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Mineralogical Services

**Microdiamond Extraction, Selection, and
Description – Torngat Project Area**

VOLUME 1

**submitted by
Twin Mining Corp.**

Project Managed by: Bruce Craig Jago, Ph.D.

Submission Date: May 18, 2001

**Project No.: 8901-221/LIMS#AUG0011, SEP0004, SEP0005, SEP0011, SEP0012,
SEP0013, SEP0014.R00**

Note

This report refers to the samples as received. The practice of this Company in issuing reports of this nature is to require the recipient not to publish the report or any part thereof without the written consent of Lakefield Research Limited.

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Summary

Microdiamond Extraction, Selection and Description

Microdiamond extraction, selection and description was completed on 87 samples of suspected kimberlite (Table 1) that were excavated from Twin Mining's Torngat dyke swarm in northern Quebec. Samples were processed using our standard caustic fusion technique with collection of caustic residues on a 150-mesh screen. A generalised flowsheet and explanation of the technique are given in Appendix A. Results are reported as Certificates of Analysis in Appendix B Volumes 1 and 2.

LAKEFIELD RESEARCH LIMITED



Bruce Craig Jago, Ph.D.
Manager - Mineralogical Services
Lakefield Research Limited

May 23, 2001

Technical Support: Rob Gill, Tyrone Kellar, Scott Young and Jeff Voyer

Table 1: Summary table of samples processed for microdiamond content

| LIMS#AUG0011 | LIMS#SEP0004 | LIMS#SEP0005 | LIMS#SEP0011 | LIMS#SEP0012 |
|--------------|--------------|--------------|--------------|--------------|
| Sample # | Sample # | Sample # | Sample # | Sample # |
| 1 DU NORTH | RRR2 | 887627 | 888469 | 887592 |
| 2 DU NORTH | RRR4 | 888466 | 887564 | 887593 |
| | | 888460 | 887567 | 887630 |
| | | 887586 | 887568 | 887631 |
| | | 887570 | 887635 | 887611 |
| | | | 887636 | 887612 |
| | | | 887634 | 887613 |
| | | | 887633 | 887616 |
| | | | 887632 | 887619 |
| | | | 887656 | 887638 |

| LIMS#SEP0013 | LIMS#SEP0014 | LIMS#SEP0015 | LIMS#SEP0016 | LIMS#SEP0017 |
|--------------|--------------|--------------|--------------|--------------|
| Sample # | Sample # | Sample # | Sample # | Sample # |
| 887623 | 887569 | 887591 | 887577 | 887598 |
| 887585 | 887571 | 887655 | 887578 | 888451 |
| 887624 | 887572 | 887654 | 887580 | 888471 |
| 887626 | 887573 | 887576 | 887584 | 887565 |
| 887597 | 887574 | 887625 | 887614 | 888468 |
| 887562 | 887575 | 887628 | 887615 | 887558 |
| 887563 | 887587 | 887629 | 887617 | 887561 |
| 887566 | 887588 | 887651 | 887618 | |
| | 887589 | 887653 | 887621 | |
| | 887590 | 887652 | 887622 | |

Table 1: Summary table of samples processed for microdiamond content - Continued

| LIMS#SEP0018 | LIMS#SEP0019 | LIMS#DEC0001 |
|---------------------|---------------------|---------------------|
| Sample # | Sample # | Sample # |
| 888454 | 888465 | 888401 |
| 887596 | 887594 | 888402 |
| 888459 | 888458 | 888403 |
| 888470 | 887582 | 888404 |
| 888456 | 887583 | 888472 |
| | 888460 | 888473 |
| | 888463 | 888474 |
| | | 888475 |
| | | 888476 |

APPENDIX A

EXPLANATION OF MICRODIAMOND EXTRACTION AND SELECTION PROCEDURE AND FLOWSHEET

DIAMOND EXTRACTION BY CAUSTIC DISSOLUTION

Introduction

Caustic dissolution of exploration samples efficiently produces a concentrate from which diamonds can readily be extracted during microscopic examination. The process uses diamond's property of high resistance to caustic soda (NaOH) and eliminates diamond size reduction and losses that often occur during extraction procedures that rely on crushing and attrition milling.

Procedure

The samples are processed according to the attached flowsheet. Very few minerals survive the harsh attack; therefore weight reductions commonly exceed 99% of the initial sample weight.

As-received samples are divided into equally sized charges of less than 8 kg. Smaller charge sizes are necessary if the sample contains a high proportion of carbonate minerals that are vigorously reactive with NaOH (evaluated by an acid test completed prior to charge preparation). If a high proportion of the sample is composed of fragments larger than 8 cm, simple breakage, crushing or attrition milling may be required, or the length of the dissolution process increased. Client consultation and approval is necessary before any size reduction of the sample is initiated.

After digestion in molten caustic soda, the sample is poured onto a large diameter 150 mesh screen. The + 150 mesh residue is liberated from the NaOH by washing the sample in a series of water and acid leach (HCl) baths. Once all of the NaOH is dissolved and removed, the concentrate is dried and screened on a 6 mesh screen to remove undigested material. The undigested material is examined microscopically by a mineralogist. If the + 6 mesh material is significant or consists of possible diamondiferous rock fragments, further digestion may be required. If the undigested material is of insignificant size or not considered as a possible source of diamonds, the - 6 mesh residue is further processed by a two (possibly three if the residue is large) stage magnetic separation procedure utilising a permanent magnet and a Frantz Barrier Magnetic Separator.

The magnetically characterised residue is then submitted for microscopic examination and diamond selection. (In addition to diamonds, the residue may contain partially undigested indicator minerals, colourless to opaque spinel, garnet, ilmenite, graphite, moissanite, zircon and kyanite.) Each of the magnetic fractions is examined at a magnification of 40x using a binocular microscope. Grains of questionable mineralogy are examined using a scanning electron microscope equipped with an energy dispersive spectral (SEM-EDS) analyser. Although each magnetically characterised fraction is examined, particular emphasis is given to the diamagnetic portion.

The X, Y and Z dimensions of selected microdiamonds are measured in millimetres. Macrodiamonds are weighed individually while microdiamonds are weighed in groups of 20 or 30 and the milligram weight, in each case, converted to carats. The colour, clarity and

morphology of each diamond are determined and all observations reported in a Certificate of Analysis.

Quality Control

Routine quality control tests are utilised to evaluate the efficiency of the caustic dissolution processing technique by running blank samples spiked with "Congo Rounds". The chance of diamond or indicator mineral contamination is evaluated by running caustic soda blanks between client's samples and examining the residue for microdiamonds and indicator minerals. Recovery of the diamond spikes typically ranges from 97 to 100%. 1998 statistics showed that, on average, only a single indicator mineral grain was carried over into the caustic soda blanks run between different client's samples.

Each residue is picked twice by separate diamond pickers. Questionable grains are examined by SEM-EDS for verification.

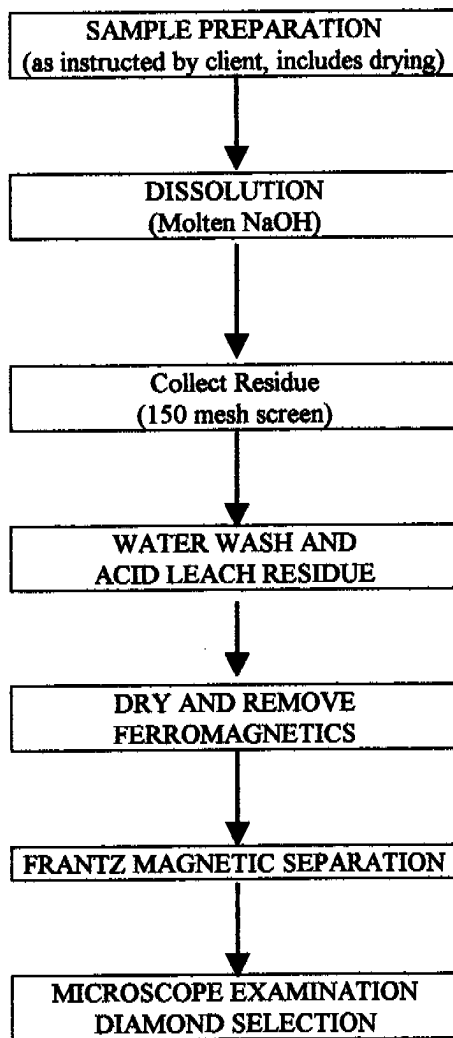
Every effort is made at each stage of sample handling during caustic dissolution, residue preparation and diamond picking to eliminate the possibility of contamination. These steps include:

- A rigorous sample tracking procedure.
- Dedicated screens and equipment for each sample during sample processing.
- Replacement of screens between each sample after pouring caustic soda.
- Thorough washing and scrubbing of all sample containers.
- Thorough cleaning of equipment used to prepare caustic residues between each processed sample.
- Sandblasting of each kiln pot once a month to remove any scale build-up that might entrap microdiamonds or indicator minerals.

Customized flowsheets for sample processing utilising caustic dissolution and other sample preparation techniques (magnetic, gravity, flotation, acid leaching, etc.) can be developed, in consultation with the client, to meet specialised requirements.

Lakefield Research Limited is not responsible for the determination of the origin, quality or valuation of any diamonds recovered unless otherwise instructed by the client.

Caustic Fusion Processing for Microdiamond Recovery



APPENDIX B

CERTIFICATE OF ANALYSIS RESULTS OF MICRODIAMOND EXTRACTION, SELECTION AND DESCRIPTION

VOLUME 1







Twin Mining Corporation
 Attn : Hermann Derbuch, P.Eng.


Suite 1250, 155 University Ave.
 Toronto, Ontario - M5H 3B7
 Canada
 Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 18 August 2000
 LR. Ref. : MI0011-AUG00
 Project : 8901 221

CERTIFICATE OF ANALYSIS

| | | | | | |
|---|--|---|---|---|--|
|  |  |  |  |  |  |
| 1: DU NORTH | 22.51 | 4 | 13 | 0.004 | 0.000 |
| 2: DD NORTH | 23.44 | 4 | 0 | 0.000 | 0.000 |


 Bruce Jago
 Manager, Mineralogical Services

Lakefield Research



Lakefield Research Limited
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Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: February 12, 2001

Client: Twin Mining Corporation

LIMS No. Aug0011.R00

Sample No. DU-NORTH

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|--------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Rock fragments, oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Rock fragments, oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 22.51 kg
Number of Syndites: 0

Total Weight (carats)*: 0.004
Number of Diamonds: 13

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.

Selection and Description
Maria Mezei
Diamond Selection Specialist

Quality Control
Tracy Gill
Mineralogy Technician

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**

Date: February 12, 2001
 LIMS No. **Aug0011.R00**
 Sample No. **DU-NORTH**

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 1 | 0.324 | 0.002 |
| | -300 / +212 µm | 3 | 0.156 | 0.001 |
| | -212 / +150 µm | 5 | 0.212 | 0.001 |
| | -150 / +100 µm | 4 | 0.106 | 0.001 |
| | TOTAL | 13 | 0.798 | 0.004 |

Sample Weight: 22.51 kg
Number of Syndites: 0

Total Weight (carats)*: 0.004
Number of Diamonds: 13

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

M. Mezei

Selection and Description
 Maria Mezei
 Diamond Selection Specialist

R. B. Gill

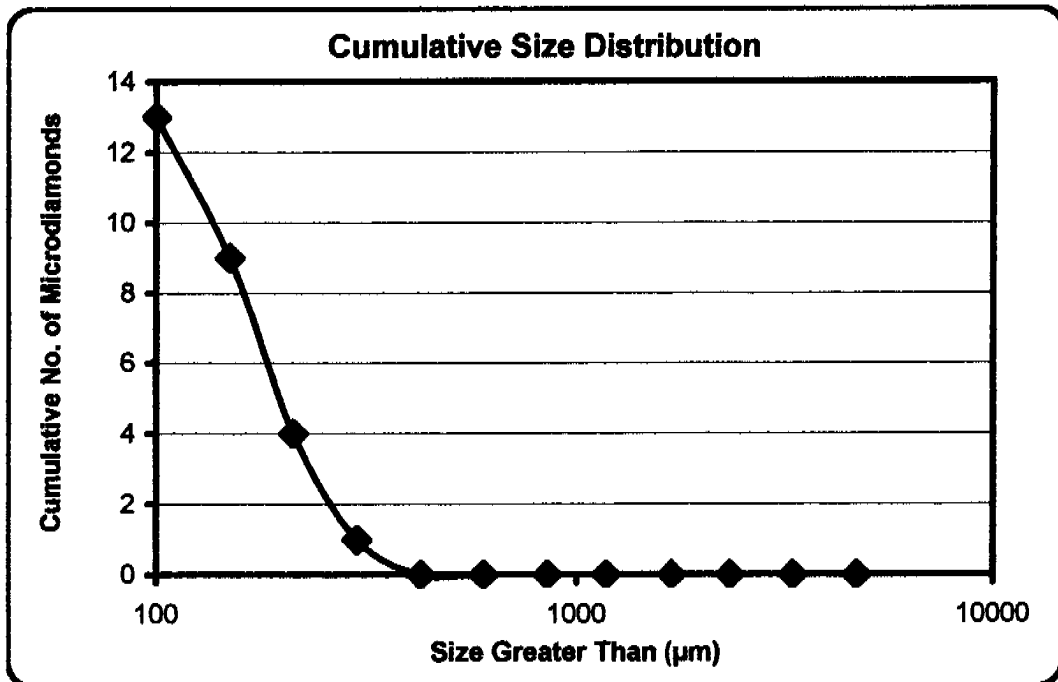
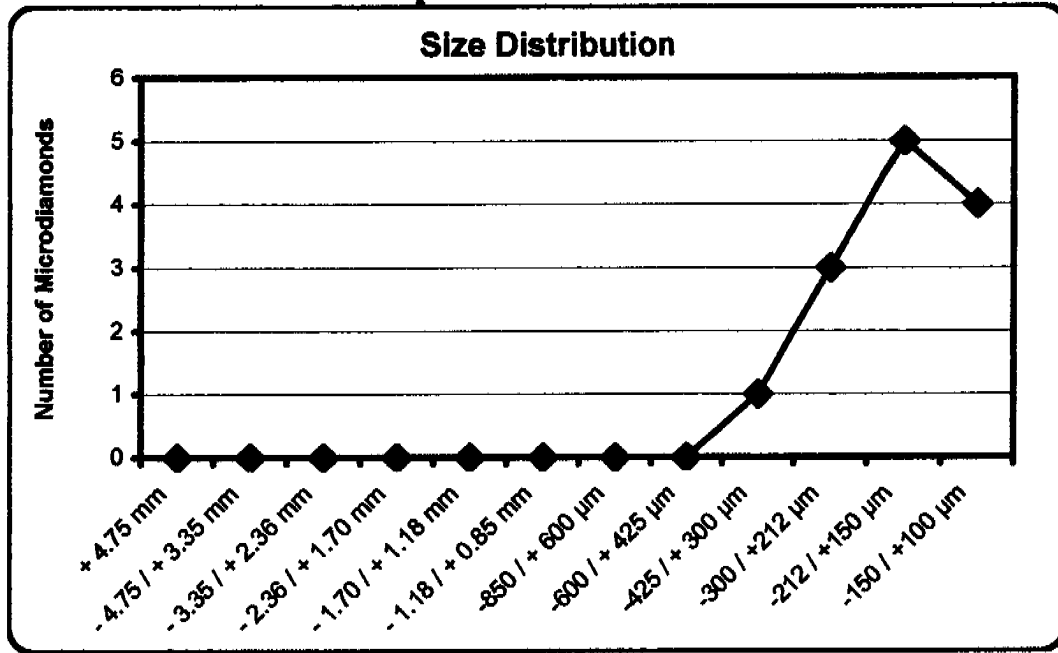
Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

Sample No. DU-NORTH





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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

Date: September 8, 2000

LIMS No. Aug0011.R00

Sample No. DD NORTH

| | Size Fraction | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|--|--------------------|---------------------------|-------------------|---------------------------|
| Each Stone Weighed and Described Separately (see report sheet) | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Weighed in Groups | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 23.44 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Selection and Description

Maria Mezei

Assistant Rare and Precious Gem Mineralogist

Quality Control

Tracy Gill

Mineralogy Technician

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve, +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Diamond Descriptions are shown as per Winspear Resources Limited Terminology,

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

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LakefieldResearch



September 8, 2000

Details of + 500 µm Individual Diamonds

Project: 8901-221

LIMS No. Aug0011.R00

Sample No. DD NORTH

Client: Twin Mining Corporation

Sample Weight (kg): 23.44

| No. | Weight | | Colour | Clarity | Stone Description Morphology |
|------------------------------------|--------|---------|--------------|---------|---------------------------------|
| | mg | Carats | | | |
| + 4.75 mm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| - 4.75 / + 3.35 mm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| - 3.35 / + 2.36 mm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| - 2.36 / + 1.70 mm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| - 1.70 / + 1.18 mm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| - 1.18 / + 0.85 mm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| -850 / + 600 µm fraction | | | | | |
| 0 | | 0.00000 | | | |
| 0 | 0.000 | 0.00000 | Sub-Total | | |
| 0 | | 0.00000 | TOTAL | | |

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 Fax: 705-652-3123

February 12, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. Aug0011.R00

Sample No. DU-NORTH

Client: Twin Mining Corporation

Sample Weight: 22.51 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|---------|-----------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |

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February 12, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. Aug0011.R00
 Sample No. DU-NORTH
 Sample Weight: 22.51 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description |
|---------------------------------|---------------------|------|------|--------|----------|-----------|-------------|----------------------|--|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.40 | 0.27 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 1 | | | | 0.324 | 0.001620 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.34 | 0.19 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | 0.48 | 0.34 | 0.27 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 3 | 0.34 | 0.29 | 0.26 | | 0.000000 | White | Transparent | 95% | Octahedral, graphite inclusions, partially distorted |
| 3 | | | | 0.156 | 0.000780 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.37 | 0.26 | 0.13 | | 0.000000 | White | Transparent | 85% | Octahedral, stepped faces |
| 2 | 0.29 | 0.26 | 0.20 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 3 | 0.37 | 0.29 | 0.15 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages |
| 4 | 0.29 | 0.26 | 0.14 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 5 | 0.40 | 0.20 | 0.19 | | 0.000000 | White | Transparent | 95% | Flat Octahedral |
| 5 | | | | 0.212 | 0.001060 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.20 | 0.14 | 0.11 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages |
| 2 | 0.17 | 0.11 | 0.08 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 3 | 0.17 | 0.14 | 0.09 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 4 | 0.20 | 0.11 | 0.10 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 4 | | | | 0.106 | 0.000530 | Sub-Total | | | |
| 13 | | | | | 0.003990 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Twin Mining Corporation
Attn : Hermann Derbuch, P.Eng.

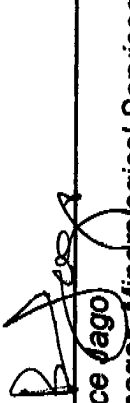
Suite 1250, 155 University Ave.
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Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 06 September 2000
LR. Ref. : MI0004-SEP00
Project : 8901-221

CERTIFICATE OF ANALYSIS

| Sample ID | Aspirate % PP | Aspirate % P | Aspirate % S | Aspirate % Fe |
|-----------|---------------------|--------------------|--------------------|---------------------|
| 1: RRR2 | 17.35 | 3 | 0 | 0.000 |
| 2: RRR4 | 18.71 | 3 | 5 | 0.005 |


Bruce Jago
Manager, Mineralogical Services

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

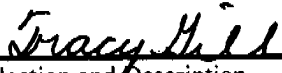
Date: September 14, 2000
LIMS No. SEP0004.R00
Sample No. RRR2


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides, graphite and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and graphite |

Sample Weight: 17.35 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician


Quality Control
Maria Mezei
Assistant Rare and Precious Gem Mineralogist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation


Date: September 14, 2000
 LIMS No. SEP0004.R00
 Sample No. RRR2

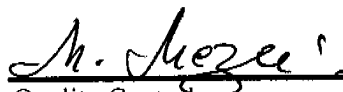
| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 17.35 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician


 Quality Control
 Maria Mezei
 Assistant Rare and Precious Gem Mineralogist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

LAKEFIELD RESEARCH LIMITED

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 Fax: 705-652-3123

September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0004.R00

Sample No. RRR2

Client: Twin Mining Corporation

Sample Weight: 17.35 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|---------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0004.R00

Sample No. RRR2

Client: Twin Mining Corporation

Sample Weight: 17.35 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|--|---------------------|---|---|--------|---------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -425 / + 300 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -300 / + 212 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -212 / + 150 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -150 / + 100 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| 0 | | | | | 0.00000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 13, 2000

Client: Twin Mining Corporation

LIMS No. SEP0004.R00

Sample No. RRR4

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |


Sample Weight: 18.71 kg
Number of Syndites: 0

Total Weight (carats)*: 0.005
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

Maria Mezei
Assistant Rare and Precious Gem Mineralogist


Quality Control

Tracy Gill
Mineralogy Technician

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 13, 2000

Client: Twin Mining Corporation

LIMS No. SEP0004.R00


Sample No. RRR4

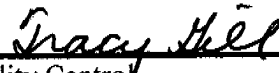
| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 1 | 0.641 | 0.003 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 2 | 0.307 | 0.002 |
| | -150 / +100 µm | 2 | 0.032 | 0.000 |
| | TOTAL | 5 | 0.980 | 0.005 |

Sample Weight: 18.71 kg
Number of Syndites: 0

Total Weight (carats)*: 0.005
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Maria Mezei
 Assistant Rare and Precious Gem Mineralogist

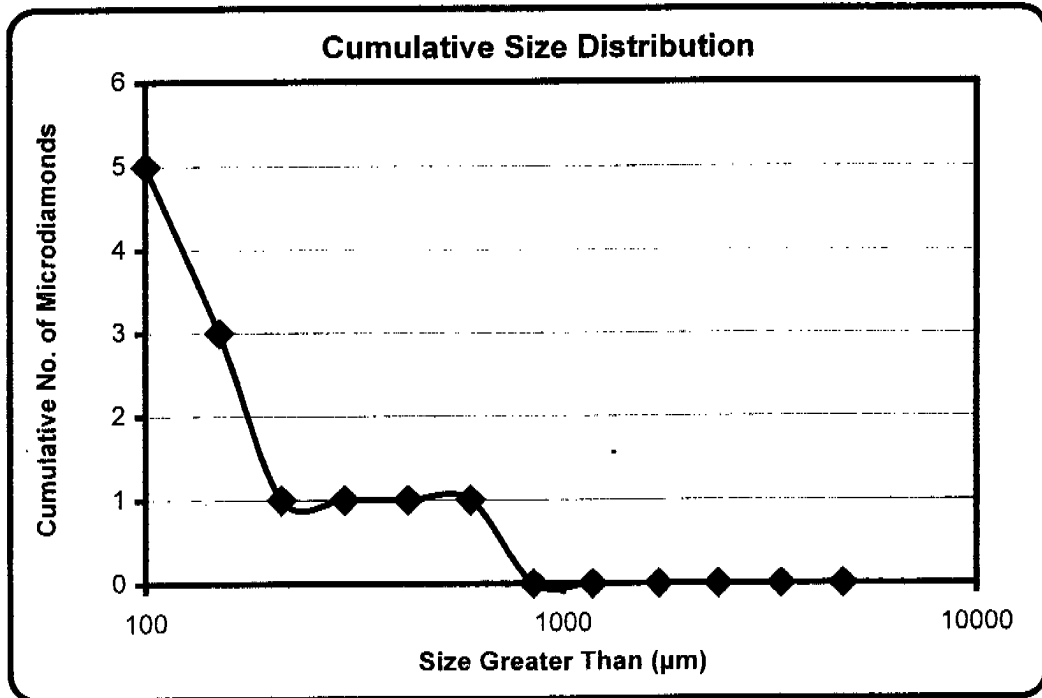
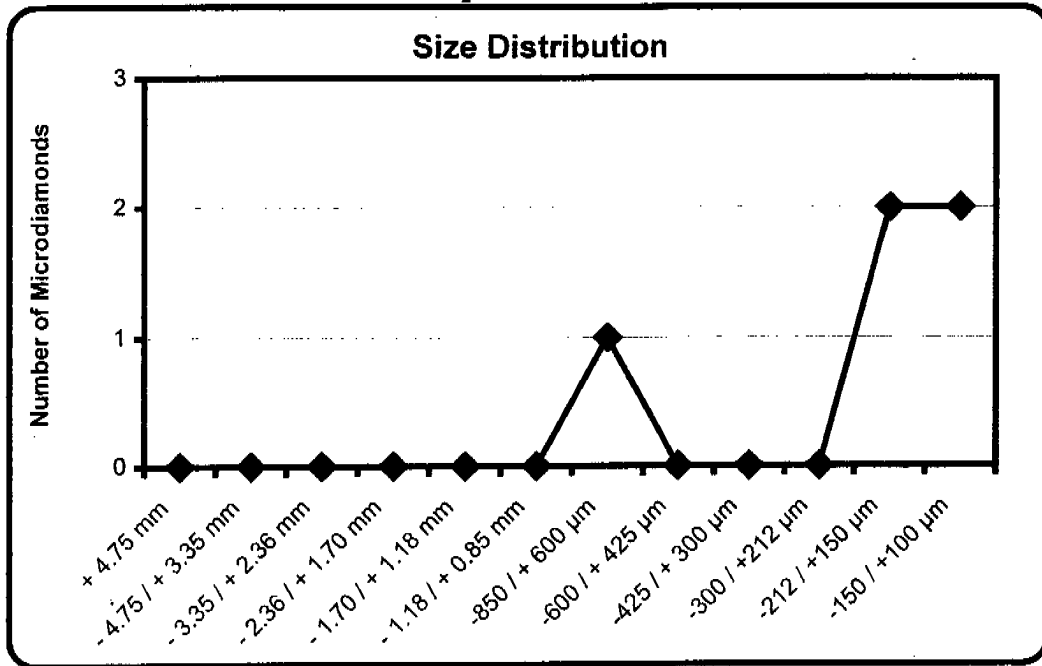

 Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

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Sample No. RRR4



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September 13, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0004.R00

Sample No. RRR4

Client: Twin Mining Corporation

Sample Weight: 18.71 kg

| No. | Stone Dimension, mm | | | Weight | | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|------|------|--------|----------|--------|--------|-------------|----------------------|-------------------|-----------|
| | X | Y | Z | mg | | | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | | |
| 1 | 0.91 | 0.74 | 0.70 | 0.641 | 0.003205 | | White | Translucent | 75% | | #N/A |
| 1 | | | | 0.641 | 0.003205 | | | | | | Sub-Total |

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September 13, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0004.R00

Sample No. RRR4

Client: Twin Mining Corporation

Sample Weight: 18.71 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|-------------------|--|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | | |
| 1 | 0.26 | 0.23 | 0.11 | | 0.000000 | White | Transparent | 95% | | Octahedral, twinned, graphite inclusions |
| 2 | 0.23 | 0.23 | 0.15 | | 0.000000 | White | Transparent | 85% | | Octahedral, twinned, stepped faces |
| 2 | | | | 0.307 | 0.001535 | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.10 | | 0.000000 | White | Transparent | 85% | | Octahedral, stepped faces |
| 2 | 0.11 | 0.11 | 0.14 | | 0.000000 | White | Transparent | 95% | | Octahedral |
| 2 | | | | 0.032 | 0.000160 | | | | | Sub-Total |
| 5 | | | | | 0.004900 | | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Twin Mining Corporation

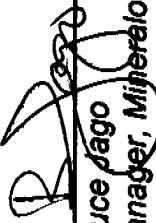
Attn :
 Suite 1250, 155 University Ave.
 Toronto, Ontario - M5H 3B7
 Canada
 Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 08 September 2000
 LR. Ref. : MI0005-SEP00
 Project : 8901-221

CERTIFICATE OF ANALYSIS

| Sample ID | Asphaltenes | Resins | Bitumen | Wax | API |
|-----------|-------------|--------|---------|-------|-----|
| 1: 887627 | 57.46 | 8 | 20 | 0.003 | |
| 2: 888466 | 48.57 | 7 | 45 | 0.009 | |
| 3: 888460 | 51.52 | 7 | 7 | 0.001 | |
| 4: 887586 | 50.55 | 7 | 5 | 0.002 | |
| 5: 887570 | 52.48 | 7 | 7 | 0.002 | |


 Bruce Jago
 Manager, Mineralogical Services

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
Client: **Twin Mining Corporation**

Date: September 14, 2000
LIMS No. **SEP0005.R00**
Sample No. **887627**

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 57.46 kg
Number of Syndites: 0

Total Weight (carats)*: 0.003
Number of Diamonds: 20

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

Maria Mezei
Assistant Rare and Precious Gem Mineralogist



Quality Control

Tracy Gill
Mineralogy Technician

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**

Date: September 14, 2000
 LIMS No. **SEP0005.R00**
 Sample No. **887627**

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 3 | 0.351 | 0.002 |
| | -212 / +150 µm | 4 | 0.066 | 0.000 |
| | -150 / +100 µm | 13 | 0.105 | 0.001 |
| | TOTAL | 20 | 0.522 | 0.003 |

