APPENDIX 4C

JAY-CARDINAL PROJECT
CONCEPTUAL ENGINEERING REPORT
ON DRAWDOWN ALTERNATIVES
OCTOBER 2013

October 16, 2013

LAC DU SAUVAGE
NORTHWEST TERRITORIES, CANADA

Stage 1 Conceptual Engineering Report on Lake Drawdown Alternatives, Jay-Cardinal Project, Ekati Mine

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REPORT

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1.0 INTRODUCTION

Dominion Diamond Resources Corporation (DDRC) has retained Golder Associates Limited (Golder) to develop a conceptual plan to mine the Jay and Cardinal kimberlite pipe deposits (Jay-Cardinal Project) at its Ekati Diamond Mine in the Northwest Territories (NT). Figure 1 presents a key plan showing the location of the Ekati Diamond Mine. The Jay and Cardinal kimberlite pipes are located under water in Lac du Sauvage (LDS), northeast of the existing Misery Pit Operations. Kimberlite mined from the Jay and Cardinal pipes will be processed at the existing Ekati Mine facilities which are located some 30 kilometres (km) northwest of the Misery Pit Operations.

Golder (2013) presents the results of a drainage basin study for LDS. The study included delineation of sub-basins in the LDS watershed, estimates of lake elevations within the sub-basins, calculation of land and water areas for each sub-basin, estimates of the mean annual water yield and water volume inflows to LDS. This study was used as the basis for the Stage 1 conceptual engineering for the Jay-Cardinal Project.

The Stage 1 project objectives were to understand any constraints or fatal flaws in the proposed LDS lake drawdown concept with respect to cost, engineering, construction, environment, permitting, regulations and safety, and to explore the feasibility of mining the Jay and Cardinal kimberlite pipes with minimal capital costs and sustainable operating costs. For the project to be feasible, mining of the Jay or Cardinal kimberlite pipes should be initiated by 2019 to avoid downtime after existing mining operations at the Ekati Mine are expected to be completed.

This report has been prepared to present a summary of the lake drawdown alternatives used in the conceptual design for the Jay-Cardinal Project.

The reader is referred to the “Study Limitations” which precedes the text and forms an integral part of this document.

2.0 BACKGROUND

2.1 Site Description

The project site is located approximately 300 km northeast of Yellowknife, NT (Figure 1). Figure 2 presents a general location plan including the existing Ekati Mine, existing Misery road, existing Misery Pit Operations area and LDS which is located northeast of the Misery Pit. Figure 2 includes the Jay and Cardinal kimberlite pipe deposit location which are both located under water in LDS.

The shoreline close to the Jay and Cardinal kimberlite pipe deposits is undeveloped. The Jay kimberlite pipe is located approximately 1.2 km from the west shoreline of LDS in a bathymetric low which is covered by about 35 m of water based on 2013 LDS bathymetry data. The Cardinal kimberlite pipe is located approximately 1.5 km from the west shoreline near the centre of this section of LDS, in a bathymetric low which is covered by about 18 m of water and is approximately 4.4 km southeast of the Jay kimberlite pipe.

Ekati's Misery Pit Operations are located approximately 7 km to the southeast of the Jay kimberlite pipe. There is an existing haul road between the Misery Pit Operation and the Ekati processing plant. The processing plant and the main Ekati Mine are located approximately 30 km to the northwest as shown in Figure 2.

2.2 Permafrost

The project site is located within a region of continuous permafrost. Permafrost is expected to a depth of approximately 350 to 400 metres (m) below the land around LDS and below the islands to varying depths depending on the size of the islands and peninsulas. Permafrost usually exists under the lake shoreline where the depth of water is less than about 2 m and winter lake ice freezes to the lake bottom. Permafrost is expected to be absent (talik zone) below the majority of LDS.

2.3 Basin Study

Golder conducted a basin study on LDS and its watershed (Golder 2013). The study identified 11 sub-basins of the LDS watershed, in addition to the local contributing area. Figure 3 presents the subwatershed boundaries and hydrography from that study. The hydrology data, such as the surface elevation and the surface area of lakes, annual water yield of lakes, the 11 sub-basins, and local contributing area, were used as design basis for lake drawdown at this stage.

Golder is in the process of completing more a detailed hydrology study for the Project which will be used in the next stage of design and to support the permitting process. Some key parameters from the basin study (Golder 2013) include:

- The surface area of LDS is 109.1 square kilometres (km^2) at elevation (EL.) 416 m.
- The total area of LDS and its watershed is 1,495.6 km^2.
- The mean annual inflow to LDS is 7.266 cubic metres per second (m^3/s).

