



**ASSESSMENT REPORT ON MACRODIAMOND TEST OF THE  
LAPOINTE KIMBERLITE: REVERSE CIRCULATION (RC) DRILLING  
AND DMS PROCESSING FOR TRES-OR RESOURCES LTD**

**Sharpe and Savard Townships**  
*Larder Lake Mining District*

UTM Zone 17 – NTS 41P16

**2842197**

NAD 83 Projection  
5308100N to 5308700N  
56300E to 565000E

Work Conducted on  
Mining Lease G8080240 and G8080239, (formerly Claims L 4200057, 4200058)  
Between September 2007 and December 2008

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**For:**

**Tres-Or Resources Ltd.**  
*February 27, 2009*

**SUMMARY**

Tres-Or Resources Ltd. discovered the Lapointe Kimberlite in May 2005 with drill hole TMN05-01. Delineation drilling returned a small number of macrodiamonds including one clear white stone weighing 0.0665 carats, and showed the kimberlite to be large (+ 21 hectares). The Lapointe Kimberlite is located on Ontario mining lease #G8080240 between Timmins and Kirkland Lake, Ontario. Tres-Or decided to test the pipe with a +50 tonne macrodiamond test, given the large size of the kimberlite and the potentially low mining costs. Extraction of the macrodiamond sample used a large diameter reverse circulation (RC) drill rig, which was brought to the site to begin drill operations January 31, 2009. The extracted kimberlite was collected in ore bags which were sealed and secured, and shipped to Microlithics Laboratory In Thunder Bay Ontario where they were processed using a 1.5 tonne per hour (rated) dense media separation (DMS) plant with a 0.8 mm bottom size screen. The heavy mineral concentrate was further reduced by caustic fusion at the Microlithics Laboratory for macrodiamond picking. No macrodiamonds were recovered, and no further work on the Lapointe Kimberlite is planned at this time.

Full description of the RC drilling, sample handing, data verification procedures, and DMS processing is provided herein for assessment work credit in the amount of \$817,527.

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## **INTRODUCTION**

Tres-Or Resources Ltd ("Tres-Or") undertook a macrodiamond test of the Lapointe Kimberlite pipe located in northeast Ontario. The test consisted of drilling a single large diameter reverse circulation (RC) hole near the center of the body, collecting and logging the kimberlite chips, and then using dense media separation (DMS) to process the kimberlite in an attempt to recover macrodiamonds. Preparation for accessing the site with the large diameter RC drill rig began in August, 2007, with the actual drill program beginning upon arrival of the rig on January 31, 2008. Processing of the kimberlite sample occurred in July, 2008. Work was done on Ontario Mining Lease # G8080240, formerly claim L 4200057. During drilling, samples of RC chips >0.5 mm were bagged and sealed on site and then secured in a locked shipping container. After completion of the drill hole, the sealed containers were trucked to DRA Americas secure warehouse in Peterborough, Ontario for storage until the laboratory was ready to receive and process. DRA Americas' President, S. Cole (P.Eng.) and DRA Americas staff engineer Lyn Jones (P. Eng.) served as Tres-Or independent process engineering consultant and auditor to insure maximum recovery of any macrodiamonds. The fine fraction (<0.5mm) that passed through the shaking deck was collected in separate "fines bags". Suspended clays and silt were discarded.

Drill site first aid and security was provided 24 hours a day during the drill program by the Timiskaming First Nation's First Nation Security group, who manned a trailer and restricted access to the site to approved personnel only. The TFN Security and all

drilling operations were conducted under the auspices of a Memorandum of Understanding signed between Tres-Or and the Timiskaming First nation band council.

From DRA Americas warehouse, the sealed containers were trucked directly to the independent processing laboratory Microlithics Laboratory in Thunder Bay, Ontario where the sample was treated during July, 2008.

Processing made use Stornoway Diamond Corporation's 1.5 tonne per hour DMS, which is located at Microlithics Laboratory, and operated by Microlithics staff. Material was passed over a 0.8mm square deck before entering the DMS, and -0.8 mm material was discarded. The DMS concentrates were reduced by caustic fusion at the Microlithics lab and then picked for diamonds. No macrodiamonds were recovered from any of the +0.8mm samples. In May 2008, due diligence inspection was completed of the Microlithics facilities to confirm suitability of the equipment and staff prior to contracting for the processing.

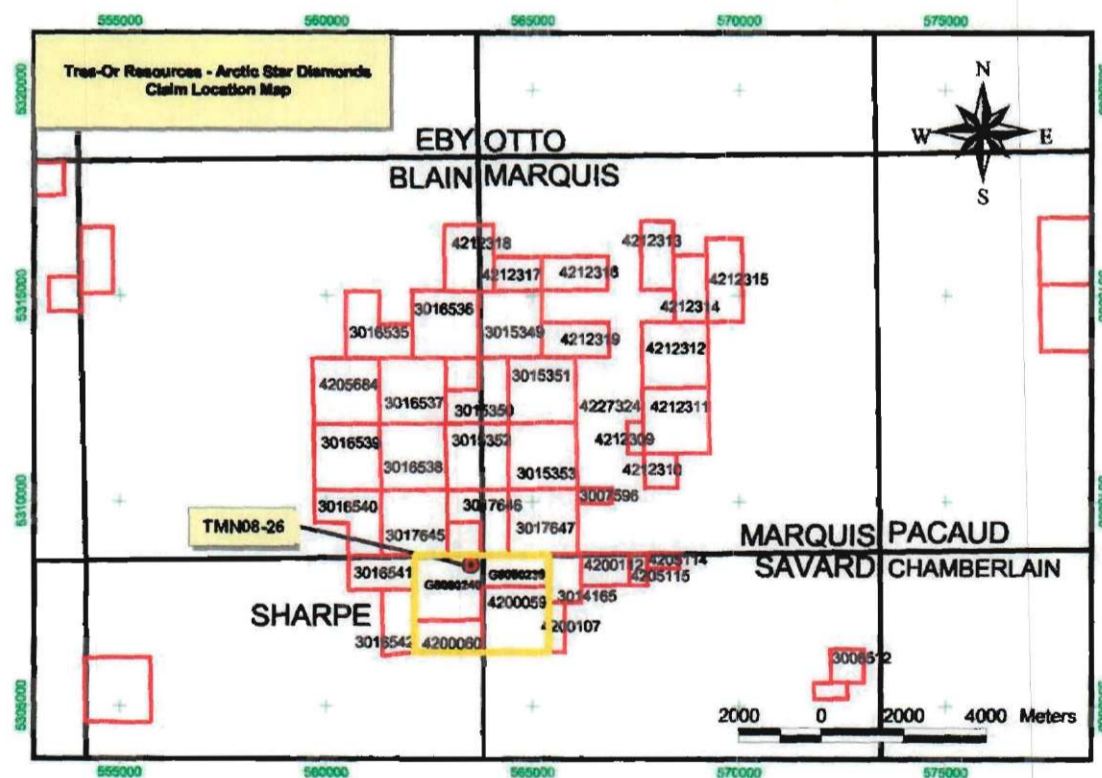
Verification screening of the fine fraction from the RC drill was conducted at Tres-Or's field office in Haileybury, Ontario to measure the proportion of +0.6 mm kimberlite that was collected in the fine instead of coarse sample bags.

Description of the entire process starting with preparation for drilling, and including processing checks and verification, is described herein for assessment credit in the value of \$817,527.

## PROPERTY ACCESS AND DESCRIPTION

The RC drill hole and macrodiamond samples described in this report tested the Lapointe Kimberlite. The kimberlite body straddles the Sharpe and Savard townships boundary and was originally discovered and delineated in 2005 by core drilling on mineral claims L4200057 and L4200058. The northern boundary of the claims approximates the southern boundary line of Blain and Marquis townships (Fig. 1). The mineral claims (L4200057 and L4200058) have been taken to two 21-year surface and mining rights leases: **G8080240** (comprising all of mining Claim L4200057 being all of Lots 1 and 2, Concession 6, Sharpe Township, containing 259.403 hectares) and **G8080239** (comprising all of Claim L4200058 being the north half of Lots 11 and 12, Concession 6, Savard Township, containing 129.297 hectares).

Figure 1: Tres-Or claims in Lapointe area at time of macrodiamond test.



The single RC drill hole described in this report was located on Mining Lease # **G8080240** (formerly Claim L 4200057), which is part of Tres-Or's contiguous claims package within the Round Lake Batholith. This claims package covers parts of 8 townships in the Larder Lake mining division of Ontario. Tres-Or operates all exploration work on the claims for the joint venture between Tres-Or Resources Ltd and Arctic Star Diamonds Corporation ("Arctic Star"). Arctic star elected not to participate in the RC drill hole and macrodiamond test program at the Lapointe Kimberlite and their interest in the Lapointe Kimberlite was converted to a 5% net profit interest (NPI). Stornoway Diamond Corporation ("Stornoway") negotiated a first right of refusal to acquire an interest in the Lapointe Kimberlite for providing access to and use of their 1.5 tonne per hour DMS plant in the Microlithics Laboratory to process the kimberlite sample. A patented claim comprising 4 claim units, upon which Tres-Or has an existing option agreement with the property owner, is located adjacent north of L4200057 in Blaine Township.

Road preparation, snow removal, and work to facilitate access and equipment landing site occurred on adjacent mining lease **G8080239** (formerly claim L4200058) in northwest Savard Township.

As described in previous assessment reports (Baša and Ethier, 2006; Baša et al., 2007; Baša et al., 2008), the Lapointe mining leases are located approximately 26 km southwest of Kirkland Lake, 23 km northwest of Englehart and 57 km north-northwest of New Liskeard. The property is accessed by car or truck from either Highway 11 (The Trans Canada Highway) or the small town of Charlton Ontario. The paved Hough Lake Road leads west from Highway 11 to within 3.5 km of the Lapointe Kimberlite. Dirt

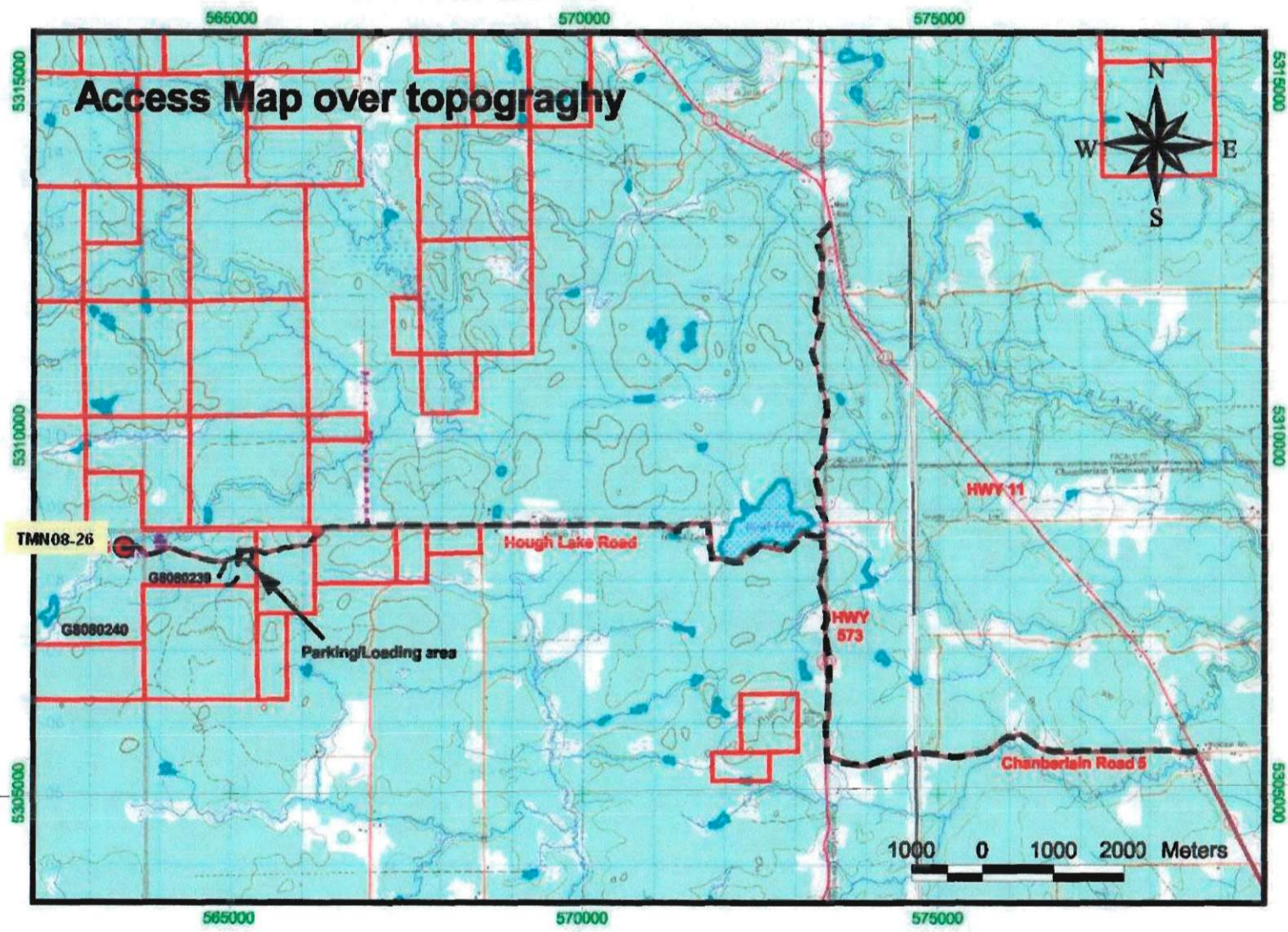


roads and tracks extend between the Hough Lake Road and pipe, with off road vehicles being most reliable in wet conditions (Fig. 2).

Significant upgrades were made to the access route to allow the large diameter rig to reach the site. Upgrading the road with grooming and adding pit run gravel in August, 2007, followed by significant road building in the fall of 2007 using the experienced contracted forestry road builders G&R Shortt Contractors of Englehart, Ontario. Following the fall road building, the drill program was delayed until late January, 2008 in order to permit the road to freeze.