Sample Weight: 57.46 kg
Number of Syndites: 0

Total Weight (carats)*: 0.003
Number of Diamonds: 20

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

M. Mezei
 Selection and Description
 Maria Mezei
 Assistant Rare and Precious Gem Mineralogist

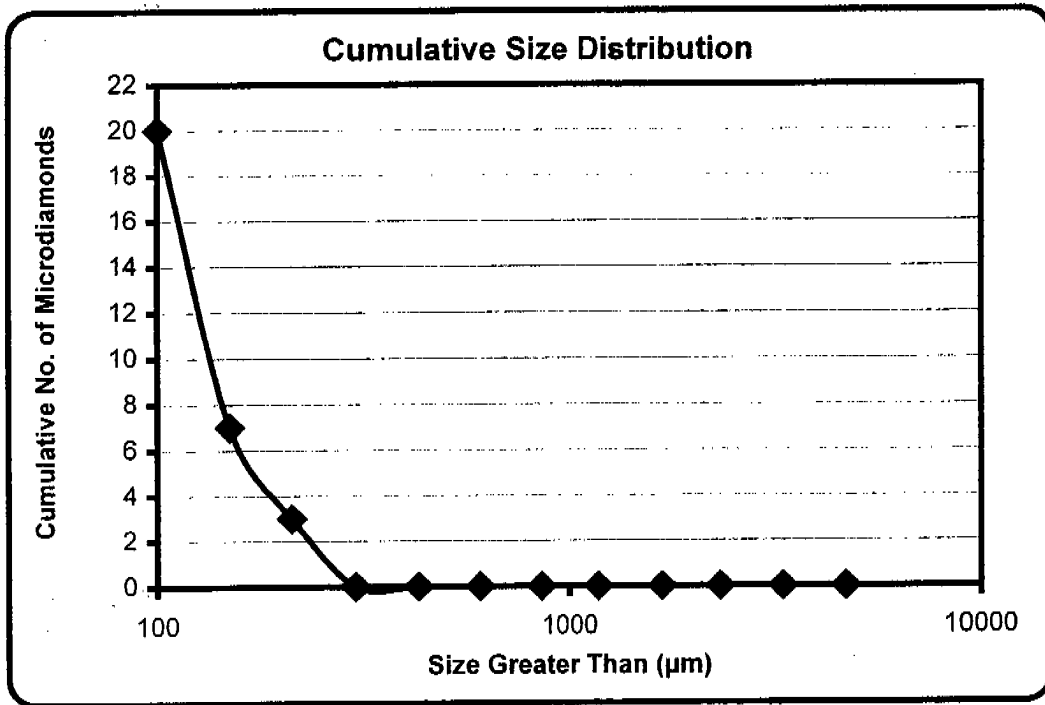
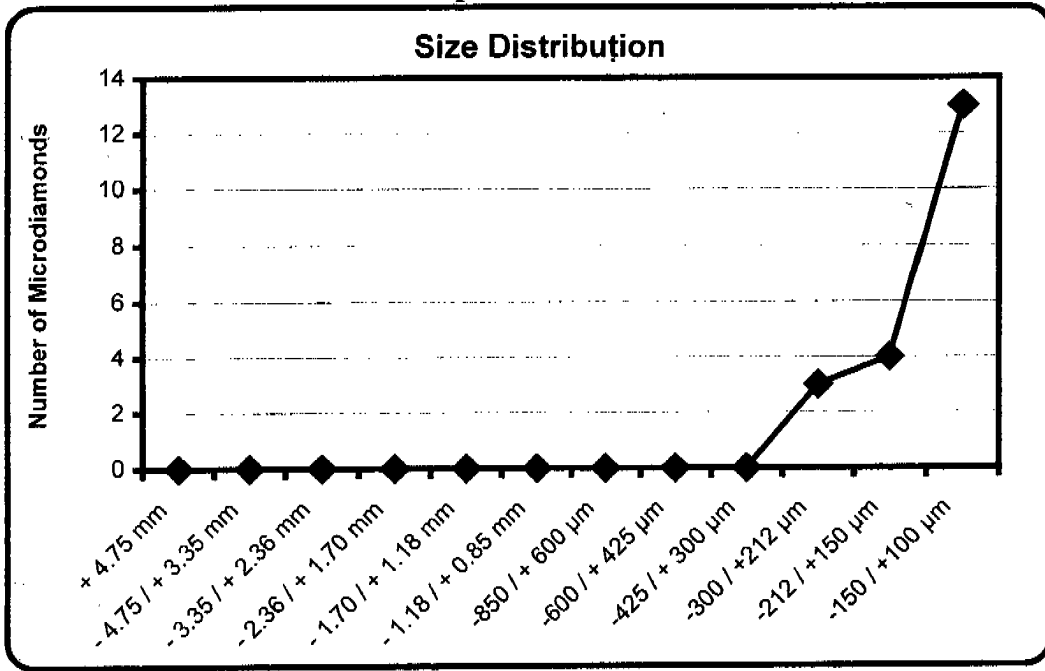
Tracy Gill
 Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

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Sample No. 887627



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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00

Sample No. 887627

Client: Twin Mining Corporation

Sample Weight: 57.46 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|-------------------|------------------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |

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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00

Sample No. 887627

Client: Twin Mining Corporation

Sample Weight: 57.46 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|----------|--------|--------|-------------|----------------------|--|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000000 | | | | | |
| | | | | | | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000000 | | | | | |
| | | | | | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.43 | 0.40 | 0.12 | 0.000000 | | White | Transparent | 99+% | Macle, twinned, other inclusions |
| 2 | 0.34 | 0.34 | 0.19 | 0.000000 | | White | Transparent | 85% | Octahedral, twinned, stepped faces |
| 3 | 0.34 | 0.31 | 0.15 | 0.000000 | | White | Transparent | 75% | Irregular |
| 3 | | | | 0.001755 | | | | | |
| | | | | | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.29 | 0.23 | 0.11 | 0.000000 | | White | Transparent | 75% | Irregular |
| 2 | 0.26 | 0.23 | 0.15 | 0.000000 | | White | Transparent | 99+% | Macle |
| 3 | 0.17 | 0.17 | 0.12 | 0.000000 | | White | Transparent | 95% | Octahedral, twinned |
| 4 | 0.26 | 0.20 | 0.17 | 0.000000 | | White | Transparent | 99+% | Octahedral, twinned |
| 4 | | | | 0.000330 | | | | | |
| | | | | | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.11 | 0.000000 | | White | Transparent | 62.5% | Tetrahedral |
| 2 | 0.11 | 0.11 | 0.09 | 0.000000 | | White | Transparent | 99+% | Octahedral |
| 3 | 0.09 | 0.06 | 0.09 | 0.000000 | | White | Transparent | 99+% | Octahedral |
| 4 | 0.20 | 0.17 | 0.11 | 0.000000 | | White | Transparent | 99+% | Octahedral, other inclusions |
| 5 | 0.14 | 0.14 | 0.10 | 0.000000 | | White | Transparent | 99+% | Octahedral, twinned, partially frosted |

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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00

Sample No. 887627

Client: Twin Mining Corporation

Sample Weight: 57.46 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----|---------------------|------|------|--------|----------|------------------|-------------|----------------------|---|--|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| 6 | 0.17 | 0.17 | 0.10 | | 0.000000 | White | Transparent | 75% | Tetrahexahedral surface fragment, minor cleavages | |
| 7 | 0.14 | 0.14 | 0.08 | | 0.000000 | White | Transparent | 85% | Macle, graphite coating | |
| 8 | 0.14 | 0.11 | 0.11 | | 0.000000 | White | Transparent | 95% | Octahedral, stepped faces | |
| 9 | 0.14 | 0.11 | 0.10 | | 0.000000 | White | Transparent | 95% | Octahedral, stepped faces | |
| 10 | 0.11 | 0.11 | 0.08 | | 0.000000 | White | Transparent | 95% | Octahedral, stepped faces | |
| 11 | 0.14 | 0.11 | 0.09 | | 0.000000 | White | Transparent | 95% | Octahedral, twinned | |
| 12 | 0.14 | 0.11 | 0.09 | | 0.000000 | White | Transparent | 95% | Octahedral, twinned | |
| 13 | 0.23 | 0.14 | 0.09 | | 0.000000 | Off White | Translucent | 85% | Aggregate, graphite inclusions, partially frosted | |
| 13 | | | | 0.105 | 0.000525 | Sub-Total | | | | |
| 20 | | | | | 0.002610 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
Client: **Twin Mining Corporation**

Date: September 18, 2000
LIMS No. **SEP0005.R00.R00**
Sample No. **888466**

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 48.57 kg
Number of Syndites: 0

Total Weight (carats)*: 0.009
Number of Diamonds: 45

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Maria Mezei
Assistant Rare and Precious Gem Mineralogist



Quality Control
Tracy Gill
Mineralogy Technician

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 18, 2000

Client: Twin Mining Corporation

LIMS No. SEP0005.R00.R00

Sample No. 888466

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 1 | 1.495 | 0.007 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 1 | 0.074 | 0.000 |
| | -300 / +212 µm | 9 | 0.316 | 0.000 |
| | -212 / +150 µm | 18 | 0.176 | 0.001 |
| | -150 / +100 µm | 16 | 0.062 | 0.000 |
| | TOTAL | 45 | 2.123 | 0.009 |


Sample Weight: 48.57 kg

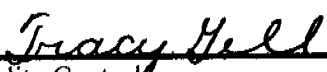
Total Weight (carats)*: 0.009

Number of Syndites: 0

Number of Diamonds: 45

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Maria Mezei
 Assistant Rare and Precious Gem Mineralogist

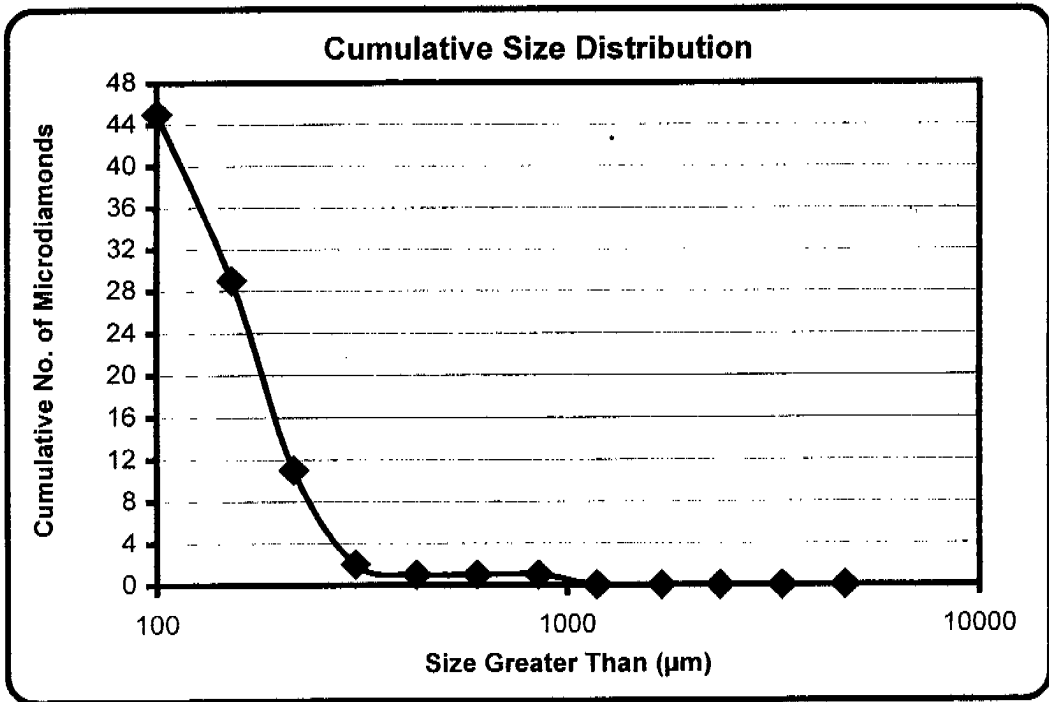
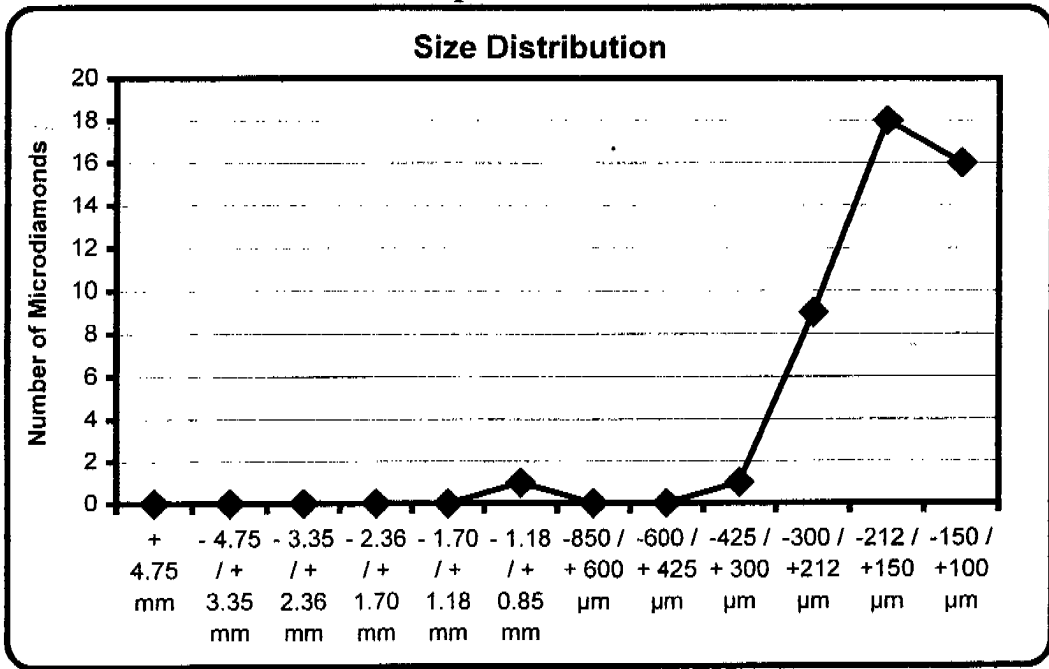

 Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

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Sample No. 888466



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September 18, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00.R0

Sample No. 888466

Client: Twin Mining Corporation

Sample Weight: 48.57 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|-------------------|---------------------------------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 1 | 1.05 | 0.86 | 0.73 | 1.495 | 0.007475 | | Transparent | 95% | | Octahedral, graphite inclusions |
| 1 | | | | 1.495 | 0.007475 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |

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September 18, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00.R0

Sample No. 888466

Client: Twin Mining Corporation

Sample Weight: 48.57 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|--|---------------------|------|------|--------|----------|-----------|-------------|----------------------|-------------------|---|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| -600 / + 425 μm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -425 / + 300 μm fraction | | | | | | | | | | |
| 1 | 0.54 | 0.43 | 0.16 | | 0.000000 | White | Transparent | 75% | | Fragment with Crystal Faces, minor cleavages |
| 1 | | | | 0.074 | 0.000370 | | | | | Sub-Total |
| -300 / + 212 μm fraction | | | | | | | | | | |
| 1 | 0.83 | 0.34 | 0.14 | | 0.000000 | White | Transparent | 75% | | Fragment with Crystal Faces, minor cleavages |
| 2 | 0.43 | 0.29 | 0.16 | | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, significant cleavages |
| 3 | 0.34 | 0.29 | 0.21 | | 0.000000 | White | Transparent | 75% | | Irregular |
| 4 | 0.31 | 0.29 | 0.24 | | 0.000000 | White | Transparent | 75% | | Irregular |
| 5 | 0.48 | 0.26 | 0.16 | | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, significant cleavages |
| 6 | 0.40 | 0.34 | 0.13 | | 0.000000 | Off White | Translucent | Note 1 | | Fragment on which crystal faces unrecognizable, very significant cleavages, graphite inclusions |
| 7 | 0.31 | 0.26 | 0.12 | | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, significant cleavages |
| 8 | 0.23 | 0.23 | 0.13 | | 0.000000 | White | Transparent | 62.5% | | Irregular |
| 9 | 0.26 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 85% | | Octahedral, twinned |
| 9 | | | | 0.316 | 0.000000 | | | | | Sub-Total |
| -212 / + 150 μm fraction | | | | | | | | | | |
| 1 | 0.37 | 0.26 | 0.07 | | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, significant cleavages |
| 2 | 0.31 | 0.20 | 0.10 | | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, significant cleavages |
| 3 | 0.54 | 0.29 | 0.11 | | 0.000000 | White | Translucent | Note 1 | | Fragment on which crystal faces unrecognizable, minor cleavages, graphite inclusions, partially frosted |

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September 18, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00.R0

Sample No. 888466

Client: Twin Mining Corporation

Sample Weight: 48.57 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|------|--------|----------|-----------|------------------|----------------------|---|--|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| 4 | 0.23 | 0.17 | 0.10 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 5 | 0.20 | 0.20 | 0.05 | | 0.000000 | White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages, partially frosted | |
| 6 | 0.20 | 0.17 | 0.12 | | 0.000000 | White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages, graphite inclusions, partially frosted | |
| 7 | 0.23 | 0.14 | 0.11 | | 0.000000 | White | Transparent | 95% | Octahedral, twinned | |
| 8 | 0.17 | 0.14 | 0.10 | | 0.000000 | White | Transparent | 99+% | Octahedral | |
| 9 | 0.31 | 0.20 | 0.15 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages | |
| 10 | 0.31 | 0.20 | 0.14 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages, graphite inclusions | |
| 11 | 0.20 | 0.20 | 0.10 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages | |
| 12 | 0.23 | 0.17 | 0.12 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages | |
| 13 | 0.20 | 0.20 | 0.12 | | 0.000000 | White | Translucent | 62.5% | Fragment with Crystal Faces, minor cleavages, graphite inclusions | |
| 14 | 0.17 | 0.17 | 0.14 | | 0.000000 | White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, frosted, graphite inclusions | |
| 15 | 0.26 | 0.20 | 0.07 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, minor cleavages | |
| 16 | 0.26 | 0.20 | 0.07 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 17 | 0.23 | 0.20 | 0.06 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages, graphite inclusions, par | |
| 18 | 0.20 | 0.17 | 0.09 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages, partially frosted | |
| 18 | | | | | 0.176 | 0.000880 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.06 | | 0.000000 | White | Transparent | 95% | Octahedral | |
| 2 | 0.17 | 0.14 | 0.09 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, significant cleavages | |
| 3 | 0.17 | 0.17 | 0.07 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages, graphite inclusions | |
| 4 | 0.17 | 0.14 | 0.11 | | 0.000000 | Grey | Opaque | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, graphite inclusions, frosted | |
| 5 | 0.20 | 0.11 | 0.05 | | 0.000000 | Off White | Opaque | Note 1 | Fragment on which crystal faces unrecognizable, very minor cleavages, frosted | |

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September 18, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00.R0

Sample No. 888466

Sample Weight: 48.57 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----|---------------------|------|------|--------|----------|------------------|-------------|----------------------|---|--|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| 6 | 0.14 | 0.11 | 0.04 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages, frosted, graphite inclusions | |
| 7 | 0.20 | 0.17 | 0.04 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 8 | 0.17 | 0.09 | 0.06 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 9 | 0.17 | 0.14 | 0.09 | | 0.000000 | Grey | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, frosted, graphite inclusions | |
| 10 | 0.14 | 0.09 | 0.03 | | 0.000000 | Grey | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, frosted, graphite inclusions | |
| 11 | 0.20 | 0.17 | 0.04 | | 0.000000 | White | Transparent | 62.5% | Fragment on which crystal faces unrecognizable, minor cleavages, frosted, graphite inclusions | |
| 12 | 0.17 | 0.14 | 0.10 | | 0.000000 | Off White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages, partially frosted | |
| 13 | 0.14 | 0.11 | 0.12 | | 0.000000 | White | Transparent | Note 1 | Fragment with Crystal Faces, minor cleavages | |
| 14 | 0.23 | 0.14 | 0.06 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 15 | 0.14 | 0.11 | 0.05 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 16 | 0.20 | 0.11 | 0.08 | | 0.000000 | White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 16 | | | | 0.062 | 0.000310 | Sub-Total | | | | |

| | | | | | | | | | | |
|----|--|--|--|--|--|--------------|----------|--|--|--|
| 45 | | | | | | TOTAL | 0.009035 | | | |
|----|--|--|--|--|--|--------------|----------|--|--|--|

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 14, 2000

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 888460

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 51.52 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.

Tracy Gill
Selection and Description
Tracy Gill
Mineralogy Technician

Maria Mezei
Quality Control
Maria Mezei
Assistant Rare and Precious Gem Mineralogist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 14, 2000

Client: Twin Mining Corporation

LIMS No. SEP0005.R00


Sample No. 888460


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 1 | 0.080 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 4 | 0.103 | 0.001 |
| | -150 / +100 µm | 2 | 0.029 | 0.000 |
| | TOTAL | 7 | 0.212 | 0.001 |

Sample Weight: 51.52 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician

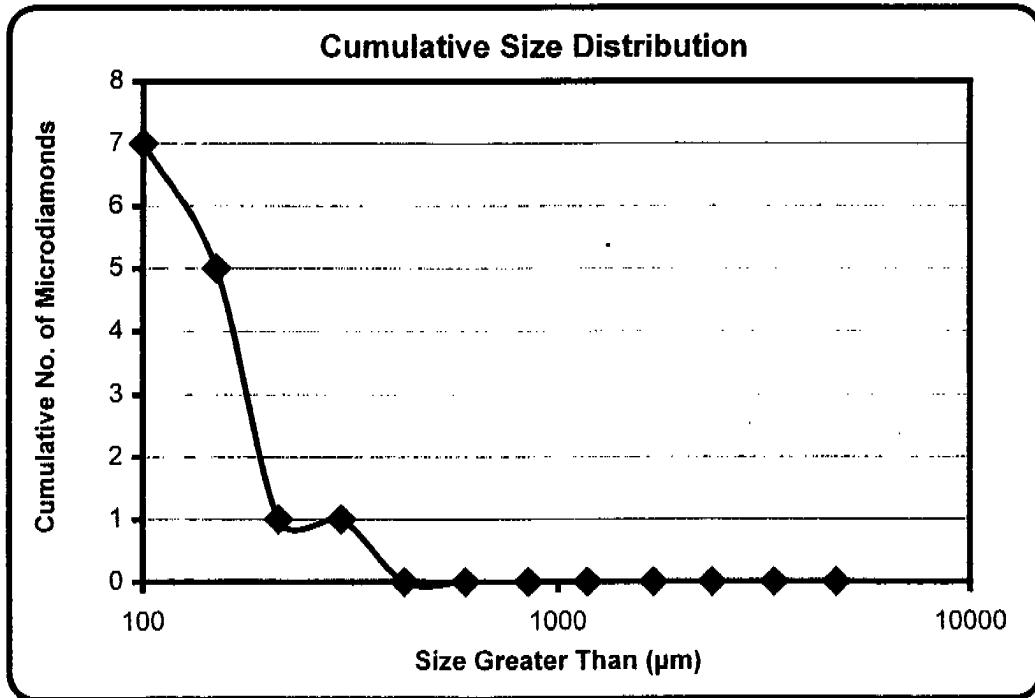
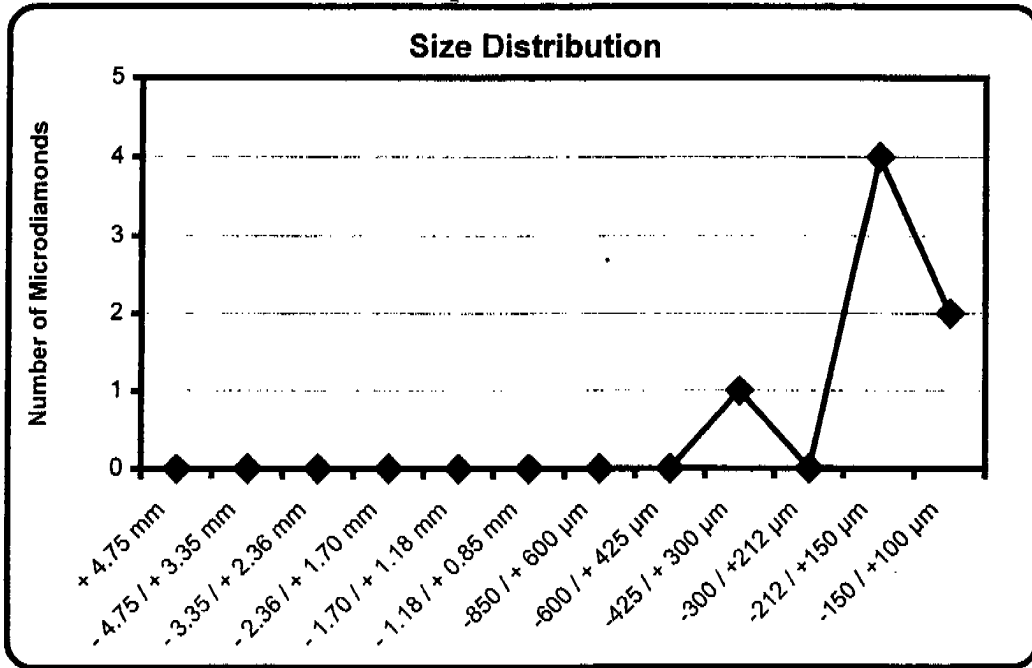

Quality Control
Maria Mezei
Assistant Rare and Precious Gem Mineralogist

Note:

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Sample No. 888460



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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 888460

Sample Weight: 51.52 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|---|---|--------|---------|--------|---------|----------------------|-------------------|-----------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |

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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 888460

Sample Weight: 51.52 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|------------------|-------------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.40 | 0.37 | 0.27 | | 0.000000 | White | Transparent | 99+% | Irregular |
| 1 | | | | 0.080 | 0.000400 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.26 | 0.23 | 0.10 | | 0.000000 | White | Transparent | 95% | Contact twinned |
| 2 | 0.20 | 0.17 | 0.14 | | 0.000000 | Grey | Translucent | 95% | Contact twinned |
| 3 | 0.23 | 0.20 | 0.16 | | 0.000000 | White | Transparent | 75% | Contact twinned |
| 4 | 0.17 | 0.17 | 0.10 | | 0.000000 | White | Transparent | 95% | Macle |
| 4 | | | | 0.103 | 0.000515 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.20 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 99+% | Octahedral |
| 2 | 0.20 | 0.14 | 0.09 | | 0.000000 | White | Transparent | 95% | Contact twinned |
| 2 | | | | 0.029 | 0.000145 | Sub-Total | | | |
| 7 | | | | | 0.001060 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



Lakefield Research Limited
185 Concession St., Box 4300
Lakefield, Ontario
K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: September 14, 2000
LIMS No. SEP0005.R00
Sample No. 887586

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 50.55 kg
Number of Syndites: 0

Total Weight (carats)*: 0.002
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Maria Mezei
Assistant Rare and Precious Gem Mineralogist



Quality Control
Tracy Gill
Mineralogy Technician

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 14, 2000

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 887586

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 3 | 0.301 | 0.002 |
| | -300 / +212 µm | 2 | 0.081 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 5 | 0.382 | 0.002 |

Sample Weight: 50.55 kg
Number of Syndites: 0

Total Weight (carats)*: 0.002
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

M. Mezei
 Selection and Description
 Maria Mezei
 Assistant Rare and Precious Gem Mineralogist

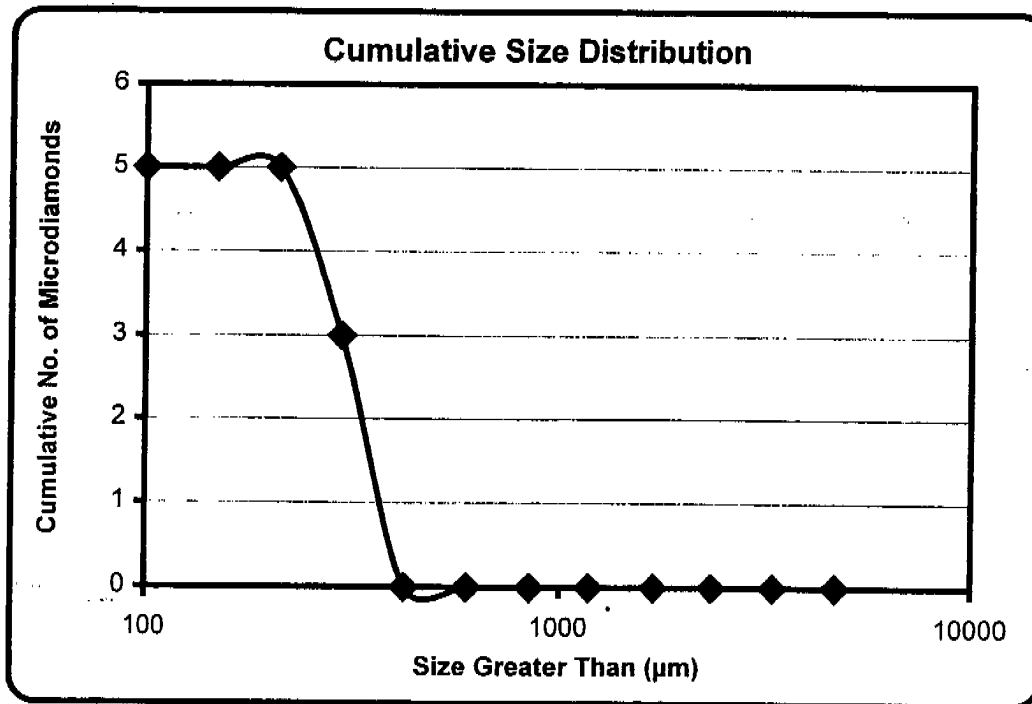
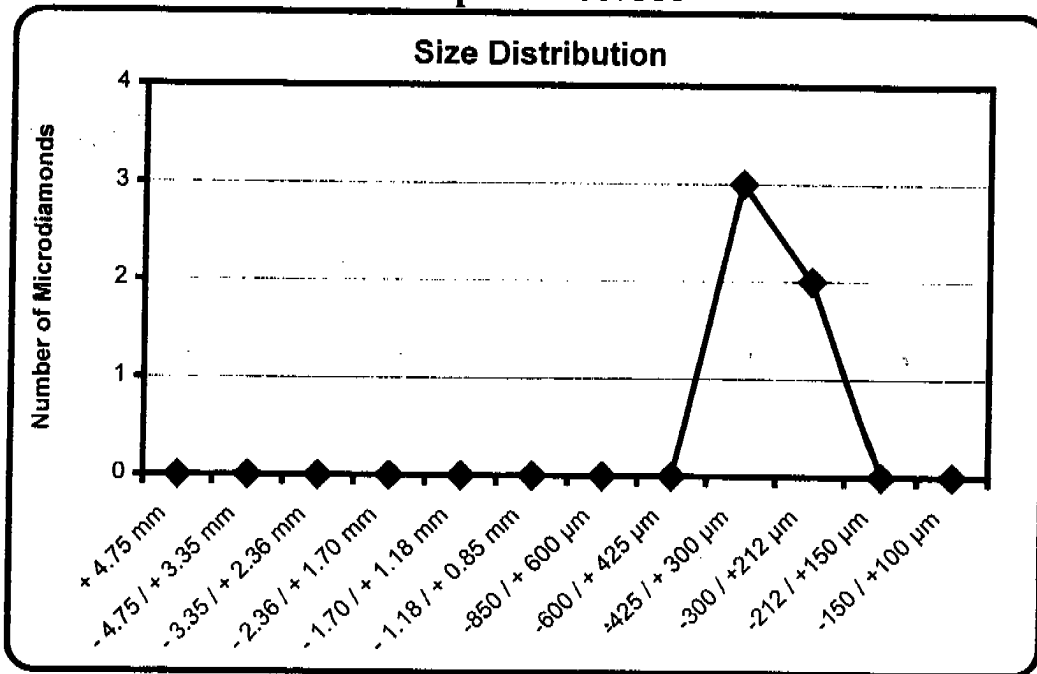
Tracy Gill
 Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

Sample No. 887586



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 Fax: 705-652-3123

September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 887586.

