected for HMS | Total Fraction | Total Floats | Total Concentrate | Vial # Picks | Vial # R.N.M. | no Vial # Magnetic | Viai # Select Picks | Vial # Metallic Grains | Notes | Original Arrival Date |
| | (g) | (tyler mesh) | (g) | (g) | (g) | Concentrate | Concentrate | Concentrate | Concentrate | Concentrate | | |
| KC-356 | 2610 | <20>40 | 212 | 197.94 | 14.06 | 2412 | 3439 | 3439 | N/A | 3439 | Metallic Grains Observed | Aug 15/06 |
| KC-357 | 1750 | <20>40 | 108 | 102.78 | 5.22 | 2418 | 3440 | 3440 | N/A | | | Aug 15/06 |
| KC-358 | 1940 | <20>40 | 130 | 123.9 | 6.1 | 2415 | 3441 | 3441 | N/A | 3441 | Metallic Grains Observed | Aug 15/06 |
| KC-359 | 3365 | <20>40 | 184 | 174.74 | 9.26 | 2424 | 3442 | 3442 | N/A | 3442 | Metallic Grains Observed | Aug 15/06 |
| KC-360 | 1535 | <20>40 | 77.84 | 73.48 | 4.36 | 2421 | 3443 | 3443 | N/A | | | Aug 15/06 |
| KC-361 | 3215 | <20>40 | 176 | 167.09 | 8.91 | 2427 | 3444 | 3444 | N/A | · · · · · · · · · · · · · · · · · · · | | Aug 15/06 |
| KC-362 | 3610 | <20>40 | 186 | 177.18 | 8.82 | 2430 | 3445 | 3445 | N/A | 3445 | Metallic Grains Observed | Aug 16/06 |
| KC-363 | 3825 | <20>40 | 196 | 185.1 | 10.9 | 3433 | 3446 | 3446 | N/A | 3446 | Metallic Grains Observed | Aug 16/06 |
| KC-364 | 1480 | <20>40 | 70 | 65.77 | 4.23 | 3457 | 3447 | 3447 | N/A | | | Aug 16/06 |
| KC-365 | 2950 | <20>40 | 62 | 61.33 | 0.67 | 3456 | 3448 | 3448 | N/A | | | Aug 16/06 |
| KC-366 | 3235 | <20>40 | 132 | 129.04 | 2.96 | 3437 | 3449 | 3449 | N/A | | | Aug 16/06 |
| KC-367 | 5525 | <20>40 | 300 | 287.05 | 12.95 | 3458 | 3450 | 3450 | N/A | 3450 | Metallic Grains Observed | Aug 17/06 |
| KC-368 | 5340 | <20>40 | 300 | 293.09 | 6.91 | 3459 | 3451 | 3451 | N/A | 3451 | Metallic Grains Observed | Aug 17/06 |
| KC-369 | 5720 | <20>40 | 300 | 285.15 | 14.85 | 3460 | 3452 | 3452 | N/A | 3452 | Metallic Grains Observed | Aug 17/06 |
| KC-370 | 6100 | <20>40 | 300 | 289.13 | 10.87 | 3461 | 3453 | 3453 | N/A | 3453 | Metallic Grains Observed | Aug 17/06 |
| KC-371 | 5860 | <20>40 | 266 | 255.06 | 10.94 | 3462 | 3454 | 3454 | N/A | 3454 | Metallic Grains Observed | Aug 17/06 |
| KC-372 | 4915 | <20>40 | 300 | 287.17 | 12.83 | 3463 | 3455 | 3455 | N/A | 3455 | Metallic Grains Observed | Aug 17/06 |

True North Mineral Laboratories Inc.