The property is located centrally within the Round Lake Batholith. The ground is low-lying and wet. The area is covered predominantly by spruce and alders. Ground cover is typically clay rich with pockets of till and perched till. Drill observation indicates a typical sequence of clay underlain by glacio-fluvial sand in turn overlying 5 to 10 m of bouldery till. The relative thickness of each may vary over the extent of the pipe. The overburden thickness typically ranges from 74 m a maximum of 85 m. Granitic outcrop has been noted in various places within 1km of the centre of the pipe – particularly within the mining leases.

Figure 2: Access to the drill site, which was upgraded to permit arrival of the large trucks carrying the heavy RC drill rig and associated equipment.



## **REGIONAL AND PROPERTY GEOLOGY**

The Lapointe Kimberlite occurs within the Superior Craton, a stable Archean continental block comprising a large part of the Canadian shield (Fig. 3). The Superior Craton is prospective for bedrock diamond deposits, due to its inferred thick lithospheric keel, and as demonstrated by its hosting De Beers recently opened Victor Diamond Mine in the James Bay Lowlands, as well as the advanced Renard diamond deposit in the Otish Mountains of Quebec.

The Lapointe kimberlite intruded granitoid rocks in the central portions of the Round Lake Batholith (RLB; Figure 3). The RLB is magnetically quiet in its eastern half, where it is cut by sparse northeast-southwest oriented mafic dykes of Late Precambrian age. The central to western portion of the RLB is magnetically more active, cut by frequent north-south mafic dykes of Early Precambrian age (Pyke et al, 2004). Little detailed published information exists on the geology of the inner portions of the RLB. John (1986) covers a portion of the batholith in parts of Robillard, Bryce and Dack townships, where it is described as consisting of tonalite, trondhjemite, granodiorite, aplite and diorite. Proterozoic platform sedimentary strata of the Huronian Supergroup and Middle Precambrian mafic intrusives of the Nippissing sill occur to the west and south of the RLB. Paleozoic rocks of Silurian and Ordovician age occur southeast of the RLB where they have been preserved by graben block faulting in the Lake Timiskaming Structural Zone. The Cross Lake and Montreal River faults of the Lake Temiskaming Structural Zone trend north-northwest from the Ottawa River across the RLB. Based on remote sensing and airborne magnetic data compilations, this structural trend appears to extend

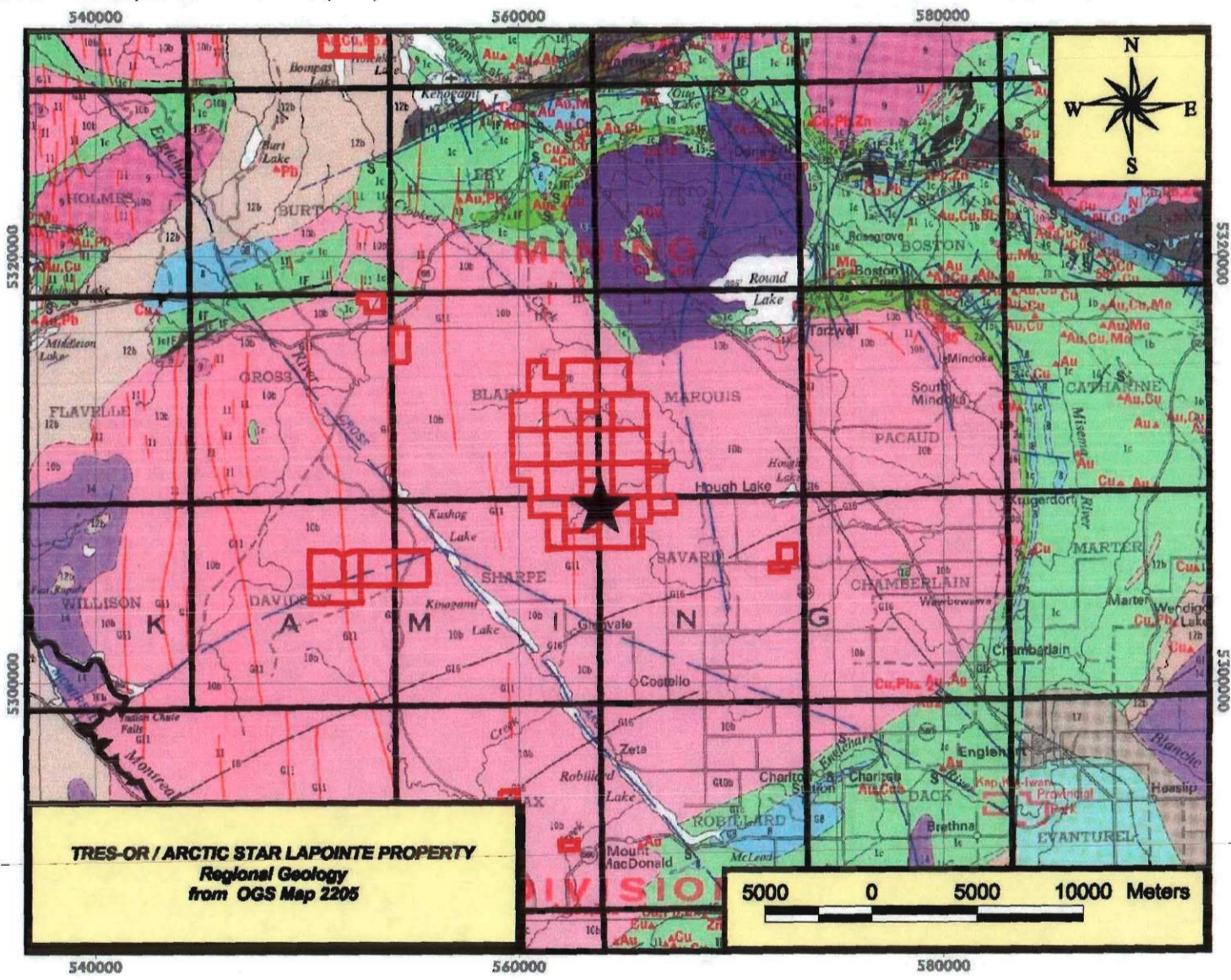
to the James Bay Lowlands, where it closely parallels the linear emplacement trend controlling the Attawapiskat kimberlites including the Victor Diamond Mine. Further details of the regional geology are provided in prior assessment reports (Baša and Ethier, 2006; Baša et al., 2007; Baša et al., 2008) and not repeated here to limit repetition.

### **PROPERTY GEOLOGY**

Kimberlite does not outcrop on the property. The sub-crop kimberlite surface has been intersected by drilling beneath recent sedimentary cover. Drill observations indicate a typical sequence of medium gray clay underlain by glacio-fluvial sand in covering 5 to 10 m of bouldery till. The relative thickness of each depositional unit may vary over the extent of the pipe, with the clay typically being the thickest unit above the pipe. The overburden thickness typically ranges from 74 m a maximum of 85 m.

Granitoid outcrop has been observed within 1km of the centre of the pipe particularly in claims L4200059 and L4200060. In parts of the property away from the kimberlite pipe sub-crop till occurs at the surface. The localization of thick clay over the pipe, suggests that the clay filled a pro-glacial lake formed in a pre-existing topographic low by the recessive weathering of the kimberlite,

Figure 3: The Lapointe Kimberlite (star) within the central Round Lake Batholith. After Pyke *et al.*, (2004).



### LEGEND

**CENOZOIC**

**PLEISTOCENE AND RECENT**  
Till, varved clay, sand, gravel, peat.

**UNCONFORMITY**

**MESOZOIC**

19 Kimberlite dikes.

**INTRUSIVE CONTACT**

**PALEOZOIC**

**LOWER AND MIDDLE SILURIAN**

18 Thornloe Formation: limestone, dolomite, sandstone.  
Wabi Formation: limestone, shale.

**MIDDLE AND UPPER ORDOVICIAN**

17 Dawson Point Formation: shale.  
Farr Formation: limestone.  
Bucke Formation: limestone, shale.  
Guigues Formation: sandstone.

**UNCONFORMITY**

**PRECAMBRIAN**

**LATE PRECAMBRIAN**

**MAFIC INTRUSIVE ROCKS**

16 Diabase: dikes.

**INTRUSIVE CONTACT**

**MIDDLE PRECAMBRIAN**

**ALKALIC INTRUSIVE ROCKS**

15 Syenite, nepheline syenite.

**MAFIC INTRUSIVE ROCKS<sup>a</sup>**

14 Diabase, granophyre: sheets and dikes.

**INTRUSIVE CONTACT**

**HURONIAN SUPERGROUP**

**COBALT GROUP**  
Lorrain Formation

13 Quartzite, arkose.

Gowganda Formation

12 Unsubdivided.  
12a Firstbrook Member: argillite, greywacke, siltstone, arkose.  
12b Coleman Member: conglomerate, arkose, greywacke, quartzite, argillite.

**UNCONFORMITY**

**EARLY PRECAMBRIAN**

**MAFIC INTRUSIVE ROCKS<sup>b</sup>**

11 Diabase: dikes.

**INTRUSIVE CONTACT**

**FELSIC INTRUSIVE ROCKS<sup>c</sup>**

10a Quartz porphyry, quartz-feldspar porphyry, feldspar porphyry, granophyre, felsited.  
10b Trondhjemite, granodiorite, quartz monzonite: simple batholiths and stocks.  
10c Trondhjemite, granodiorite, quartz monzonite, quartz diorite, aplite, pegmatite, migmatite: complex batholiths.

9 Syenite, monzonite, feldspar porphyry<sup>d</sup>.

**METAMORPHOSED MAFIC AND ULTRAMAFIC ROCKS<sup>e</sup>**

8 Gabbro, diorite, lamprophyre.

7 Peridotite, dunite, pyroxenite, serpentinite<sup>f</sup>.

**INTRUSIVE CONTACT**

**METASEDIMENTS<sup>g</sup>**

6 Conglomerate, greywacke, siltstone, slate, argillite<sup>h</sup>.

5 Greywacke, siltstone, slate, argillite and minor pebble conglomerate<sup>i</sup>.

**METAVOLCANICS<sup>j</sup>**

**ALKALIC METAVOLCANICS<sup>k</sup>**

4 Trachyte, leucitic trachyte; flows, tuff, breccia.

**ULTRAMAFIC METAVOLCANICS<sup>l</sup>**

3 Serpentinized dunitic and peridotitic flows.

**FELSIC METAVOLCANICS<sup>m</sup>**

2 Unsubdivided.  
2a Pyroclastic rocks.  
2b Flows.

**INTERMEDIATE AND MAFIC METAVOLCANICS<sup>n</sup>**

1 Unsubdivided.  
1a Intermediate flows.  
1b Intermediate pyroclastic rocks.  
1c Mafic flows and pyroclastic rocks.

IF Iron formation and ferruginous chert (occurs as a member of stratigraphic units 1, 2, 4, and 6).

S Sulphide mineralization.

<sup>a</sup>Formerly classified as Nipissing in part.  
<sup>b</sup>North-trending dikes are part of Matachewan swarm.  
<sup>c</sup>Formerly classified as Algoman.  
<sup>d</sup>Several ages; some units appear to be intrusive equivalents of volcanic formations whereas others postdate volcanism.  
<sup>e</sup>Formerly classified as Halleyburian.  
<sup>f</sup>May in part be composed of ultramafic flows.  
<sup>g</sup>Rocks in these groups are subdivided lithologically and the order does not necessarily imply age relationship within or among groups.  
<sup>h</sup>Formerly classified as Timiskaming.  
<sup>i</sup>Formerly classified as Keewatin.  
<sup>j</sup>Probably composed mainly of ultramafic flows, but may include some sills.  
<sup>k</sup>The letter "G" preceding a rock unit number, for example "G14", indicates interpretation from geophysical data in drift covered areas.

### SYMBOLS

Geological boundary.

Synclinal axis.

Anticlinal axis.

Fault.

Lineament.

1500' Altitude in feet above mean sea level.

Railway with station or flagstop.

Provincial highway.

Motor road.

Other road.

Aircraft landing facilities.

Larger community.

Smaller community.

Producing mine.

Past producing mine.

Mineral occurrence.

Resident Geologist's, Mining Recorder's offices, Kirkland Lake, Timmins.

Mining Division with boundary.

Interprovincial boundary.

District boundary.

Township boundary.

Line of section.

**THE MAP INDEX**

The red letters and numbers in the borders provide a location reference system based on that of Map 2024, Ontario Mineral Map.

**DEPOSIT TYPE (Diamond)**

Bedrock sources of diamond are limited to kimberlite or closely related rock types, which are rare, deep-seated magmas. All of these deep-seated kimberlitic rocks are Mg-, Ca- and volatile rich, as well as silica-poor. They are classified based on numerous and commonly overlapping mineralogical and trace element characteristics into three major types: group 1 (archetypal) kimberlite; group 2 (micaeous) kimberlite (sometimes named "orangeite"), or olivine lamproite (Mitchell, 1986). Although debates rage as to the derivation and most important characteristics of these different rock types, each can carry economic diamonds, and for the purposes of this report "kimberlite" or "kimberlitic" should be understood to encompass all three.

Most economic diamond deposits occur in Archean (> 2.5 Ga) cratons. These deposits may be in the form of carrot-shaped pipes, or thin dykes (usually less than 2 m across). The pipes or dykes may penetrate thick supracrustal sequences, but Archean rocks that have not been significantly heated and deformed (Archons of Janse, 1997) are required as a basement. Only relatively cool, thick lithosphere can fracture to sufficiently great depths to provide pathways for kimberlitic magmas to reach the surface.

Tres-Or's evaluation of the diamond potential Lapointe Kimberlite began following its discovery in May, 2005. Like most bedrock diamond deposits occurring in kimberlite, the Lapointe pipe was formed by multiple intrusive events, each intrusive magma ("phase") holding the potential to carry a different diamond content. The phases include some with significant dilution by crustal xenoliths and pronounced layering suggestive of accumulation within the volcanic crater, and other phases minorly diluted by only small

crustal xenoliths, and exhibiting magmatic characteristics typical of kimberlite that lithified within the pipe-shaped diatreme that formed beneath the eruptive center. All phases encountered by drilling were sampled for microdiamonds, and crustal xenoliths dilution was recorded for each sampled interval. The large size of the Lapointe Kimberlite, combined with its easily accessed location within a low-cost mining area enhance the importance of microdiamond counts even when they might be less abundant than would be required in the smaller pipes typical of the remote Arctic regions of northern Canada.