Sample Weight: 50.55 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 887586

Sample Weight: 50.55 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|------------------|-------------|----------------------|---------------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.54 | 0.54 | 0.25 | | 0.000000 | White | Translucent | 85% | Irregular |
| 2 | 0.51 | 0.43 | 0.02 | | 0.000000 | White | Transparent | 99+% | Octahedral, graphite inclusions |
| 3 | 0.48 | 0.40 | 0.21 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces |
| 3 | | | | 0.301 | 0.001505 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.34 | 0.24 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces |
| 2 | 0.37 | 0.31 | 0.10 | | 0.000000 | White | Transparent | 99+% | Octahedral, graphite coating, twinned |
| 2 | | | | 0.081 | 0.000405 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| 5 | | | | | 0.001910 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
Client: **Twin Mining Corporation**

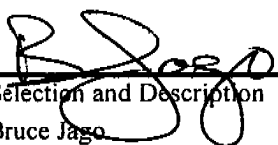
Date: September 14, 2000
LIMS No. **SEP0005.R00**
Sample No. **887570**


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 52.48 kg
Number of Syndites: 0

Total Weight (carats)*: 0.002
Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Bruce Jago
Head-Diamond Exploration Services


Quality Control
Maria Mezei
Assistant Rare and Precious Gem Mineralogist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: September 14, 2000

Client: Twin Mining Corporation

LIMS No. SEP0005.R00

Sample No. 887570

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 1 | 0.257 | 0.001 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 1 | 0.040 | 0.000 |
| | -212 / +150 µm | 2 | 0.033 | 0.000 |
| | -150 / +100 µm | 3 | 0.014 | 0.000 |
| | TOTAL | 7 | 0.344 | 0.002 |

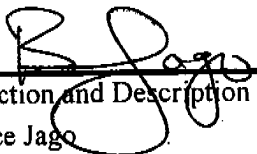
Sample Weight: 52.48 kg

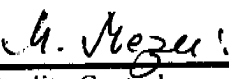
Total Weight (carats)*: 0.002

Number of Syndites: 0

Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Bruce Jago
 Head-Diamond Exploration Services

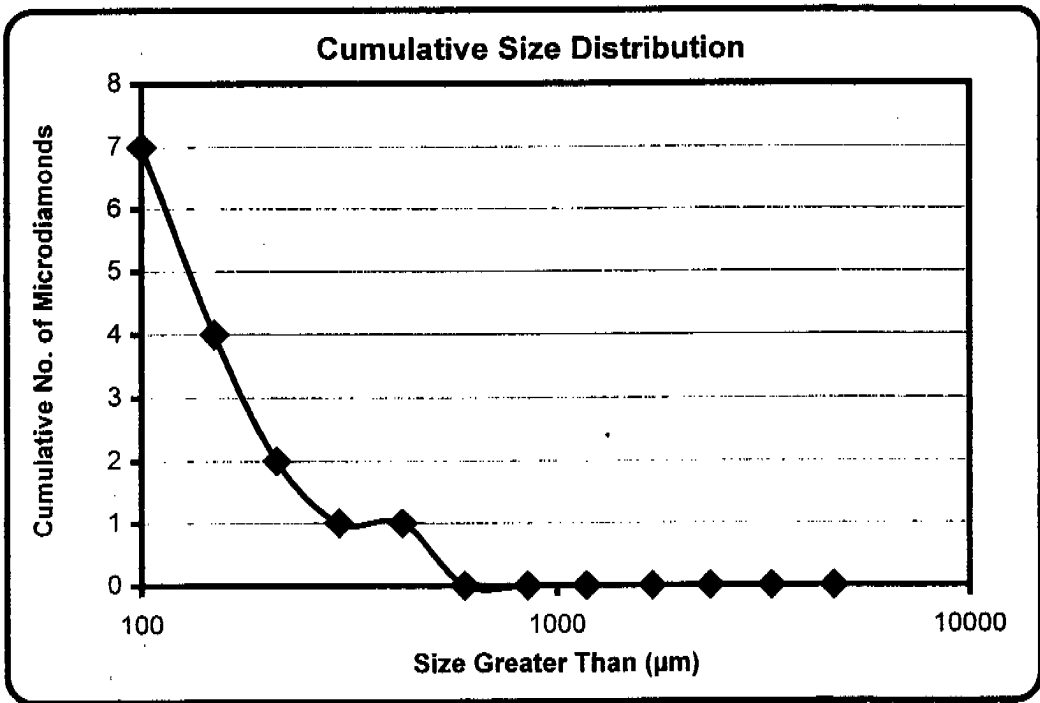
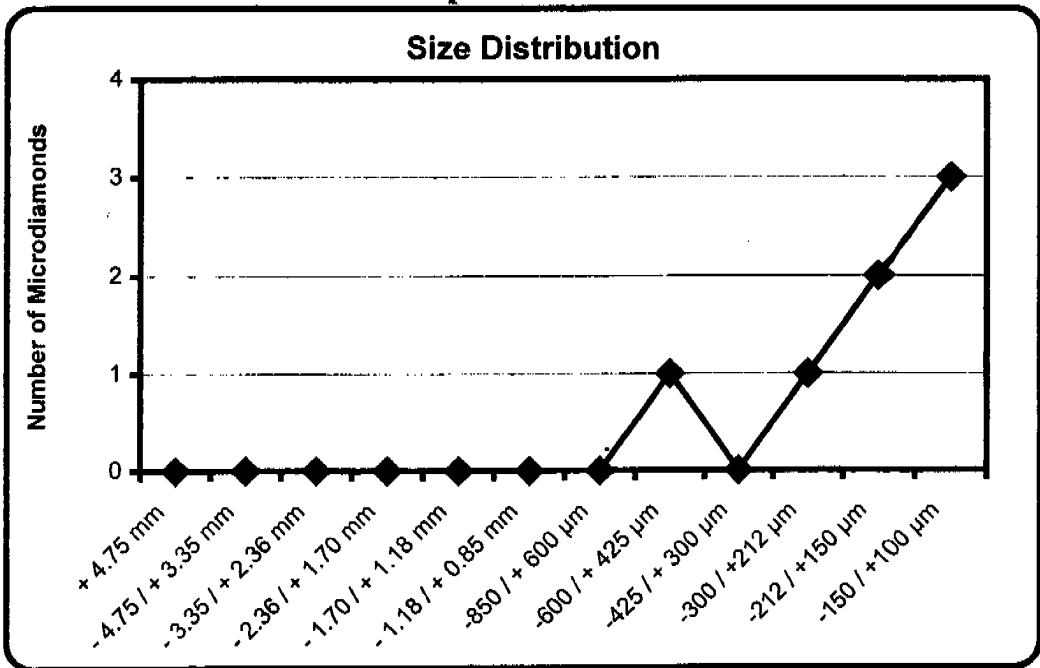

 Quality Control
 Maria Mezei
 Assistant Rare and Precious Gem Mineralogist

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

Sample No. 887570



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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00

Sample No. 887570

Client: Twin Mining Corporation

Sample Weight: 52.48 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|------|----------|----------|--------|-------------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 0.63 | 0.60 | 0.41 | 0.257 | 0.001285 | White | Transparent | 99+% | Octahedral, twinned |
| 1 | | | | 0.257 | 0.001285 | | | | Sub-Total |

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September 14, 2000

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0005.R00

Sample No. 887570

Client: Twin Mining Corporation

Sample Weight: 52.48 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------------|--------|-------------|---------|--|---------------------------------|
| | X | Y | Z | | | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | | | | | |
| | | | | | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.37 | 0.29 | 0.19 | 0.000000 | White | Transparent | 95% | Contact Twinned | |
| 1 | | | | 0.040 | | | | | |
| | | | | | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.26 | 0.26 | 0.22 | 0.000000 | White | Transparent | 85% | Octahedral, stepped faces | |
| 2 | 0.23 | 0.20 | 0.11 | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, minor cleavages | |
| 2 | | | | 0.033 | | | | | |
| | | | | | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.20 | 0.17 | 0.10 | 0.000000 | White | Transparent | 99+% | Octahedral, twinned | |
| 2 | 0.17 | 0.14 | 0.08 | 0.000000 | White | Transparent | 95% | Octahedral, stepped faces | |
| 3 | 0.23 | 0.17 | 0.06 | 0.000000 | White | Transparent | 85% | Octahedral, twinned | |
| 3 | | | | 0.014 | | | | | |
| | | | | | | | | | Sub-Total |
| 7 | | | | | | | | | TOTAL |
| | | | | 0.001720 | | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Twin Mining Corporation
 Attn : Hermann Derbuch, P.Eng.


Suite 1250, 155 University Ave.
 Toronto, Ontario - M5H 3B7
 Canada
 Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 21 September 2000
 LR. Ref. : MI0011-SEP00
 Project : 8901-221

CERTIFICATE OF ANALYSIS

| | | | | |
|------------|------|---|----|-------|
| 1: 888469 | 24.0 | 3 | 7 | 0.001 |
| 2: 887564 | 24.0 | 3 | 14 | 0.014 |
| 3: 887567 | 24.0 | 3 | 0 | 0.000 |
| 4: 887568 | 24.0 | 3 | 0 | 0.000 |
| 5: 887635 | 24.0 | 3 | 0 | 0.000 |
| 6: 887636 | 24.0 | 3 | 0 | 0.000 |
| 7: 887634 | 24.0 | 3 | 3 | 0.000 |
| 8: 887633 | 53.9 | 7 | 15 | 0.005 |
| 9: 887632 | 24.0 | 3 | 1 | 0.000 |
| 10: 887656 | 24.0 | 3 | 0 | 0.000 |


 Bruce Jago
 Manager, Mineralogical Services

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

Date: January 29, 2001

LIMS No. SEP0011.R00

Sample No. 888469

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides and silicates |

Sample Weight: 24.00 kg

Number of Syndites: 0

Total Weight (carats)*: 0.001

Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.

Selection and Description

Maria Mezei

Diamond Selection Specialist

Quality Control

Tracy Gill

Mineralogy Technician

Note:

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Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: January 29, 2001

Client: Twin Mining Corporation

LIMS No. SEP0011.R00

Sample No. 888469

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 1 | 0.198 | 0.001 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 1 | 0.014 | 0.000 |
| | -150 / +100 µm | 5 | 0.032 | 0.000 |
| | TOTAL | 7 | 0.244 | 0.001 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Selection and Description
 Maria Mezei
 Diamond Selection Specialist

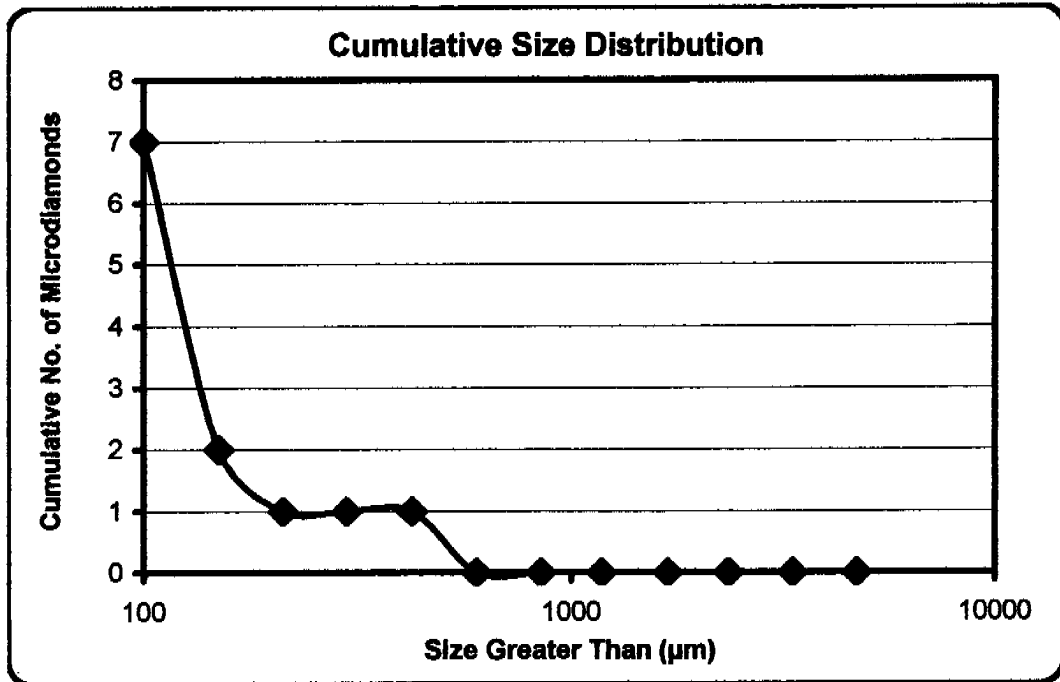
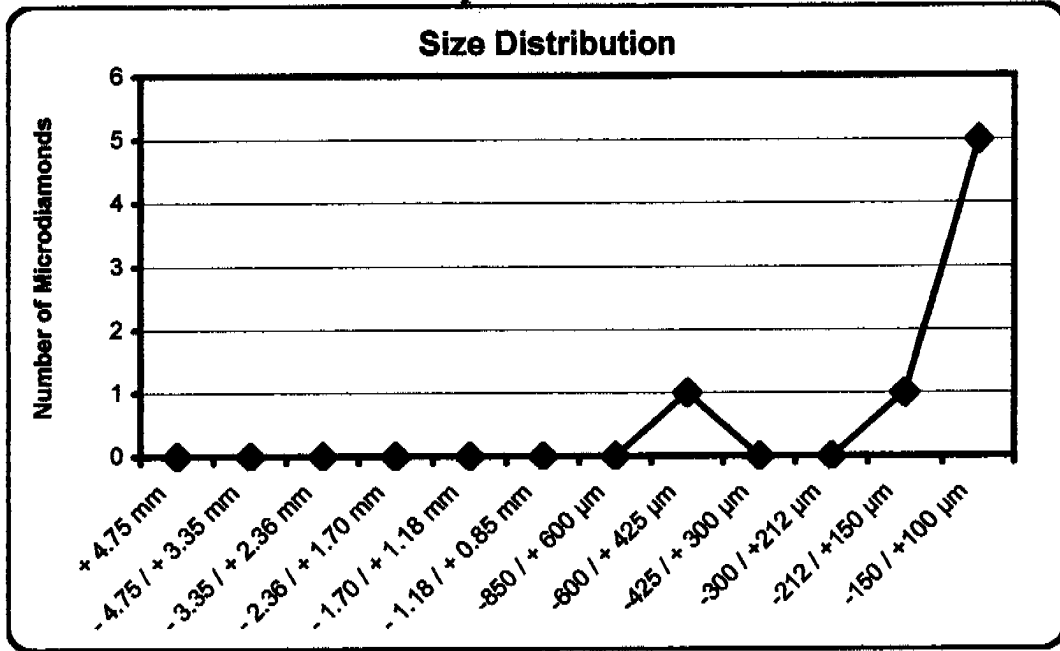
Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

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Sample No. 888469



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January 29, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 888469

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|-------------------|-----------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |

LAKEFIELD RESEARCH LIMITED

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January 29, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 888469

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|--|---------------------|------|------|--------|----------|------------------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 μm fraction | | | | | | | | | |
| 1 | 0.91 | 0.63 | 0.25 | 0.198 | 0.00990 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 1 | | | | 0.198 | 0.00990 | Sub-Total | | | |
| -425 / + 300 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -300 / + 212 μm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -212 / + 150 μm fraction | | | | | | | | | |
| 1 | 0.23 | 0.20 | 0.10 | 0.014 | 0.00070 | White | Transparent | 85% | Macle, graphite inclusions |
| 1 | | | | 0.014 | 0.00070 | Sub-Total | | | |
| -150 / + 100 μm fraction | | | | | | | | | |
| 1 | 0.20 | 0.14 | 0.10 | | 0.00000 | White | Transparent | 95% | Octahedral, twinned |
| 2 | 0.17 | 0.14 | 0.08 | | 0.00000 | White | Transparent | 95% | Octahedral, twinned |
| 3 | 0.40 | 0.17 | 0.06 | | 0.00000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 4 | 0.14 | 0.14 | 0.06 | | 0.00000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 5 | 0.11 | 0.11 | 0.08 | | 0.00000 | White | Transparent | 85% | Fragment with Crystal Faces, twinned |
| 5 | | | | 0.032 | 0.00160 | Sub-Total | | | |
| 7 | | | | | 0.001220 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
Client: **Twin Mining Corporation**

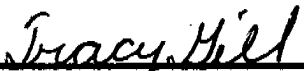
Date: **March 6, 2001**
LIMS No. **SEP0011.R01**
Sample No. **887564**

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0


Total Weight (carats)*: 0.014
Number of Diamonds: 14

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation


Date: March 6, 2001
 LIMS No. SEP0011.R01
 Sample No. 887564

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 2 | 2.569 | 0.013 |
| | -425 / + 300 µm | 2 | 0.142 | 0.001 |
| | -300 / +212 µm | 1 | 0.026 | 0.000 |
| | -212 / +150 µm | 5 | 0.061 | 0.000 |
| | -150 / +100 µm | 4 | 0.017 | 0.000 |
| | TOTAL | 14 | 2.815 | 0.014 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.014
Number of Diamonds: 14

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Robert Buchan
 Consulting Mineralogist

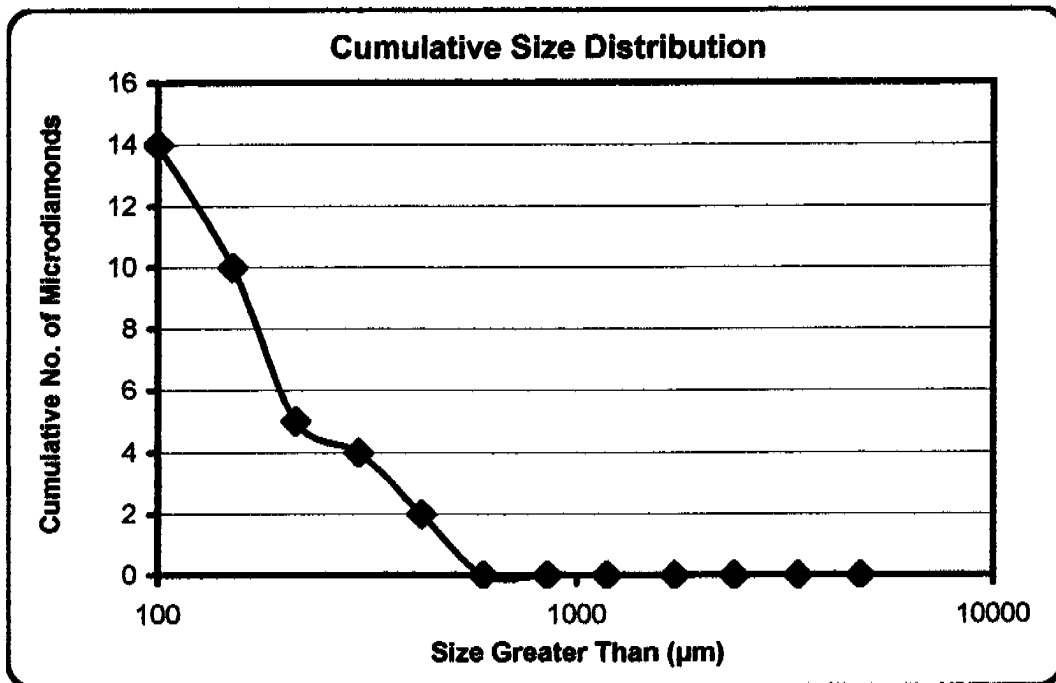
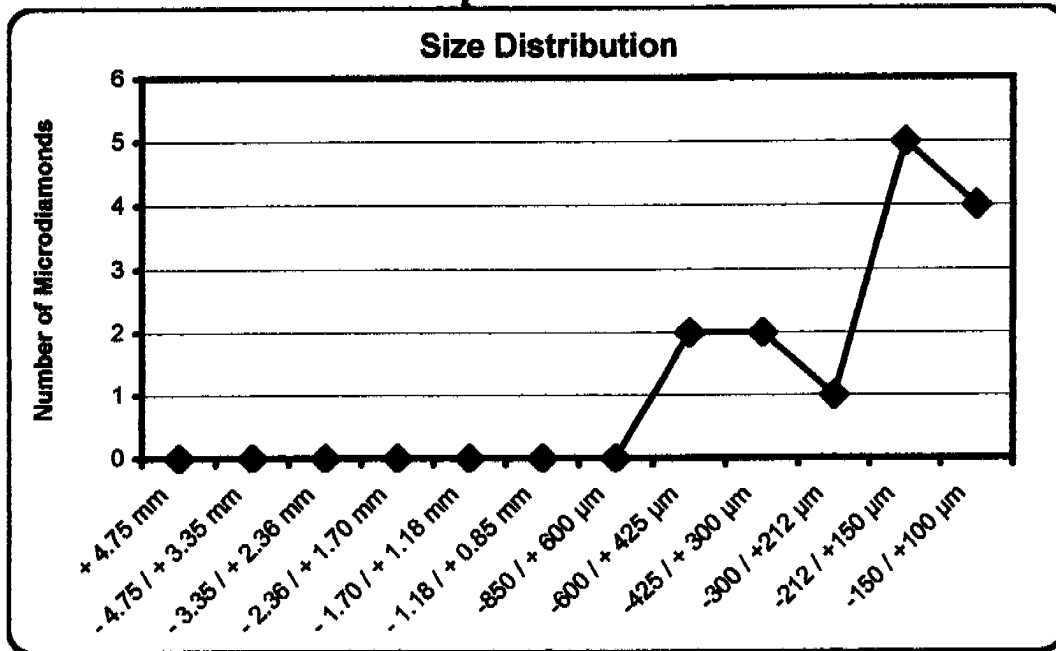

 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887564



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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0011.R01

Sample No. 887564

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 1.34 | 1.20 | 0.84 | | 0.000000 | White | Translucent | 62.5% | Tetrahedral, very minor cleavages |
| 2 | 1.03 | 0.63 | 0.23 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 2 | | | | 2.569 | 0.012845 | | | | Sub-Total |

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887564

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Carats | Colour | Clarity | Percent Preservation | | Stone Description Morphology | |
|---------------------------------|---------------------|------|------|--------|----------|----------|------------------|-------------|----------------------|--|--|--|
| | X | Y | Z | mg | Carats | | | | | | | |
| -425 / + 300 µm fraction | | | | | | | | | | | | |
| 1 | 0.48 | 0.40 | 0.21 | | 0.000000 | 0.000000 | Off White | Translucent | Note 1 | | Fragment on which crystal faces unrecognizable, graphite inclusion, very significant cleavages | |
| 2 | 0.51 | 0.29 | 0.27 | | 0.000000 | 0.000000 | White | Translucent | Note 1 | | Fragment on which crystal faces unrecognizable, graphite inclusion, minor cleavages | |
| 2 | | | | 0.142 | 0.000710 | 0.000710 | Sub-Total | | | | | |
| -300 / + 212 µm fraction | | | | | | | | | | | | |
| 1 | 0.34 | 0.26 | 0.15 | | 0.000000 | 0.000000 | White | Translucent | 62.5% | | Fragment with Crystal Faces, graphite inclusion, minor cleavages | |
| 1 | | | | 0.026 | 0.000130 | 0.000130 | Sub-Total | | | | | |
| -212 / + 150 µm fraction | | | | | | | | | | | | |
| 1 | 0.20 | 0.17 | 0.09 | | 0.003000 | 0.003000 | White | Transparent | 99+% | | Octahedral, very minor cleavages | |
| 2 | 0.23 | 0.17 | 0.15 | | 0.003000 | 0.003000 | White | Translucent | 1-55% | | Tetrahedral, very minor cleavages | |
| 3 | 0.14 | 0.14 | 0.16 | | 0.000000 | 0.000000 | Off White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 4 | 0.23 | 0.20 | 0.20 | | 0.000000 | 0.000000 | White | Transparent | 62.5% | | Fragment with Crystal Faces, very minor cleavages | |
| 5 | 0.20 | 0.17 | 0.14 | | 0.000000 | 0.000000 | White | Translucent | Note 1 | | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 5 | | | | 0.061 | 0.000305 | 0.000305 | Sub-Total | | | | | |
| -150 / + 100 µm fraction | | | | | | | | | | | | |
| 1 | 0.34 | 0.17 | 0.11 | | 0.000000 | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, cleavages, minor cleavages | |
| 2 | 0.20 | 0.11 | 0.08 | | 0.000000 | 0.000000 | White | Translucent | 62.5% | | Fragment with Crystal Faces, very minor cleavages | |
| 3 | 0.20 | 0.14 | 0.10 | | 0.000000 | 0.000000 | White | Transparent | 99+% | | Octahedral, very minor cleavages | |
| 4 | 0.17 | 0.14 | 0.08 | | 0.000000 | 0.000000 | White | Transparent | Note 1 | | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 4 | | | | 0.017 | 0.000085 | 0.000085 | Sub-Total | | | | | |
| 14 | | | | | 0.014075 | 0.014075 | TOTAL | | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 6, 2001

Client: Twin Mining Corporation

LIMS No. SEP0011.R01

Sample No. 887567

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

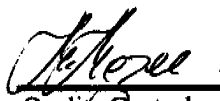
Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 6, 2001
 LIMS No. SEP0011.R01
 Sample No. 887567

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description
 for Robert Buchan
 Consulting Mineralogist

Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887567

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------------|----------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| 0 | | | | | 0.00000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 6, 2001

Client: Twin Mining Corporation

LIMS No. SEP0011.R01

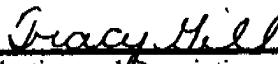
Sample No. 887568

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

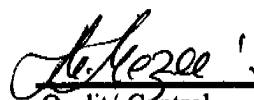
Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 6, 2001
 LIMS No. SEP0011.R01
 Sample No. 887568

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill
 Selection and Description
 Tracy Gill
 Mineralogy Technician

Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

LIMS No. SEP0011.R01
 Sample No. 887568
 Sample Weight: 24.00 kg

Project: 8901-221
 Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|---------|---------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

LAKEFIELD RESEARCH LIMITED

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887568

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| 0 | | | | | 0.000000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: January 25, 2001

Client: Twin Mining Corporation

LIMS No. SEP0011.R00

Sample No. 887635

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**


Date: **January 25, 2001**
 LIMS No. **SEP0011.R00**
 Sample No. **887635**


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician


 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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January 25, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 887635

Sample Weight: 24.00 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|-------|--------------|-----------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |

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January 25, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation
 LIMS No. SEP0011.R00
 Sample No. 887635
 Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------|---------|------------------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| 0 | | | | | 0.00000 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

Date: January 29, 2001

LIMS No. SEP0011.R00

Sample No. 887636

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides and silicates |

Sample Weight: 24.00 kg

Number of Syndites: 0

Total Weight (carats)*: 0.000

Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

Maria Mezei

Diamond Selection Specialist



Quality Control

Tracy Gill

Mineralogy Technician

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation


Date: January 29, 2001
 LIMS No. SEP0011.R00
 Sample No. 887636


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Maria Mezei
 Diamond Selection Specialist


 Quality Control
 Tracy Gill
 Mineralogy Technician

Note:

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January 29, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 887636

Sample Weight: 24.00 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|---------|-----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.00000 | Sub-Total | | | | |

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January 29, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 887636

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|---|-------|--------------|--------|--------|---------|-------------------------|-------------------|-----------|
| | X | Y | Z | | | | | | Morphology | |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | 0.000 | 0.00000 | | | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | 0.000 | 0.00000 | | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | 0.000 | 0.00000 | | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | 0.000 | 0.00000 | | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.00000 | | | | | | Sub-Total |
| 0 | | | | 0.00000 | | | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 6, 2001
LIMS No. SEP0011.R01
Sample No. 887634

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Rock fragments, oxides, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and graphite |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 3

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 6, 2001
 LIMS No. SEP0011.R01
 Sample No. 887634

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 1 | 0.021 | 0.000 |
| | -150 / +100 µm | 2 | 0.022 | 0.000 |
| | TOTAL | 3 | 0.043 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 3

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description

for Robert Buchan
 Consulting Mineralogist

M. Mezei
 Quality Control

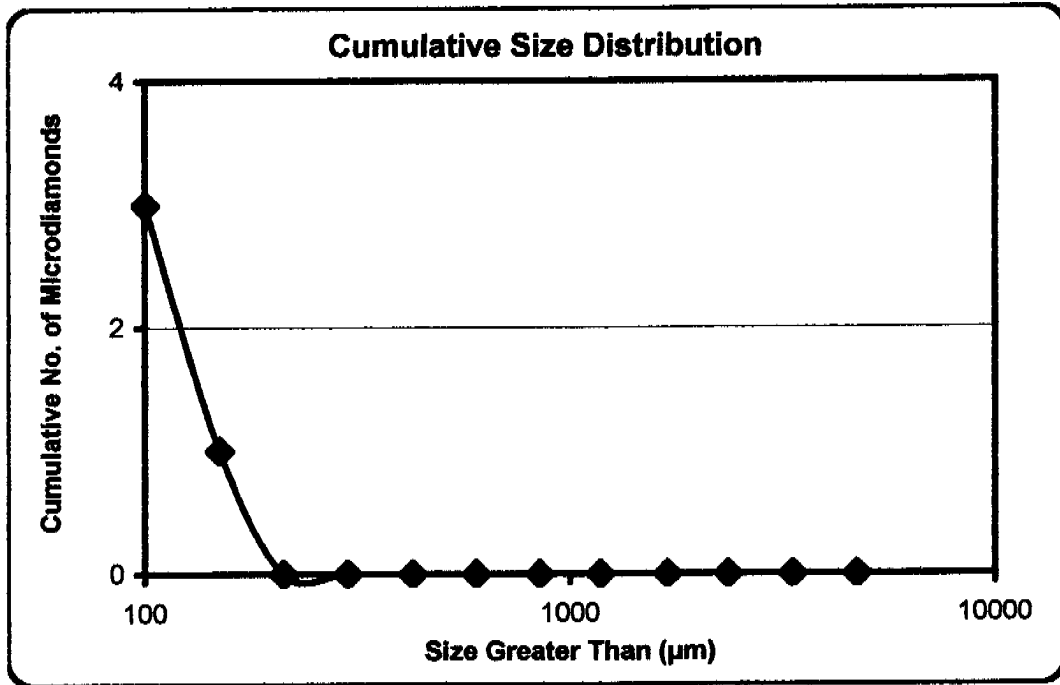
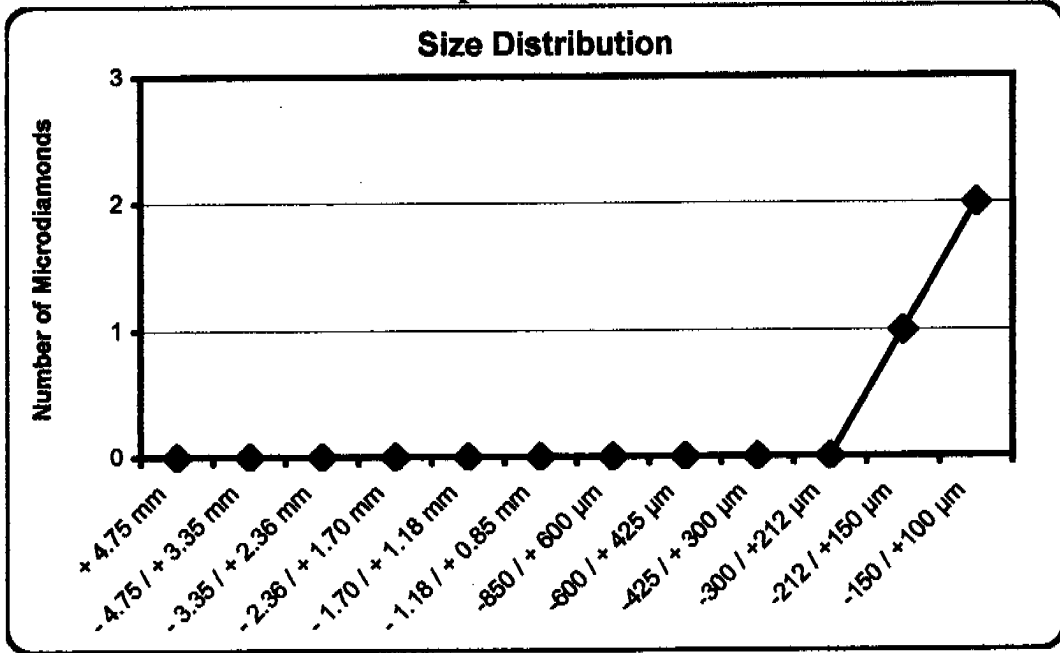
Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887634