Appendix II

Where observed concentrates and picked grains from this program were deemed not worthy of further SEM and Microprobe analysis the microscope observations attached, are included in the current report as well as photographs found in Appendix III.

| Abbreviations | Meaning | |
|---------------|-------------------|--|
| CHR | -Chromite | |
| CLR/WHT | -Clear/White | |
| CPX | -Clinopyroxene | |
| ECL | -Eclogitic garnet | |
| GAR | - Garnet | |
| ILM | -Ilmenite | |
| OLI | - Olivine | |
| OPX | - Orthopyroxene | |

True North Mineral Laboratories Inc. Appendix II Project: Bristol Property Client: Big Red Diarnond

Summary of Heavy Mineral Observation

| Sample No. | Fraction | Vial # | GAR | ECL | СРХ | ILM | CHR | OPX | OLI | CLR/WHT | Total Number | Remarks | Observer | Date |
|------------|----------|--------|-----|-----|-----|-----|-----|-----|------------|---------|-----------------|---------|----------|------|
| KC-356 | | | | | | | | | | | | | | |
| KC-357 | | | | | | | | | | | | | | |
| KC-358 | | | | | | | | | | | | | | |
| KC-359 | | | | A | | | ^ | | | | | | | |
| KC-360 | | | | | 10 | | AD | DII | <u>C</u> 2 | able | Ĵ, | | | |
| KC-361 | | | | | | | -1- | | | | | | | |
| KC-362 | | | | | | | | | | | | | | |
| KC-363 | | | | | | | | | | | | | | |
| KC-364 | | | | | | | | | | | | | | |
| KC-365 | | | | | | | | | | | | | | |
| KC-366 | | | | | | | | | | | | | | |
| KC-367 | | | | | | | | | | | | | | |
| KC-368 | | | | | | | | | | | | | | |
| KC-369 | | | | | | | | | | | | | | |
| KC-370 | | | | | | | | | | | | | | |
| KC-371 | | | | | | | | | | | | | | |
| KC-372 | | | | | | | | | | | | | | |

Appendix III - P1 of P6

KC-356

KC- 357

First Pass



Vial #2412

First Pass



Vial #2418

Final Picks

N/A Sent for Gold Assay

Final Picks

N/A Sent for Gold Assay



Vial #2415

KC- 358

Final Picks

N/A Sent for Gold Assay

Appendix III - P2 of P6

KC- 359

Final Picks



Vial #2424

KC- 360

Final Picks



Vial #2421

N/A Sent for Gold Assay

N/A Sent for Gold Assay

KC- 361

Final Picks

N/A Sent for Gold Assay

First Pass



Vial #2427

0

Appendix III - P3 of P6

KC- 362

First Pass

Final Picks



Vial #2430

N/A Sent for Gold Assay

N/A Sent for Gold Assay

KC- 363

Final Picks



Vial #3433

a site a

Final Picks



Vial #3457

N/A Sent for Gold Assay

KC- 364

Appendix III - P4 of P6

KC- 365

Final Picks



Vial #3456

KC- 366

Final Picks

N/A Sent for Gold Assay



Vial #3437

First Pass

KC-367

Final Picks

N/A Sent for Gold Assay

N/A Sent for Gold Assay





Vial #3458

Appendix III - P5 of P6

KC- 368

Final Picks

First Pass



Vial #3459

N/A Sent for Gold Assay

KC- 369

First Pass



Vial #3460

KC- 370

Final Picks

N/A Sent for Gold Assay





Vial #3461



Final Picks

N/A Sent for Gold Assay

Appendix III - P6 of P6

KC- 371

First Pass

Final Picks



Vial #3462

N/A Sent for Gold Assay

KC- 372

First Pass



Vial #3463

Final Picks

N/A Sent for Gold Assay

Appendix IV

Material Handling Prior to Analysis - Methods and Procedures

1. Recording Sample Information

The sample is weighed, information is taken from a field book, sample log and hand written weight logs and entered into appropriate computer spreadsheet(s). Hand written location coordinates are normally cross checked against stored GPS waypoints if available. Often, GPS waypoints are downloaded into a computer and archived at this time as further backup. An effort for completeness is made to properly document the following information prior to the start of sample processing as it is critical sample information:

- Sample location in NAD83, UTM coordinates including zone number.
- Sample logs type, depth (if auger), material description, observations.
- Sample weight full sample weight as it arrived from the field.