For the Jay-Cardinal Project, LDS has been divided into the major areas which include the East Arm, South Arm, West Arm, North Arm and Duchess Arm, as shown by the boundaries on Figure 3.

LDS drains into Lac de Gras (LDG) through the LDS outflow channel at the southwest end of the lake.

2.4 Bathymetric and Topographic Survey

2.4.1 Bathymetric Data

Aurora Geosciences Limited (Aurora) conducted a bathymetric survey of LDS and neighboring lakes, including Lake Ad8, Lake E1, and Paul Lake in June and July 2013. Aurora (2013) noted that the bathymetric survey was completed at 50 m line spacing with a sonar frequency of 200 kHz.

Aurora provided Golder the results of the 2013 bathymetry survey on August 1, 2013. Figure 4 presents the LDS 2013 bathymetry which shows the following key features:

- The deepest area of LDS is located around the Jay kimberlite pipe with base at EL. 381 m, which is 35 m below the lake surface.
- The geographic low at Cardinal kimberlite pipe is EL. 398 m, which is 18 m below the lake surface.
- A trench up to over 20 m deep runs along the southwest shoreline of LDS.
- A similar trench exists along the southwest shoreline of Duchess Lake but with shallower depth (less than 14 m).

2.4.2 Topographic Data

Golder obtained 1:50,000 topographic data from CanVec, Department of Natural Resources Canada, for this study. Portions of this topography data were updated by Aurora with the RTK (real time kinematic) GPS (Global Position System) data of 10 areas, which was made available in August 2013. Real time kinematic GPS is a technique used to enhance the precision of position data derived from GPS, and provides up to centimetre-level accuracy. The 10 areas were of high priority identified at the beginning of the field survey. Figure 4 presents the project area topography used for this study.

During August 2013, Aurora subcontracted LiDAR Services International Inc. to conduct an airborne light detection and ranging (LiDAR) survey for the project site. LiDAR surveys are able to detect subtle topographic features, and measure the land-surface elevation beneath the vegetation canopy and to better resolve spatial derivatives of elevation. LiDAR survey data will be used in subsequent stages of engineering studies for this project.

3.0 LAKE DRAWDOWN ASSESSMENT

A range of lake drawdown options that will allow for the development of mines at both the Jay and Cardinal kimberlite pipes have been developed.

The general concept of lake drawdown will include pumping to establish an initial drawdown which will provide access to the Jay and Cardinal kimberlite pipe areas and allow for construction of local water management infrastructure. During the mine operation period, lake drawdown will be maintained through pumping. During operations it is assumed that the lake drawdown elevation will fluctuate to allow for some attenuation of spring freshet inflows and as part of turbidity management.

All pumped lake water during initial and on-going lake drawdown will be piped to either a sediment control pond constructed within LDS which overflows through a controlled outlet into Lake E1 and then Paul Lake (an arm of LDG) if suitable water quality, or decanted through a pipeline and directly discharged into either LDG or upstream of the Jay-Cardinal Project diversion dikes. The concept includes an allowance for a water treatment plant at the sediment control pond.

3.1 Hydrology Study

Golder (2013) presents preliminary estimates of the mean annual and monthly inflows reporting to the sub-basins of LDS. These were used to support the lake drawdown options and pumping study. The hydrology study applied regional water yields and monthly distributions to basin watershed mapping and derive values for mean conditions. Historical precipitation data were used to provide estimates of factors to be applied to annual values to characterize wet and dry conditions. Runoff in this region is heavily influenced by the depth of winter snowpack, and inter-annual variability in snowpack is typically much less than variability in rainfall.

A detailed hydrology study, which will use historical data and data collected during baseline studies in 2013 to develop, calibrate and validate a water balance model for the entire LDS basin, is currently in progress. This will provide estimates of flows and water levels for mean and extreme conditions based on long-term regional climate data, and will allow short and long duration flood and drought conditions to be characterized with greater confidence.

3.2 Lake Elevation

The surface elevations of key lakes in the project area were provided by Aurora and are summarized in Table 1. Lake surface elevations were surveyed between June and August, 2013 while the lakes were ice-free. Further hydrology studies are underway and include development of a water balance model for the LDS basin which will be used in further stages of the project.