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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887634

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|----------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887634

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----|---------------------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | |
| | -300 / + 212 µm fraction | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | |
| | -212 / + 150 µm fraction | | | | | | | | |
| 1 | 0.20 | 0.17 | 0.18 | | 0.000000 | White | Transparent | 95% | Macle, very minor cleavages |
| 1 | | | | 0.021 | 0.000105 | | | | |
| | -150 / + 100 µm fraction | | | | | | | | |
| 1 | 0.14 | 0.14 | 0.12 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | 0.20 | 0.14 | 0.13 | | 0.000000 | White | Transparent | 95% | Octahedral, minor cleavages |
| 2 | | | | 0.022 | 0.000110 | | | | |
| | | | | | | | | | |
| 3 | | | | | 0.000215 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 6, 2001
LIMS No. SEP0011.R01
Sample No. 887633

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 53.9 kg
Number of Syndites: 0

Total Weight (carats)*: 0.005
Number of Diamonds: 15

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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 Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 6, 2001
 LIMS No. SEP0011.R01
 Sample No. 887633

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 2 | 0.668 | 0.003 |
| | -425 / + 300 µm | 1 | 0.153 | 0.001 |
| | -300 / +212 µm | 2 | 0.095 | 0.000 |
| | -212 / +150 µm | 4 | 0.049 | 0.000 |
| | -150 / +100 µm | 6 | 0.039 | 0.000 |
| | TOTAL | 15 | 1.004 | 0.005 |

Sample Weight: 53.9 kg
Number of Syndites: 0

Total Weight (carats)*: 0.005
Number of Diamonds: 15

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill

Selection and Description

for Robert Buchan
 Consulting Mineralogist

Maria Mezei

Quality Control

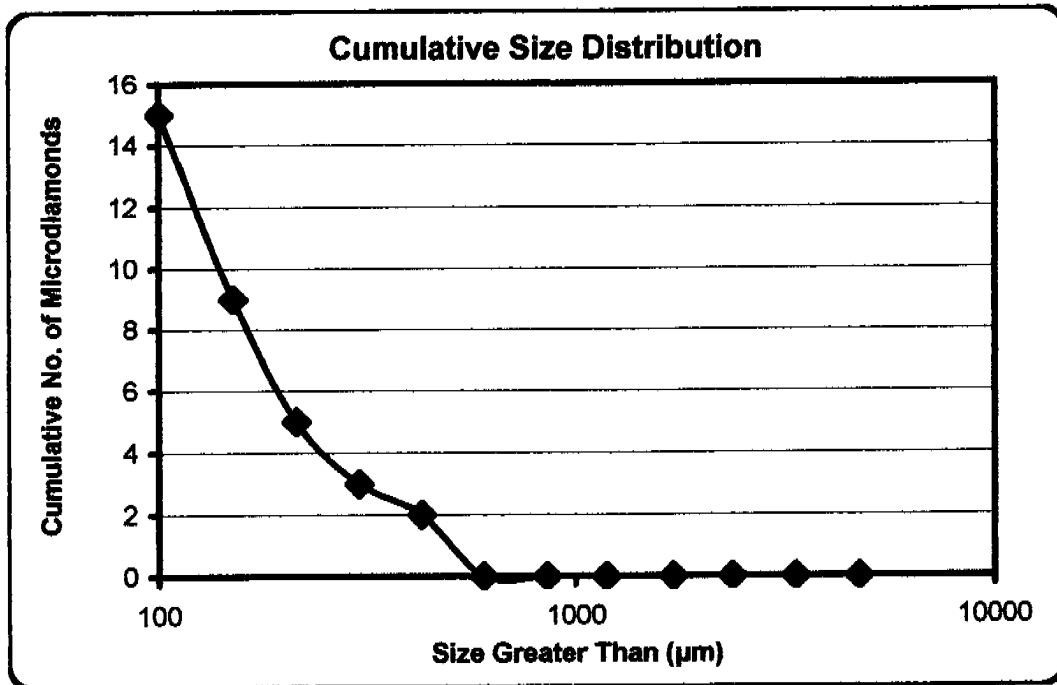
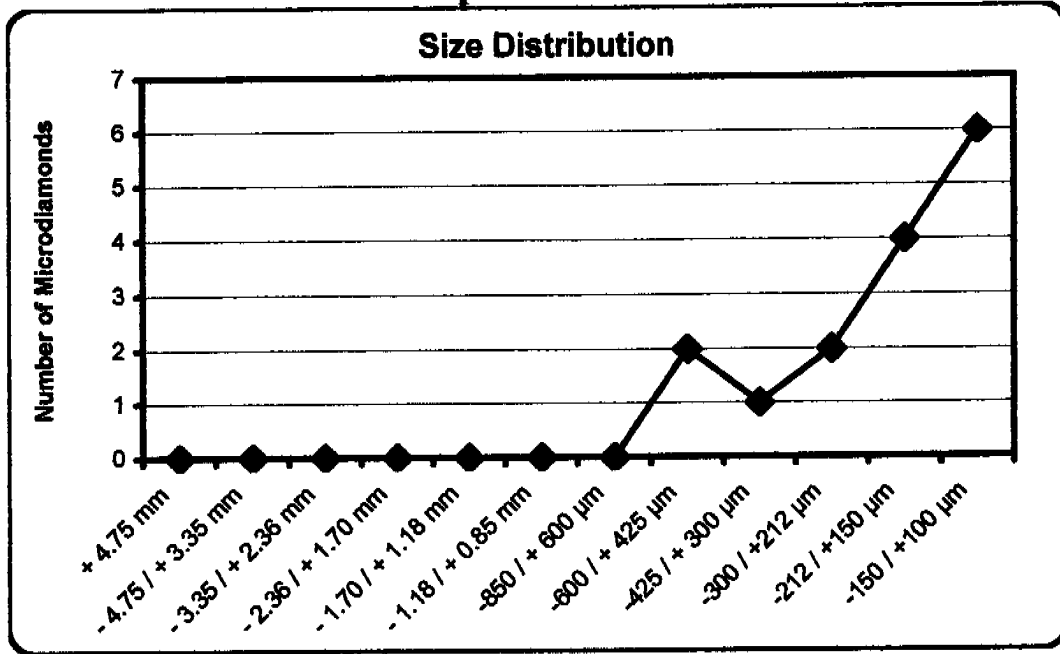
Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887633



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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887633

Client: Twin Mining Corporation

Sample Weight: 53.9 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|------|--------|----------|-----------|-------------|----------------------|--|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 0.77 | 0.60 | 0.50 | | 0.00000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages |
| 2 | 0.57 | 0.54 | 0.32 | | 0.00000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages |
| 2 | | | | 0.668 | 0.003340 | Sub-Total | | | |

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887633

Client: Twin Mining Corporation

Sample Weight: 53.9 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|-----------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.37 | 0.37 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 1 | | | | 0.153 | 0.003765 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.40 | 0.29 | 0.16 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages |
| 2 | 0.54 | 0.26 | 0.20 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 2 | | | | 0.085 | 0.000475 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.26 | 0.17 | 0.15 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 2 | 0.23 | 0.17 | 0.09 | | 0.000000 | White | Opaque | #N/A | Fragment on which crystal faces unrecognizable, minor inclusions, significant cleavages |
| 3 | 0.26 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 4 | 0.17 | 0.14 | 0.15 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces, twinned, very minor cleavages |
| 4 | | | | 0.049 | 0.000245 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.40 | 0.14 | 0.11 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | 0.17 | 0.14 | 0.11 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 3 | 0.11 | 0.11 | 0.13 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very minor cleavages |
| 4 | 0.17 | 0.14 | 0.13 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, very minor cleavages |
| 5 | 0.29 | 0.17 | 0.09 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 6 | 0.17 | 0.14 | 0.12 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 6 | | | | 0.039 | 0.000195 | Sub-Total | | | |
| 15 | | | | | 0.005020 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 6, 2001
LIMS No. SEP0011.R01
Sample No. 887632

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 6, 2001
 LIMS No. SEP0011.R01
 Sample No. 887632

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 1 | 0.080 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 1 | 0.080 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill
 Selection and Description
 Tracy Gill
 Mineralogy Technician

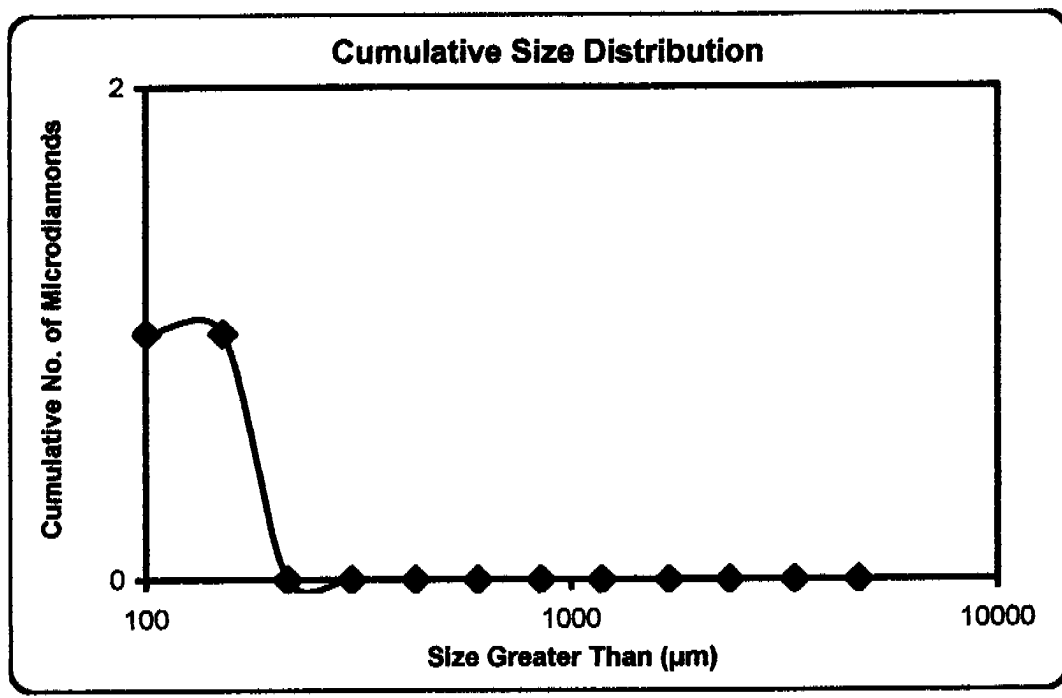
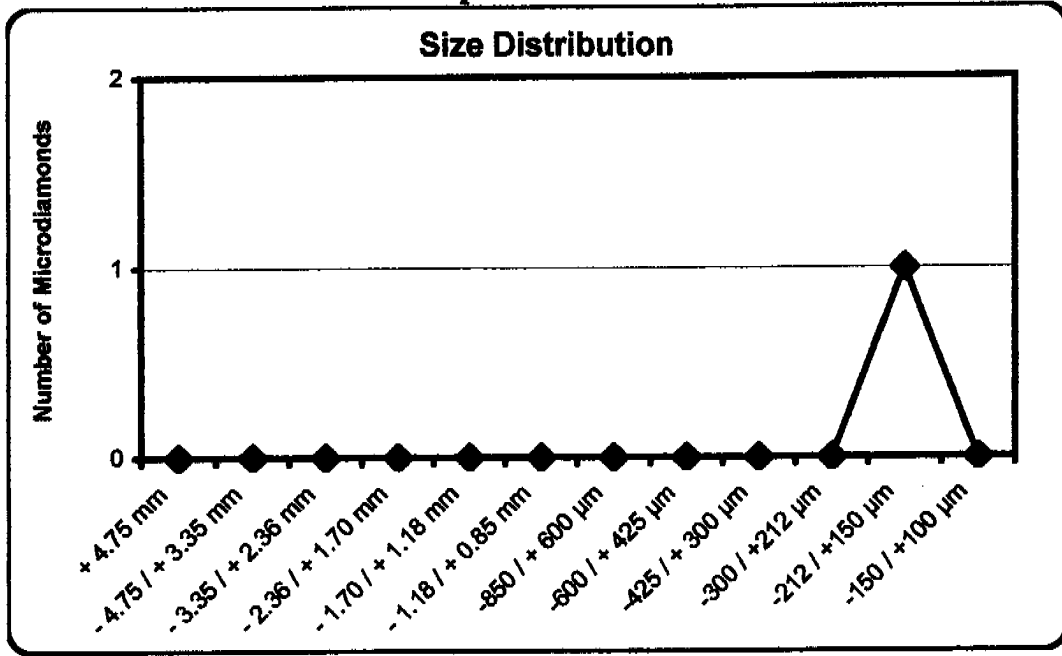
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887632



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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

LJMS No. SEP0011.R01
 Sample No. 887632
 Sample Weight: 24.00 kg

Project: 8901-221
 Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | mg | Weight Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|-------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | | | | | 0.00000 | | | | |
| 2 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

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March 6, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R01

Sample No. 887632

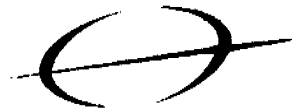
Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------------|--------|--------|---------|-------------------------|---|
| | X | Y | Z | | | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.46 | 0.23 | 0.18 | 0.00000 | | | | | Fragment on which crystal faces unrecognizable, minor cleavages, pitted, pitted |
| 1 | | | | 0.080 | | | | | Note 1 |
| | | | | 0.000400 | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | | | | | Sub-Total |
| 1 | | | | 0.000400 | | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: January 25, 2001
LIMS No. SEP0011.R00
Sample No. 887656

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Oxides |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and oxides |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: January 25, 2001

Client: Twin Mining Corporation

LIMS No. SEP0011.R00


Sample No. 887656

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician


 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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 Fax: 705-652-3123

January 25, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 887656

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|-------|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |

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 Fax: 705-652-3123

January 25, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0011.R00

Sample No. 887656

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.000000 | Sub-Total | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.000000 | Sub-Total | | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.000000 | Sub-Total | | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.000000 | Sub-Total | | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | 0.000 | | | 0.000000 | Sub-Total | | | | |
| 0 | | | | 0.000000 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Twin Mining Corporation
 Attn : Hermann Derbuch, P.Eng.

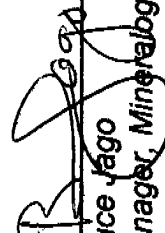
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 Toronto, Ontario - M5H 3B7
 Canada
 Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 22 September 2000
 LR. Ref. : MI0012-SEP00
 Project : 8901-221

CERTIFICATE OF ANALYSIS

| Sample ID | Sample wt kg | # Pours | Dia # | Dia ct |
|------------|--------------|---------|-------|--------|
| 1: 887592 | 24.0 | 3 | 5 | 0.003 |
| 2: 887593 | 24.0 | 3 | 8 | 0.001 |
| 3: 887630 | 24.0 | 3 | 0 | 0.000 |
| 4: 887631 | 24.0 | 3 | 5 | 0.001 |
| 5: 887611 | 24.0 | 3 | 0 | 0.000 |
| 6: 887612 | 24.0 | 3 | 0 | 0.000 |
| 7: 887613 | 24.0 | 3 | 2 | 0.000 |
| 8: 887616 | 24.0 | 3 | 4 | 0.000 |
| 9: 887619 | 24.0 | 3 | 0 | 0.000 |
| 10: 887638 | 24.0 | 3 | 17 | 0.001 |


 Bruce Jago
 Manager, Mineralogical Services

Lakefield Research



Lakefield Research Limited
185 Concession St., Box 4300
Lakefield, Ontario
K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 7, 2001
LIMS No. SEP0012.R00
Sample No. 887592

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Rock fragments, oxides, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides and silicates |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.003
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
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Date: March 7, 2001
 LIMS No. SEP0012.R00
 Sample No. 887592

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -850 / + 600 µm | 1 | 0.536 | 0.003 |
| | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 3 | 0.038 | 0.000 |
| | -150 / +100 µm | 1 | 0.007 | 0.000 |
| | TOTAL | 5 | 0.581 | 0.003 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.003
 Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description

for Robert Buchan
 Consulting Mineralogist

Maria Mezei
 Quality Control

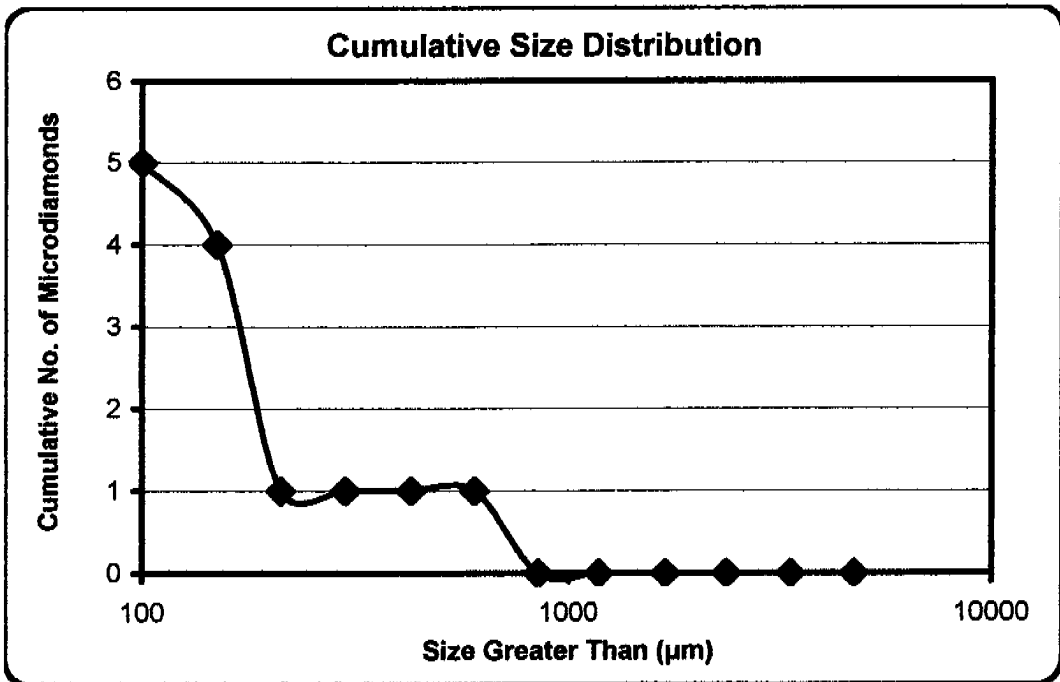
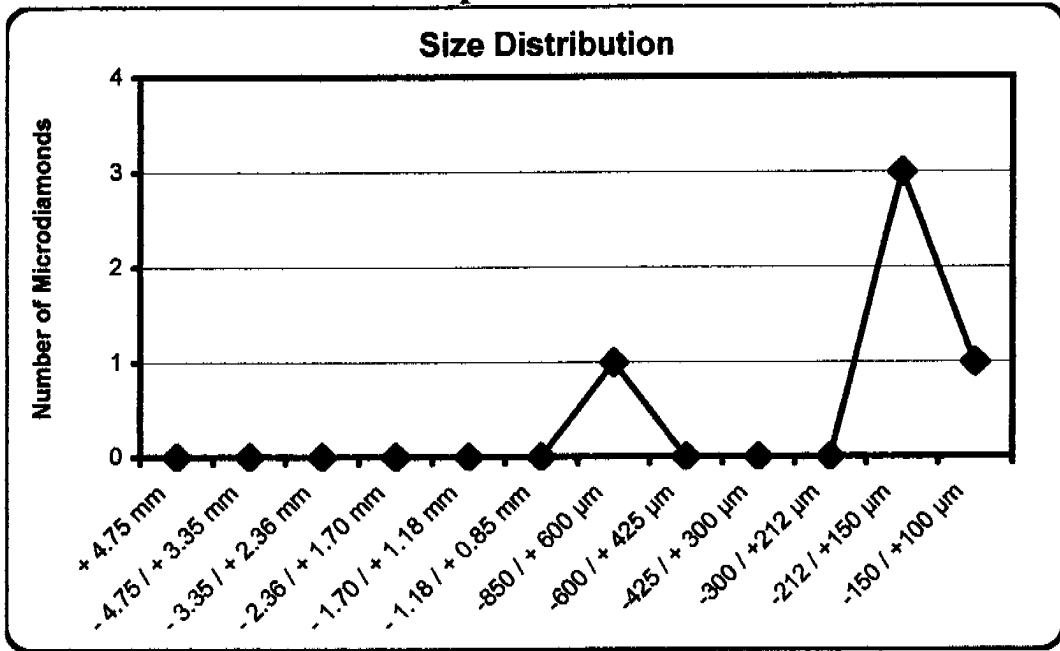
Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887592



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887592

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|-------|--------------|------------------|------------------|-------------|-------------------------|---|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 1 | 0.86 | 0.71 | 0.43 | 0.536 | 0.002680 | | Transparent | 62.5% | Fragment with Crystal Faces, stepped faces, minor cleavages |
| 1 | | | | 0.536 | 0.002680 | Sub-Total | | | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887592

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.26 | 0.23 | 0.13 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, partially distorted, minor cleavages |
| 2 | 0.31 | 0.17 | 0.14 | | 0.000000 | White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, minor inclusions, minor cleavages |
| 3 | 0.29 | 0.14 | 0.12 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, significant cleavages |
| 3 | | | | 0.038 | 0.000190 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.11 | | 0.000000 | White | Transparent | 95% | Octahedral, very minor cleavages |
| 1 | | | | 0.007 | 0.000035 | | | | Sub-Total |
| 5 | | | | | 0.002905 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 7, 2001
LIMS No. SEP0012.R00
Sample No. 887593

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Rock fragments, oxides, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

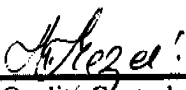
Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 8

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0012.R00
 Sample No. 887593

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 μ m | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 μ m | 0 | 0.000 | 0.000 |
| | -425 / + 300 μ m | 2 | 0.220 | 0.001 |
| | -300 / +212 μ m | 0 | 0.000 | 0.000 |
| | -212 / +150 μ m | 3 | 0.027 | 0.000 |
| | -150 / +100 μ m | 3 | 0.018 | 0.000 |
| | TOTAL | 8 | 0.265 | 0.001 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 8

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Inaay Hill
 Selection and Description

for Robert Buchan
 Consulting Mineralogist

M. Mezei
 Quality Control

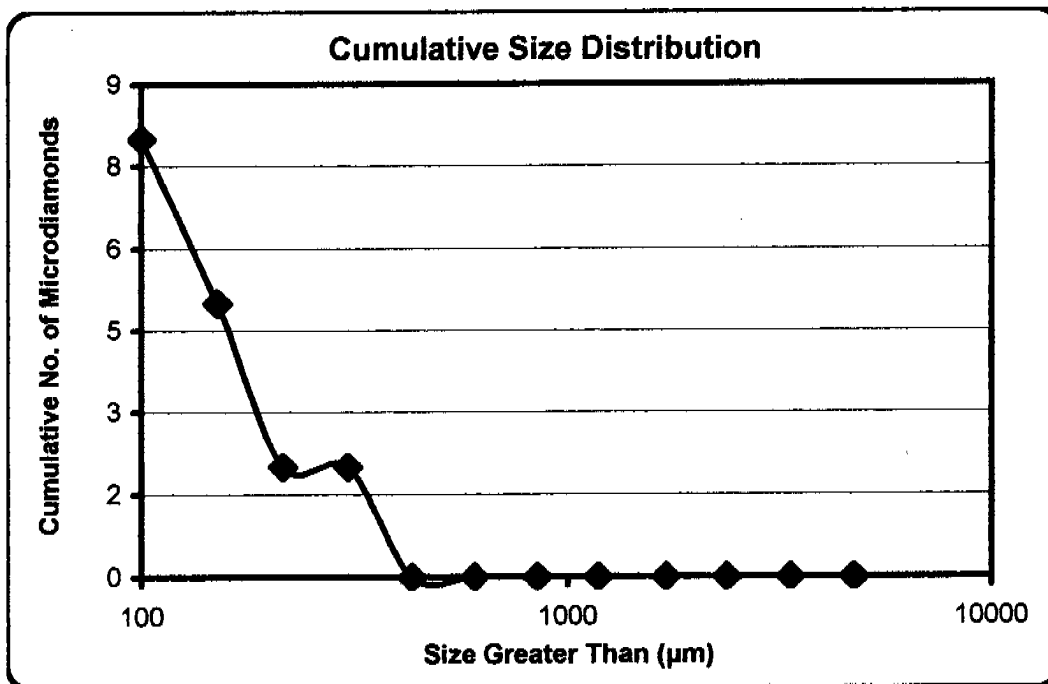
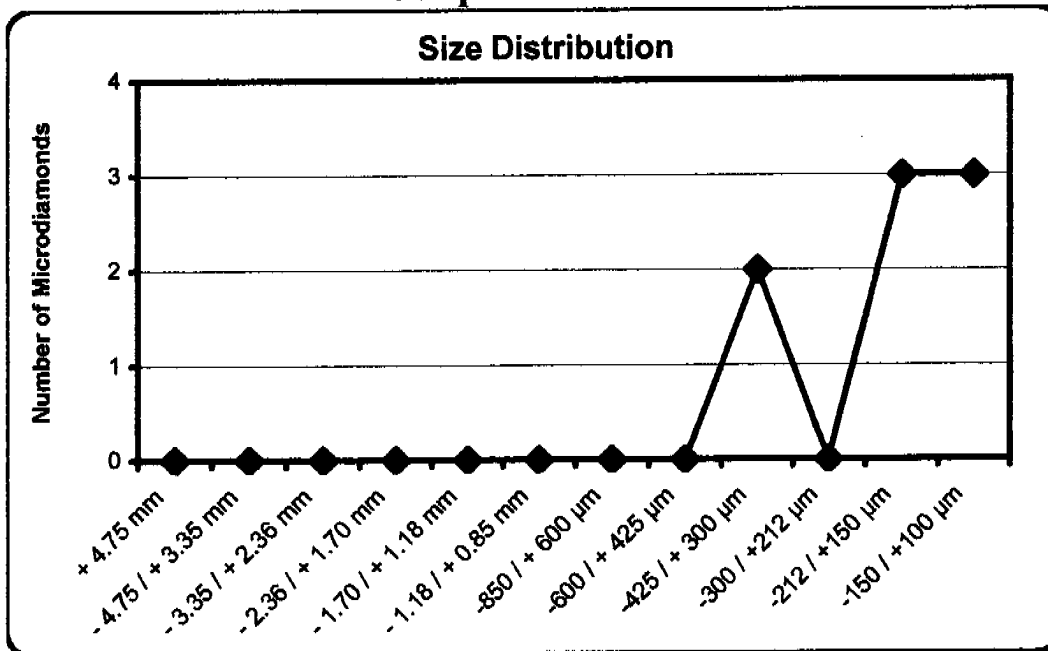
Maria Mezei
 Diamond Selection Specialist

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Sample No. 887593



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887593

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887593

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|----------|----------|-------------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.60 | 0.34 | 0.31 | 0.000000 | White | Transparent | Transparent | 62.5% | Fragment with Crystal Faces, very minor cleavages |
| 2 | 0.54 | 0.40 | 0.18 | 0.000000 | White | Transparent | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | | | | 0.220 | 0.001100 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.29 | 0.23 | 0.11 | 0.000000 | White | Transparent | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very minor cleavages |
| 2 | 0.17 | 0.17 | 0.14 | 0.000000 | White | Transparent | Transparent | 62.5% | Tetrahedral, very minor cleavages |
| 3 | 0.26 | 0.17 | 0.14 | 0.000000 | White | Transparent | Transparent | 75% | Fragment with Crystal Faces, twinned, minor cleavages |
| 3 | | | | 0.027 | 0.000135 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.23 | 0.17 | 0.10 | 0.000000 | White | Transparent | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | 0.20 | 0.14 | 0.12 | 0.000000 | White | Transparent | Transparent | 62.5% | Fragment with Crystal Faces, very minor cleavages |
| 3 | 0.20 | 0.11 | 0.09 | 0.000000 | White | Transparent | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 3 | | | | 0.018 | 0.000090 | | | | Sub-Total |
| 8 | | | | | 0.001325 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887630


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and oxides |
| +100 | Ferromagnetic Mag | Oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

 Robert Buchan
Consulting Mineralogist


Quality Control

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Diamond Selection Specialist

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Project: 8901-221
 Client: Twin Mining Corporation


Date: March 7, 2001
 LIMS No. SEP0012.R00
 Sample No. 887630


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -850 / + 600 μ m | 0 | 0.000 | 0.000 |
| | -600 / + 425 μ m | 0 | 0.000 | 0.000 |
| | -425 / + 300 μ m | 0 | 0.000 | 0.000 |
| | -300 / +212 μ m | 0 | 0.000 | 0.000 |
| | -212 / +150 μ m | 0 | 0.000 | 0.000 |
| | -150 / +100 μ m | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


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 for Robert Buchan
 Consulting Mineralogist


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 Diamond Selection Specialist

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00
 Sample No. 887630

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|-------|--------------|-----------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |

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Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887630

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|-------|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| 0 | | | | 0.000000 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

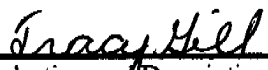
Sample No. 887631

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, oxides, and silicates |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887631