## EXPLORATION WORK: DRILL PROGRAM

Drilling consisted of a single large diameter reverse circulation (RC) drill hole (TMN08-26), drilled vertically near the center of the large western lobe of the Lapointe Kimberlite (Fig. 4). The RC hole was collared at UTME: 563486 and UTMN: 5308457 (NAD83 – Zone 17T). The RC location is 1 m north and 5 m east of the collar of “guide” hole TMN07-25, an NQ core hole that preceded the RC hole to minimize the possibility of encountering difficult drilling situations (Baša et al., 2008).

The RC drill hole reached 260.5 m depth from surface, and extracted approximately 56 tonnes (wet weight) of kimberlite (see drill log Fig. 5). Tres-Or contracted Northwest Sequoia Drilling from Lethbridge, Alberta to supply the drill rig and all associated equipment, as well as complete the drill hole. In addition to providing all the required equipment, Northwest Sequoia Drilling brought their experienced crew led by driller/owner Jacob Entz, due to the specialized nature of the large diameter RC drilling (Fig. 6).

Figure 4 (over): Collar location of RC hole TMN08-26 with horizontal projection of earlier discovery and delineation drill holes at the Lapointe kimberlite (over – map datum NAD83). Background is the analytical signal signature of the Lapointe Kimberlite from the Round Lake airborne magnetic geophysical survey. Contour interval 2 m from digital terrain model. Stream flows from west to east across map, and is blocked by beaver dams at several locations (black lines).

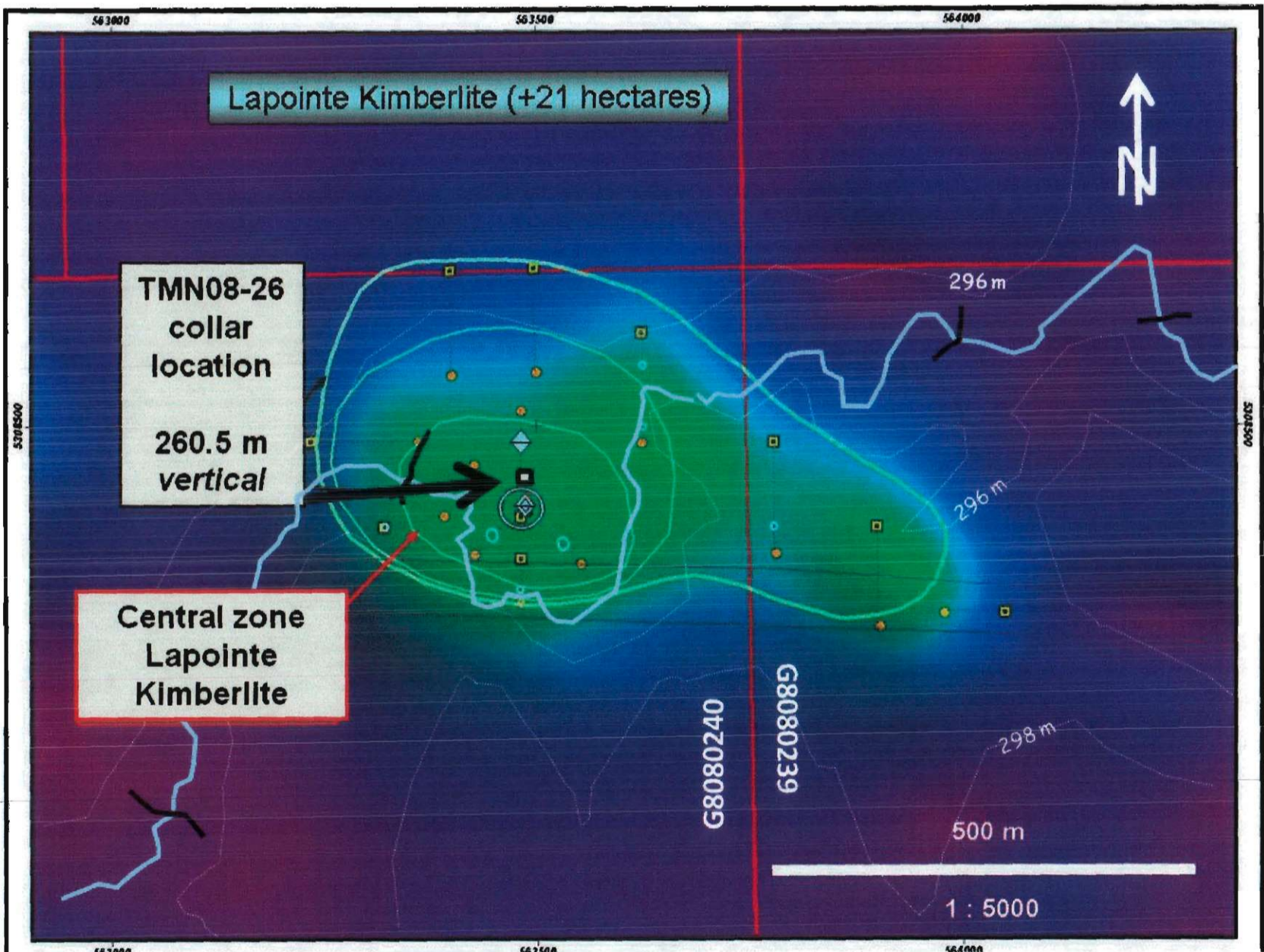


Figure 5: Large diameter RC drill rig on site drilling TMN08-26, February, 2008.



The drill was set-up on a frozen pad within swampy ground covering the pipe with a surficial organic layer. Clay extends from beneath the organic layer to the top of till, with some thin breaks of sand and gravel. The clay is soft, gray and completely unconsolidated as it returns from the drill bit. The clays were likely deposited in proglacial Lake Ojibway after the Laurentide glacier front retreated past the area around 9,000 years ago (Dyke and Prest, 1986). The first layer of medium sand and pebbles was encountered at 66 m followed by a second layer at 68.9 m. Glacio-fluvial deposits were entered beneath the Lake Ojibway clay at 70 m based on the return of abundant angular pebbles (to 5 cm) and a sharp increase in coarse sand among the drill returns as they passed across the shaking table (Fig. 7). At 71.3 m, drill advance slowed dramatically as the bit apparently began cutting through one or more boulders. At 75 m, the drill advance increased sharply, with returns comprising sand and gravel indicating the top of the basal till.

Figure 7: Shaking table where returns from the drill were observed continuously.



Kimberlite is interpreted to have been entered at 81 m, beneath overburden comprised of thick (+/- 70 m) pro-glacial clays, 5 m of glacio-fluvial deposits, and 6 m of till. Sample bags 4902 and higher (in consecutive numbers) were all collected entirely within kimberlite. However, the hole was not cased below 49 m, and slumping from the unconsolidated glacio-fluvial sands and gravels (70 to 75 m) diluted the kimberlite occasionally.

Filling of the first sample bag began till, in order to capture any concentration or lag of macrodiamonds that might potentially occur at the top surface of the kimberlite. The first sample (#4900) bag began filling at 77.1 m and ended at 81.05 where the drill returned the first observed kimberlite chips (Table 1). By 82 m, the returns crossing the shaking table appeared to be almost entirely kimberlite carrying abundant oxide and

Table1: Sample List.

Sample #	Date	Project	Hole	Sampler	time started	time finished	depth - from (m)	depth - to (m)	Interval	seal #	comments
4900	03-Feb-08	Lapointe	TMN08-26	H.Cookenboo	5:10 PM		77.10	81.05	3.95	01600	lop of kimberlite/base of fill, basal till to top of kimberlite <1% kimberlite, +6.8mm 75-80% coarse grained kimberlite
4901	03-Feb-08	Lapointe	TMN08-26	H.Cookenboo	5:30PM	6:15PM	81.05	86.00	4.95	01601	
4902	03-Feb-08	Lapointe	TMN08-26	M.Ethier	6:15PM	6:50PM	86.00	89.00	3.00	01602	kimberlite, only 3m in bag; put more pressure on bit, coarse
4903	03-Feb-08	Lapointe	TMN08-26	M.Ethier	6:52PM	7:35PM	89.00	93.00	4.00	01603	kimberlite; hard to sieve; very coarse chunks
4904	03-Feb-08	Lapointe	TMN08-26	M.Ethier	7:48PM	8:41PM	93.00	97.00	4.00	01604	kimberlite
4905	03-Feb-08	Lapointe	TMN08-26	M.Ethier	8:45PM	9:30PM	97.00	101.00	4.00	01605	kimberlite
4906	03-Feb-08	Lapointe	TMN08-26	M.Ethier	9:35PM	10:25PM	101.00	105.00	4.00	01606	kimberlite, gravel size, drill added a rod at 9:45
4907	03-Feb-08	Lapointe	TMN08-26	M.Ethier	10:32PM	11:40PM	105.00	109.00	4.00	01607	less viscosity (more granite cobbles)
4908	03-Feb-08	Lapointe	TMN08-26	M.Ethier	11:47PM	12:40PM	109.00	113.00	4.00	01608	full bag
4909	04-Feb-08	Lapointe	TMN08-26	H.Cookenboo		1:35 AM	113.00	117.00	4.00	01609	gray with black specs, very full bag
4910	04-Feb-08	Lapointe	TMN08-26	H.Cookenboo	1:43 AM	2:40 AM	117.00	121.00	4.00	01610	medium dark grey kimberlite
4911	04-Feb-08	Lapointe	TMN08-26	H.Cookenboo	2:45 AM	3:35 AM	121.00	125.50	4.50	01611	(driller exceeded 4m length)
4912	04-Feb-08	Lapointe	TMN08-26	H.Cookenboo	3:40 AM	4:30 AM	125.50	129.00	3.50	01612	Dark grey Kimberlite
4913	04-Feb-08	Lapointe	TMN08-26	H.Cookenboo	4:35 AM		129.00	133.00	4.00	01613	
4914	04-Feb-08	Lapointe	TMN08-26				133.00	137.00	4.00	01614	
4915	04-Feb-08	Lapointe	TMN08-26				137.00	141.00	4.00	01615	
4916	04-Feb-08	Lapointe	TMN08-26	LLD	7:00 AM	9:00 AM	141.00	145.00	4.00	01616	jets not working on shaker table 144.5-145m, dark green kimberlite
4917	04-Feb-08	Lapointe	TMN08-26	LLD	9:00 AM	10:00 AM	145.00	149.00	4.00	01617	145-148.1m-dark black/gray hard kimberlite, jets on 147.6-hole plugged in screen monitor
4918	04-Feb-08	Lapointe	TMN08-26	LLD	10:00AM	11:26 AM	149.00	153.00	4.00	01618	screen fixed, 150m-more competent kimberlite-dark grey
4919	04-Feb-08	Lapointe	TMN08-26	LLD	11:30AM	12:50 PM	153.00	157.00	4.00	01619	154-154.5(smaller pieces/dark grey kimberlite) 156.8 pipe change
4920	04-Feb-08	Lapointe	TMN08-26	LLD	12:55 PM	1:50PM	157.00	161.00	4.00	01620	158new fines bag, pebble size granite clasts
4921	04-Feb-08	Lapointe	TMN08-26	LLD	1:54PM	2:55PM	161.00	165.00	4.00	01621	dark grey kimberlite- minor clasts
4922	04-Feb-08	Lapointe	TMN08-26	LLD	2:59PM	4:00PM	165.00	169.00	4.00	01622	small clasts/dark grey kimberlite
4923	04-Feb-08	Lapointe	TMN08-26	LLD	4:05PM	5:01PM	169.00	173.00	4.00	01623	dark grey kimberlite, change fines bag collection 169.5m
4924	04-Feb-08	Lapointe	TMN08-26	M.Ethier	5:05 PM	6:36PM	173.00	177.00	4.00	01624	all good kimberlite
4925	04-Feb-08	Lapointe	TMN08-26	M.Ethier	6:38PM	8:43PM	177.00	180.00	3.00	01625	Too much till added to sample, 179m-sand/gravel, 179m-back in kimberlite
4926	04-Feb-08	Lapointe	TMN08-26	M.Ethier	8:50PM	10:20PM	180.00	184.00	4.00	01626	Rate of advance, amount of cuttings across shaking table + size of cuttings decreased from day time and early morning by 1/3
4927	04-Feb-08	Lapointe	TMN08-26	H.Cookenboo	10:30PM	12:45AM	184.00	188.00	4.00	01627	bag not full(?80% full?)(~2/3 full)
4928	05-Feb-08	Lapointe	TMN08-26	H.Cookenboo	12:50AM	4:05 AM	188.00	192.00	4.00	01628	dark grey kimberlite, bit gummed up-stop 45 minutes in soft kimberlite
4929	05-Feb-08	Lapointe	TMN08-26	H.Cookenboo	4:15 AM	6:10 AM	192.00	196.00	4.00	01629	
4930	05-Feb-08	Lapointe	TMN08-26	H.Cookenboo	6:15 AM	8:05 AM	196.00	200.00	4.00	01630	
4931	05-Feb-08	Lapointe	TMN08-26	H.Cookenboo	8:10 AM	9:50 AM	200.00	204.00	4.00	01631	tescoching mud weight, bag a little more than half full
4932	05-Feb-08	Lapointe	TMN08-26	H.Cookenboo	9:55 AM	11:35 AM	204.00	208.00	4.00	01632	207m-sealed fines bag-80% full
4933	05-Feb-08	Lapointe	TMN08-26	LLD	11:29 AM	1:44PM	208.00	212.00	4.00	01633	screen fixed 211.7m-see over, 210.8 m 5 large chunks kimberlite from drill bit 211.7m
4934	05-Feb-08	Lapointe	TMN08-26	LLD	1:47PM	3:18PM	212.00	216.00	4.00	01634	2 large chunk-drill bit cleaned/balling-up kimberlite
4935	05-Feb-08	Lapointe	TMN08-26	LLD	3:20PM	4:50PM	216.00	220.00	4.00	01635	screens repaired, 213.5-very large chunk-kimberlite
4936	05-Feb-08	Lapointe	TMN08-26	LLD-ME	4:45PM	6:25PM	220.00	224.00	4.00	01636	217.8m-chip sizes(kimberlite)improving, dark grey kimberlite
4937	05-Feb-08	Lapointe	TMN08-26	M.Ethier	6:42PM	8:17PM	224.00	228.00	4.00	01637	rod change @ 224m; fixed screens at 6:35pm
4938	05-Feb-08	Lapointe	TMN08-26	M.Ethier	8:20PM	10:30PM	228.00	234.00	6.00	01638	
4939	06-Feb-08	Lapointe	TMN08-26	M.Ethier	10:30PM	11:30 PM	234.00	240.00	6.00	01639	
4940	06-Feb-08	Lapointe	TMN08-26	M.Ethier	1:30 AM	4:00 AM	240.00	246.00	6.00	01640	
4941	06-Feb-08	Lapointe	TMN08-26	M.Ethier	4:00 AM	6:45 AM	246.00	252.00	6.00	01641	
4942	06-Feb-08	Lapointe	TMN08-26	M.Ethier/LLD	6:50 AM	9:44 AM	252.00	258.00	6.00	01642	new siltfines bag @ 254.4m; dark green-grey kimberlite
4943	06-Feb-08	Lapointe	TMN08-26	LLD	9:45 AM	11:00 AM	258.00	260.50	2.50	01643	end of casing run; @ 259.8m limestone, soft white calcite in kimberlite, small nodules

silicate kimberlite indicator minerals and continued as kimberlite until the second sample bag was filled (sample 4901 from 81.05 to 86 m). Thus, sample 4900 comprises mostly till, and sample 4901 comprises mostly kimberlite.