Weighing Field Sample

2. Sieving, Sorting, Pre-wash

The sieves are thoroughly cleaned and inspected to eliminate any possibility of contamination from previous samples. The sample is washed through a stack of sieves. This process provides a preliminary wash for the mineral grains and sorts them by size. Selection of appropriate sieve mesh sizes can vary according to the type of material being sorted. Typical sieve sizes used are (Tyler mesh) #12, #20, #40 and #70.

Stated as metric equivalents:

| #12 = 1.7mm |
|--------------|
| #20 = 0.85mm |
| #40 = 0.43mm |
| #70 = 0.21mm |

Sieve mesh sizes used for any particular sample can be found in the attached appencies that provide sample weights and mineral grain observations. Normally a lower size limit is determined and accepted beforehand. Sample material smaller than the lowest mesh size is normally washed away. In some cases all of the fine material is kept for possible microscope study, particularly in the case of an expensive sample.

3. Washing

Each resulting size fraction is washed thoroughly with clean water and dish soap as it is removed from the sieves. Any organic material remaining with each fraction is floated off and washed away through repeated washing and rinsing. Washing is complete when the mineral grains are free of any organics, soap and fine silt.

4. Drying

The resulting, washed fractions are then dried. An oven can be used to speed drying time. Once dry each of the size fractions is bagged in a plastic zip-loc bag and weighed. The resulting weight is recorded in both hand written log form and on computer spreadsheet. Clear labels must accompany each fraction through all remaining procedures.





Drying sample fractions

Fractions bagged and labelled Fractions weighed 5. Heavy Liquid Separation

The resulting size fractions are looked at to determine which fraction(s) are suitable for heavy liquid separation. Larger size fractions may not contain enough mineral grains to make heavy liquid separation worthwhile. Program budget may limit the number of heavy liquid separations per sample or sample program. Smaller size fractions can provide the greatest number of heavy grains for observation in the resulting heavy mineral concentrate. However, fine grains can be more difficult to handle during microscope work. Each sample will have one ore more size fractions that are better suited for the process than the others.

The selected size fraction is run through a heavy liquid process where all grains having a density greater then 2.85 g/ml (sinks) are separated from the lighter fraction material (floats). All kimberlite indicator minerals will sink, as will many other minerals of economic interest, such as gold.

Both the sinks and floats are rinsed thoroughly in distilled water. The distilled water is saved for recycling as most of the expensive heavy liquid can be recaptured later. Both portions are then dried. An oven can be used to speed drying time. The floats are normally put in storage as the grains may warrant further study should the heavy mineral portion yield positive results. Abrasion due to grain transport for example, can help to determine transport distance. The sinks, or heavy mineral concentrate moves on to the next stage.



Separatory funnel

Typical yield of Heavy Minerals Floats (less than 2.85 g/ml) stored 6. Observation and Picking

The microscope observation table and surrounding area must be thoroughly cleaned to ensure there are no grains around from past samples. A clean paper table cover is placed under the microscope to cover the surrounding table top. All grain handling is done on the table cover.

Small portions of heavy mineral concentrate are placed in plastic dishes in preparation for microscope observation. A small hand magnet is used to pull out and separate any magnetic grains from each dish. The magnetic grains are carefully placed into a separate dish for observation. This portion will be stored separately in a numbered plastic vial.

The non-magnetic portion of the heavy mineral concentrate is observed using binocular microscope and a good light source. When visually identified, kimberlite indicator minerals or any mineral grains of interest are manually picked using tweezers and placed in a numbered plastic vial. A computer log is maintained during observation where notes are linked to sample number, fraction, vial number and other basic information. When observation of each dish is complete, any remaining, unpicked grains are placed into a separate, numbered plastic vial using a small funnel. Observation notes are backed up regularly onto CD and archived. All vials are weighed on a fine scale and documented by hand written log and computer spreadsheet before storage.