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 3 | 0.129 | 0.001 |
| | -212 / +150 µm | 1 | 0.016 | 0.000 |
| | -150 / +100 µm | 1 | 0.005 | 0.000 |
| | TOTAL | 5 | 0.150 | 0.001 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.001
 Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description

for Robert Buchan
 Consulting Mineralogist

Maria Mezei
 Quality Control

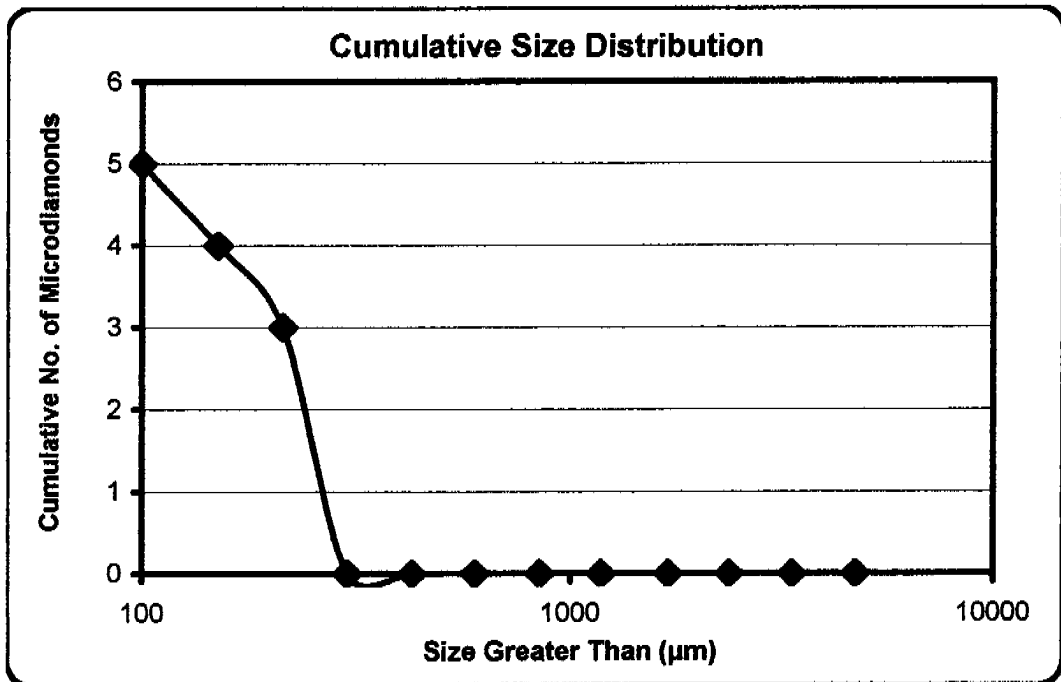
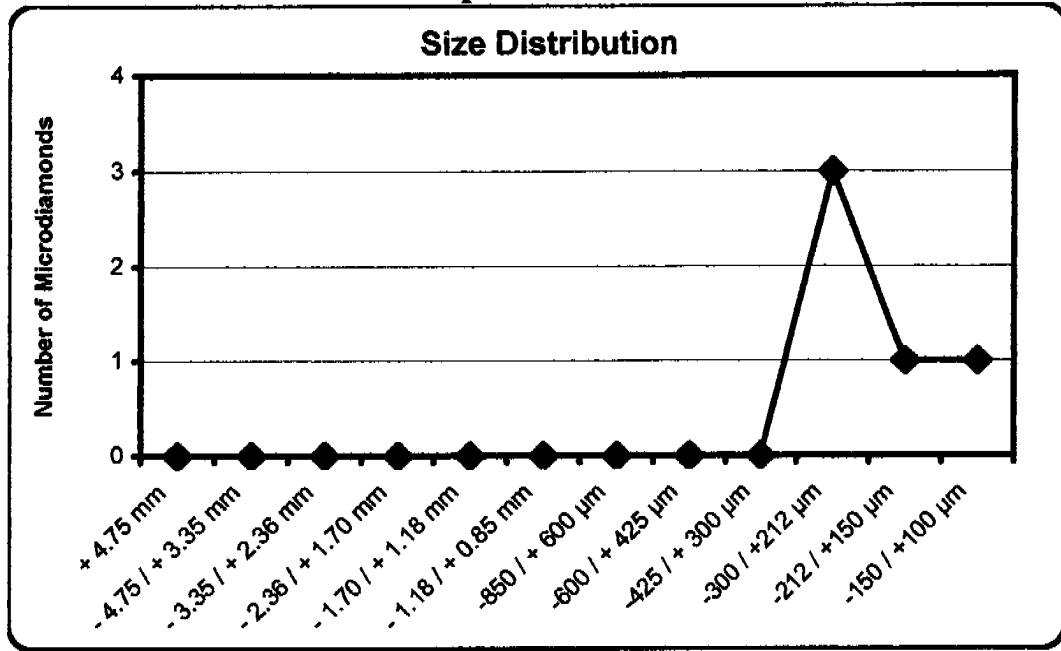
Maria Mezei
 Diamond Selection Specialist

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Sample No. 887631



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887631

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|-------|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887631

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|-----------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.34 | 0.29 | 0.23 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 2 | 0.37 | 0.26 | 0.27 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, very significant cleavages |
| 3 | 0.40 | 0.23 | 0.14 | | 0.000000 | Off White | Transparent | 95% | Octahedral, graphite inclusion, very minor cleavages |
| 3 | | | | 0.129 | 0.000645 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.20 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 95% | Octahedral, very minor cleavages |
| 1 | | | | 0.016 | 0.000080 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.10 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, very minor cleavages |
| 1 | | | | 0.005 | 0.000025 | | | | Sub-Total |
| 5 | | | | | 0.000750 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

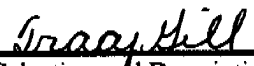
Sample No. 887611


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides, rock fragments, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

 Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

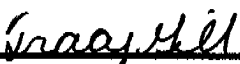
Sample No. 887611


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -850 / + 600 μ m | 0 | 0.000 | 0.000 |
| | -600 / + 425 μ m | 0 | 0.000 | 0.000 |
| | -425 / + 300 μ m | 0 | 0.000 | 0.000 |
| | -300 / +212 μ m | 0 | 0.000 | 0.000 |
| | -212 / +150 μ m | 0 | 0.000 | 0.000 |
| | -150 / +100 μ m | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 for Robert Buchan
 Consulting Mineralogist


 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887611

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|-------|--------------|-----------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887611

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|---|---|--------------|--------|--------|---------|-------------------------|-------------------|------------------|
| | X | Y | Z | | | | | | Morphology | |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.00000 | | | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.00000 | | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.00000 | | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.00000 | | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.00000 | | | | | | Sub-Total |
| 0 | | | | 0.00000 | | | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887612

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides, rock fragments, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |


Sample Weight: 24.00 kg

Total Weight (carats)*: 0.000

Number of Syndites: 0

Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887612

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Inagy Hill

Selection and Description

for Robert Buchan
 Consulting Mineralogist

M. Mezei

Quality Control

Maria Mezei
 Diamond Selection Specialist

Note:

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887612

Sample Weight: 24.00 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|-------------------|-----------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887612

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|-------|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| 0 | | | | 0.000000 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 7, 2001
LIMS No. SEP0012.R00
Sample No. 887613

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides, rock fragments, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates |

Sample Weight: 24.00 kg
Number of Syndites: 0


Total Weight (carats)*: 0.000
Number of Diamonds: 2

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0012.R00
 Sample No. 887613

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 1 | 0.020 | 0.000 |
| | -150 / +100 µm | 1 | 0.005 | 0.000 |
| | TOTAL | 2 | 0.025 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 2

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Robert Buchan
 Selection and Description
 for Robert Buchan
 Consulting Mineralogist

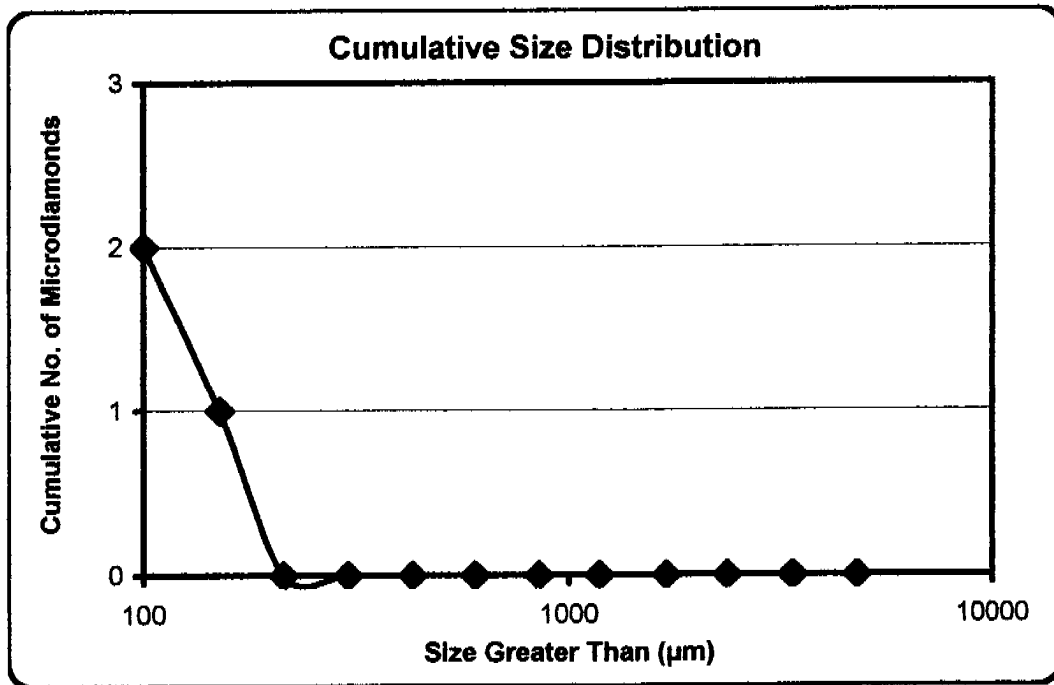
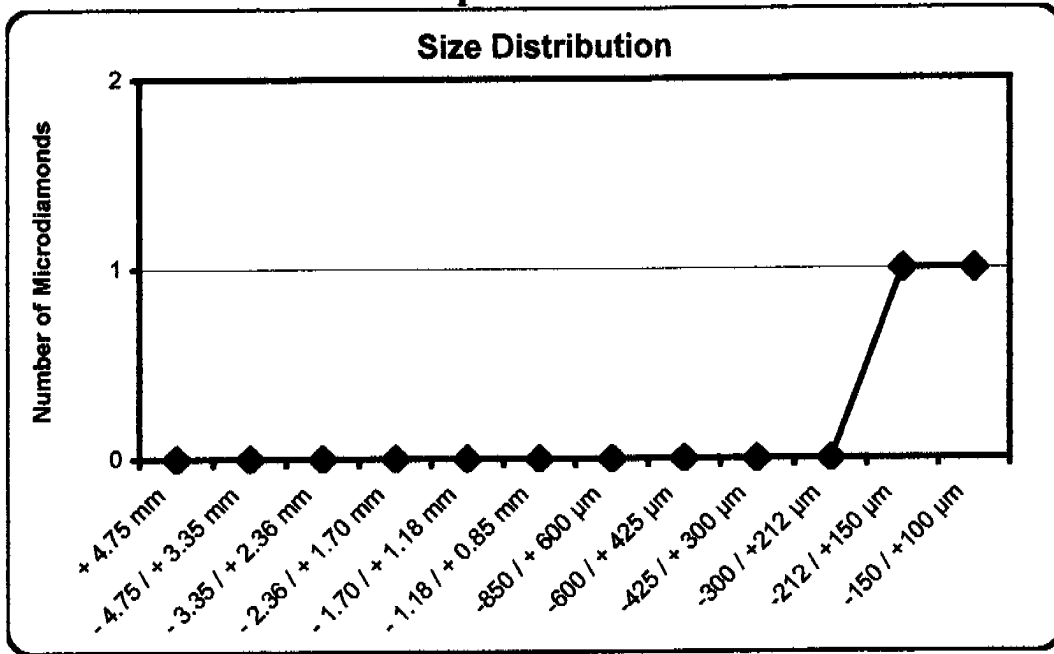
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887613



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887613

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------------|----------|-----------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887613

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.34 | 0.26 | 0.13 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 1 | | | | 0.020 | 0.000100 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.12 | | 0.000000 | White | Translucent | 95% | Octahedral, frosted, very minor cleavages |
| 1 | | | | 0.005 | 0.000025 | | | | Sub-Total |
| 2 | | | | | 0.000125 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0012.R00
Sample No. 887616


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, oxides, and silicates |
| +100 | Ferromagnetic Mag | Rock fragments, oxides, and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 4

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician


Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887616

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 4 | 0.031 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 4 | 0.031 | 0.000 |

Sample Weight: 24.00 kg

Total Weight (carats)*: 0.000

Number of Syndites: 0

Number of Diamonds: 4

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill
 Selection and Description
 Tracy Gill
 Mineralogy Technician

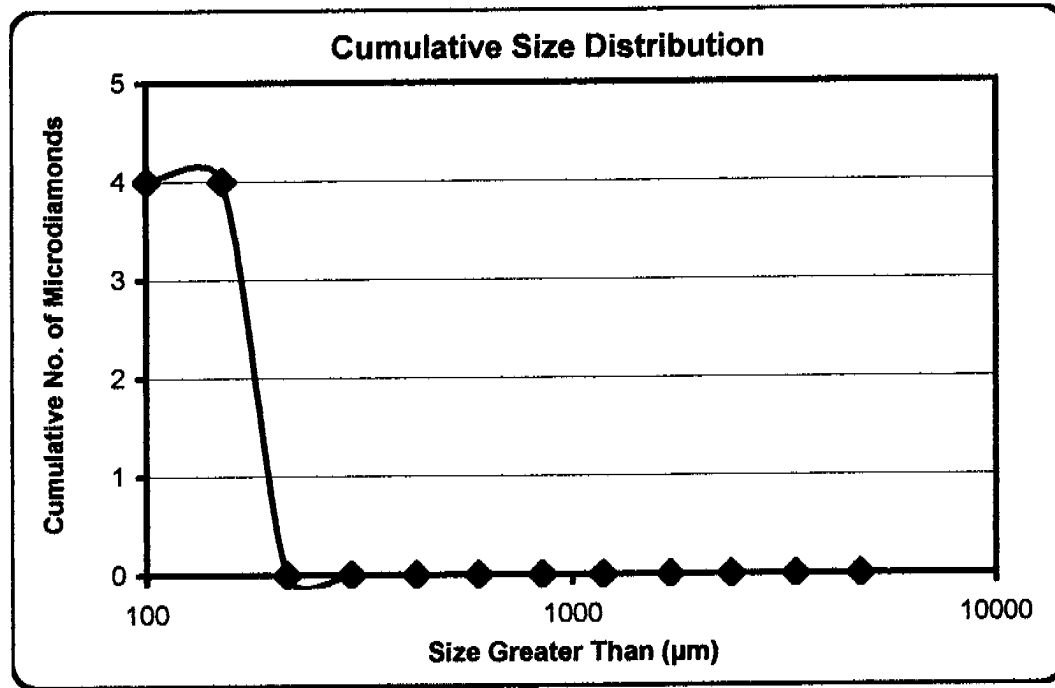
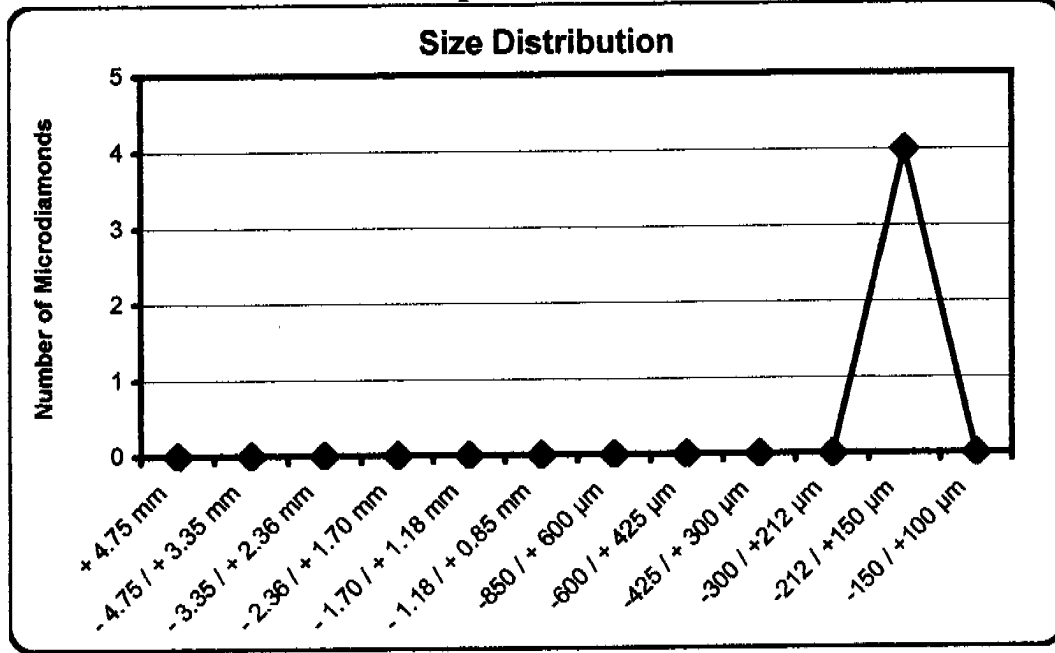
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887616



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887616

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887616

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|------|--------|----------|-----------|-------------|----------------------|---|------------------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | | |
| 1 | 0.43 | 0.26 | 0.12 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 2 | 0.26 | 0.23 | 0.24 | | 0.000000 | White | Transparent | 95% | Octahedral | |
| 3 | 0.20 | 0.20 | 0.13 | | 0.000000 | Off White | Translucent | 85% | Fragment with Crystal Faces, minor cleavages, graphite coating | |
| 4 | 0.23 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 85% | Flat Octahedral | |
| 4 | | | | 0.031 | 0.000155 | | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| 4 | | | | | 0.000155 | | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0012.R00
Sample No. 887619

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00


Sample No. 887619


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 for Robert Buchan
 Consulting Mineralogist


 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887619

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|---------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0012.R00

Sample No. 887619

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|--|---------------------|---|-------|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| -600 / + 425 μm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -425 / + 300 μm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -300 / + 212 μm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -212 / + 150 μm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -150 / + 100 μm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | |
| 0 | | | | 0.000000 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 7, 2001
LIMS No. SEP0012.R00
Sample No. 887638

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and silicates |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 17

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for
Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

Lakefield Research



Lakefield Research Limited
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Lakefield, Ontario
K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887638

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 1 | 0.066 | 0.000 |
| | -300 / +212 µm | 3 | 0.089 | 0.000 |
| | -212 / +150 µm | 5 | 0.060 | 0.000 |
| | -150 / +100 µm | 8 | 0.039 | 0.000 |
| | TOTAL | 17 | 0.254 | 0.001 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 17

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill

Selection and Description

for Robert Buchan
Consulting Mineralogist

Maria Mezei

Quality Control

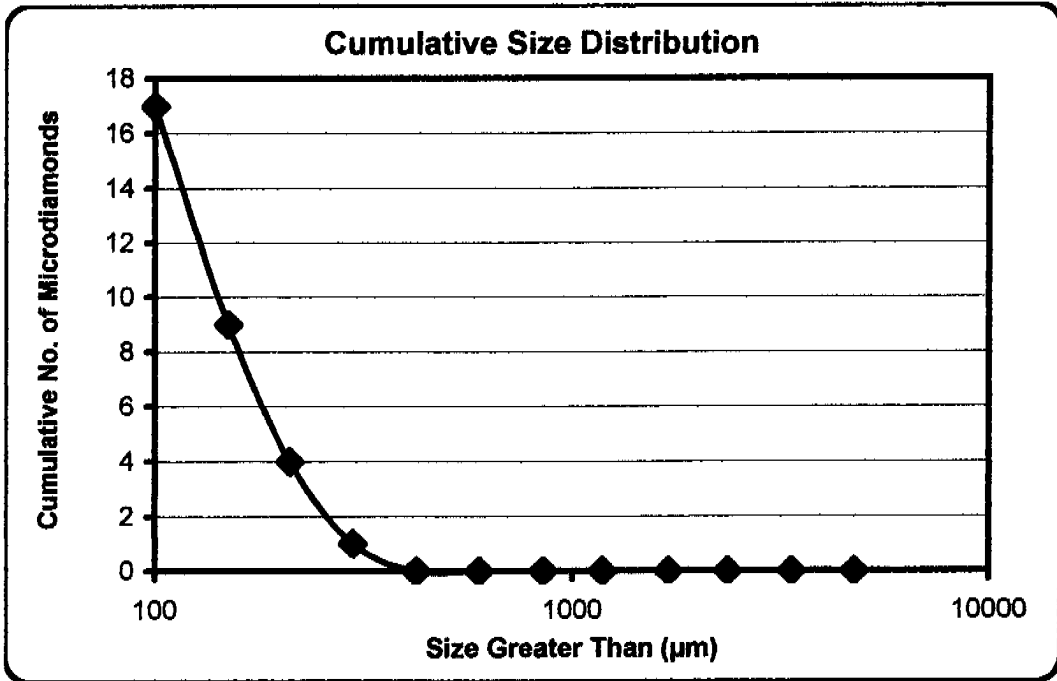
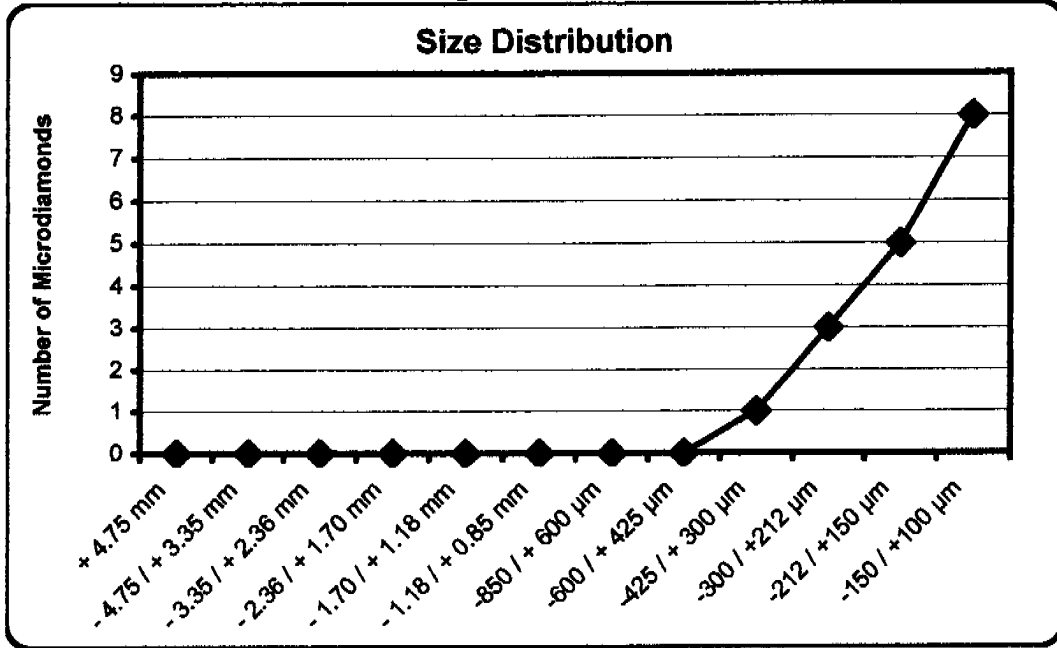
Maria Mezei
Diamond Selection Specialist

Note:

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Sample No. 887638



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00

Sample No. 887638

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|---------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0012.R00
 Sample No. 887638
 Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|------------------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | 0.37 | 0.29 | 0.29 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, twinned, minor cleavages |
| 1 | | | | 0.066 | 0.000330 | | | | |
| | | | | | Sub-Total | | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.29 | 0.29 | 0.15 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | 0.34 | 0.34 | 0.20 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 3 | 0.29 | 0.23 | 0.14 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 3 | | | | 0.089 | 0.000445 | | | | |
| | | | | | Sub-Total | | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.31 | 0.17 | 0.17 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages |
| 2 | 0.23 | 0.14 | 0.18 | | 0.000000 | White | Transparent | 62.5% | Tetrahedral, very minor cleavages |
| 3 | 0.26 | 0.14 | 0.17 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, minor cleavages |
| 4 | 0.20 | 0.17 | 0.11 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 5 | 0.20 | 0.17 | 0.13 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 5 | | | | 0.080 | 0.000300 | | | | |
| | | | | | Sub-Total | | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.11 | 0.09 | 0.10 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 2 | 0.23 | 0.14 | 0.14 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 3 | 0.29 | 0.17 | 0.13 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 4 | 0.14 | 0.14 | 0.11 | | 0.000000 | White | Transparent | 95% | Octahedral, very minor cleavages |
| 5 | 0.14 | 0.09 | 0.08 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 6 | 0.20 | 0.17 | 0.07 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 7 | 0.14 | 0.14 | 0.08 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 8 | 0.20 | 0.14 | 0.10 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 8 | | | | 0.039 | 0.000195 | | | | |
| | | | | | Sub-Total | | | | |
| | | | | | TOTAL | | | | |
| 17 | | | | | 0.001270 | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.



Twin Mining Corporation
Attn : Hermann Derbuch, P.Eng.

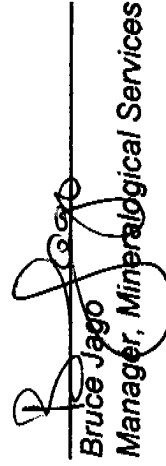
Suite 1250, 155 University Ave.
Toronto, Ontario - M5H 3B7
Canada
Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 22 September 2000
LR. Ref. : MI0013-SEP00
Project : 8901-221

CERTIFICATE OF ANALYSIS

| Sample ID | Sample wt kg | # Pours | Dia # | Dia ct |
|-----------|-----------------|---------|-------|-----------|
| 1: 887623 | 24.0 | 3 | 2 | 0.000 |
| 2: 887585 | 24.0 | 3 | 7 | 0.001 |
| 3: 887624 | 24.0 | 3 | 4 | 0.001 |
| 4: 887626 | 24.0 | 3 | 0 | 0.000 |
| 5: 887597 | 24.0 | 3 | 0 | 0.000 |
| 6: 887562 | 24.0 | 3 | 0 | 0.000 |
| 7: 887563 | 24.0 | 3 | 1 | 0.000 |
| 8: 887566 | 24.0 | 3 | 0 | 0.000 |


Bruce Jago
Manager, Mineralogical Services

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

Date: March 7, 2001
LIMS No. SEP0013.R00
Sample No. 887623

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 2

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0013.R00
 Sample No. 887623

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 1 | 0.009 | 0.000 |
| | -150 / +100 µm | 1 | 0.007 | 0.000 |
| | TOTAL | 2 | 0.016 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 2

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill

Selection and Description

for Robert Buchan
 Consulting Mineralogist

Maria Mezei

Quality Control

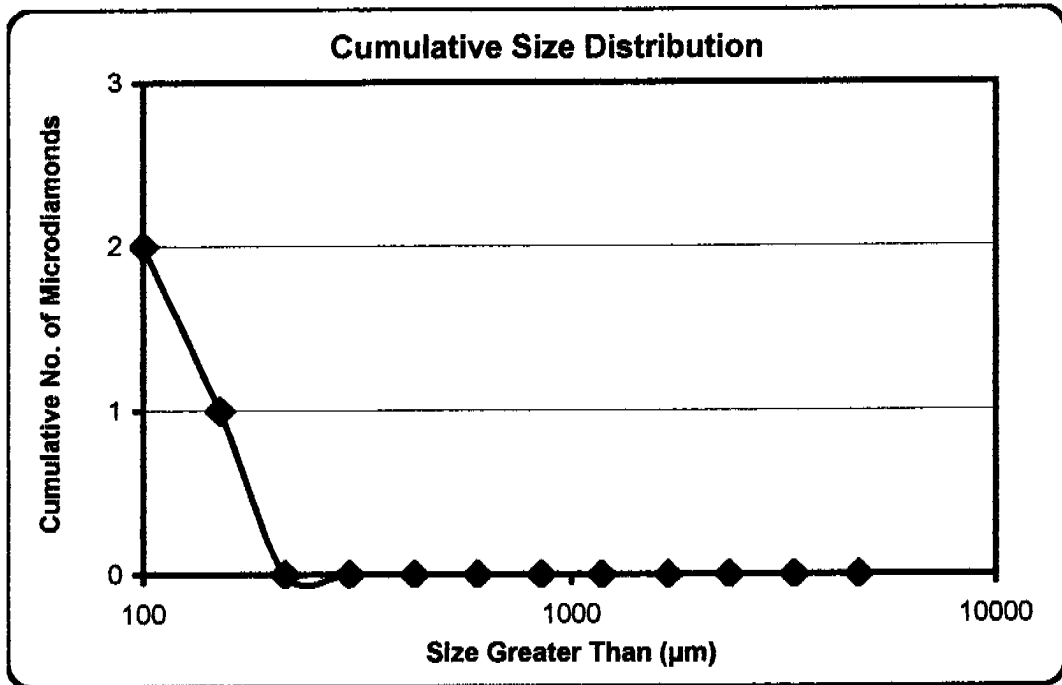
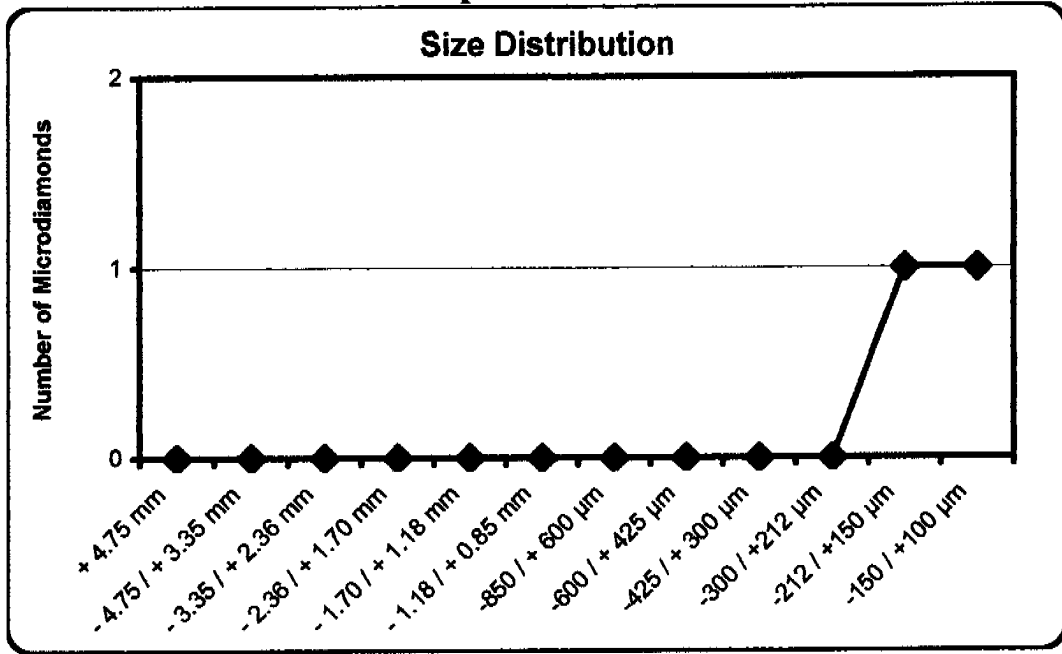
Maria Mezei
 Diamond Selection Specialist