The RC drill hole reached a total depth of 260.5 m. A total of 44 samples were collected, with 43 of the samples in kimberlite (Table 1). Sampling was continuous, with each sample collecting a drill interval of between 2.5 and 6.0 m. The RC chips were collected in lined ore bags set at the end of the shaking table, and rapidly exchanged at the end of each sample interval so that no kimberlite was lost.

Immediately upon removal from the shaking table, sample bags were secured, sealed and recorded by Tres-Or's site geologist. The sample bag was then transported by forklift to one of the two secure and locked shipping containers on site. As soon as drilling was completed, the locked shipping containers were taken by Manitoulin Shipping to their own secure storage facility to await delivery to Microlithics Laboratory. Fines that pass through the 0.5 mm square mesh screen of the shaking deck were collected in ore bags outside the drill shack (Fig. 8). Suspended material is generally of silt or clay size and was not retained. The fine fraction bags were changed as they approached full, and a fork lift was then used to set the bags in snow until they were frozen to allow transport. Sample intervals for the fine fraction bags are roughly 2 to 3 times the lengths of the macrodiamond samples (Table 2).

Figure 8: Fine fraction (<0.5mm) that passed through the shaking table being collected in sample bags outside the drill shack.



An important concern of macrodiamond sampling using an RC drill is to minimize diamond breakage (stone fatality) by recovering kimberlite in large chips. Tres-Or representatives collected small (<1 kg) sub-samples from the shaking table during drilling to monitor the size of the kimberlite chips. The collected chips were hand-screened using 8 inch brass screens with square mesh opening of 6.89 mm and 0.5mm above a solid pan for collecting the <0.5 mm. A visual estimate was recorded for each size fraction. The screen test was completed usually one or more times per sample bag. The kimberlite was returned to the shaking table after screening (Table 3). The returns were consistently coarse, with more than 95% of the kimberlite remaining on the 6.89 mm screen. The consistent coarse size of returned kimberlite chips supports an expectation of minimal stone fatality.

Sands and gravels from the overlying glacio-fluvial deposits slumped into the drill hole occasionally, most notably during collection of sample 4907 (105-109 m) and 4925 (177-180 m). Drill mud weight and viscosity were increased to control slumping.

Table 2: Fine fraction bags and intervals.

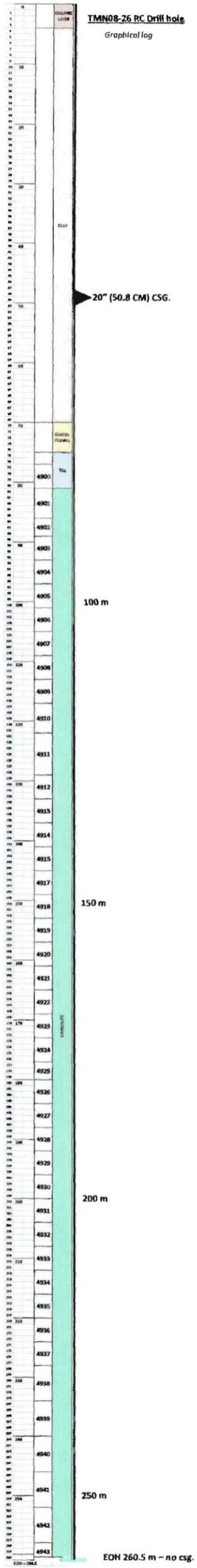
<u>RC Drill hole</u>		<u>start (m)</u>	<u>stop (m)</u>	<u>condition</u>
TMN 08-26	Fine fraction interval:	81.1	144.2	3 bags (1 of 3, 2 of 3, and 3 of 3); good condition
TMN 08-26	Fine fraction interval:	144.2	150.7	Good
TMN 08-26	Fine fraction interval:	150.7	158.0	Good
TMN 08-26	Fine fraction interval:	150.0	169.5	Good
TMN 08-26	Fine fraction interval:	169.5	178.0	Good
TMN 08-26	Fine fraction interval:	178.0	187.6	Good
TMN 08-26	Fine fraction interval:	187.6	199.0	Good
TMN 08-26	Fine fraction interval:	199.0	207.0	Good
TMN 08-26	Fine fraction interval:	207.0	214.8	Top damage; used a new bag; didn't lose anything
TMN 08-26	Fine fraction interval:	214.8	223.0	Good
TMN 08-26	Fine fraction interval:	223.0	234.0	Good
TMN 08-26	Fine fraction interval:	234.0	246.0	Good
TMN 08-26	Fine fraction interval:	246.0	254.4	Good
TMN 08-26	Fine fraction interval:	254.4	260.5	Top damage; used a new bag; didn't lose anything



Table 3: Hand-screen check samples: percent recovery of coarse kimberlite chips.

Sample #	Date	Project	Hole	Sampler	time	depth (m)	+6.8mm	-6.8- +0.6mm	-0.6mm	rock type	comments
4901	03-Feb-08	Lapointe	TMN08-26	HC	4:50pm	81.05	75-80%	20-25%	trace	basal till;	base of fill/top of kimberlite
4901	03-Feb-08	Lapointe	TMN08-26	LLD	5:42pm	85.00	90-95%	5-10%	Trace	Kimberlite	
4902	03-Feb-08	Lapointe	TMN08-26	ME	6:25pm	86.50	95%	5%	trace	Kimberlite	very clumpy
4902	03-Feb-08	Lapointe	TMN08-26	ME	6:48pm	88.90	95+%	5%	trace	Kimberlite	Jake started putting more weight on bit; bigger chunks (9500 pdc on bit)
4902	03-Feb-08	Lapointe	TMN08-26	ME	7:00pm					Kimberlite	
4903	03-Feb-08	Lapointe	TMN08-26	ME	7:15pm	90.90	99+%	10%		Kimberlite	nice consistent chunks, hard to sieve, not much coming out of de-sitter (low liquid)
4904	03-Feb-08	Lapointe	TMN08-26	ME	7:50pm	93.10	80%	20%	nl	20% shale	
4904	03-Feb-08	Lapointe	TMN08-26	ME	8:00pm	93.50	100%			Kimberlite	no shale, consistent chunks (0.5-2")
4904	03-Feb-08	Lapointe	TMN08-26	ME	8:20pm					Kimberlite	
4905	03-Feb-08	Lapointe	TMN08-26	ME	8:50pm	97.50	100%			Kimberlite	good 0.5-2" chunks
4905	03-Feb-08	Lapointe	TMN08-26	ME	9:15pm	100.00	100%			Kimberlite	good 0.5-2" chunks
4906	03-Feb-08	Lapointe	TMN08-26	ME	9:40pm	101.50	100%			Kimberlite	more dark green kimberlite, harder with clay-rich k.; added rod at 9:45pm
4907	03-Feb-08	Lapointe	TMN08-26	ME	10:40pm	105.50	100%			Kimberlite	coarse granite pieces with kimberlite gravel
4907	03-Feb-08	Lapointe	TMN08-26	ME	11:00pm	106.90	98%	2%		Kimberlite	gravel kimberlite
4907	03-Feb-08	Lapointe	TMN08-26	ME	11:35pm	108.90	90%	10%		Kimberlite	low viscosity, adding more mud
4909	04-Feb-08	Lapointe	TMN08-26	HC	12:45am	113.20	95%	4%	1%	Gray	harder than above
4909	04-Feb-08	Lapointe	TMN08-26	HC	1:30am	116.90	95%	4%	TR	Kimberlite	
4910	04-Feb-08	Lapointe	TMN08-26	HC	2:10am	119.30	95%	5%	TR	Kimberlite	
4911	04-Feb-08	Lapointe	TMN08-26	HC	2:50am	122.00	90%	10%	TR	Kimberlite	
4912	04-Feb-08	Lapointe	TMN08-26	HC	4:05am	127.00	99%	1%	TR	Kimberlite	
4916	04-Feb-08	Lapointe	TMN08-26	HC	4:45am	129.30	98%	2%	TR	Kimberlite	7:00AM: 127m-144m - fines bag failed; new fines bag at 144.2m
4913	04-Feb-08	Lapointe	TMN08-26	LLD	8:11am	144.80	98%	2%	TR	Kimberlite	
4917	04-Feb-08	Lapointe	TMN08-26	LLD	9:13am	145.70	98%	2%	TR	Kimberlite	jets not working on shaker table; 2% darker, wet
4917	04-Feb-08	Lapointe	TMN08-26	LLD	9:59am	149.00	99%	1%	TR	Kimberlite	soft green/grey
4918	04-Feb-08	Lapointe	TMN08-26	LLD	10:29am	150.70	96%	4%	TR	Kimberlite	new fines bag @ 150.7m
4918	04-Feb-08	Lapointe	TMN08-26	LLD	11:15am	152.70	98%	2%	TR	Kimberlite	dark grey
4919	04-Feb-08	Lapointe	TMN08-26	LLD	11:52am	154.50	90%	10%	TR	Kimberlite	clay-rich; dark grey kimberlite, slower penetration
4919	04-Feb-08	Lapointe	TMN08-26	LLD	12:07am	155.00	95%	5%	TR	Kimberlite	dark grey, hard
4919	04-Feb-08	Lapointe	TMN08-26	LLD	12:19am	155.80	98%	2%	TR	Kimberlite	dark grey, clasts
4920	04-Feb-08	Lapointe	TMN08-26	LLD	1:17pm	158.00	98%	2%	TR	Kimberlite	dark grey, pebble-size clasts/granite/limestone smaller
4921	04-Feb-08	Lapointe	TMN08-26	LLD	2:25pm	162.90	99%	1%	TR	Kimberlite	dark grey, clasts
4922	04-Feb-08	Lapointe	TMN08-26	LLD	3:20pm	166.70	98%	2%	TR	Kimberlite	dark grey, clasts
4922	04-Feb-08	Lapointe	TMN08-26	LLD	3:49pm	168.70	98%	2%	TR	Kimberlite	dark grey kimberlite
4923	04-Feb-08	Lapointe	TMN08-26	ME	4:46pm	171.90	99%	0.01	TR	Kimberlite	dark grey kimberlite
4924	04-Feb-08	Lapointe	TMN08-26	ME	5:50pm	175.10	98%	2%			added rod
4924	04-Feb-08	Lapointe	TMN08-26	ME	6:05pm	175.20	98%	2%		Kimberlite	dark grey kimberlite, clay-rich
4925	04-Feb-08	Lapointe	TMN08-26	ME	7:17pm	178.00	95%	5%			hard drilling
4925	04-Feb-08	Lapointe	TMN08-26	ME	7:30pm	178.10	90%	10%	Trace	Kimberlite	2-5cm till?? From above?? Added lots of mud
4925	04-Feb-08	Lapointe	TMN08-26	ME	8:05pm	179.00	90%	2%	Trace	Kimberlite	small clasts 1-2cm
4926	04-Feb-08	Lapointe	TMN08-26	ME	8:50pm	180.10	98%	2%	TR	Kimberlite	good
4926	04-Feb-08	Lapointe	TMN08-26	ME	9:20am	181.00	95%	5%	TR	Kimberlite	rod change, smaller size pieces
4927	05-Feb-08	Lapointe	TMN08-26	HC	11:05am	184.90	95%	5%	TR	Gray	
4928	05-Feb-08	Lapointe	TMN08-26	HC	2:55am	189.50	99%	1%	TR	Gray	
4929	05-Feb-08	Lapointe	TMN08-26	HC	4:35am	192.50	95%	5%	TR	Gray	
4930	05-Feb-08	Lapointe	TMN08-26	HC	7:00am	198.00	99%	1%	TR	Gray	
4933	05-Feb-08	Lapointe	TMN08-26	LD	11:50am	208.70	99%	1%	TR	Gray	small pieces
4933	05-Feb-08	Lapointe	TMN08-26	LD	12:53pm	211.70	99%	1%	TR	Gray	gamets
4934	05-Feb-08	Lapointe	TMN08-26	LD	2:17pm	213.70	99%	1%	TR	Dark Gray	2 large chunks from above bit
4935	05-Feb-08	Lapointe	TMN08-26	LD	3:45pm	217.80	98%	2%	TR	Dark Gray	larger chip sizes
4935	05-Feb-08	Lapointe	TMN08-26	ME	4:10pm	219.50	99%	1%	TR	Dark Gray	5+ orange gamets
4936	05-Feb-08	Lapointe	TMN08-26	ME	6:17pm	224.00	95%	5%	TR	Dark Gray	
4937	05-Feb-08	Lapointe	TMN08-26	ME	7:10pm	225.00	95%	5%	TR	Dark Gray	
4941	06-Feb-08	Lapointe	TMN08-26	ME	4:00am	246.00	95%	5%	TR	Dark Gray	
4942	06-Feb-08	Lapointe	TMN08-26	LLD	9:18am	257.50	98%	2%	TR	Dark Gray	
4943	06-Feb-08	Lapointe	TMN08-26	LLD	10:15am	259.30	98%	2%	TR	Dark Gray	some white calcite nodules

EOH @  
260.8m



### **SAMPLE SECURITY AND DATA VERIFICATION**

Samples were secured and sealed by the Tres-Or drill site representative with each change of ore bag. From there, the samples were carried by forklift to one of two sealed and locked containers. The containers remained locked until delivery of the next sample. Upon completing of drilling, the sample list for each container was verified by the Tres-Or representative and the containers were trucked from the Lapointe site by Manitoulin Transport Inc. directly to DRA Americas' secure warehouse in Peterborough Ontario, where they were stored under independent control until shipped for processing.