Important grains or vials of picked grains that are selected for further analysis, such as SEM and microprobe are photographed through the microscope using a digital camera. Total number of grains to be sent for analysis is verified by counting them on the digital image using suitable graphics software. Normally all grains sent for SEM or microprobe analysis are returned, mounted on a slide or plug. The digital photograph, observation notes and grain count can be used at that time for basic verification and identification of analyzed grains. Copies of the digital photographs can be shipped to the analytical lab along with the selected vials of grains. This helps the receiver to confirm all grains were received and discrepancies can be noted by both parties.

Observation work station



Typical full concentrate



Grains in vials



Appendix V

Field Logs for Bristol Samples:

| KC-356 |
|--------|
| KC-357 |
| KC-358 |
| KC-359 |
| KC-360 |
| KC-361 |
| KC-362 |
| KC-363 |
| KC-364 |
| KC-365 |
| KC-366 |
| KC-367 |
| KC-368 |
| KC-369 |
| KC-370 |
| KC-371 |
| KC-372 |

August 2006

| Sample # KC - 356 | Sample # KC - 357 |
|--|--|
| name: Kenn Con date: Aug 12/06 | name: <u>Keving Cooc</u> date: <u>Aug 12/06</u> |
| project: BRISTOL - 2006 | project: BRISTOL - 2006 |
| Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 365, 679</u> Easting: <u>455, 977</u> | Location: (Nad 83, UTM, Zone 17) Northing: <u>5,365,678</u> Easting: <u>456,205</u> |
| Location: (Local grid reference) | |
| N/A | <u> </u> |
| Sampling method: Have AUGER | Sampling method: Hand Auge |
| Depth: <u>3</u> | Depth:3 ′ |
| Comments: - DARK BROWN, SANDY MATERIAL WITH ANGULAR CLASTS - Some WELL ROUNDED CLASTS PRESENT | Comments: - DARK BROWN, SANDY MATELIAL WITH ANGULAR CLASTS PRESENT. |
| ample # KC- 358 | Sample #Kc • 359 |
| name: Keun Cool date: Aug 12/06 | name: <u>Kevin Coon</u> date: <u>Aug 13/06</u> |
| project: BRISTOL - ZOOG | project: BRISTOL - ZOOL |
| Location: (Nad 83, UTM, Zone 17) Northing: <u>5,365,686</u> Easting: <u>456,4-11</u> Location: (Local grid reference) | Location: (Nad 83, UTM, Zone 17) Northing: <u>5,365,704</u> Easting: <u>456,65</u> Location: (Local grid reference) |
| N/A | |
| Sampling method: Have Auger | Sampling method: Hand Auger |
| Depth:3/ | Depth:3 |
| Comments: DARK BROWN, SANDY | Comments: DARK BROWN, SANDY |
| MATERAL WITH ANGULAR CLASTS | MATERIAL WITH ANGULAR CLASTS |
| RESENT | PRESENT. |