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Sample No. 887623



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887623

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887623

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|-------|--------------|------------------|-------------|---------|-------------------------|----------------------------------|--------------|
| | X | Y | Z | | | | | | Morphology | |
| -425 / + 300 µm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -300 / + 212 µm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -212 / + 150 µm fraction | | | | | | | | | | |
| 1 | 0.17 | 0.17 | 0.08 | 0.000000 | White | Transparent | | 95% | Macle, very minor cleavages | |
| 1 | | | 0.009 | 0.000045 | Sub-Total | | | | | |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 1 | 0.14 | 0.14 | 0.11 | 0.000000 | White | Transparent | | 95% | Octahedral, very minor cleavages | |
| 1 | | | 0.007 | 0.000035 | Sub-Total | | | | | |
| 2 | | | | | | | | | | TOTAL |
| | | | | | | | | | | 0.000080 |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887585

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg

Total Weight (carats)*: 0.001

Number of Syndites: 0

Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0013.R00
 Sample No. 887585

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 2 | 0.052 | 0.000 |
| | -212 / +150 µm | 2 | 0.042 | 0.000 |
| | -150 / +100 µm | 3 | 0.014 | 0.000 |
| | TOTAL | 7 | 0.108 | 0.001 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.001
 Number of Diamonds: 7

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description
 for Robert Buchan
 Consulting Mineralogist

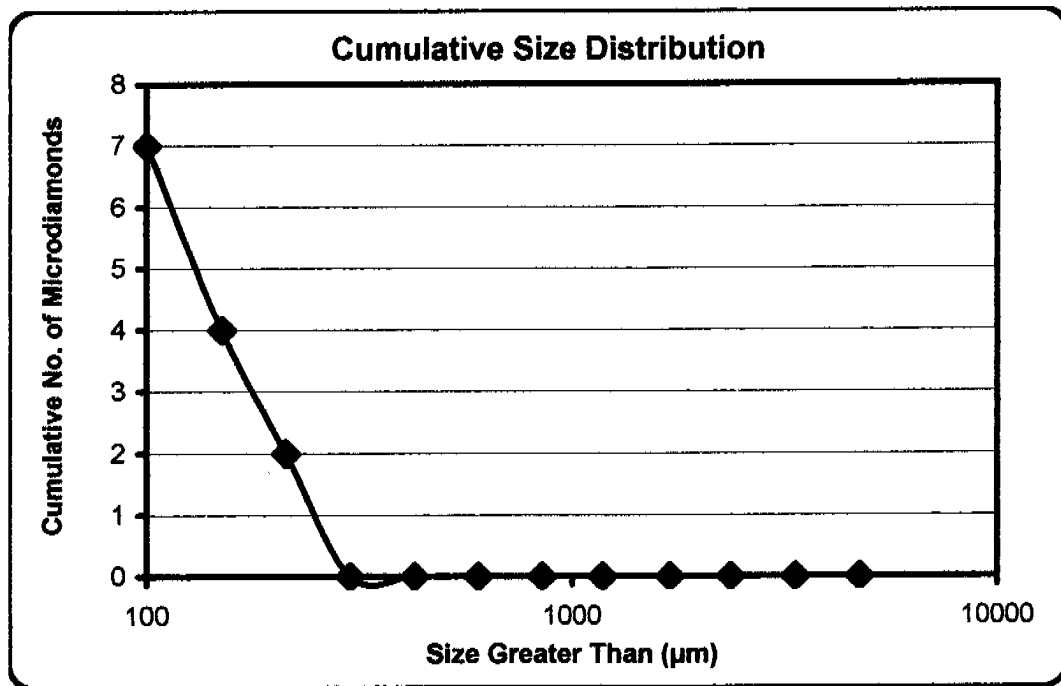
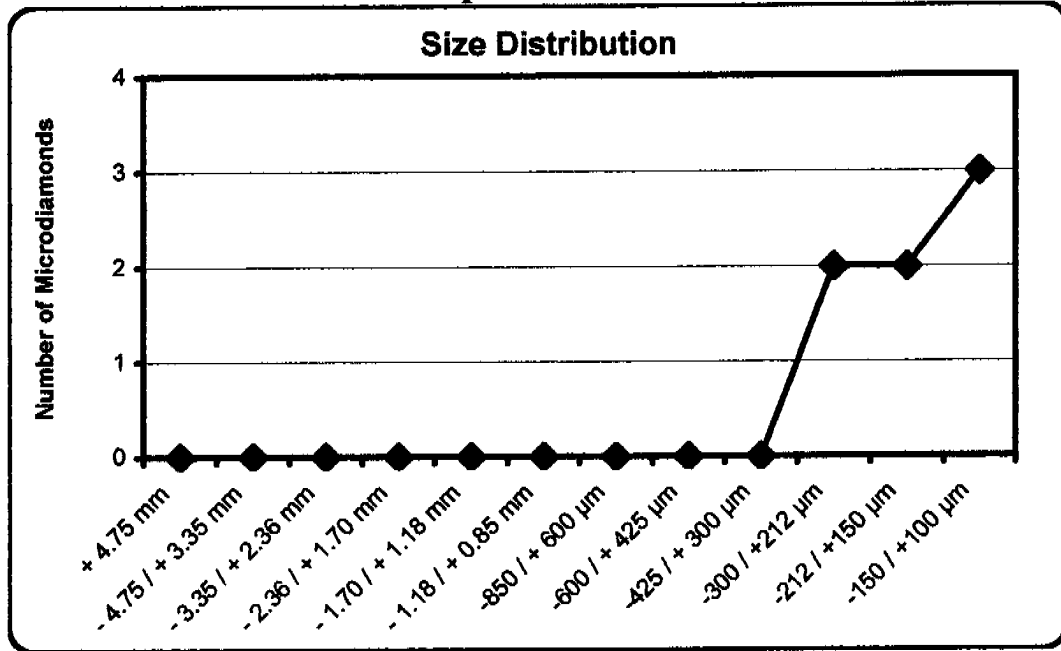
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887585



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887585

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|-------------------|-----------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |

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March 7, 2001

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Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887585

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.40 | 0.26 | 0.12 | | 0.000000 | White | Transparent | 62.5% | Fragment with Crystal Faces, significant cleavages |
| 2 | 0.29 | 0.23 | 0.20 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces, twinned, minor cleavages |
| 2 | | | | 0.052 | 0.000260 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.26 | 0.23 | 0.13 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, graphite inclusion, minor cleavages |
| 2 | 0.29 | 0.17 | 0.15 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces, minor cleavages |
| 2 | | | | 0.042 | 0.000210 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.29 | 0.14 | 0.08 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 2 | 0.17 | 0.14 | 0.12 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces, minor cleavages |
| 3 | 0.17 | 0.17 | 0.11 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, minor cleavages |
| 3 | | | | 0.014 | 0.000070 | | | | Sub-Total |
| 7 | | | | | 0.000540 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0013.R00
Sample No. 887624

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 4

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation


Date: March 7, 2001
 LIMS No. SEP0013.R00
 Sample No. 887624


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 1 | 0.069 | 0.000 |
| | -300 / +212 µm | 1 | 0.058 | 0.000 |
| | -212 / +150 µm | 1 | 0.018 | 0.000 |
| | -150 / +100 µm | 1 | 0.070 | 0.000 |
| | TOTAL | 4 | 0.215 | 0.001 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 4

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician

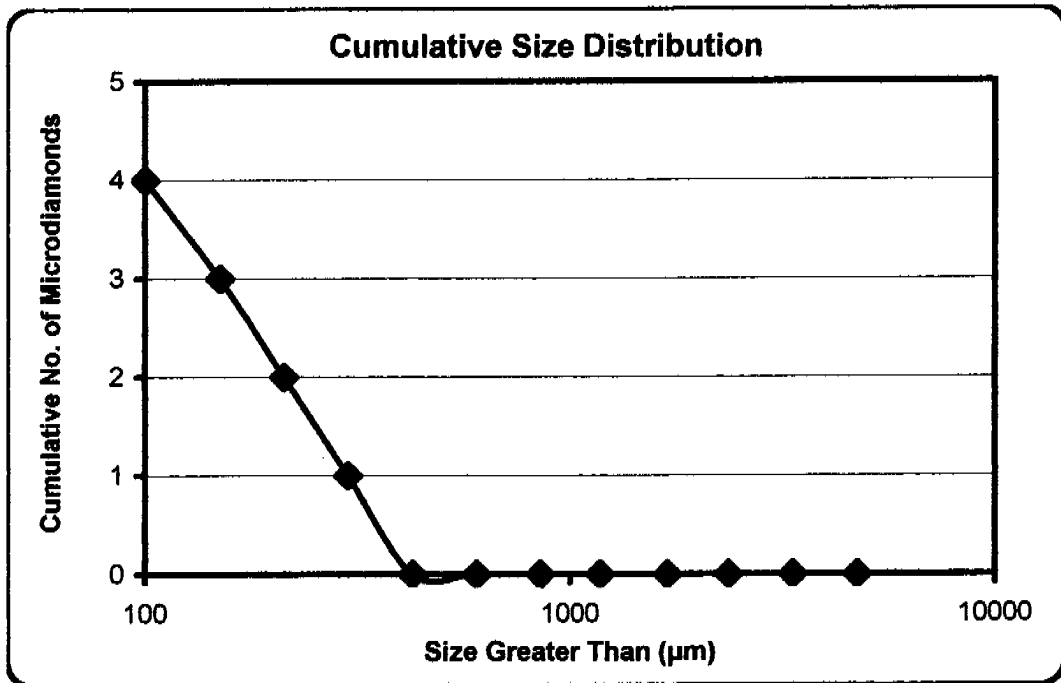
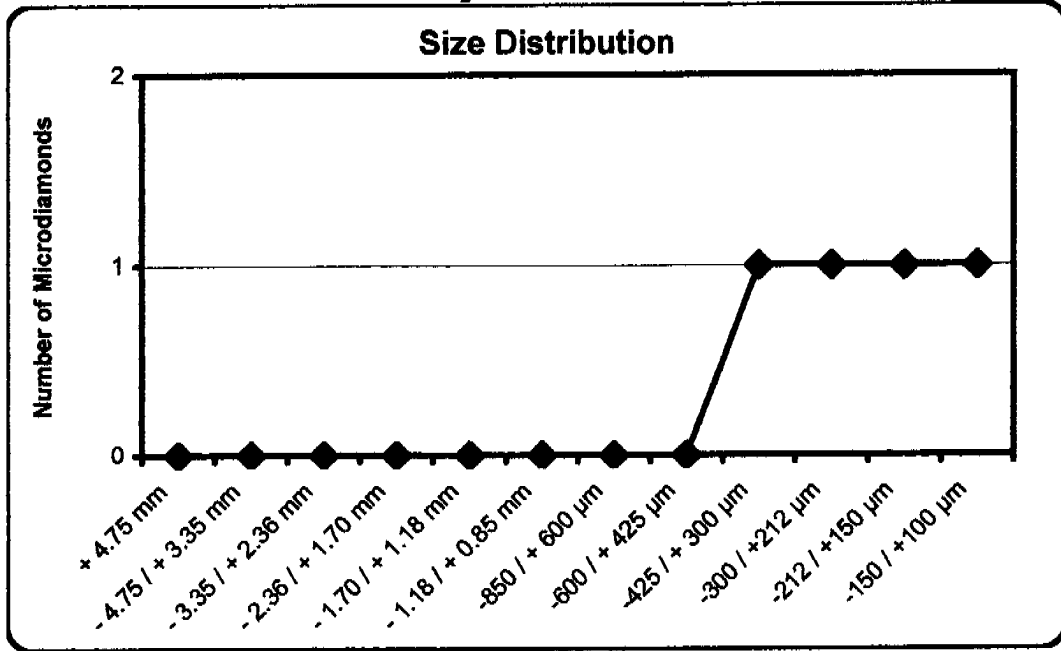

 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887624



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887624

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|-------|--------------|--------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | 0.000 | 0.000000 | | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887624

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------------|----------|------------------|-------------|-------------------------|---|
| | X | Y | Z | | | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.31 | 0.34 | 0.000000 | | Off White | Transparent | 75% | Dodecahedral |
| 1 | | | | 0.069 | 0.000345 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.54 | 0.34 | 0.21 | 0.000000 | | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 1 | | | | 0.058 | 0.000290 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.34 | 0.23 | 0.20 | 0.000000 | | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 1 | | | | 0.018 | 0.000090 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.29 | 0.17 | 0.13 | 0.000000 | | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 1 | | | | 0.070 | 0.000350 | Sub-Total | | | |
| 4 | | | | | 0.001075 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0013.R00
Sample No. 887626

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Rock fragments and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

for Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0013.R00
 Sample No. 887626

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill

Selection and Description

for Robert Buchan
 Consulting Mineralogist

Maria Mezei

Quality Control

Maria Mezei
 Diamond Selection Specialist

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887626

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887626

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| 0 | | | | | 0.000000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887597

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, oxides, and silicates |
| +100 | Ferromagnetic Mag | Rock fragments, oxides, and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates, oxides, and graphite |

Sample Weight: 24.00 kg

Total Weight (carats)*: 0.000

Number of Syndites: 0

Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**

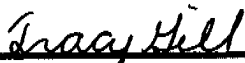
Date: March 7, 2001
 LIMS No. **SEP0013.R00**
 Sample No. **887597**


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 for Robert Buchan
 Consulting Mineralogist


 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887597

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887597

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| 0 | | | | | 0.000000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



Lakefield Research Limited
185 Concession St., Box 4300
Lakefield, Ontario
K0L 2H0, CANADA

Tel: (705) 652-2112
Fax: (705) 652-3123
Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

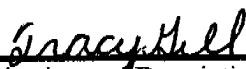
Sample No. 887562

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Oxides and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, graphite, and silicates |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

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Date: March 7, 2001

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LIMS No. SEP0013.R00

Sample No. 887562

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg

Total Weight (carats)*: 0.000

Number of Syndites: 0

Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill

Selection and Description

Tracy Gill

Mineralogy Technician

Maria Mezei

Quality Control

Maria Mezei

Diamond Selection Specialist

Note:

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887562

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|---------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887562

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| 0 | | | | | 0.000000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887563


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Oxides and rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description

 Robert Buchan
Consulting Mineralogist


Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0013.R00
 Sample No. 887563

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 1 | 0.008 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 1 | 0.008 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Inaay Hill
 Selection and Description
 for Robert Buchan
 Consulting Mineralogist

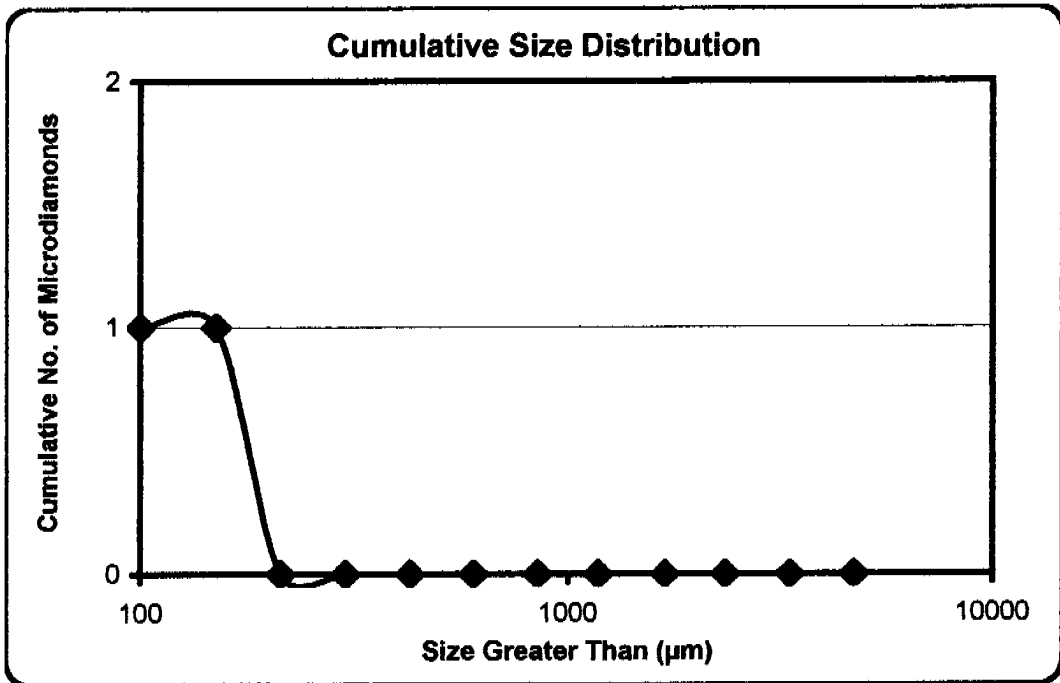
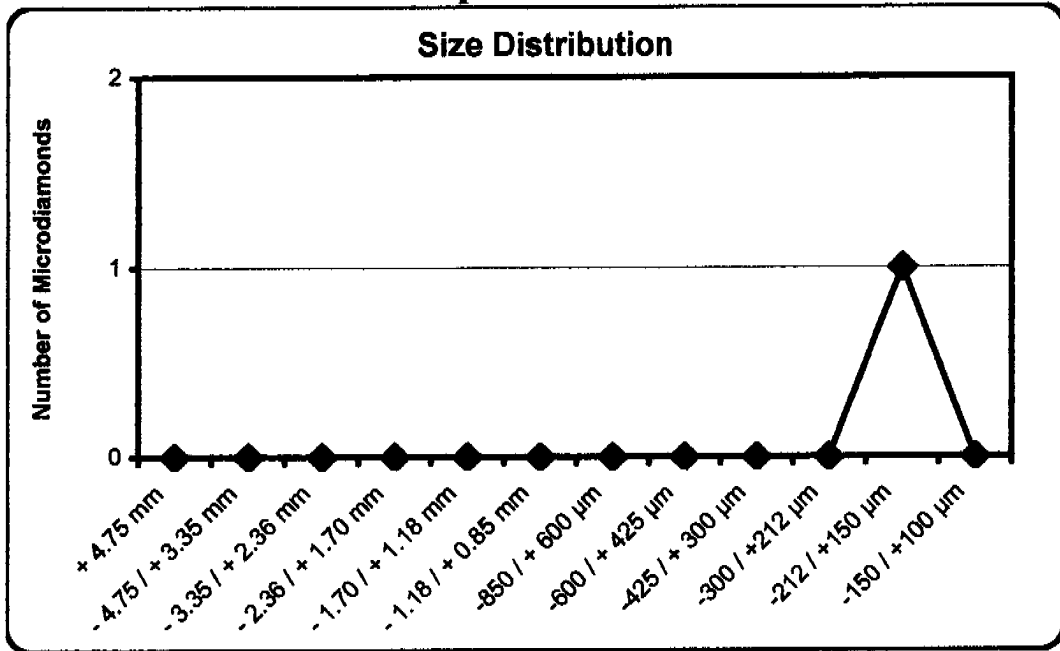
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887563



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887563

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------------|---------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0013.R00

Sample No. 887563

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|---------|--------|-------------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.26 | 0.20 | 0.17 | | 0.00000 | White | Transparent | 99+% | Octahedral |
| 1 | | | | 0.008 | 0.00040 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| 1 | | | | | 0.00040 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
Client: **Twin Mining Corporation**

Date: March 7, 2001
LIMS No. **SEP0013.R00**
Sample No. **887566**

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and oxides |
| +100 | Ferromagnetic Mag | Oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0


Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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Project: **8901-221**
 Client: **Twin Mining Corporation**

Date: **March 7, 2001**
 LIMS No. **SEP0013.R00**
 Sample No. **887566**

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill

Selection and Description

for Robert Buchan
 Consulting Mineralogist

Maria Mezei

Quality Control

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887566

Sample Weight: 24.00 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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Project: 8901-221

LIMS No. SEP0013.R00

Sample No. 887566

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| 0 | | | | | 0.000000 | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Twin Mining Corporation
 Attn : Hermann Derbuch, P.Eng.


Suite 1250, 155 University Ave.
 Toronto, Ontario - M5H 3B7
 Canada
 Fax : (416) 777-0014

Lakefield, 05 23, 2001

Date Rec. : 22 September 2000
 LR. Ref. : MI0014-SEP00
 Project : 8901-221

CERTIFICATE OF ANALYSIS

| Sample ID | Sample wt kg | # Pours | Dia # | Dia ct |
|------------|--------------|---------|-------|--------|
| 1: 887569 | 24.0 | 3 | 1 | 0.000 |
| 2: 887571 | 24.0 | 3 | 13 | 0.014 |
| 3: 887572 | 24.0 | 3 | 5 | 0.000 |
| 4: 887573 | 24.0 | 3 | 32 | 0.006 |
| 5: 887574 | 24.0 | 3 | 14 | 0.002 |
| 6: 887575 | 24.0 | 3 | 2 | 0.000 |
| 7: 887587 | 24.0 | 3 | 15 | 0.021 |
| 8: 887588 | 24.0 | 3 | 1 | 0.003 |
| 9: 887589 | 24.0 | 3 | 3 | 0.001 |
| 10: 887590 | 24.0 | 3 | 0 | 0.000 |


Bruce Dago
 Manager, Mineralogical Services

Lakefield Research



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Project: 8901-221

Client: Twin Mining Corporation

Date: March 7, 2001

LIMS No. SEP0014.R00

Sample No. 887569

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides and silicates |

Sample Weight: 24.00 kg
Number of Syndites: 0


Total Weight (carats)*: 0.000
Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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 Fax: (705) 652-3123
 Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation

Date: March 7, 2001
 LIMS No. SEP0014.R00
 Sample No. 887569

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 1 | 0.011 | 0.000 |
| TOTAL | | 1 | 0.011 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description
 for Robert Buchan
 Consulting Mineralogist

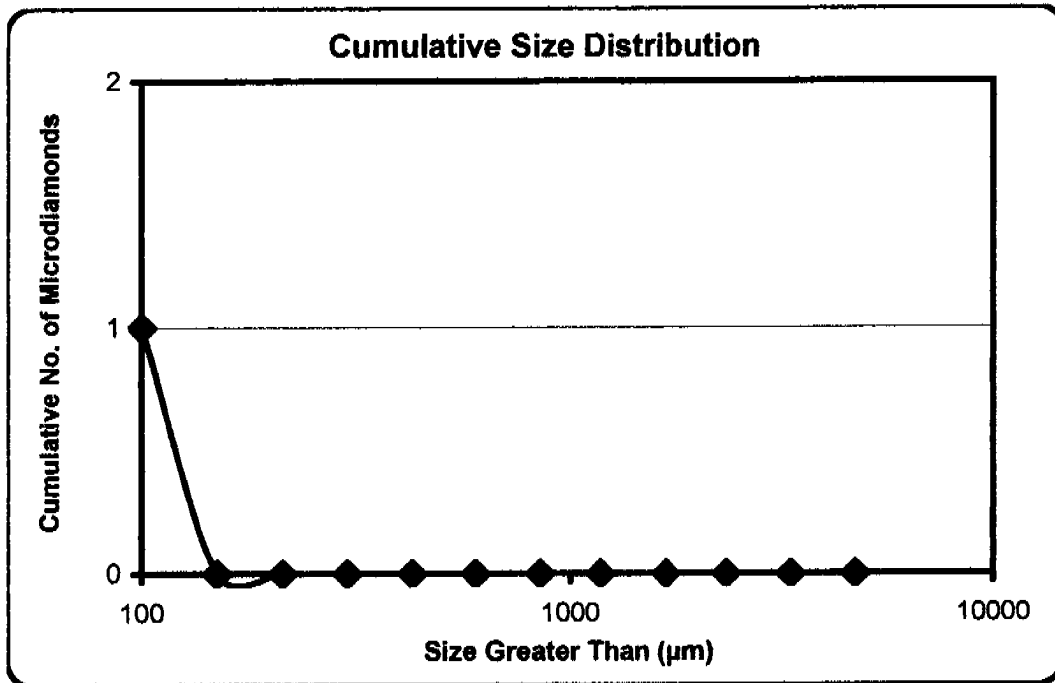
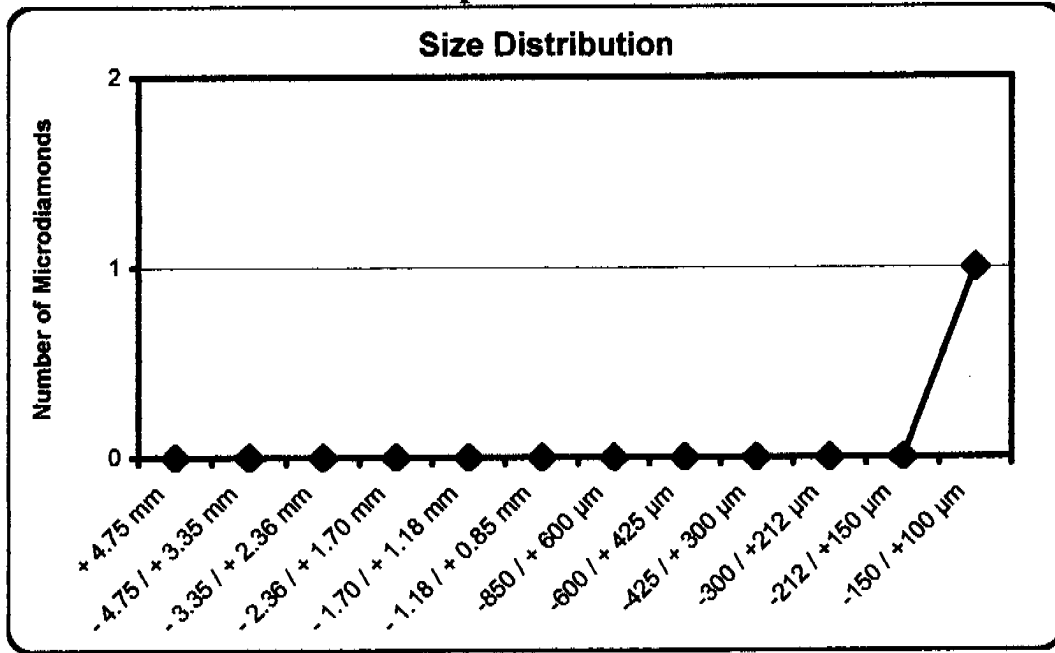
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

Sample No. 887569



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887569

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887569

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|--|---------------------|------|-------|--------------|--------|--------|-------------|-------------------------|-------------------|----------------------------------|
| | X | Y | Z | | | | | | Morphology | |
| -600 / + 425 μm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| | | | | | | | | | | Sub-Total |
| -425 / + 300 μm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| | | | | | | | | | | Sub-Total |
| -300 / + 212 μm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| | | | | | | | | | | Sub-Total |
| -212 / + 150 μm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| | | | | | | | | | | Sub-Total |
| -150 / + 100 μm fraction | | | | | | | | | | |
| 1 | 0.20 | 0.14 | 0.14 | 0.000000 | | | Transparent | 99+% | | Octahedral, very minor cleavages |
| 1 | | | 0.011 | 0.000055 | | | | | | |
| | | | | | | | | | | Sub-Total |
| 1 | | | | 0.000055 | | | | | | TOTAL |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

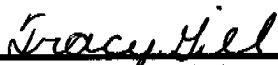
Date: March 7, 2001
LIMS No. SEP0014.R00
Sample No. 887571

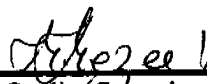
| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments, silicates, and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.014
Number of Diamonds: 13

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician


Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**


Date: **March 7, 2001**
 LIMS No. **SEP0014.R00**
 Sample No. **887571**

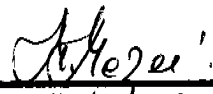
| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 1 | 1.979 | 0.010 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 1 | 0.341 | 0.002 |
| | -425 / + 300 µm | 2 | 0.296 | 0.001 |
| | -300 / +212 µm | 2 | 0.058 | 0.000 |
| | -212 / +150 µm | 6 | 0.068 | 0.000 |
| | -150 / +100 µm | 1 | 0.004 | 0.000 |
| | TOTAL | 13 | 2.746 | 0.014 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.014
Number of Diamonds: 13