Drill site first aid and security was provided 24 hours a day by the Timiskaming First Nation's First Nation Security group, who manned a trailer and restricted access to the site to only involved personnel.

At Microlithics Laboratory, sample handling was monitored by Tres-Or geologists and independent process engineers S. Cole and L. Jones from DRA Americas. All seals were verified, and 0.85 mm synthetic diamond spikes were added to the samples. The spikes were recovered at 97.5%, indicating efficient plant operations, as described under the 'Processing: DMS lab at Thunder Bay' heading later.

Independent operation reports which more fully describe Microlithics' DMS processing and DRA Americas' evaluation of procedures are attached as Appendices 1 and 2.

**PROCESSING: DMS LAB AT THUNDER BAY**

Processing of the kimberlite for macrodiamonds was undertaken at Microlithics Laboratory in Thunder Bay, Ontario. The processing used a dense media separation (DMS) plant rated at 1.5 tonnes per hour to create a heavy mineral concentrate (Fig. 10). The plant is owned by Stornoway, and was provided at cost for Tres-Or's sample for Stornoway to receive a first right of refusal on the Lapointe Kimberlite. Microlithics staff operated the DMS and subsequent diamond recovery steps.

Observation of each step was provided by Tres-Or representatives H. Cookenboo (Ph.D, and P.Geo.) and L. Duffett (P.Geo. and President), with independent auditing of conducted by S. Cole (P.Eng. and President - DRA Americas) and L. Jones (P.Eng.- DRA Americas) to insure reliability and efficient diamond recovery.

Processing began July 3, 2008, following completion of other lab projects and complete clean-up of the DMS and related equipment. The two sealed and locked containers containing all the sample bags were opened and each sample was verified present and properly sealed. Samples were run sequentially from the top of the drill hole in batches of 3 to 6 bags, in order to maximize efficiency of recovery and plant procedures (Table 4).

The kimberlite delivered to Thunder Bay in 44 sample bags weighed 42.01 tonnes wet. Microlithics collected and dried small subsamples weighting between 5 and 9 kg from each bag to calculate dry weights. On average, the calculated dry weights were 20% reduction from the wet weights, and the calculated dry weight of processed material

Figure 10: The conveyor feed system for the DMS at Microlithics Laboratory, Thunder Bay.



Table 4: Samples batches – bag #s and depth interval processed as a group

<b>Sample Batches</b>					
<u>from</u>	<u>to</u>	<u>Top</u>	<u>Base</u>	<u>Length</u>	
4900	4901	77.1 m	86 m	8.9 m	Base of till and top of kimberlite
4902	4907	86 m	109 m	23 m	Kimberlite
4908	4912	109 m	129 m	20 m	Kimberlite
4913	4917	129 m	149 m	20 m	Kimberlite
4918	4922	149 m	169 m	20 m	Kimberlite
4923	4927	169 m	188 m	19 m	Kimberlite
4928	4932	188 m	208 m	20 m	Kimberlite
4933	4938	208 m	234 m	26 m	Kimberlite
4939	4943	234 m	260.5 m	26.5 m	Kimberlite

totalled 33.45 tonnes (Table 5). Excluding sample bag 4900 which was collected in till above the kimberlite, the total dry weight of kimberlite processed was 32.6 tonnes.

Table 5: Measured (wet) and calculated (dry) weights for kimberlite sample bags.

bag #	Compiled sample bags	Kgs on pallet	Kgs bag and pallet	Kgs kimberlite (wet)	% reduction	Calculated kgs kimberlite (dry)
4900	1	880.5	26.5	854	3.9%	820.8
4901	1	875	21	854	16.0%	717.7
4902	2	754.5	21	733.5	15.5%	619.6
4903	2	1089	24	1065	19.0%	862.4
4904	2	1167	18	1149	19.3%	927.3
4905	2	1146	21	1125	18.9%	912.3
4906	2	1139	24	1115	18.7%	906.6
4907	2	1159.5	21	1138.5	16.0%	956.2
4908	3	1113	21	1092	24.9%	819.8
4909	3	1117	22	1095	22.1%	852.5
4910	3	1213	23.5	1189.5	23.1%	914.8
4911	3	1240	25	1215	22.7%	938.7
4912	3	1037	28.5	1008.5	25.9%	747.3
4913	4	1180	20	1160	22.7%	896.4
4914	4	1106	23.5	1082.5	24.6%	815.7
4915	4	1064.5	25.5	1039	23.0%	800.5
4916	4	1022.5	21.5	1001	19.1%	809.9
4917	4	984.5	18.5	966	16.7%	804.4
4918	5	1078	41.5	1036.5	18.6%	843.5
4919	5	1035.3	26	1009.3	17.5%	832.8
4920	5	1067.5	31	1036.5	19.6%	833.6
4921	5	1052	23.5	1028.5	21.7%	805.2
4922	5	1045.5	17.5	1028	21.2%	809.8
4923	6	1060.5	18	1042.5	21.1%	822.8
4924	6	1048	18	1030	17.6%	848.2
4925	6	831.5	17.5	814	18.3%	664.8
4926	6	827	18.5	808.5	23.4%	619.3
4927	6	828.5	26	802.5	22.3%	623.8
4928	7	775.5	23.5	752	23.8%	573.2
4929	7	889	24	865	22.0%	674.4
4930	7	877.5	21.5	856	22.8%	660.5
4931	7	685.5	27.5	658	20.7%	522.0
4932	7	747	30	717	18.8%	582.3
4933	8	763	33.5	729.5	21.7%	571.3
4934	8	748.5	23	725.5	21.4%	570.4
4935	8	823	21.5	801.5	20.6%	636.4
4936	8	760	30.5	729.5	21.1%	575.8
4937	8	718	29.5	688.5	20.1%	550.1
4938	8	1256	26	1230	21.1%	970.7
4939	9	1157.5	24	1133.5	20.9%	896.8
4940	9	1145	41.5	1103.5	22.0%	860.2
4941	9	1088.5	41	1047.5	21.5%	822.3
4942	9	1096	41	1055	20.8%	835.7

The DMS was run steadily at a split point density between 3.00 and 3.05 for the 2 mm tracers with continual monitoring by Microlithics staff. The kimberlite was cycled on a continuous re-grinding circuit (see Appendix 1 for details) until all kimberlite from each sample bag passed through the 0.8 mm square deck. The DMS concentrate was sealed and stored securely, and then further reduced by caustic fusion to create a concentrate suitable for hand picking for diamonds. The caustic fusion process was completed at the Microlithics laboratory, using standard procedures, as detailed in Appendix 1. Twenty synthetic diamonds spikes each 0.84 mm across were added at the start of each kimberlite batch to monitor recovery through both the DMS and caustic fusion processing stages. A total of 156 out of 160 added synthetics were recovered, demonstrating good recovery efficiency. The fewest recovered in any one batch were 17 of 20 from sample batch 4933 to 4938 (208 m to 234 m).

The starting sample weight consists of the kimberlite processed, plus the fine fraction (-0.5 mm) collected at the drill rig, as well as suspended material that was not retained. Sloughing from uncased glacio-fluvial deposits above the kimberlite, as occurred occasionally during drilling, added some dilution to the kimberlite, although it is assumed to be minor. A volume calculation of the extracted kimberlite probably gives the best estimate of actual start weight, because of uncertainties in the weight of fine fraction sample bags, and the amount of material lost in suspension. The theoretical drill hole volume equals  $27.9 \text{ m}^3$ , given the 17.5 inch diameter drill bit was used to cut 179.45 m in kimberlite. Assuming a dry density of  $2 \text{ g/cm}^3$ , the  $27.9 \text{ m}^3$  of kimberlite extracted would weigh 55.8 tonnes (Table 5). Sloughing within the kimberlite, which

would have added kimberlite in addition to the volume of the drill hole, is unlikely, based on drill J. Entz's evaluation of hole conditions.

DRA Americas engineers Steve Cole and Lyn Jones observed and evaluated all aspects of the processing at Microlithics Laboratory for Tres-Or, and concluded that overall "...the plant operated in a consistent and controlled manner." and furthermore that "Operating emphasis was on product quality rather than throughput." (Appendix 2).

During drilling at approximately 210 m, holes were noted and repaired in the shaking table screen. The holes in the screens would have permitted an unknown portion of coarse material passing across the shaking table to report to the fines, and therefore the fines bags were screened at 0.6 mm to determine how much coarse material was not collected.

The screening was done by Tres-Or staff at the Tres-Or field office in Haileybury, Ontario, using a 1 m diameter automated SWECO screen. The amount of coarse material that reported to the fines increased from about 144 m to 210 m, consistent with the screen tearing progressively until the tears were noticed (Table 6). However the total amount of coarse material reaching was only 31.5 kgs which is less than 0.1% of the weight of coarse material processed. There is no obvious reason to consider the coarse material passing through the screen tears to be more likely to carry diamonds than the kimberlite samples, and thus the material from the fines is considered insignificant to the results.



Table 6: Fines fraction bags – weight of material from each bag remaining on a 0.6 mm square mesh screen.

<b>Bag sequence</b>	<b>Weight (Kg)</b>	<b>Sample seal #</b>
81m to 127m (Bag 1 of 3)	0.3	10531
81m to 127m (Bag 2 of 3)	0.3	10532
81m to 127m (Bag 3 of 3)	0.7	10533
127m to 144m	0.7	10534
144m to 150.7m	2.5	10535
150.7m to 158m	4.7	10536
158m to 169.5m	1.7	10537
169.5m to 178m	4.5	10538
178m to 187.6m	2.0	10539
187.6m to 199m	1.9	10540
199m to 207m	5.1	10541
207m to 214.8m	4.0	10542
214.8 to 223m	0.6	10543
223m to 234m	1.0	10544
234m to 246m	0.7	10547
246m to 254.4m	0.6	10545
254.4 to 260.5m	0.7	10546
<b>Total Weight:</b>	<b>31.5</b>	<b>kg</b>

## RESULTS

No macrodiamonds >0.8 mm were recovered from any of the kimberlite batches. The recovery of >95% of synthetic diamond spikes, plus abundant kimberlite indicator minerals, supports efficient operation of the recovery plant.

## **CONCLUSIONS AND RECOMMENDATIONS**

Caustic fusion tests of almost 4 tonnes of the Lapointe Kimberlite yielded results potentially suggestive of a low diamond concentration but coarse size distribution (see Tres-Or news releases 2005 to 2008, Tres-Or website). Such hints of a coarse distribution warranted further examination due to the large size of the body (+21 hectares) and low mining costs in the area. The RC drill operations returned consistently very coarse kimberlite chips (+95% of chips remained on a 6.89 mm screen), suggesting stone fatality was not a significant problem. DMS operations were continuously monitored, with the plant operations being stable and synthetic diamonds spikes being recovered consistently. Lack of recovery of macrodiamonds thus likely reflects a dearth of macrodiamonds in the central Lapointe Kimberlite section tested. No further work is recommended at the Lapointe Kimberlite at this time.

**REFERENCES**

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## STATEMENT OF QUALIFICATIONS

To accompany the report entitled: **ASSESSMENT REPORT ON MACRODIAMOND TEST OF THE LAPOINTE KIMBERLITE: REVERSE CIRCULATION (RC) DRILLING AND DMS PROCESSING FOR TRES-OR RESOURCES LTD**

I, Laura Lee Duffett, of the city of White Rock, in the Province of British Columbia, Canada, hereby certify that I have read, contributed and verified the contents of this report as follows:

1. I am a graduate geologist from Carleton University in Ottawa, Ontario in 1982 and hold a Bachelor of Science in Geology.
2. I am a Professional Geologist and a member of the Association of Professional Engineers and Geoscientists of British Columbia since 1992.
3. I am a Professional Geologist and a registered member of the Professional Geoscientists of Ontario (member number 1311).
4. I am a fellow of the Geological Association of Canada, a member of the Prospectors and Developers Association of Canada, member of the Prospectors Association of Ontario, and a member of the Association of Mineral Exploration of British Columbia.
5. I have worked as a geologist over a 20 year career and acted as a Consulting Geologist and Manager of Business Development for both private and public exploration companies, government agencies and as an industry consultant with international work experience encompassing mineral exploration programs in Southeast Asia, South America, Africa, Canada, the U.S. and Mexico.
6. I am the President and CEO and a member of the Board of Directors of Tres-Or Resources Ltd.
7. I am a consulting geologist for Tres-Or Resources Ltd. and a Qualified Person by the Standards of National Instrument 43-101 and have been actively involved in the fieldwork reported on and have verified and approved the contents of this report herein.



Laura Lee Duffett, B.Sc., P.Geo.