| Sample # KC- 360 | Sample # <u>KC- 361</u> |
|--|---|
| name: KEVIN COOL date: AUG 13/06 | name: Kevin CooL date: Aug 13/06 |
| project: BRISTOL- 2006 | project: BRISTOL - 2006 |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) |
| Northing: 5,365,674 | Northing: <u>5,364,585</u> |
| Easting: 456, 957 | Easting: 456, 444 |
| Location: (Local grid reference) | Location: (Local grid reference) |
| N/A | ~/A |
| Sampling method: Hare Auger | Sampling method: Hand Auger |
| Depth: <u>3</u> ′ | Depth: <u>3'</u> |
| Comments: | Comments: |
| BROWN, SANDY MATCHIAL WITH | BROWN, SANOY MATELIAL WITH |
| ANGULAR CLASTS PRESENT. | ANGULAR CLASTS PRESENT |
| | |
| ample # KC·362 | Sample # <u>KC-363</u> |
| name: <u>Kevin Cool</u> date: <u>Aug 13/06</u> | name: <u>Kevin Cool</u> date: <u>AuG 14/06</u> |
| project: BRISTOL - 2006 | project: BRISTOL - ZOO6 |
| Leasting (Ned 02 LITM Zene 17) | |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) |
| Northing: 5,364,750 | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> |
| Location: (Nad 83, UTM, Zone 17) Northing: <u>5,364,750</u> Easting: <u>456,331</u> | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> |
| Location: (Nad 83, UTM, Zone 17) Northing: <u>5,364,750</u> Easting: <u>456,331</u> Location: (Local grid reference) | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) |
| Location: (Nad 83, UTM, Zone 17) Northing: <u>5,364,750</u> Easting: <u>456,331</u> Location: (Local grid reference) <u>N/A</u> | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) \bowtie/A |
| Location: (Nad 83, UTM, Zone 17) Northing: 5, 364, 750 Easting: 456, 331 Location: (Local grid reference) N/A Sampling method: $H_{A \sim o} A \cup G \in R$ | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) <u>N/A</u> Sampling method: <u>Hamp Auger</u> |
| Location: (Nad 83, UTM, Zone 17)Northing: $5, 364, 750$ Easting: $456, 331$ Location: (Local grid reference) N/A Sampling method: $H_{A \sim 0} A_{\cup G \in R}$ Depth: $3'$ | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) <u>N/A</u> Sampling method: <u>H_{AND}</u> <u>Auguar</u> Depth: <u>$3'$</u> |
| Location: (Nad 83, UTM, Zone 17) Northing: 5, 364, 750 Easting: 456, 331 Location: (Local grid reference) N/A Sampling method: $H_{A \sim 0} A \cup G \in R$ Depth: 3' Comments: | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) <u>N/A</u> Sampling method: <u>H_{AMD} Auguar</u> Depth: <u>$3'$</u> Comments: |
| Location: (Nad 83, UTM, Zone 17) Northing: 5, 364, 750 Easting: 456, 331 Location: (Local grid reference) N/A Sampling method: $H_{A \sim 0} A_{\cup G \in R}$ Depth: 3' Comments: BROWN, SANDY MATERIAL WITH | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) <u>N/A</u> Sampling method: <u>Hamp Auger</u> Depth: <u>3'</u> Comments: BROWN, SAMPY MATCHIAL |
| Location: (Nad 83, UTM, Zone 17) Northing: 5, 364, 750 Easting: 456, 331 Location: (Local grid reference) N/A Sampling method: HAND AUGER Depth: 3' Comments: BROWN, SANDY MATERIAL WITH MGULAR CLASTS PRESENT. | Location: (Nad 83, UTM, Zone 17) Northing: <u>5, 364, 95,9</u> Easting: <u>456, 243</u> Location: (Local grid reference) <u>N/A</u> Sampling method: <u>Hamp Auger</u> Depth: <u>3'</u> Comments: BROWN, SAMOY MATERIAL WITH ANGULAR CLASTS PRESENT. |