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician

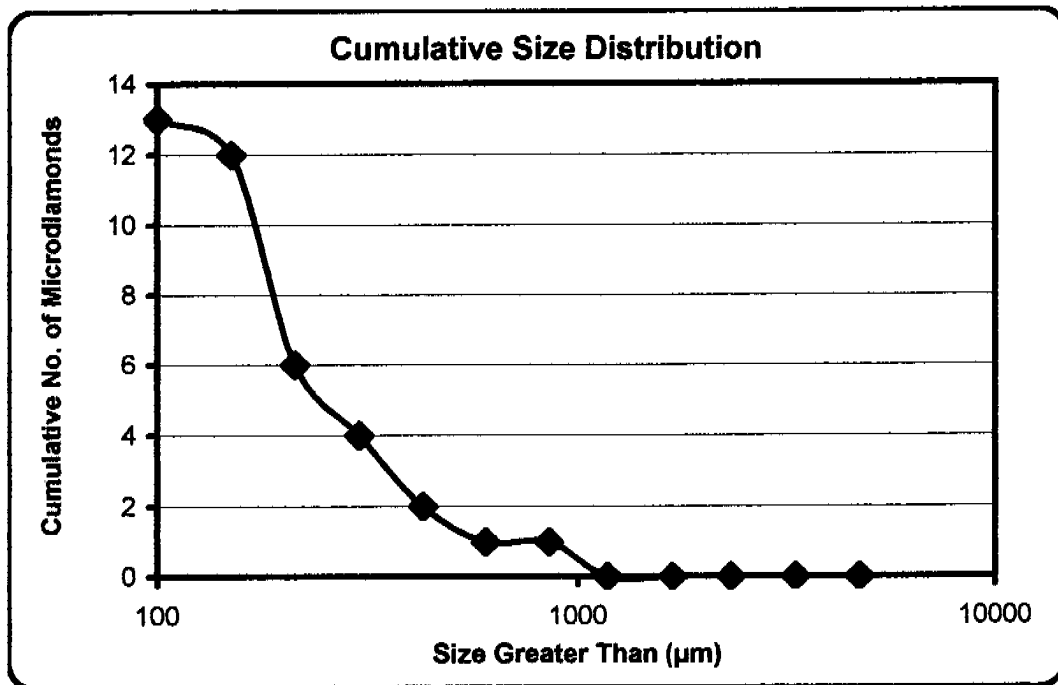
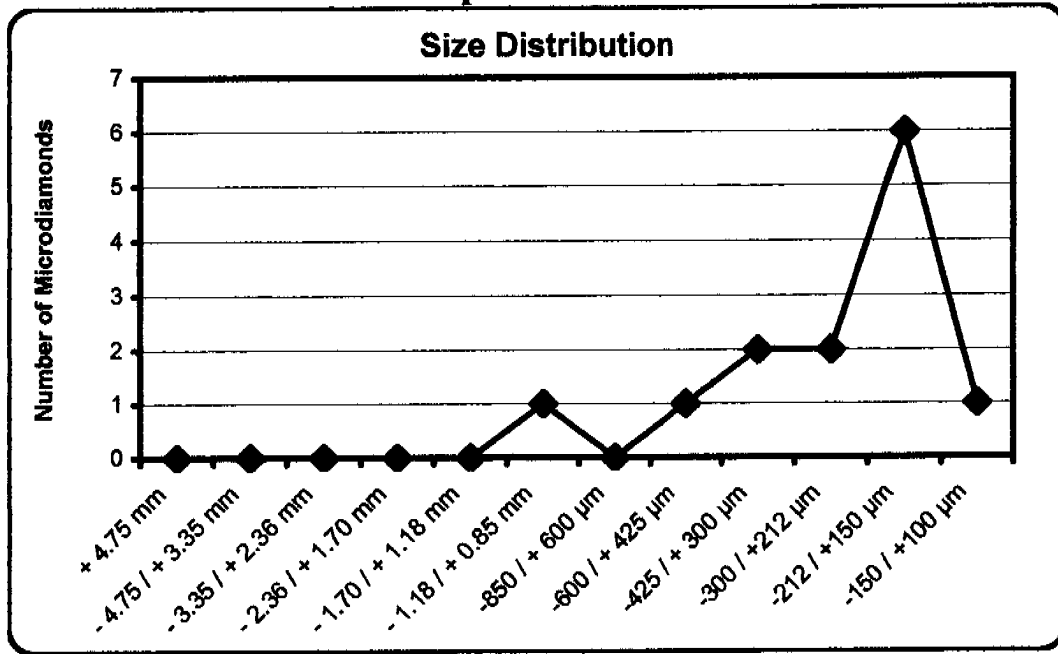

 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887571



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887571

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | 1.05 | 1.03 | 1.01 | 1.979 | 0.009895 | | Transparent | 75% | Dodecahedral, very minor cleavages, graphite inclusions |
| 1 | | | | 1.979 | 0.009895 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 0.83 | 0.57 | 0.42 | | 0.000000 | | Transparent | 85% | Fragment with Crystal Faces, very minor cleavages |
| 1 | | | | 0.341 | 0.001705 | | | | Sub-Total |

March 7, 2001

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887571

Sample Weight: 24.00 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|------|--------|----------|------------------|-------------|---------|----------------------|--|--|
| | X | Y | Z | mg | Carats | | | | | Morphology | |
| -425 / + 300 µm fraction | | | | | | | | | | | |
| 1 | 0.68 | 0.48 | 0.39 | | 0.000000 | White | Transparent | | 85% | Fragment with Crystal Faces, very minor cleavages | |
| 2 | 0.54 | 0.37 | 0.26 | | 0.000000 | White | Transparent | | 85% | Fragment with Crystal Faces, very minor cleavages | |
| 2 | | | | 0.296 | 0.001480 | Sub-Total | | | | | |
| -300 / + 212 µm fraction | | | | | | | | | | | |
| 1 | 0.37 | 0.29 | 0.16 | | 0.000000 | White | Transparent | | 85% | Fragment with Crystal Faces, minor cleavages | |
| 2 | 0.31 | 0.29 | 0.24 | | 0.000000 | White | Transparent | | 95% | Octahedral, stepped faces | |
| 2 | | | | 0.058 | 0.000290 | Sub-Total | | | | | |
| -212 / + 150 µm fraction | | | | | | | | | | | |
| 1 | 0.37 | 0.20 | 0.16 | | 0.000000 | White | Transparent | | 85% | Fragment with Crystal Faces, minor cleavages | |
| 2 | 0.29 | 0.23 | 0.15 | | 0.000000 | White | Transparent | | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, graphite inclusions | |
| 3 | 0.31 | 0.23 | 0.10 | | 0.000000 | White | Transparent | | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, graphite inclusions | |
| -4 | 0.20 | 0.17 | 0.11 | | 0.000000 | White | Transparent | | 95% | Octahedral | |
| -3 | 0.23 | 0.17 | 0.13 | | 0.000000 | White | Transparent | | 85% | Fragment with Crystal Faces, minor cleavages, graphite inclusions | |
| 6 | 0.31 | 0.20 | 0.14 | | 0.000000 | White | Transparent | | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages, graphite inclusions | |
| 6 | | | | 0.068 | 0.000340 | Sub-Total | | | | | |
| -150 / + 100 µm fraction | | | | | | | | | | | |
| 1 | 0.23 | 0.17 | 0.12 | | 0.000000 | White | Transparent | | 85% | Fragment with Crystal Faces, very minor cleavages | |
| 1 | | | | 0.004 | 0.000020 | Sub-Total | | | | | |
| 13 | | | | | 0.013730 | TOTAL | | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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Email: bjago@lakefield.com

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00


Sample No. 887572

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and oxides |
| +100 | Ferromagnetic Mag | Silicates and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and graphite |


Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00


Sample No. 887572

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 μ m | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 μ m | 0 | 0.000 | 0.000 |
| | -425 / + 300 μ m | 0 | 0.000 | 0.000 |
| | -300 / +212 μ m | 1 | 0.021 | 0.000 |
| | -212 / +150 μ m | 2 | 0.014 | 0.000 |
| | -150 / +100 μ m | 2 | 0.009 | 0.000 |
| | TOTAL | 5 | 0.044 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 5

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician

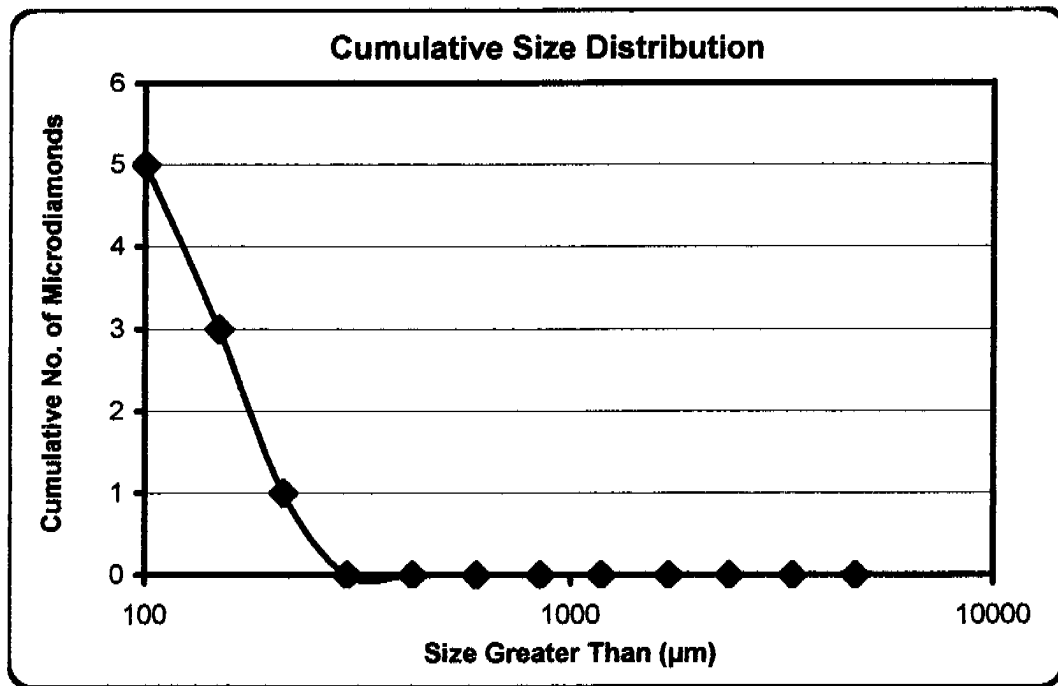
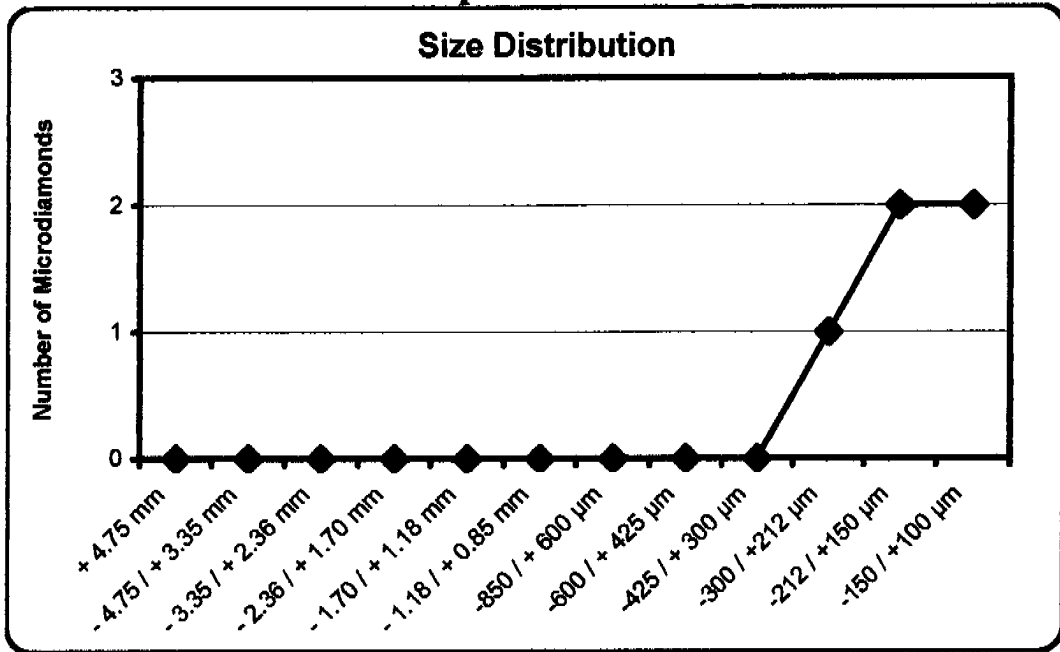

Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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Sample No. 887572



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887572

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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 Fax: 705-652-3123

March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887572

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|---|---|--------|---------|--------|---------|----------------------|-------------------|-----------|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | | Sub-Total |

LAKEFIELD RESEARCH LIMITED

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887572

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|--|---------------------|------|------|--------------|----------|--------|---------|-------------------------|-------------------|---|
| | X | Y | Z | | | | | | Morphology | |
| -600 / + 425 μm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -425 / + 300 μm fraction | | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | | Sub-Total |
| -300 / + 212 μm fraction | | | | | | | | | | |
| 1 | 0.34 | 0.29 | 0.17 | 0.000000 | | | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 1 | | | | 0.021 | 0.000105 | | | | | Sub-Total |
| -212 / + 150 μm fraction | | | | | | | | | | |
| 1 | 0.29 | 0.17 | 0.14 | 0.000000 | | | Grey | Opaque | 75% | Aggregate, minor cleavages, graphite inclusions |
| 2 | 0.23 | 0.17 | 0.20 | 0.000000 | | | Yellow | Transparent | 95% | Octahedral, twinned |
| 2 | | | | 0.014 | 0.000070 | | | | | Sub-Total |
| -150 / + 100 μm fraction | | | | | | | | | | |
| 1 | 0.17 | 0.14 | 0.07 | 0.000000 | | | White | Transparent | 95% | Macle |
| 2 | 0.14 | 0.11 | 0.09 | 0.000000 | | | White | Transparent | 99+% | Octahedral |
| 2 | | | | 0.009 | 0.000045 | | | | | Sub-Total |
| TOTAL | | | | | | | | | | |
| 5 | | | | 0.000220 | | | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0014.R00
Sample No. 887573


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments, silicates, and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.006
Number of Diamonds: 32

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician


Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**


Date: March 7, 2001
 LIMS No. **SEP0014.R00**
 Sample No. **887573**


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 1 | 0.400 | 0.002 |
| | -425 / + 300 µm | 2 | 0.300 | 0.002 |
| | -300 / +212 µm | 9 | 0.354 | 0.002 |
| | -212 / +150 µm | 10 | 0.126 | 0.001 |
| | -150 / +100 µm | 10 | 0.055 | 0.000 |
| | TOTAL | 32 | 1.235 | 0.006 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.006
Number of Diamonds: 32

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician

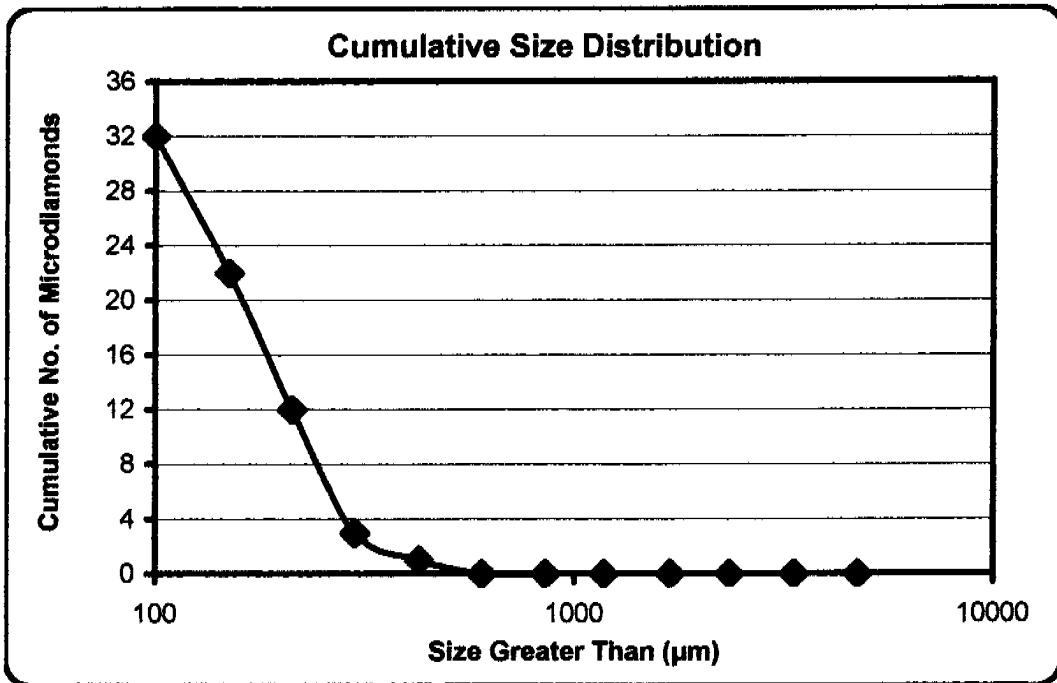
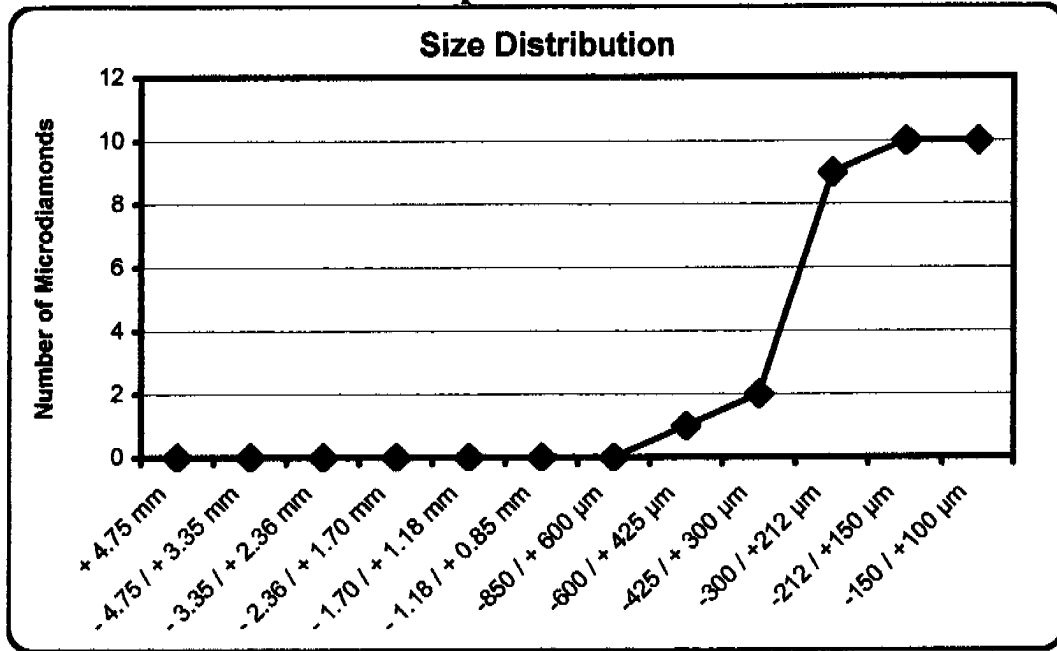

 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887573



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887573

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|-------|--------------|-----------|-------------|---------|--|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 1.08 | 0.51 | 0.42 | 0.00000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages | |
| 1 | | | 0.400 | 0.002000 | Sub-Total | | | | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0014.R00
 Sample No. 887573
 Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------------|----------|------------------|-------------|-------------------------|--|
| | X | Y | Z | | | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 1.20 | 0.46 | 0.38 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages, graphite inclusions |
| 2 | 0.48 | 0.40 | 0.27 | | 0.000000 | Grey | Opaque | 75% | |
| 2 | | | | 0.300 | 0.001500 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.40 | 0.34 | 0.28 | | 0.000000 | Grey | Opaque | 75% | Aggregate, very minor cleavages, graphite inclusions |
| 2 | 0.48 | 0.31 | 0.26 | | 0.000000 | White | Opaque | 75% | |
| 3 | 0.43 | 0.40 | 0.17 | | 0.000000 | Grey | Opaque | 75% | Aggregate, very minor cleavages, graphite inclusions |
| 4 | 0.34 | 0.31 | 0.20 | | 0.000000 | Grey | Opaque | 75% | |
| 5 | 0.37 | 0.29 | 0.18 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 6 | 0.37 | 0.31 | 0.22 | | 0.000000 | White | Transparent | 85% | |
| 7 | 0.43 | 0.34 | 0.26 | | 0.000000 | White | Transparent | 75% | Dodecahedral |
| 8 | 0.43 | 0.29 | 0.23 | | 0.000000 | White | Transparent | 62.5% | |
| 9 | 0.31 | 0.26 | 0.20 | | 0.000000 | Grey | Translucent | 62.5% | Dodecahedral, very minor cleavages |
| 9 | | | | 0.354 | 0.001770 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.40 | 0.23 | 0.13 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 2 | 0.31 | 0.26 | 0.13 | | 0.000000 | White | Opaque | 75% | |
| 3 | 0.23 | 0.20 | 0.11 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages |
| 4 | 0.26 | 0.17 | 0.17 | | 0.000000 | White | Transparent | 85% | |
| 5 | 0.34 | 0.17 | 0.11 | | 0.000000 | White | Opaque | 75% | Aggregate, very minor cleavages |
| 6 | 0.29 | 0.20 | 0.13 | | 0.000000 | White | Transparent | 85% | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887573

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|------|--------|----------|------------------|-------------|----------------------|---|--|
| | X | Y | Z | mg | Carats | | | | Morphology | |
| 7 | 0.20 | 0.20 | 0.16 | | 0.000000 | White | Transparent | 85% | Dodecahedral | |
| 8 | 0.20 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 85% | Octahedral, twinned, very minor cleavages | |
| 9 | 0.20 | 0.20 | 0.16 | | 0.000000 | Grey | Opaque | 75% | Aggregate, graphite inclusions, very minor cleavages | |
| 10 | 0.23 | 0.17 | 0.15 | | 0.000000 | Grey | Opaque | 75% | Aggregate, graphite inclusions, very minor cleavages | |
| 10 | | | | 0.126 | 0.000630 | Sub-Total | | | | |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 1 | 0.29 | 0.26 | 0.12 | | 0.000000 | White | Opaque | Note 1 | Fragment on which crystal faces unrecognizable, graphite inclusions, minor cleavages | |
| 2 | 0.26 | 0.17 | 0.15 | | 0.000000 | Off White | Opaque | Note 1 | Fragment on which crystal faces unrecognizable, graphite inclusions, minor cleavages | |
| 3 | 0.31 | 0.17 | 0.13 | | 0.000000 | Off White | Opaque | Note 1 | Fragment on which crystal faces unrecognizable, graphite inclusions, minor cleavages | |
| 4 | 0.29 | 0.17 | 0.14 | | 0.000000 | Off White | Opaque | Note 1 | Fragment on which crystal faces unrecognizable, graphite inclusions, minor cleavages | |
| 5 | 0.23 | 0.14 | 0.09 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages | |
| 6 | 0.17 | 0.14 | 0.10 | | 0.000000 | White | Transparent | 85% | Dodecahedral | |
| 7 | 0.26 | 0.20 | 0.14 | | 0.000000 | Off White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, frosted, minor cleavages | |
| 8 | 0.31 | 0.20 | 0.11 | | 0.000000 | Grey | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages, graphite inclusions | |
| 9 | 0.23 | 0.17 | 0.08 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 10 | 0.17 | 0.17 | 0.10 | 0.055 | 0.000275 | Sub-Total | | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | |
| 32 | | | | | 0.006175 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0014.R00
Sample No. 887574

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides and silicates |

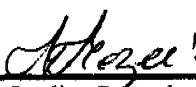
Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.002
Number of Diamonds: 14

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887574

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 2 | 0.243 | 0.001 |
| | -300 / +212 µm | 5 | 0.129 | 0.001 |
| | -212 / +150 µm | 6 | 0.062 | 0.000 |
| | -150 / +100 µm | 1 | 0.004 | 0.000 |
| | TOTAL | 14 | 0.438 | 0.002 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.002
 Number of Diamonds: 14

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill
 Selection and Description
 Tracy Gill
 Mineralogy Technician

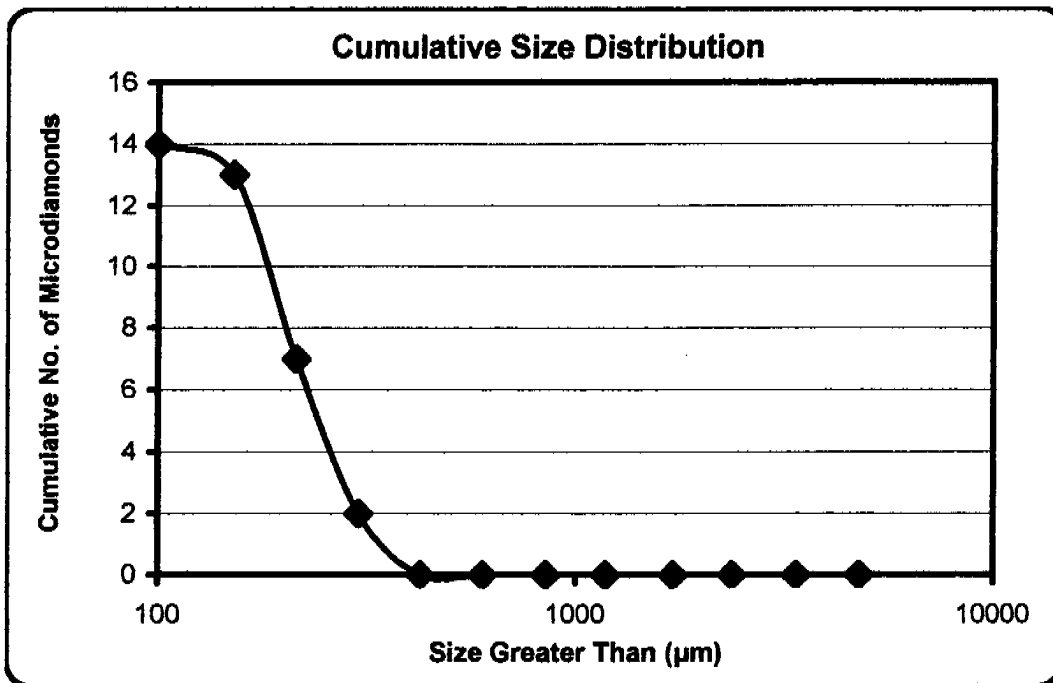
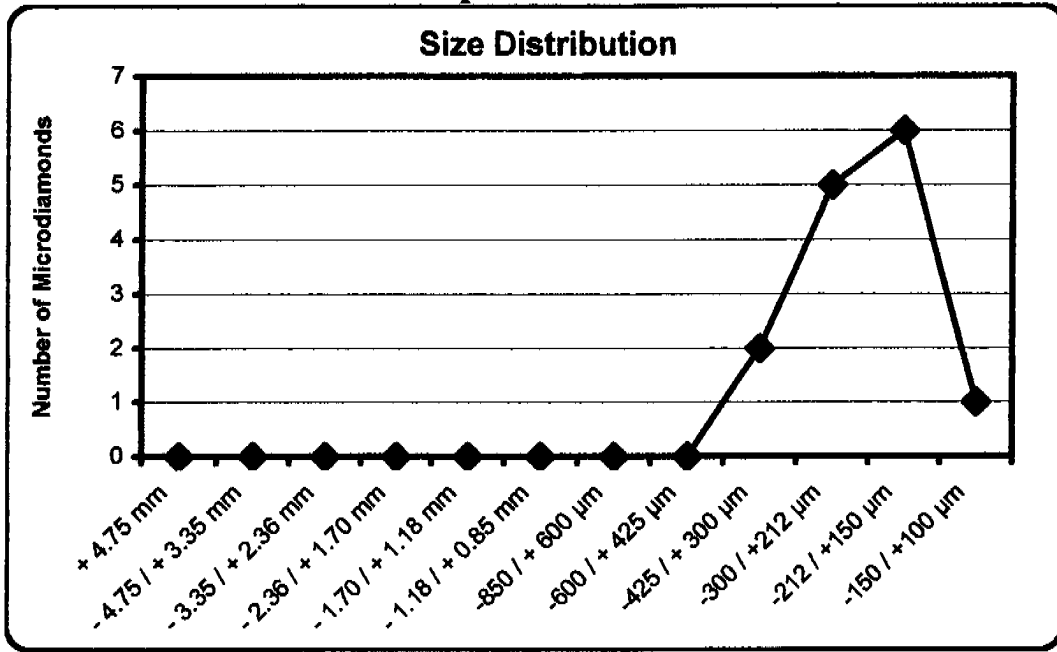
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887574



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887574

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00
 Sample No. 887574
 Sample Weight: 24.00 kg

Client: Twin Mining Corporation

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description | | |
|---------------------------------|---------------------|------|------|--------|----------|------------------|-------------|----------------------|---|--|--|
| | X | Y | Z | mg | Carats | | | | Morphology | | |
| -425 / + 300 µm fraction | | | | | | | | | | | |
| 1 | 0.60 | 0.40 | 0.37 | | 0.000000 | White | Transparent | 75% | Irregular | | |
| 2 | 0.46 | 0.37 | 0.28 | | 0.000000 | White | Transparent | 85% | Fragment with Crystal Faces, minor cleavages | | |
| 2 | | | | 0.243 | 0.001215 | | | | | | |
| | | | | | | Sub-Total | | | | | |
| -300 / + 212 µm fraction | | | | | | | | | | | |
| 1 | 0.34 | 0.29 | 0.18 | | 0.000000 | White | Transparent | 95% | Octahedral | | |
| 2 | 0.26 | 0.26 | 0.22 | | 0.000000 | White | Transparent | 99+% | Octahedral | | |
| 3 | 0.31 | 0.29 | 0.19 | | 0.000000 | White | Transparent | 62.5% | Dodecahedral | | |
| 4 | 0.34 | 0.26 | 0.20 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | | |
| 5 | 0.40 | 0.26 | 0.18 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, minor cleavages | | |
| 5 | | | | 0.129 | 0.000645 | Sub-Total | | | | | |
| -212 / + 150 µm fraction | | | | | | | | | | | |
| 1 | 0.29 | 0.20 | 0.13 | | 0.000000 | White | Transparent | 95% | Octahedral, very minor cleavages | | |
| 2 | 0.20 | 0.20 | 0.18 | | 0.000000 | White | Transparent | 95% | Octahedral, twinned | | |
| 3 | 0.17 | 0.17 | 0.17 | | 0.000000 | White | Transparent | 95% | Octahedral, very minor cleavages | | |
| 4 | 0.34 | 0.20 | 0.15 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, minor cleavages | | |
| 5 | 0.23 | 0.20 | 0.13 | | 0.000000 | White | Transparent | 75% | Fragment with Crystal Faces, minor cleavages | | |
| 6 | 0.20 | 0.17 | 0.11 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages | | |
| 6 | | | | 0.062 | 0.000310 | Sub-Total | | | | | |
| -150 / + 100 µm fraction | | | | | | | | | | | |
| 1 | 0.34 | 0.14 | 0.10 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages | | |
| 1 | | | | 0.004 | 0.000020 | Sub-Total | | | | | |
| 14 | | | | | 0.002190 | TOTAL | | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation


Date: March 7, 2001
LIMS No. SEP0014.R00
Sample No. 887575

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments and silicates |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

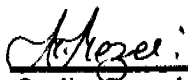
Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 2

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887575

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 μ m | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 μ m | 0 | 0.000 | 0.000 |
| | -425 / + 300 μ m | 0 | 0.000 | 0.000 |
| | -300 / +212 μ m | 0 | 0.000 | 0.000 |
| | -212 / +150 μ m | 1 | 0.008 | 0.000 |
| | -150 / +100 μ m | 1 | 0.004 | 0.000 |
| | TOTAL | 2 | 0.012 | 0.000 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 2