## Statement of Qualification

Harrison O. Cookenboo, Ph.D., P.Geo., Consulting Geologist  
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To accompany the report entitled: ASSESSMENT REPORT ON MACRODIAMOND TEST OF THE LAPOINTE KIMBERLITE: REVERSE CIRCULATION (RC) DRILLING AND DMS PROCESSING FOR TRES-OR RESOURCES LTD:

1) I, Harrison O. Cookenboo, Ph.D., P.Geo., P.Geol., do hereby certify that:

I am a consulting geologist providing my services through: B.C. 664163 Ltd.; 278 West 5th Street; North Vancouver, B.C. Canada V7M 1K1


2) I graduated with a Bachelor of Science Degree (cum laude) in geology from Duke University (Durham, North Carolina) in 1981. In addition, I have obtained a Masters of Science in geology from the University of British Columbia in 1989, and a Ph.D. in geology from the University of British Columbia in 1994.

3) I am a member of the Association of Professional Engineers, Geoscientists of British Columbia (APEGBC), practicing member of the Association of Professional Geoscientists of Ontario (APGO), Temporary Licensee of the OGQ, and licensee of the Association of Professional Engineers,, as well as a Fellow of the Geological Association of Canada (GAC).

4) I have worked as a geologist for 22 years since graduation from Duke University in 1981. From 1981 to 1986, I worked as an exploration geologist generating and evaluating hydrocarbon prospects in the Gulf of Mexico. Between 1987 and 1993, I completed my M.Sc. and Ph.D. degrees and worked as a research and teaching assistant at the University of British Columbia. From 1993 to the present, I have worked in mineral exploration, including diamonds, nickel, copper, and the platinum group metals, and since 2002 as an independent consulting geologist. I was appointed a Senior Associate Geologist by Watts, Griffis and McQuat Consulting Geologists and Engineers, Toronto Canada in 2004.

5) I am acting as consulting geologist for Tres-Or Resources Ltd. I have verified the reported work and related expenses

Signed by



"Harrison Cookenboo"  
 Harrison Cookenboo, Ph.D. P.Geo. (APGO Members number 1358)  
 Dated Vancouver, B.C., July 20, 2009

**APPENDIX 1: DMS METHODS AND LABORATORY REPORT**



**APPENDIX 2: DRA AMERICAS PROCESSING OBSERVATION AND EVALUATION  
REPORT**



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# Memo

**To:** Harrison Cookenboo, Consulting Geologist to Tres Or Resources Limited

**From:** Lyn Jones, Process Engineer, DRAA; Steve Cole, President, DRAA

**Re:** Tres Or Bulk Sample Pilot Plant Run

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This memo provides a summary of observations made during a site visit to the Microlithics DMS pilot plant in Thunder Bay, Ontario between July 8<sup>th</sup> and 10<sup>th</sup>, 2008. The purpose of the visit was to evaluate the operating methods in place for the pilot plant run of a bulk sample for Tres Or Resources Limited.

## Sample Handling

Sample storage consists of bulk bags shipped from Peterborough and stored in two locked trailers. The bags are removed from the trailers in sequential lots of roughly 5 bags. Each lot corresponds to a measured section of the drill hole. The lots are stored in the plant building while being processed. Each bag is weighed, the security tag is removed, and a sample is collected for moisture content.

The bags are loaded individually in sequence into a portable hopper that is loaded onto a stand above the belt feeder. As the bag is placed into the hopper the bottom drawstring is untied to permit the sample to fall, or be pushed, into the hopper.

Final concentrate is collected in 20L white plastic pails. At the end of each lot, or at the end of the day, whichever comes first, the bucket is lidded, labeled, and sealed with three security tags. The tagged buckets are transferred to the caustic fusion lab.

Minus 2mm tailings from the bottom of the Sweco screen are discharged into 200L steel drum. When the drum is full it is lidded, banded, and labeled and

replaced with new drum. The -2mm tailings for each lot are kept separate. The drums are stored in the plant or in a locked trailer.

Minus 0.8mm from the feed prep screen under pan are fed to a degrit cyclone. The cyclone underflow is settled in a 1000 gallon cone bottomed tank. Settled solids from the tank are pumped into drums or bulk bags and decanted.

Fine slimes from the settling tank off and the cyclone off report to the plant sump and are removed by sucker truck.

### **Operations**

The sample consists of nominal -1/2" material with a significant clayey fraction and ~22% moisture. As a result, each bulk bag contains an agglomerated mass that requires a full time "hopper poker" operator to ensure coverage of the belt feeder. One or two more operators are required to break any large clumps of material before entering the scrubber feed hopper.

To improve scrubbing performance additional pebbles (~200kg) have been added to the scrubber. The trommel screen oversize crusher gap has been opened up to prevent crushing of the pebbles. At the end of the pilot plant run the pebbles are to be picked out, and the gap tightened to process any recirculating sample material.

The feed prep screen is running at ~10% coverage due to the high concentration of fines in the sample. The feed prep screen consists of polyurethane panels 12" square with 0.8mm square holes. As necessary the panels are cleaned with compressed air or a nylon brush. Silicone sealant has been applied at the edge of the screen area, between the panels, and around the hold-down pegs.

Written DMS start up and operating procedures are present.

DMS cyclone pressure is measured by a digital gauge mounted on a wafer-type, iso-ring diaphragm. An operator is present in the DMS container at all times.

Correct media density control is achieved by Debex controller. Calibration of the Debex is checked at the beginning and end of the shift by Marcy scale. Density alarms from the Debex are displayed on a beacon mounted on the outside of the DMS container and are visible from virtually anywhere in the plant. A chart recorder collects continuous density readings during normal operation.

The product screen is 0.25mm stainless steel wedge wire, slots with flow. The DMS operator cleans the screen regularly with a wire brush.

A three stage recrush of the tails is conducted using a Sweco-type vibrating screen deck with 6mm, 4mm, and 2mm screens. The oversize from each screen reports to a separate 10" cone crusher. All three crushers discharge onto the same belt which returns to the feed conveyor. The -2mm screen product is collected in drums as tailings. Prior to the startup of the plant the gap of each crusher was checked using lead pellets (sinkers) and the results recorded.

### **QA/QC**

Two full tracer tests were conducted on June 27<sup>th</sup> prior to the startup of the plant on this feed. Each full test consisted of ten 2mm and ten 0.8mm tracers in the following specific gravities: 2.70, 2.80, 2.90, 3.00, 3.10, 3.20, 3.30, 3.40, and 3.53 (180 tracers in total).

A full tracer test of 2mm tracers (90 tracers total) was conducted after the completion of the fourth sample (bag 17).

At the start and end of each shift, ten 2mm 3.53 tracers are added to the mixing box and the results recorded on the logsheet.

A total of 20 synthetic diamond spikes are added during the processing of each sample. The spikes are 0.85-1.00 mm in size and are added in two lots of ten to the material on the belt feeder.

### **Data Collection**

A Diamond Plant Daily Logsheets consisting of a single page lined sheet is used as an events log to record start and stop times for each bulk bag and changes in plant operation. A new events log sheet is started each day.

A Plant Operations Logsheets is used to record plant parameters including: scrubber feed rate, DMS cyclone operating pressure, manual density checks, and diamond tracer tests. A new logsheet is started each operating day.

A DMS Sample Sheet logsheet is used to record the weight of each bulk bag as it is brought into the plant. The sheet also records the weight of the subsample of each bag before and after drying.

A Sample Receipt logsheet is used to record the bulk bag numbers and corresponding security tags.

A DMS Quality Control Worksheet is filled out whenever spikes are added to the feed. The sheet records the date and sample number, as well as the names of the person adding the spikes and a witness.

Final concentrate security tag numbers are recorded in a DMS Seal Registry logsheet.

### **Housekeeping**

Spillage and splashing from process equipment in the plant is minimized by extensive guarding and shielding. These include side guards on the feed conveyor, rubber boots on the Sweco screen discharges, lexan covers on the screen decks, and enclosures on all conveyor discharges.

Drip pans running the length of each conveyor are used to collect any material getting past the two belt scrapers. These trays are washed down at the end of every sample run and the collected material is returned to the circuit.

Process solution spilled onto the floor area or drips on equipment are cleaned up by Shop-Vac and passed over a 250 mesh screen in the sump area with the oversize collected in a bucket.

Washdown of the tailings screen and recrush circuit is conducted on a regular basis. Washdown of the DMS module occurs at the end of each day.

Between samples the scrubber is reversed and emptied of most, but not all, entrained material. At the same time, all trays, screens and launders are sprayed clean.

### **Overall**

During the period of the site visit the plant operated in a consistent and controlled manner. There was an appropriate number of operations staff available to address feed handling issues while maintaining constant supervision of the DMS module. Operating emphasis was on product quality rather than throughput. All feeds and products were kept labeled, lidded, and sealed, as required. All equipment was running in good order.

### **Recommendations**

Based on the operation as observed from July 8-10<sup>th</sup>, 2008, the following recommendations are made:

- In addition to the start-up and shut-down tracer checks, and the spikes in each sample, a full tracer test using 2mm tracers should be run between each sample.

- The Plant Operations logsheet should be updated hourly with particular attention to recording the cyclone pressure and the plant feed rate.
- The -2mm tailings drum should be checked for oversize periodically and the observations recorded on the Plant Operations logsheet.
- Feed rate measurements should be made by collecting the overflow from the belt feeder using a square pan for a period of 10 seconds, provided that this can be done safely.
- Moisture sampling of each bag should be carried out by collecting a series of 5 cuts, each roughly 1kg in mass, spaced over the time it takes to empty the individual bag. The cuts should be taken at the overflow from the belt feeder, provided this can be done safely. The cuts should be stored in a lidded 10L pail until the last cut is taken when the sample can be transferred to a pan and weighed.

42197



## Diamond Processing Report

Prepared For:

Tres-Or Resources Ltd.

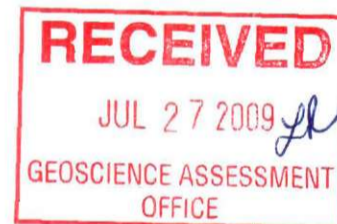
Lapointe 2008 Bulk Sample

### Processing Methods:

Dense Medium Separation

Caustic Dissolution

Diamond Observation



By:

Microlithics Laboratories Inc.  
827 Harold Cres.  
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Canada  
P7C 5H8

**Results Reported for Samples As Received**



## DMS Sample Preparation

Sample ID: Lapointe 2008

Client: Tres-Or Resources Ltd.

Sample ID	Sample Part	Date Processing Started	Date Processing Complete	Weight With Bag/Skid (kg)	Weight of Bag/Skid (kg)	Total Weight Processed Wet (kg)	Rock Press Required	Pre Crush Required	Pre Crush Size (mm)	Wet Weight (kg)	Dry Weight (kg)	Moisture Content % of Wet Weight	Moisture Content % of Dry Weight	Calculated Dry Wt (kg)
4900-4901	4900	July 3, 2008	July 3, 2008	880.5	26.5	854	No	No	N/A	7.835	7.53	3.892788768	4.05046481	820.76
4900-4901	4901	July 3, 2008	July 4, 2008	875	21	854	No	No	N/A	5.985	5.03	15.95655806	18.9860835	717.73
4902-4907	4902	July 4, 2008	July 4, 2008	754.5	21	733.5	No	No	N/A	4.895	4.135	15.52604699	18.3796856	619.62
4902-4907	4903	July 4, 2008	July 4, 2008	1089	24	1065	No	No	N/A	6.375	5.162	19.02745098	23.4986439	862.36
4902-4907	4904	July 6, 2008	July 6, 2008	1167	18	1149	No	No	N/A	6.505	5.25	19.29285165	23.9047619	927.33
4902-4907	4905	July 6, 2008	July 6, 2008	1146	21	1125	No	No	N/A	6.955	5.64	18.90726096	23.3156028	912.29
4902-4907	4906	July 6, 2008	July 6, 2008	1139	24	1115	No	No	N/A	5.67	4.61	18.69488536	22.9934924	906.55
4902-4907	4907	July 6, 2008	July 7, 2008	1159.5	21	1138.5	No	No	N/A	6.84	5.745	16.00877193	19.0600522	956.24
4908-4912	4908	July 7, 2008	July 7, 2008	1113	21	1092	No	No	N/A	7.26	5.45	24.93112948	33.2110092	819.75
4908-4912	4909	July 7, 2008	July 7, 2008	1117	22	1095	No	No	N/A	5.395	4.2	22.15013902	28.452381	852.46
4908-4912	4910	July 7, 2008	July 7, 2008	1213	23.5	1189.5	No	No	N/A	6.56	5.045	23.0945122	30.0297324	914.79
4908-4912	4911	July 7, 2008	July 8, 2008	1240	25	1215	No	No	N/A	7.63	5.895	22.73918742	29.4317218	938.72
4908-4912	4912	July 8, 2008	July 8, 2008	1037	28.5	1008.5	No	No	N/A	6.95	5.15	25.89928058	34.9514563	747.31
4913-4917	4913	July 8, 2008	July 8, 2008	1180	20	1160	No	No	N/A	5.72	4.42	22.72727273	29.4117647	896.36
4913-4917	4914	July 8, 2008	July 8, 2008	1106	23.5	1082.5	No	No	N/A	6.675	5.03	24.64419476	32.7037773	815.73
4913-4917	4915	July 8, 2008	July 8, 2008	1064.5	25.5	1039	No	No	N/A	6.425	4.95	22.95719844	29.7979798	800.47
4913-4917	4916	July 8, 2008	July 9, 2008	1022.5	21.5	1001	No	No	N/A	5.945	4.81	19.09167368	23.5966736	809.89
4913-4917	4917	July 9, 2008	July 9, 2008	984.5	18.5	966	No	No	N/A	6.305	5.25	16.73275178	20.0952381	804.36
4918-4922	4918	July 9, 2008	July 9, 2008	1078	41.5	1036.5	No	No	N/A	6.095	4.96	18.62182116	22.8830645	843.48
4918-4922	4919	July 9, 2008	July 10, 2008	1035.5	26	1009.5	No	No	N/A	6.825	5.63	17.50915751	21.2255773	832.75
4918-4922	4920	July 10, 2008	July 10, 2008	1067.5	31.5	1036	No	No	N/A	8.575	6.9	19.5335277	24.2753623	833.63





## DMS Sample Preparation

Sample ID: Lapointe 2008

Client: Tres-Or Resources Ltd.