| Sample # KC- 364 | Sample # <u>KC-365</u> |
|---|---|
| name: Kevin Cook date: Aug 14/06 | name: KEVIN COOL date: AUG 14/06 |
| project: BRISTOL - 2006 | project: BRISTOL - 2006 |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) |
| Northing: <u>5, 365, 225</u> | Northing: 5,366,695 |
| Easting: 456,23 | Easting: 455, 988 |
| Location: (Local grid reference) | Location: (Local grid reference) |
| N/A | N/A |
| Sampling method: HAND AUGEC | Sampling method: HAND AUGER |
| Depth:3' | Depth: <u>6.5</u> |
| Comments: | Comments: |
| BROWN, SANOT MATERIAL WITH | -LIGHT, SANOY MATCHIAL |
| ANGULAR CLASTS PRESENT. | - FINE MATERIAL |
| | - ENDED HOLE WHEN ADEQUATE VOWME OF APPROX. #40 MESH GRAINS RECOVERED. |
| ample # K(- 366 | Sample # KC-367 |
| name: <u>Kevi~ Coo</u> L date: <u>Aug 15/06</u> | name: KEVIN COOL date: AUG: 15/06 |
| project: BRISTOL - 2006 | project: BRISTOL - ZOO6 |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) |
| Northing: 5, 366, 631 | Northing: <u>5,366,638</u> |
| Easting: 456, 289 | Easting: 456,847 |
| Location: (Local grid reference) | Location: (Local grid reference) |
| N/A | N/A |
| Sampling method: HANE AUGER | Sampling method: Hand Auber |
| Depth:6.01 | Depth:3 ' |
| Comments: | Comments: |
| -LIGHT, SANDY MATERIAL | - TAN, SANOY/SILTY MATTEIAL |
| FINE MATERIAL | |
| OF APPROX. #40 MESH GRAINS RECNERED | |

| Sample # <u>Kc-368</u> | Sample # <u>KC- 369</u> | | | |
|---|--|--|--|--|
| name: Kevin Coor date: Aug 15/06 | name: KEVIN COOL date: AUG 16/66 | | | |
| project: BRISTOL - ZOOG | project: BRISTOL - 2006 | | | |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) | | | |
| Northing: <u>5,366,949</u> | Northing: <u>5,367,211</u> | | | |
| Easting: 456, 866 | Easting: 457, 123 | | | |
| Location: (Local grid reference) | Location: (Local grid reference) | | | |
| N/A | N/A | | | |
| Sampling method: HAND AUGER | method: HAND AUGER Sampling method: HAND AUGER | | | |
| Depth:5' | Depth: <u>5'</u> | | | |
| Comments: | Comments: | | | |
| TAN, SANDY/SILTY MATCHIAL | TAN, SANOT SILTY MATERIAL | | | |
| $\square ample \# KC. 370$ | Sample # KC-371 | | | |
| name: Vous Coast date: Aug. 16/04 | | | | |
| Hame. <u>Revin Coop</u> date. <u>Phys</u> | Hame. KAVIA COUL Udic. AUG 16/06 | | | |
| project: BRISTOL - 2006 | project: BRISTOL - 2006 | | | |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) | | | |
| Northing: 5,366,909 | Northing: 5,366,689 | | | |
| Easting: 457, 133 | Easting: 457,164 | | | |
| Location: (Local grid reference) | Location: (Local grid reference) | | | |
| ~/A | N/A | | | |
| Sampling method: HAND AUGER | Sampling method: Harp Auger | | | |
| Depth: $3 \cdot 5'$ | Depth:3' | | | |
| Comments: | Comments: | | | |
| TAN, SANDY/SILTY MATERIAL | TAN, SANOY SILTY MATERIAL | | | |
| | | | | |
| | | | | |
| | | | | |