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill

Selection and Description

Tracy Gill

Mineralogy Technician

Maria Mezei

Quality Control

Maria Mezei

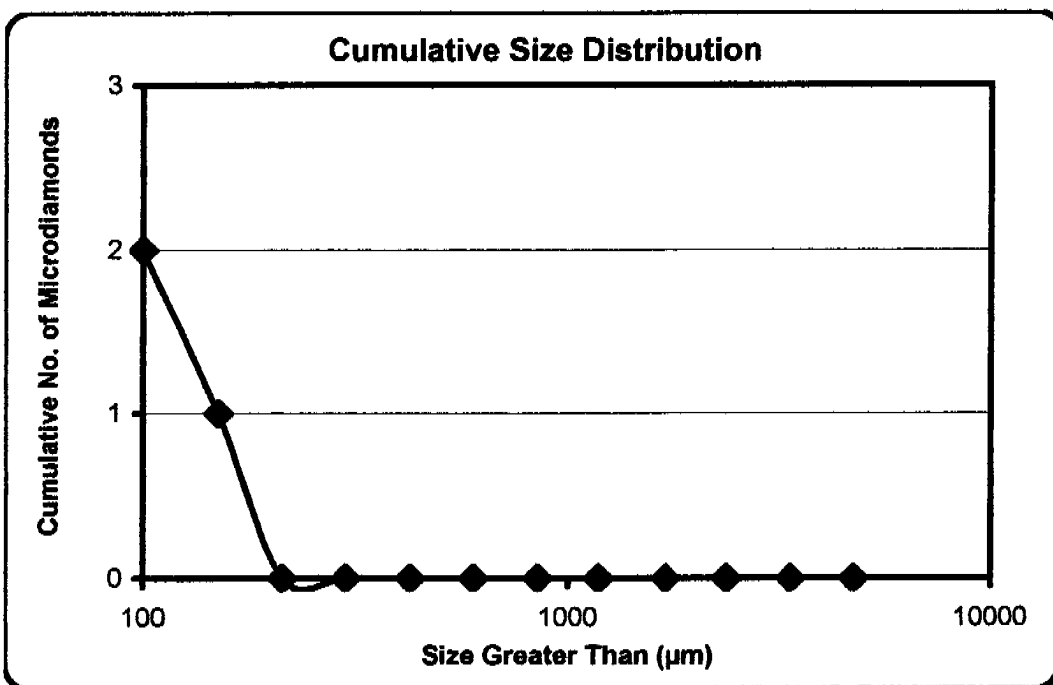
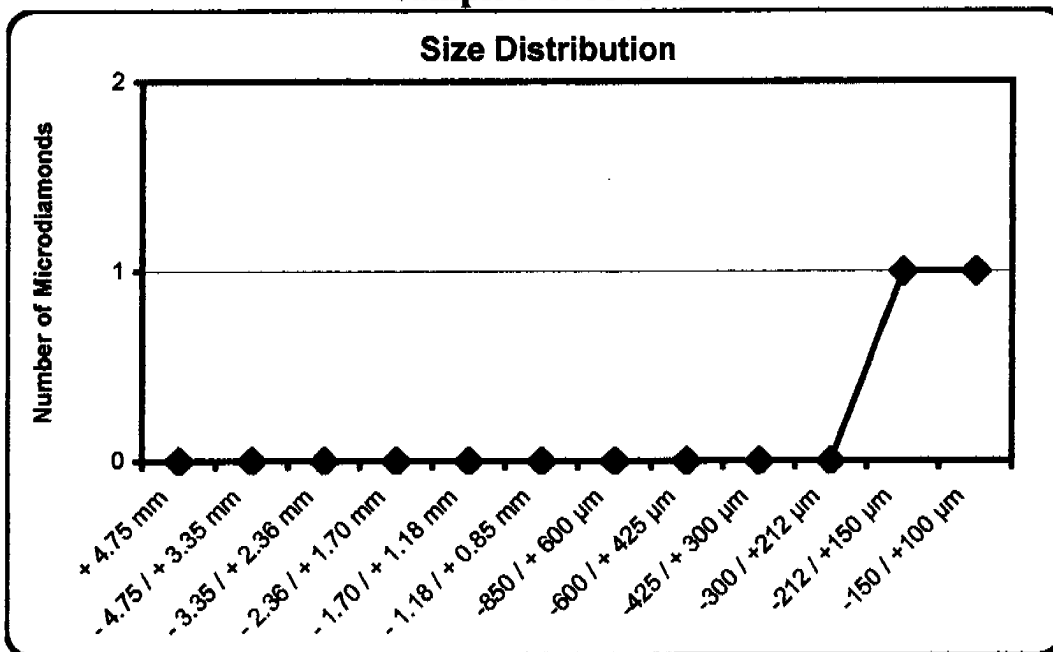
Diamond Selection Specialist

Note:

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Sample No. 887575



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887575

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | | 0.000000 | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887575

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|---------------------------------|---------------------|------|------|--------------|----------|-------------|---------|-------------------------|-------------------|--|
| | X | Y | Z | | | | | | Morphology | |
| -600 / + 425 µm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -425 / + 300 µm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -300 / + 212 µm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | | |
| -212 / + 150 µm fraction | | | | | | | | | | |
| 1 | 0.43 | 0.29 | 0.16 | 0.000000 | White | Transparent | | 85% | Irregular | |
| 1 | | | | 0.008 | 0.000040 | Sub-Total | | | | |
| -150 / + 100 µm fraction | | | | | | | | | | |
| 1 | 0.14 | 0.11 | 0.11 | 0.000000 | White | Transparent | | 99+% | Made | |
| 1 | | | | 0.004 | 0.000020 | Sub-Total | | | | |
| 2 | | | | | 0.000060 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887587

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments and oxides |
| +100 | Ferromagnetic Mag | Rock fragments, silicates, and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg

Total Weight (carats)*: 0.021

Number of Syndites: 0

Number of Diamonds: 15

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

for Robert Buchan
Consulting Mineralogist



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887587

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 1 | 2.830 | 0.014 |
| | -850 / + 600 µm | 1 | 0.534 | 0.003 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 2 | 0.380 | 0.002 |
| | -425 / + 300 µm | 1 | 0.380 | 0.002 |
| | -300 / +212 µm | 2 | 0.052 | 0.000 |
| | -212 / +150 µm | 5 | 0.065 | 0.000 |
| | -150 / +100 µm | 3 | 0.012 | 0.000 |
| | TOTAL | 15 | 4.253 | 0.021 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.021
Number of Diamonds: 15

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Hill
 Selection and Description
 for Robert Buchan
 Consulting Mineralogist

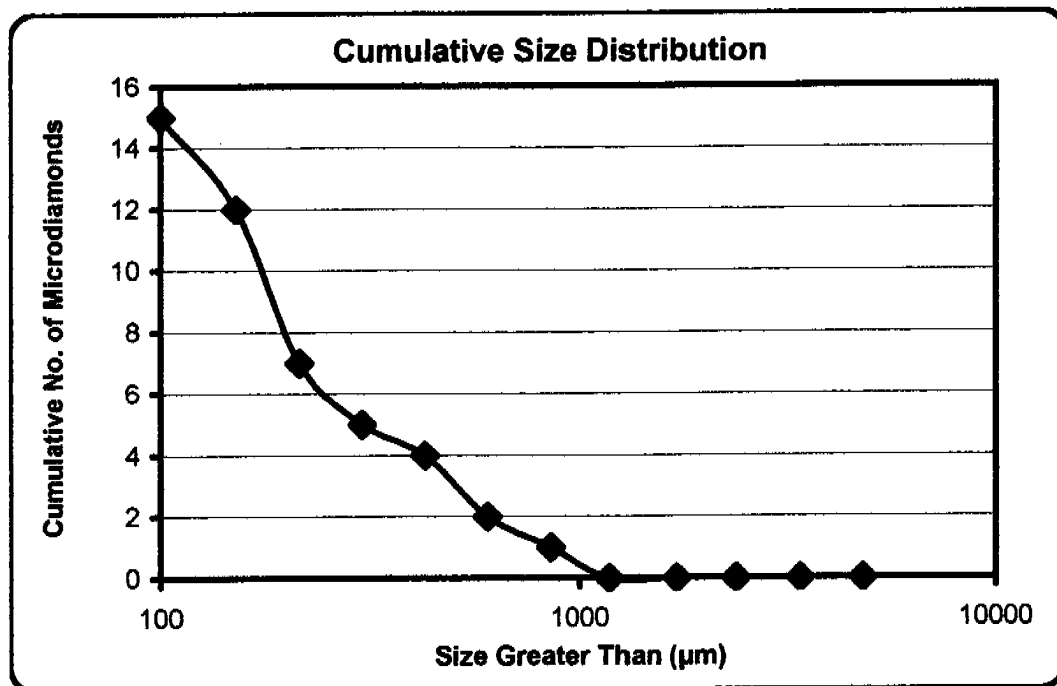
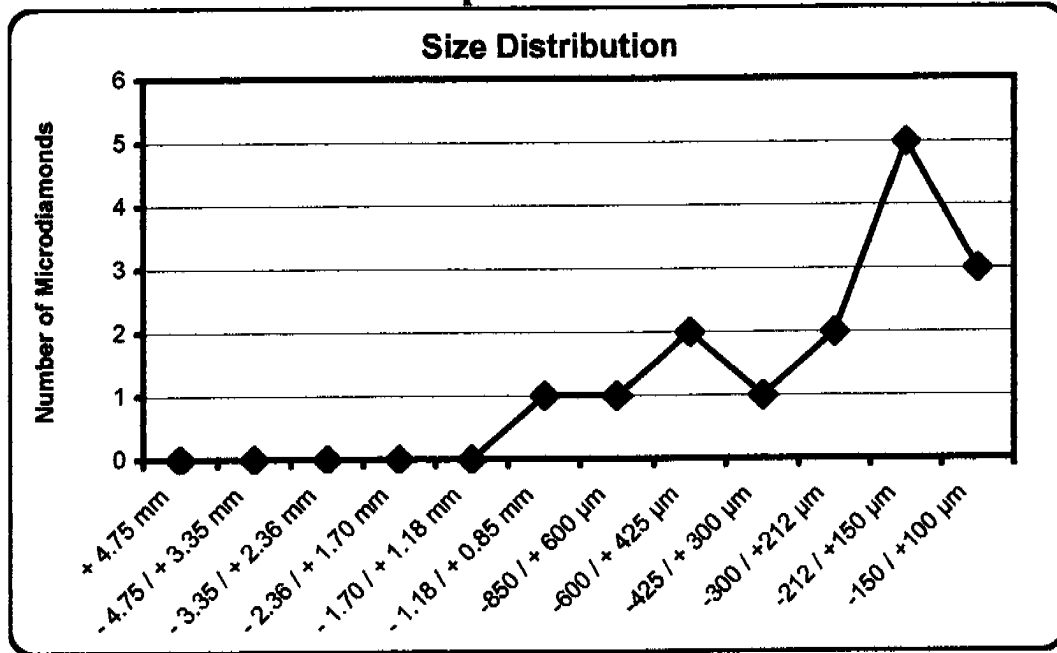
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887587



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887587

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|------|------|--------|----------|--------|-------------|----------------------|---|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | | 0.00000 | | | | |
| 0 | | | | 0.000 | 0.00000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | 1.85 | 1.25 | 1.07 | 2.830 | 0.014150 | White | Translucent | 62.5% | Fragment with Crystal Faces, partially distorted, significant cleavages |
| 1 | | | | 2.830 | 0.014150 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | 0.91 | 0.63 | 0.53 | 0.534 | 0.002670 | White | Translucent | 85% | Fragment with Crystal Faces, significant cleavages |
| 1 | | | | 0.534 | 0.002670 | | | | Sub-Total |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 0.86 | 0.74 | 0.15 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 2 | 0.51 | 0.48 | 0.45 | | 0.000000 | White | Translucent | 1-55% | Tetrahexahedral, minor cleavages |
| 2 | | | | 0.380 | 0.001900 | | | | Sub-Total |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887587

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------|----------|------------------|-------------|----------------------|--|
| | X | Y | Z | mg | Carats | | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.37 | 0.30 | | 0.000000 | Off White | Transparent | 75% | Octahedral, graphite inclusion, very minor cleavages |
| 1 | | | | 0.380 | 0.001900 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 1 | 0.37 | 0.20 | 0.22 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces, twinned, very minor cleavages |
| 2 | 0.26 | 0.20 | 0.18 | | 0.000000 | White | Transparent | 95% | Octahedral, twinned, very minor cleavages |
| 2 | | | | 0.052 | 0.000260 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 1 | 0.29 | 0.14 | 0.11 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages |
| 2 | 0.37 | 0.23 | 0.15 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 3 | 0.26 | 0.20 | 0.18 | | 0.000000 | White | Transparent | 95% | Fragment with Crystal Faces, significant cleavages |
| 4 | 0.23 | 0.20 | 0.11 | | 0.000000 | White | Translucent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 5 | 0.17 | 0.17 | 0.14 | | 0.000000 | White | Transparent | 1-55% | Tetrahedral, minor cleavages |
| 5 | | | | 0.065 | 0.000325 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.14 | 0.11 | 1.02 | | 0.000000 | Off White | Transparent | 99+% | Octahedral, very minor cleavages |
| 2 | 0.14 | 0.14 | 0.09 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages |
| 3 | 0.23 | 0.20 | 0.06 | | 0.000000 | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, very significant cleavages |
| 3 | | | | 0.012 | 0.000060 | Sub-Total | | | |
| 15 | | | | | 0.021265 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887588

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments, silicates, and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Silicates and graphite |

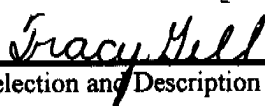
Sample Weight: 24.00 kg

Total Weight (carats)*: 0.003

Number of Syndites: 0

Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description

Tracy Gill
Mineralogy Technician



Quality Control

Maria Mezei
Diamond Selection Specialist

Note:

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
 Client: **Twin Mining Corporation**


Date: March 7, 2001
 LIMS No. **SEP0014.R00**
 Sample No. **887588**


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 μ m | 1 | 0.514 | 0.003 |
| Stones Described Individually / Group Weighed | -600 / + 425 μ m | 0 | 0.000 | 0.000 |
| | -425 / + 300 μ m | 0 | 0.000 | 0.000 |
| | -300 / +212 μ m | 0 | 0.000 | 0.000 |
| | -212 / +150 μ m | 0 | 0.000 | 0.000 |
| | -150 / +100 μ m | 0 | 0.000 | 0.000 |
| | TOTAL | 1 | 0.514 | 0.003 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.003
Number of Diamonds: 1

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


 Selection and Description
 Tracy Gill
 Mineralogy Technician

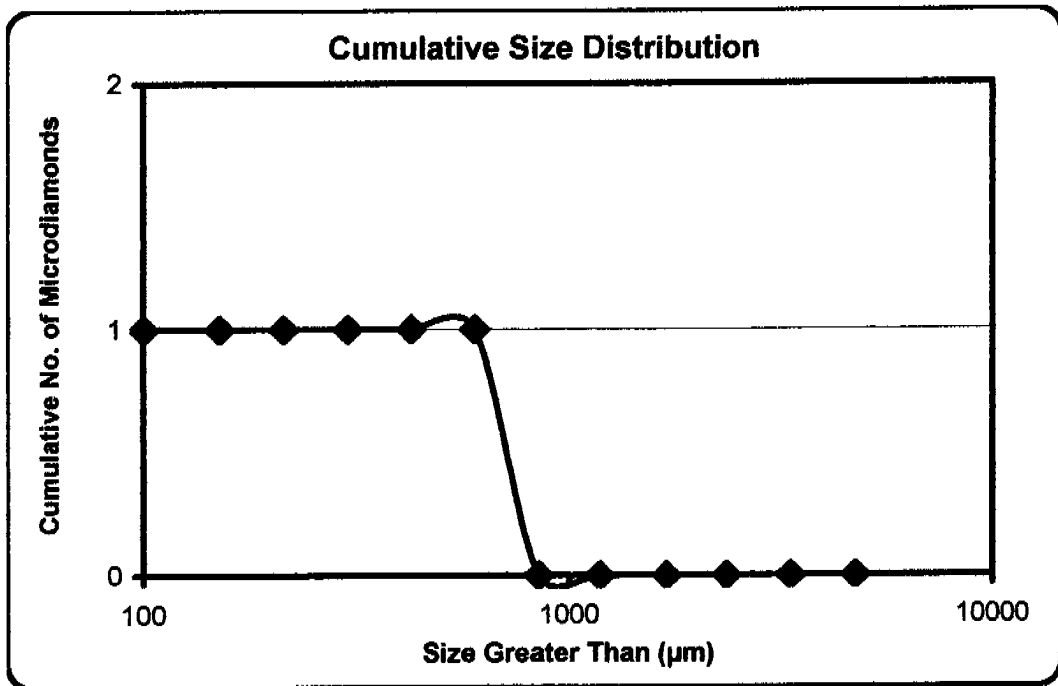
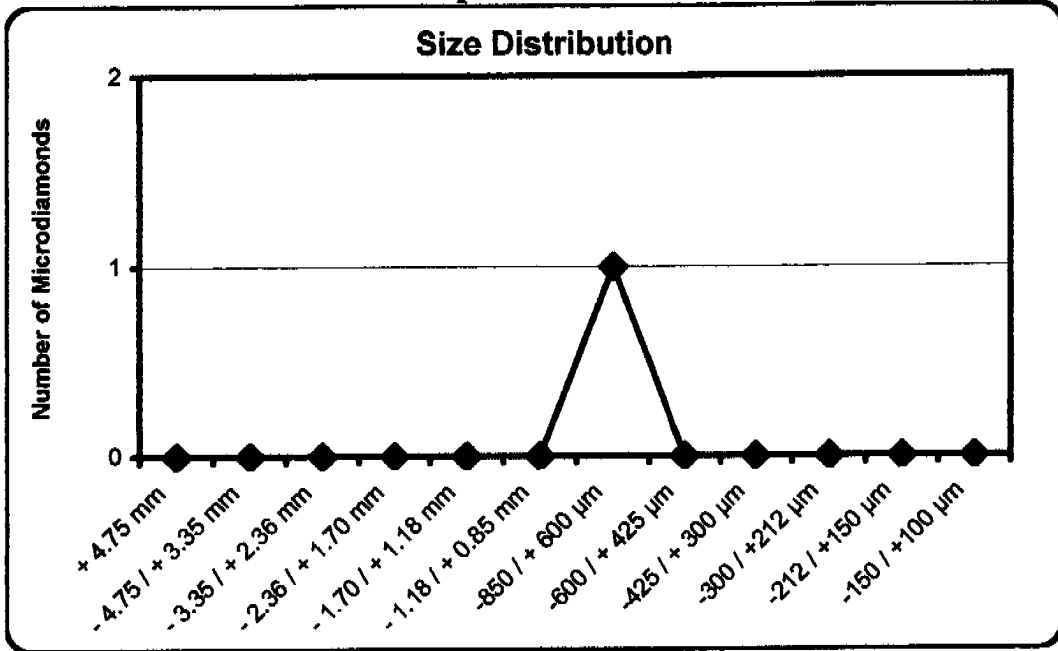

 Quality Control
 Maria Mezei
 Diamond Selection Specialist

Note:

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Sample No. 887588



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887588

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description | |
|-----------------------------------|---------------------|------|-------|--------------|------------------|-------------|---------|-------------------------|-------------------|--------------|
| | X | Y | Z | | | | | | Morphology | |
| + 4.75 mm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | | |
| 0 | | | 0.000 | 0.000000 | Sub-Total | | | | | |
| -850 / + 600 µm fraction | | | | | | | | | | |
| 1 | 0.77 | 0.74 | 0.51 | 0.002570 | White | Transparent | | 62.5% | | Dodecahedral |
| 1 | | | 0.514 | 0.002570 | Sub-Total | | | | | |

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 Fax: 705-652-3123

March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887588

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|--|---------------------|---|-------|--------------|------------------|--------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| -600 / + 425 μm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -425 / + 300 μm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -300 / + 212 μm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -212 / + 150 μm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| -150 / + 100 μm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | 0.000 | 0.00000 | Sub-Total | | | | |
| 1 | | | | 0.002570 | TOTAL | | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

Lakefield Research



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
Client: Twin Mining Corporation

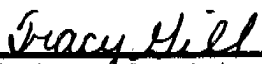
Date: March 7, 2001
LIMS No. SEP0014.R00
Sample No. 887589


| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments, silicates, and oxides |
| +100 | Ferromagnetic Mag | Rock fragments and oxides |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Rock fragments, oxides, and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides, silicates, and graphite |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 3

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.


Selection and Description
Tracy Gill
Mineralogy Technician


Quality Control
Maria Mezei
Diamond Selection Specialist

Note:

Lakefield Research Limited is not responsible for the determination of the origin, quality or value of any diamonds recovered. Each +35 mesh (Tyler sieve; +0.420 mm) stone was individually weighed, and the -35 mesh stones were weighed in groups. Stone dimensions are limited to accuracy of three dimensional measurements of irregular shapes using a petrographic microscope.

Accredited by the Standards Council of Canada to the ISO/IEC Guide 25 standard for specific registered tests.



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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

Date: March 7, 2001

Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887589

| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 1 | 0.156 | 0.001 |
| | -425 / + 300 µm | 1 | 0.104 | 0.001 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 1 | 0.006 | 0.000 |
| | TOTAL | 3 | 0.266 | 0.001 |

Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.001
Number of Diamonds: 3

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.

Tracy Gill
 Selection and Description
 Tracy Gill
 Mineralogy Technician

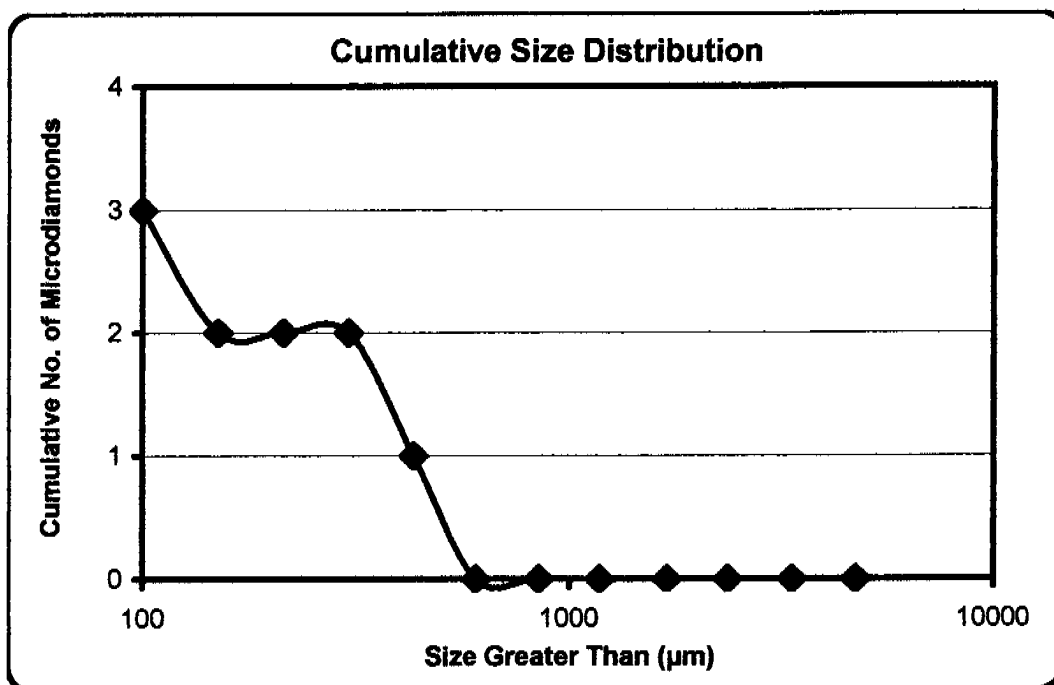
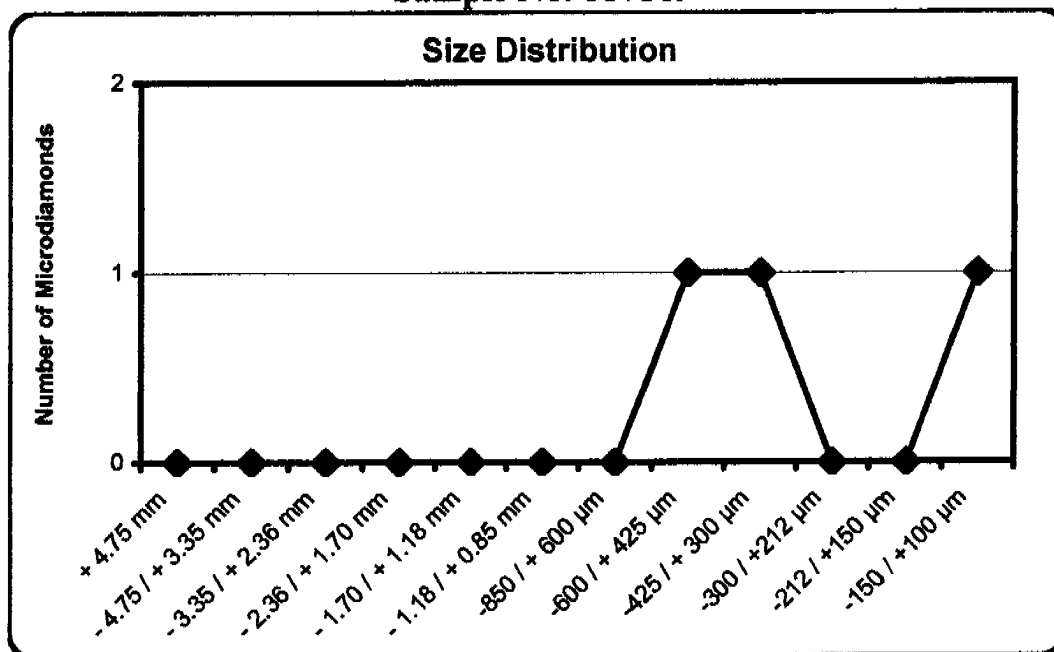
Maria Mezei
 Quality Control
 Maria Mezei
 Diamond Selection Specialist

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Sample No. 887589



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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887589

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|--------------|----------|-----------|---------|-------------------------|---------------------------------|
| | X | Y | Z | | | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |

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March 7, 2001

DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221

LIMS No. SEP0014.R00

Sample No. 887589

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight mg | Carats | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|------|------|--------------|----------|------------------|-------------|-------------------------|---|
| | X | Y | Z | | | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 1 | 0.57 | 0.57 | 0.31 | 0.000000 | | White | Transparent | 85% | Fragment with Crystal Faces, stepped faces, very minor cleavages |
| 1 | | | | 0.156 | 0.000780 | Sub-Total | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 1 | 0.48 | 0.43 | 0.27 | 0.000000 | | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, minor cleavages |
| 1 | | | | 0.104 | 0.000520 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | 0.000000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 1 | 0.31 | 0.20 | 0.06 | 0.000000 | | White | Transparent | Note 1 | Fragment on which crystal faces unrecognizable, significant cleavages |
| 1 | | | | 0.006 | 0.000030 | Sub-Total | | | |
| 3 | | | | | 0.001330 | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: **8901-221**
Client: **Twin Mining Corporation**


Date: March 7, 2001
LIMS No. **SEP0014.R00**
Sample No. **887590**

| Mesh | Fraction | Dissolution Residue Description |
|---------|-------------------------------|---------------------------------|
| +6 | Ferromagnetic Non-mag | Not applicable |
| -6+20 | Ferromagnetic Non-mag | Rock fragments |
| +100 | Ferromagnetic Mag | Rock fragments |
| -20+100 | Paramagnetic Mag (0.1 amp) | Not applicable |
| -20+100 | Paramagnetic Mag (0.3 amp) | Not applicable |
| -20+100 | Diamagnetic Mag (0.5 amp) | Oxides and silicates |
| -20+100 | Diamagnetic Non-mag (0.5 amp) | Oxides and silicates |

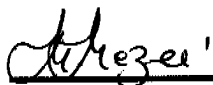
Sample Weight: 24.00 kg
Number of Syndites: 0

Total Weight (carats)*: 0.000
Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are measured to within 0.002 mg.



Selection and Description
Tracy Gill
Mineralogy Technician



Quality Control
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Diamond Selection Specialist

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DIAMOND RECOVERY BY CAUSTIC DISSOLUTION

Project: 8901-221
 Client: Twin Mining Corporation


Date: March 7, 2001
 LIMS No. SEP0014.R00
 Sample No. 887590


| | Diamond Size Fractions | Number of Stones in Group | Group Weight (mg) | Group Carats (calculated) |
|---|------------------------|---------------------------|-------------------|---------------------------|
| Stones Described and Weighed Individually | + 4.75 mm | 0 | 0.000 | 0.000 |
| | - 4.75 / + 3.35 mm | 0 | 0.000 | 0.000 |
| | - 3.35 / + 2.36 mm | 0 | 0.000 | 0.000 |
| | - 2.36 / + 1.70 mm | 0 | 0.000 | 0.000 |
| | - 1.70 / + 1.18 mm | 0 | 0.000 | 0.000 |
| | - 1.18 / + 0.85 mm | 0 | 0.000 | 0.000 |
| | -850 / + 600 µm | 0 | 0.000 | 0.000 |
| Stones Described Individually / Group Weighed | -600 / + 425 µm | 0 | 0.000 | 0.000 |
| | -425 / + 300 µm | 0 | 0.000 | 0.000 |
| | -300 / +212 µm | 0 | 0.000 | 0.000 |
| | -212 / +150 µm | 0 | 0.000 | 0.000 |
| | -150 / +100 µm | 0 | 0.000 | 0.000 |
| | TOTAL | 0 | 0.000 | 0.000 |

Sample Weight: 24.00 kg
 Number of Syndites: 0

Total Weight (carats)*: 0.000
 Number of Diamonds: 0

* Total Weight (carats) was calculated from mg weights. All reported mg weights are weighed to within 0.002 mg.


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LIMS No. SEP0014.R00

Sample No. 887590

Client: Twin Mining Corporation

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|---------------------------------|---------------------|---|---|---------|---------|-----------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| -600 / + 425 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -425 / + 300 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -300 / + 212 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -212 / + 150 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| -150 / + 100 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.00000 | Sub-Total | | | |
| 0 | | | | 0.00000 | | TOTAL | | | |

Note 1: Diamond Fragments - No Crystal Faces - Preservation (Resorption) cannot be estimated.

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Client: Twin Mining Corporation

LIMS No. SEP0014.R00

Sample No. 887590

Sample Weight: 24.00 kg

| No. | Stone Dimension, mm | | | Weight | | Colour | Clarity | Percent Preservation | Stone Description Morphology |
|-----------------------------------|---------------------|---|---|---------|----------|--------|---------|----------------------|------------------------------|
| | X | Y | Z | mg | Carats | | | | |
| + 4.75 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -4.75 / + 3.35 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -3.35 / + 2.36 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -2.36 / + 1.70 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.70 / + 1.18 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -1.18 / + 0.85 mm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |
| -850 / + 600 µm fraction | | | | | | | | | |
| 0 | | | | 0.00000 | | | | | |
| 0 | | | | 0.000 | 0.000000 | | | | Sub-Total |