Sample ID	Sample Part	Date Processing Started	Date Processing Complete	Weight With Bag/Skid (kg)	Weight of Bag/Skid (kg)	Total Weight Processed Wet (kg)	Rock Press Required	Pre Crush Required	Pre Crush Size (mm)	Wet Weight (kg)	Dry Weight (kg)	Moisture Content % of Wet Weight	Moisture Content % of Dry Weight	Calculated Dry Wt (kg)
4918-4922	4921	July 10, 2008	July 10, 2008	1052	23.5	1028.5	No	No	N/A	8.36	6.545	21.71052632	27.7310924	805.21
4918-4922	4922	July 10, 2008	July 11, 2008	1045.5	17.5	1028	No	No	N/A	7.56	5.955	21.23015873	26.9521411	809.75
4923-4927	4923	July 11, 2008	July 11, 2008	1060.5	18	1042.5	No	No	N/A	7.355	5.805	21.07409925	26.7011197	822.80
4923-4927	4924	July 11, 2008	July 11, 2008	1048	18	1030	No	No	N/A	6.29	5.18	17.64705882	21.4285714	848.24
4923-4927	4925	July 11, 2008	July 11, 2008	831.5	17.5	814	No	No	N/A	6.765	5.525	18.32963784	22.4434389	664.80
4923-4927	4926	July 11, 2008	July 11, 2008	827	18.5	808.5	No	No	N/A	6.43	4.925	23.4059098	30.5583756	619.26
4923-4927	4927	July 11, 2008	July 14, 2008	828.5	26	802.5	No	No	N/A	6.42	4.99	22.2741433	28.6573146	623.75
4928-4932	4928	July 14, 2008	July 14, 2008	775.5	23.5	752	No	No	N/A	7.19	5.48	23.78303199	31.2043796	573.15
4928-4932	4929	July 14, 2008	July 14, 2008	889	24	865	No	No	N/A	6.375	4.97	22.03921569	28.2696177	674.36
4928-4932	4930	July 14, 2008	July 14, 2008	877.5	21.5	856	No	No	N/A	7.88	6.08	22.84263959	29.6052632	660.47
4928-4932	4931	July 14, 2008	July 14, 2008	685.5	27.5	658	No	No	N/A	8.61	6.83	20.67363531	26.0614934	521.97
4928-4932	4932	July 15, 2008	July 15, 2008	747	30	717	No	No	N/A	7.69	6.245	18.79063719	23.1385108	582.27
4933-4938	4933	July 15, 2008	July 15, 2008	763	33.5	729.5	No	No	N/A	6.525	5.11	21.68582375	27.6908023	571.30
4933-4938	4934	July 15, 2008	July 15, 2008	748.5	23	725.5	No	No	N/A	6.9	5.425	21.37681159	27.1889401	570.41
4933-4938	4935	July 15, 2008	July 15, 2008	823	21.5	801.5	No	No	N/A	6.725	5.34	20.59479554	25.9363296	636.43
4933-4938	4936	July 15, 2008	July 15, 2008	760	30.5	729.5	No	No	N/A	8.185	6.46	21.07513745	26.7027864	575.76
4933-4938	4937	July 15, 2008	July 15, 2008	718	29.5	688.5	No	No	N/A	8.185	6.54	20.09773977	25.1529052	550.13
4933-4938	4938	July 16, 2008	July 16, 2008	1256	26	1230	No	No	N/A	8.94	7.055	21.08501119	26.7186393	970.65
4939-4943	4939	July 16, 2008	July 16, 2008	1157.5	24	1133.5	No	No	N/A	8.715	6.895	20.88353414	26.3959391	896.79
4939-4943	4940	July 16, 2008	July 16, 2008	1145	41.5	1103.5	No	No	N/A	9.14	7.125	22.04595186	28.2807018	860.22
4939-4943	4941	July 16, 2008	July 16, 2008	1088.5	41	1047.5	No	No	N/A	8.42	6.61	21.49643705	27.3827534	822.32



## DMS Sample Preparation

Sample ID: Lapointe 2008

Client: Tres-Or Resources Ltd.

Sample ID	Sample Part	Date Processing Started	Date Processing Complete	Weight With Bag/Skid (kg)	Weight of Bag/Skid (kg)	Total Weight Processed Wet (kg)	Rock Press Required	Pre Crush Required	Pre Crush Size (mm)	Wet Weight (kg)	Dry Weight (kg)	Moisture Content % of Wet Weight	Moisture Content % of Dry Weight	Calculated Dry Wt (kg)
4939-4943	4942	July 16, 2008	July 16, 2008	1096	41	1055	No	No	N/A	9.115	7.22	20.78990675	26.2465374	835.67
4939-4943	4943	July 16, 2008	July 17, 2008	432.5	37	395.5	No	No	N/A	8.05	6.545	18.69565217	22.9946524	321.56

Chris Berner  
Laboratory Manager



# DMS Processing Summary

Sample ID: Lapointe 2008

Client: Tres-Or Resources Ltd.

Sample ID	Proc Date Started	Sample Wt Wet Kilograms (kg)	Average Moisture Content (%)	Lower Cut Off (mm)	Operating Density (sg)	2mm Tracer D50 Cutpoint and Epm 75/25	Second Crush (cone) Square Mesh Cut (mm)	Third Crush (cone) Square Mesh Cut (mm)	Fourth Crush (cone) Square Mesh Cut (mm)	DMS Concentrate Wt (Dry kg)	Proc Date Completed
4900-4901	July 3, 2008	1708	9.92	0.8mm Square	2.2	3.00 @ 0.05	6	4	2	44.415	July 4, 2008
4902-4907	July 4, 2008	6326	17.91	0.8mm Square	2.2	3.05 @ 0.05	6	4	2	20.71	July 7, 2008
4908-4912	July 7, 2008	5600	23.76	0.8mm Square	2.2		6	4	2	15.42	July 8, 2008
4913-4917	July 8, 2008	5248.5	21.23	0.8mm Square	2.2		6	4	2	9.806	July 9, 2008
4918-4922	July 9, 2008	5138.5	19.72	0.8mm Square	2.2	3.04 @ 0.03	6	4	2	13.43	July 11, 2008
4923-4927	July 11, 2008	4497.5	20.55	0.8mm Square	2.2	3.00 @ 0.06	6	4	2	18.19	July 14, 2008
4928-4932	July 14, 2008	3848	21.63	0.8mm Square	2.2	3.02 @ 0.05	6	4	2	8.285	July 15, 2008
4933-4938	July 15, 2008	4904	20.99	0.8mm Square	2.2	3.04 @ 0.03	6	4	2	15.01	July 16, 2008
4939-4943	July 16, 2008	4735	20.78	0.8mm Square	2.2	3.04 @ 0.03	6	4	2	24.005	July 17, 2008

**Chris Berner**  
Laboratory Manager



## Caustic Dissolution Summary

Sample ID: Lapointe 2008  
 Client: Tres-Or Resources Ltd.

Sample ID	Batch ID	Proc Date Started	Sample Wt Dry Kilograms (kg)	Sample Wt Dry Kilograms (kg) Processed	Lower Cut Off Square Mesh (mm)	Number of Primary Burns	Number of Secondary Burns	Number of Micro Fusions	Number of Peroxide Fusions	Concentrate Wt (g)	Proc Date Completed	Processing Comments
4900-4901	Lapointe 08	July 22, 2008	44.415	44.415	0.23	6	0	0	0	499.2	July 29, 2008	
4902-4907	Lapointe 08	July 7, 2008	20.71	20.71	0.23	3	0	0	0	486.1	July 9, 2008	pot 18 burn 2 of 3 1-2ml boilover splash recovered separately
4908-4912	Lapointe 08	July 8, 2008	15.42	15.42	0.23	3	0	0	0	439	July 11, 2008	
4913-4917	Lapointe 08	July 15, 2008	9.8	9.8	0.23	2	0	0	0	380	July 18, 2008	
4918-4922	Lapointe 08	July 16, 2008	13.43	13.43	0.23	2	0	0	0	622.4	July 18, 2008	
4923-4927	Lapointe 08	July 16, 2008	18.19	18.19	0.23	3	0	0	0	697	July 21, 2008	
4928-4932	Lapointe 08	July 17, 2008	8.285	8.285	0.23	2	0	0	0	485.4	July 22, 2008	
4933-4938	Lapointe 08	July 17, 2008	15.01	15.01	0.23	2	0	0	0	713.7	July 22, 2008	reactive-splash to lid and lip of pot-no apparent loss
4939-4943	Lapointe 08	July 18, 2008	24.005	24.005	0.23	4	0	0	0	767.3	July 23, 2008	

Chris Berner

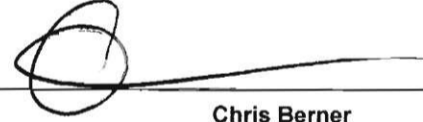
Laboratory Manager



# Diamond Observation Summary

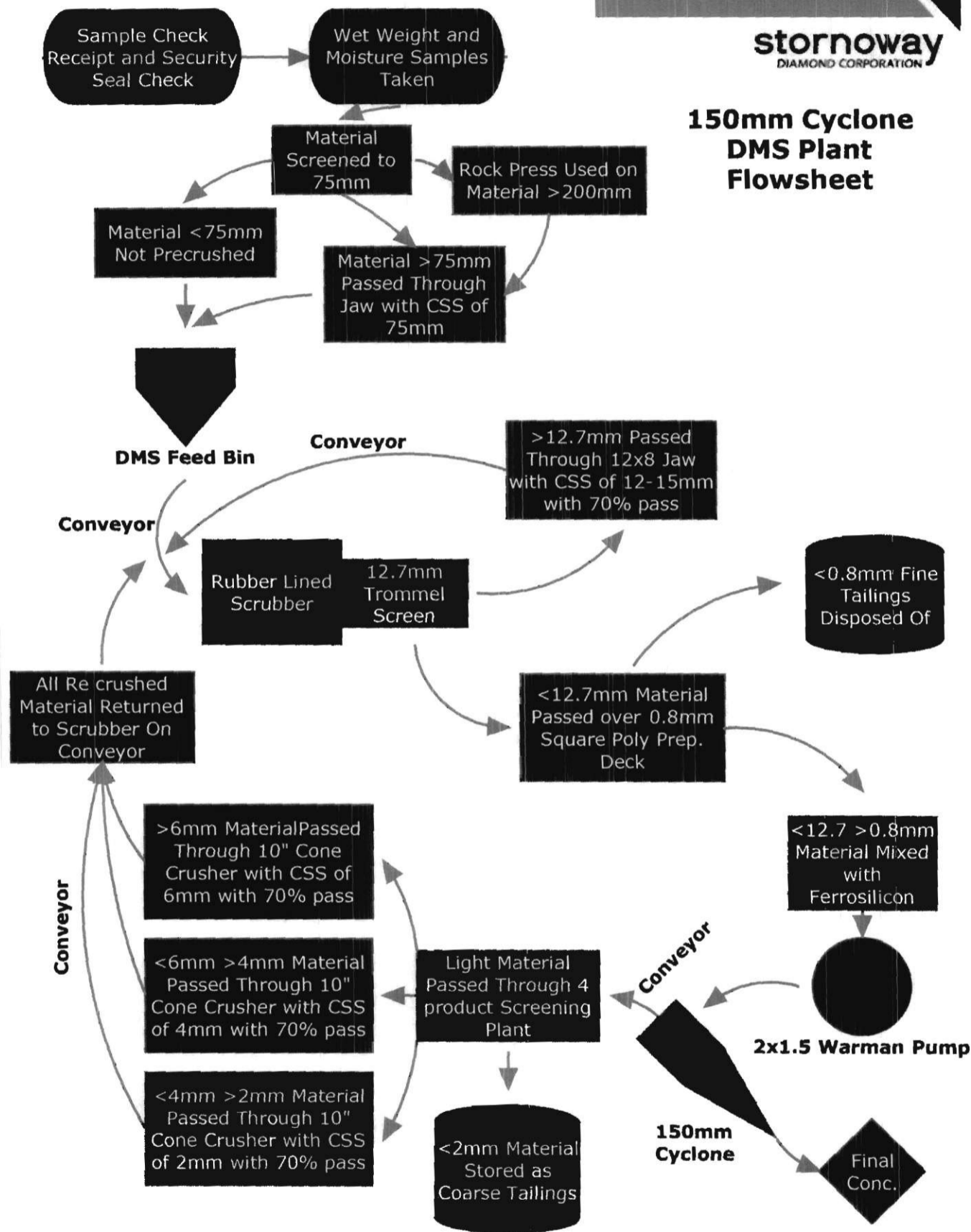
Sample ID: Lapointe 2008  
Client: Tres-Or Resources Ltd.