| Sample # KC - 372 | Sample # | | |
|----------------------------------|----------------------------------|--|--|
| name: KEVIN COOL date: AUG 16/06 | name: date: | | |
| project: BRISTOL - ZOO 6 | project: | | |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) | | |
| Northing: <u>5,367,221</u> | Northing: | | |
| Easting: <u>457,447</u> | Easting: | | |
| Location: (Local grid reference) | Location: (Local grid reference) | | |
| N/A | | | |
| Sampling method: HAND AUGER | Sampling method: | | |
| Depth: <u>3</u> | Depth: | | |
| Comments: | Comments: | | |
| TAN, SANDY/SILTY MATERIAL | | | |
| | | | |
| ample # | Sample # | | |
| name: date: | name: date: | | |
| project: | project: | | |
| Location: (Nad 83, UTM, Zone 17) | Location: (Nad 83, UTM, Zone 17) | | |
| Northing: | Northing: | | |
| Easting: | Easting: | | |
| Location: (Local grid reference) | Location: (Local grid reference) | | |
| Sampling method: | Sampling mathadu | | |
| Death: | Deaths | | |
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| Comments: | Comments: | | |
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| | | Apr | pendix VI | |
|---------------|--------------------|---------------------------|---|--------------------|
| | Sample loc | ations - NAD83, UTM, Zone | 17 Coordinates and Local Grid Coordinates | |
| | | | | |
| 0 | | | UTM NAD83, Zone 17 | UTM NAD83, Zone 17 |
| Sample Number | Local Grid Easting | Local Grid Northing | Northing | Easting |
| KC-355 | N/A | N/A | 5365679 | 455977 |
| KC-35/ | N/A | N/A | 5365678 | 456205 |
| KC-358 | N/A | N/A | 5365686 | 456/11 |
| KC-359 | N/A | N/A | 5365704 | 456651 |
| KC-360 | N/A | N/A | 5365674 | 450051 |
| KC-361 | N/A | N/A | 5364585 | 450957 |
| KC-362 | N/A | N/A | 5364750 | 450444 |
| KC-363 | N/A | N/A | 5364959 | 450551 |
| KC-364 | N/A | N/A | 5365225 | 450245 |
| KC-365 | N/A | N/A | 5366605 | 450231 |
| KC-366 | N/A | N/A | 5366621 | 400988 |
| KC-367 | N/A | N/A | 5366629 | 456289 |
| KC-368 | N/A | N/A | 5300030 | 456847 |
| KC-369 | N/A | N/A | 5300949 | 456866 |
| KC-370 | N/A | N/A | 5367211 | 457123 |
| KC-371 | Ν/Δ | | 5366909 | 457133 |
| KC-372 | | | 5366689 | 457164 |
| 10-072 | | N/A | 5367221 | 457447 |
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Final Report Activation Laboratories

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APPENDIX VII

Quality Analysis ...



Innovative Technologies

 Date Submitted:
 25/08/2006 12:39:43 PM

 Invoice No.:
 A06-3077

 Invoice Date:
 30/08/2006

 Your Reference:

True North Mineral Laboratories 475 Railway Street Timmins Ontario P4N 2P5 Canada

ATTN: Kevin Cool

CERTIFICATE OF ANALYSIS

17 Crushed Rock samples were submitted for analysis.

The following analytical package was requested: Code 1A2 Au - Fire Assay AA

REPORT A06-3077

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

NOTE: "Values for Au are not recommended due to very small samples, (especially samples: 3440 to 3449 and 3451).

CERTIFIED BY :

Eric Hoffman, Ph.D. President/General Manager

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL ancaster@actlabsint.com ACTLABS GROUP WEBSITE http://www.actlabsint.com



Ministry of Northern Development and Mines Government of Ontario 933 Ramsey Lake Rd. Sudbury (Ontario) P3E 685 Canada

Ref: Big Red Diamond Corporation (MNDM Client 304011) / Filing of assessment work

To Whom It May Concern:

We hereby authorize Mr. Kevin Cool of Timmins (Ontarlo), to file all necessary documents, attachments and invoices related to assessment work needed for the renewal of mining claims owned by Big Red Diamond Corporation.

If necessary, you can contact the undersigned at (514) 982-6044 ext. 223

rançois Alexanders

François C. Desrosiers President Big Red Diamond Corporation

AUG-30 QUUE(WED) US:28 ANTORO

(fax)514 982 9559

500/500 A

Ministry of Northern Development and Mines Government of Ontario Kirkland Lake Office 10 Government Rd. Kirkland Lake (Ontario) P2N 1A2 Canada

Ref: John Der Weduwen (MNDM Client Number 125420) / Filing of assessment work

To Whom It May Concern:

We hereby authorize Mr. Kevin Cool of Timmins (Ontario), to file all necessary documents, attachments and invoices related to assessment work needed for the renewal of mining claims owned by myself in the Bristol and Lakeshore Townships.

If necessary, you can contact the undersigned at (705) 235-9669 or (705) 363-7302

John Der Weduwen P.O. Box 1353, 191 Main Street South Porcupine (Ontario) PON 1H0 Canada

Aug 30/06

Author: Kevin Cool

Report Completion Date: August 29, 2006

Qualifications and Experience

1982 Graduated from Timmins High and Vocational School - Timmins, Ontario

- 1983 Studied photography at Humber College, Toronto
- 1984 to 1988 Worked for family owned transportation business in Moosonee, Ontario
- 1988 to 1992 Studied Survey at Northern College, South Porcupine, Ontario
- 1992 Graduated with Survey Engineering Technician diploma
- 1992 to 2001 Owned and operated General Surveys and Exploration based out of Timmins, Ontario This small company provided contract survey services as well as computer drafting and exploration/mining information and data handling. Software includes Acad computer drafting, Gemcom, Surpac with specialization in using computers for the mining and exploration industry. Survey work included volumetric surveys of land areas for use as tailing basins where 3D models were utilized. Diamond drillhole surveys, underground engineering surveys and mechanical design construction surveys were common contracts for numerous mining and exploration companies including: DeBeer's Canada Exploration (then Monopros), SouthernEra Resources Dome Exploration, Placer Dome Detour Lake and Dome Mines, Exall Glimmer Mine, Claude Rundle Gold Mine, TVX Mines projects in Northern Greece, Moneta Porcupine Mines, Black Pearl Minerals, St. Andrews Goldfields, Battle Mountain Gold, Pentland Firth, Kinross Gold, Band-Ore Resources, McKinnon Prospecting and many other companies and individual prospectors.
- 2000 to 2005 Began collaborative work with Brian K. Polk of Polk Geological Services in Timmins Ontario that lead to the formation of a private exploration company called Big Red Diamond Company. This small company began to stake property in the Attawapiskat region of Ontario as well as the Coral Rapids area. Eventually the survey business was put aside to focus full time on diamond exploration.

Big Red Diamond Company entered into a Joint Venture with a private company owned 100% by Dr. Charles Fipke of Kelowna B.C. on a large group of properties near DeBeer's Victor Pipe in the Attawapiskat region. Dr Fipke is the renowned geologist who found Canada's first diamond mine, the Ekati Mine in the Northwest Territories. Since 2001 the author has been exposed to all aspects of diamond exploration including staking and field work, camp construction and field work management and administration, airborne and ground based magnetometer surveys, planning and management of large scale geophysical survey programs, planning, management and interpretation of large scale regional, as well as Property scale sampling programs. Exposure to the entire sampling process was gained including training and field work experience under the direct supervision of Dr. Fipke. Introduction to kimberlite mineral identification from Dr. Fipke was expanded through personal research and study by the author which continues to current and has resulted in the development of a privately owned mineral processing laboratory in Timmins, Ontario. Advanced analysis of materials or minerals processed in the lab, beyond the stage of Heavy Mineral Separation and the observation of mineral concentrates using binocular microscope are handled by other analytical laboratories, such as CF Minerals, in Kelowna B.C.

2002 Big Red Diamond Company became a publicly traded corporation and was renamed Big Red Diamond Corporation The author is one of the co-founders of the publicly traded corporation, which trades on the TSX Venture Exchange under the symbol DIA.

Currently the author continues to actively stake mining claims and process samples for several active companies, both private and public.

2005 to 2006 Established True North Mineral Laboratories at 475 Railway Street, Timmins. Became Actlabs-Timmins in Early 2006. Laboratory processes, equipment setup and procedures are now supervised by Actlabs, based in Ancaster Ontario. The management and employees of True North Minerals receive ongoing support and training directly from Actlabs and the laboratory processes fall under Actlabs certification providing that final analysis is carried out by the main facility in Ancaster. In this capacity, True North Mineral Laboratories acts as a preparation lab for Actlabs and is qualified to handle material preparation prior to direct analysis by Actlabs. The author of this report is the sole director and officer of the corporation (True North Mineral Laboratories - Actlabs Timmins)