Sample ID	Fraction Observed	Date Observation Started	Date Observation Completed	Number of Times Sample Observed	Number of Diamonds Recovered	Other Recovered	Observation Comments	Number of Spike Grains Inserted	Type of Spike Grain Inserted	Sieve Size of Spike Grain Inserted	Number of Spike Grains Recovered
4900-4901	>0.6mm Fusion Conc.	August 1, 2008	August 1, 2008	2	0	Corundum/ Suite of KIMs		0			
4902-4907	>0.6mm Fusion Conc.	July 9, 2008	August 1, 2008	2	0	Corundum/ Suite of KIMs	one spike found in 0.6mm sieve	20	Synthetic Diamond	0.85 to 1.0mm	20
4908-4912	>0.6mm Fusion Conc.	July 15, 2008	August 5, 2008	2	0	Corundum/ Suite of KIMs	3 spikes found in 0.6mm sieve	20	Synthetic Diamond	0.85 to 1.0mm	20
4913-4917	>0.6mm Fusion Conc.	July 15, 2008	July 23, 2008	2	0	Corundum/ Suite of KIMs		20	Synthetic Diamond	0.85 to 1.0mm	20
4918-4922	>0.6mm Fusion Conc.	July 21, 2008	August 5, 2008	2	0	Corundum/ Suite of KIMs		20	Synthetic Diamond	0.85 to 1.0mm	20
4923-4927	>0.6mm Fusion Conc.	July 22, 2008	July 24, 2008	2	0	Corundum/ Suite of KIMs		20	Synthetic Diamond	0.85 to 1.0mm	19
4928-4932	>0.6mm Fusion Conc.	July 23, 2008	July 28, 2008	2	0	Corundum/ Suite of KIMs		20	Synthetic Diamond	0.85 to 1.0mm	20
4933-4938	>0.6mm Fusion Conc.	July 23, 2008	July 30, 2008	2	0	Corundum/ Suite of KIMs		20	Synthetic Diamond	0.85 to 1.0mm	17
4939-4943	>0.6mm Fusion Conc.	July 24, 2008	August 1, 2008	2	0	Corundum/ Suite of KIMs		20	Synthetic Diamond	0.85 to 1.0mm	20

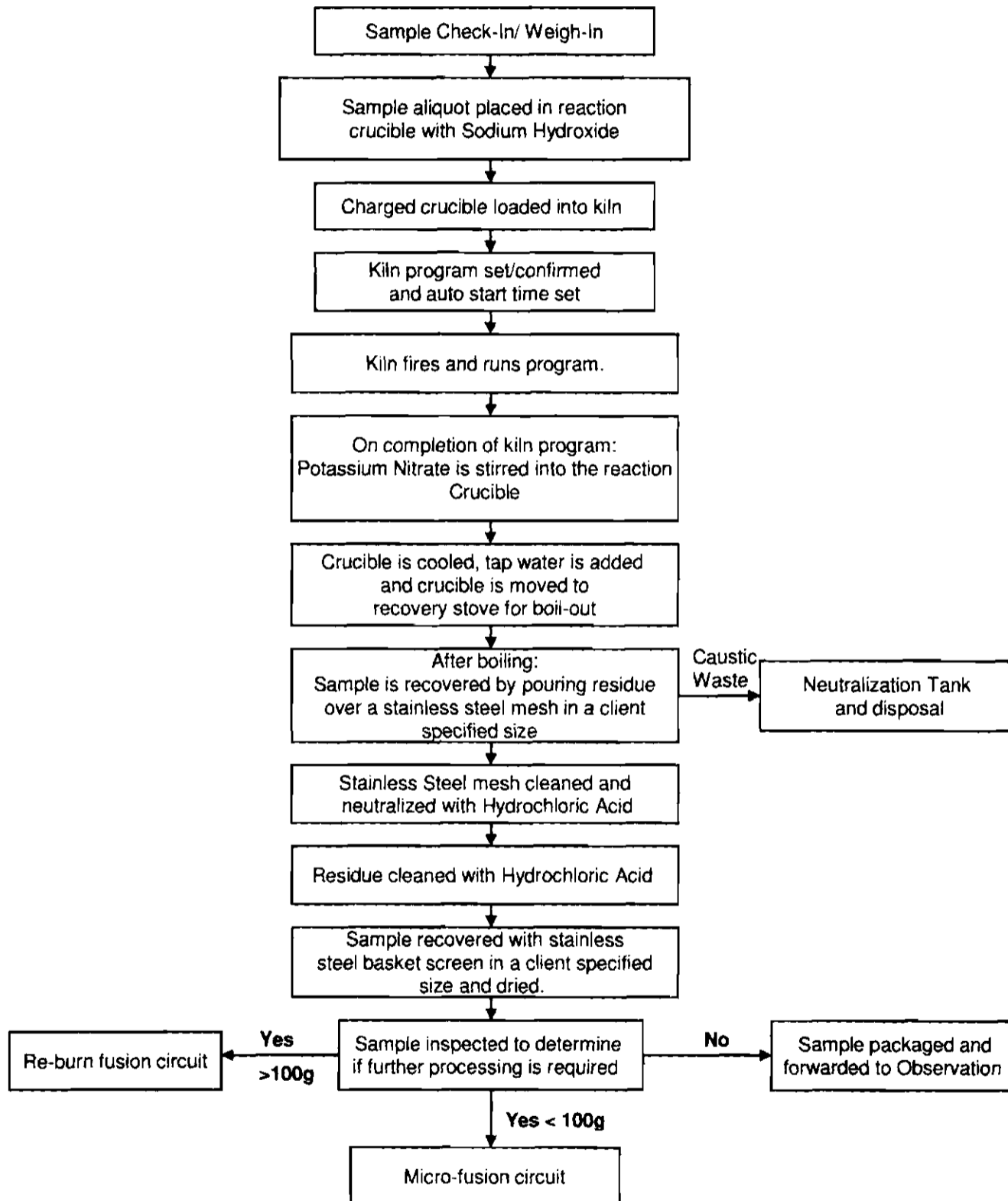
  
 Chris Berner

Laboratory Manager

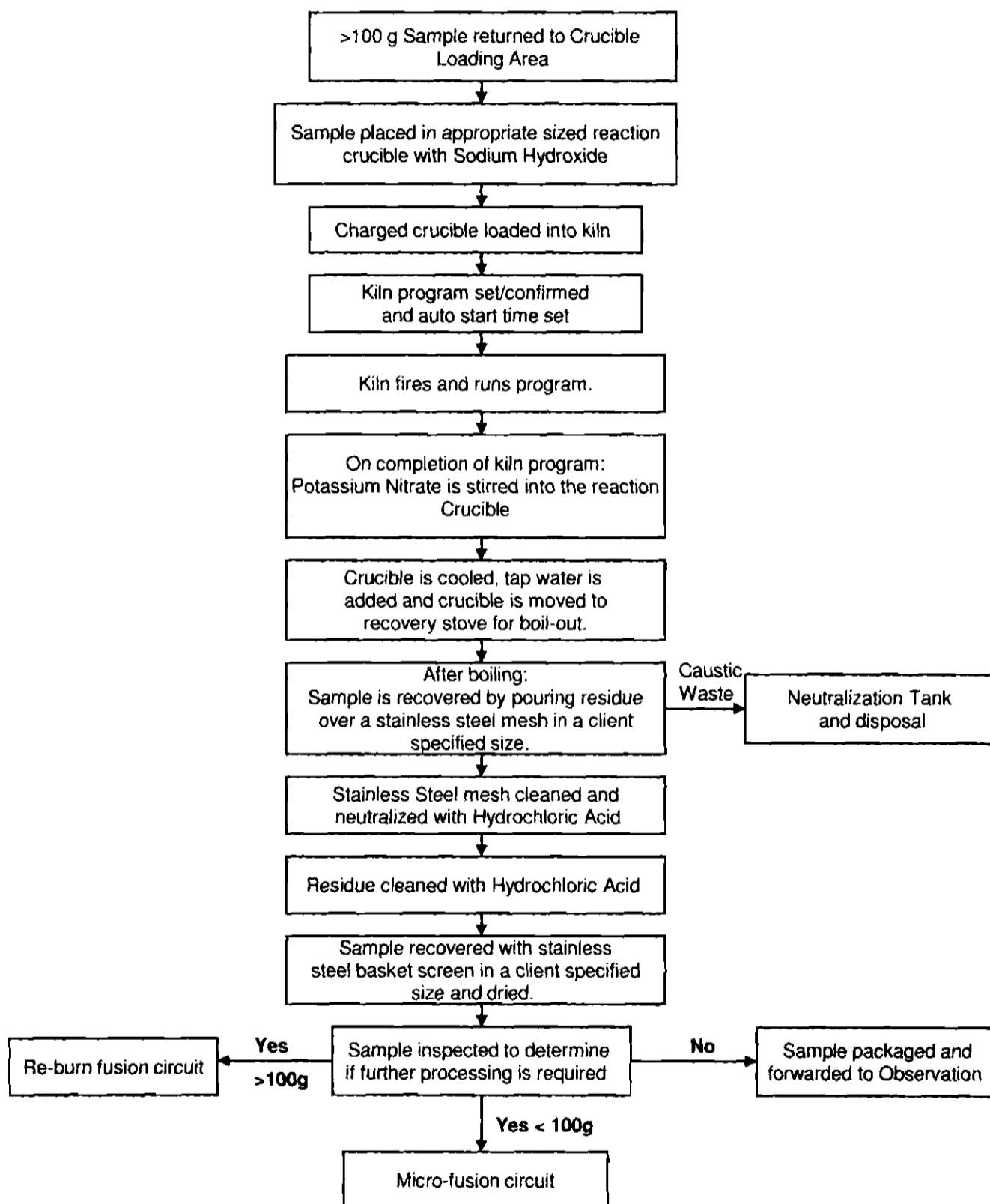
**150mm Cyclone  
DMS Plant  
Flowsheet**



## Caustic Dissolution – Processing Flowchart

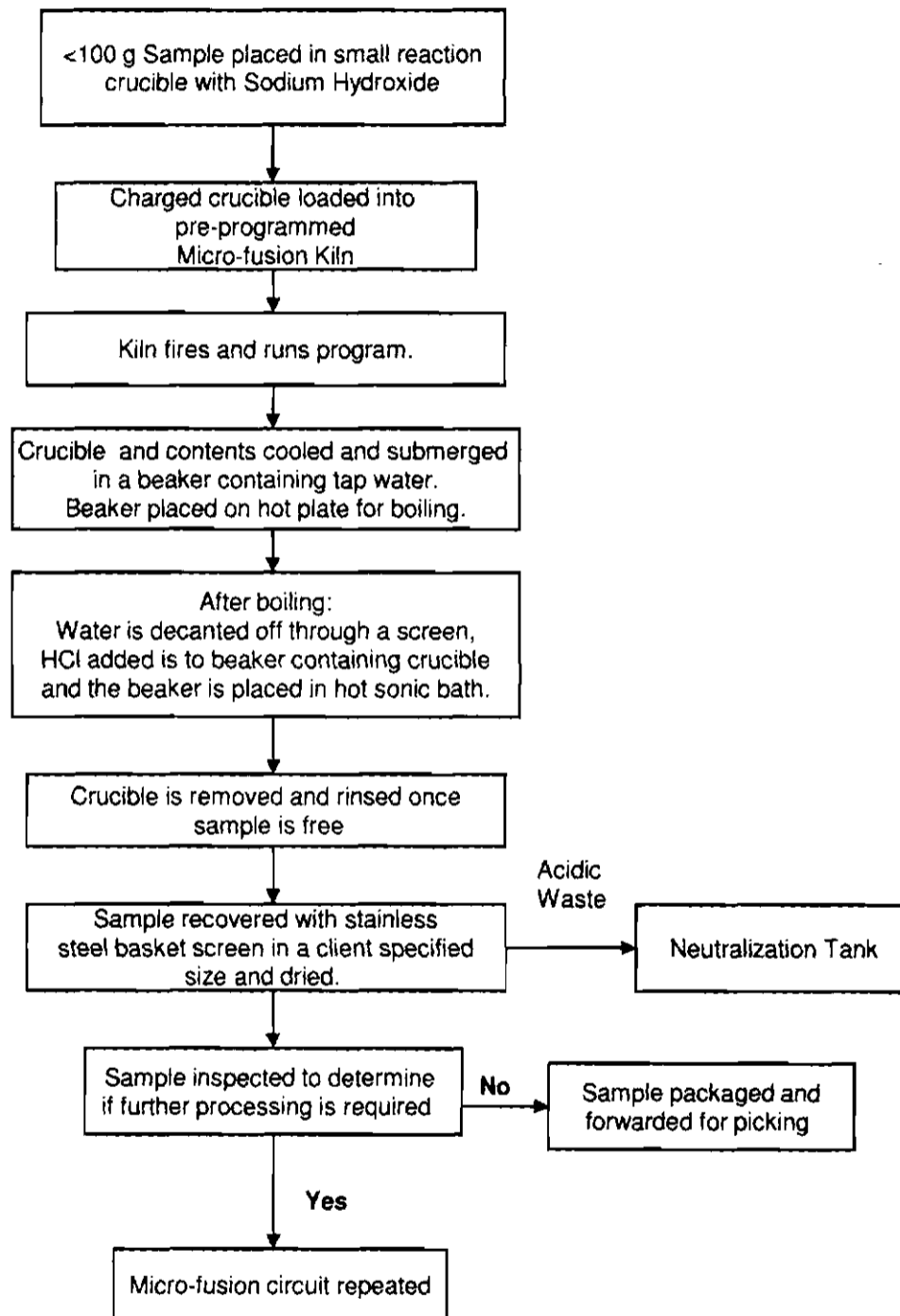


## Caustic Dissolution – Re-burn Circuit





## Caustic Dissolution – Micro-Fusion Circuit





















## DIAMOND PLANT DAILY LOG SHEET

**Client:** Tres-Or Resources Ltd.  
**Sample:** Lapointe 08  
**Start Time:** 7:00  
**Stop Time:** 20:00

**Date:** July 14, 2008

Time:	Event
7:00	Remove jaw crusher conveyor motor and test
7:20	Organize next sub-sample 4928-4932
7:30	Test motor and gear box
8:00	Remove -0.8mm barrels
8:30	Reinstall motor for jaw crusher conveyor
8:30	Pump -0.8 mm from 1000 gal. tank
9:15	Plant start up
9:45	Plant shut down. Repair Circ. Medium
10:20	Plant start up
10:35	Tracers-10-OR 2mm-5 GRN-2mm-5 BL-2mm
11:00	Reverse pluse 4927
11:08	Full reverse
11:30	Sample done
11:37	Full 2 mm tracers 3.02-05
12:00	Start 4928
13:20	Finish 4928
13:30	Start 4929
14:10	10 +0.8mm-1mm spikes in 4929 CB, ML
14:45	Blockage in agitator outlet. Stop feed
14:56	Start feed
15:35	Done 4929
15:45	Start 4930
15:55	Spike 4930 with 10 0.85-1mm syns by CB, TY
16:10	Agitator discharge outlet blocked
16:15	Start feed
17:40	Agitator blocked
17:47	Start feed
17:52	Done 4930
18:20	Start 4931
19:35	Finish 4931
19:40	2mm 10 3.53
19:47	Plant shut down