Table 1: Summary of Lake Surface Elevations in Summer 2013

Lake	Lake Surface Elevation (m)	Survey Date
Duchess Lake	416.9	August 19, 2013
LDS	416.5	August 19, 2013
LDG	416.3	August 19, 2013
Lake E1	418.2	August 19, 2013
Paul Lake	417.2	August 19, 2013
Ad8 Lake	418.6	June 23, 2013
Hammer Lake	432.8	August 19, 2013
Lynx Lake	432.0	August 19, 2013

Note: Data provided by Aurora by email on August 19, 2013.

Note that the August 2013 surveyed LDS elevation was reported as 416.5 m, or 0.5 m above that in Golder (2013). As the hydrology study work is ongoing, the conceptual engineering was advanced based on a mean normal lake elevation of 416 m.

3.3 Lake Volume

A three-dimensional model of the LDS lakebed was prepared based on 2013 bathymetry data provided by Aurora and Figure 5 presents the LDS volume by elevation.

A number of key assumptions were made to calculate the lake drawdown volume by elevation for the alternative options. These include the assumptions that the mean normal lake elevation is 416 m and that all in-lake ponds gradually isolated by the lake drawdown are hydraulically connected so that drawing down the lake in one area results in drawdown of all areas of the lake. Some of the isolated ponds may be hydraulically disconnected from the rest of the lake, which will significantly reduce the water volume for pumping. Further investigation of potential hydraulic connection of sub-basins within the lake will be part of the next stage of the design for this project.

Based on the assumptions noted above, the water volume (base volume) of the entire LDS is approximately 500,000,000 m^3 between EL. 416 m and EL. 406 m.

3.4 Drawdown Criteria

The determination of a target lake drawdown elevation considers the following criteria:

- Bathymetry of the LDS lakebed relative to the geometry of the proposed open pits;
- Limited ring dike requirements around the proposed open pit areas; and
- Freeboard between the pit rim and drawn-down lake that accounts for a seasonal fluctuations and a design storm / snowmelt inflow event.

3.5 Staged Drawdown

Review of the drawdown criteria, the proposed Jay and Cardinal open pits, and the 2013 bathymetry data indicates that the following steps of lake drawdown are required for the project development.

- Initial Lake Drawdown: Pumping to draw down LDS to EL. 406 m (10 m drawdown assuming initial lake surface at EL. 416 m) and expose the lakebed surrounding the Jay and Cardinal kimberlite pipes. The initial drawdown is planned to be completed over one year. The total volume includes existing base volume in LDS (between EL. 416 m and EL. 406 m) plus the volume of annual watershed inflows reporting to the lake during the one year initial drawdown period.

  Access roads will be advanced towards the proposed pit areas to allow for construction of local water management infrastructure.

- Pit Area Dewatering: Following initial drawdown, and development of local water management infrastructure, local pumping will be required to dewater from EL. 406 m down to the about EL. 381 m at the Jay kimberlite pipe and down to about EL. 398 m at Cardinal kimberlite pipe to exposed the pipe areas for open pit pre-stripping development.

- Maintaining Lake Drawdown: During mining operations, pumping continues to transfer annual inflows, groundwater inflow and seepage reporting to the drawn-down lake and maintain the target lake elevation between about EL. 406 and 407 m.

3.6 Lake Drawdown for Jay Pipe Development

During initial drawdown of LDS, a platform to the east of the Jay kimberlite pipe will start being exposed at about EL. 410 m. Drawdown of the lake to El. 406 m will isolate the Jay kimberlite pipe area from the surrounding west arm sub-basins. Two rockfill causeways to Jay Pit will be constructed from the west shore. Sections of these causeways will be lined with till on the one side to create local sediment ponds within the lake drawdown area, which will keep pumping water, inflows and seepage from reaching the pit area.

3.7 Lake Drawdown for Cardinal Pipe Development

Most of the area around the Cardinal kimberlite pipe will be exposed during the initial lake drawdown to EL. 406 m. A rockfill causeway will be advanced from Dike JP4 towards the Cardinal kimberlite pipe area. Around the Cardinal kimberlite pipe, two rockfill berms will be advanced to isolate the pipe from other residual ponds. Both berms require placing compacted till for seepage reduction. With the lake drawdown maintained between El. 406 and 407 m, local pumping will be required from the isolated ponds north of Cardinal Pit and below Dike JP4 North.

4.0 LAKE DRAWDOWN ALTERNATIVES

Figure 2 presents a site plan showing the existing conditions at the project site. With the exception of the Misery Pit Operations, located 7 km southeast of the Jay Pipe, the areas around LDS are generally undeveloped.

Lake drawdown to support the development of both the Jay and Cardinal kimberlite pipes can be achieved with a range of combinations of pumping the LDS base water and diverting watershed inflows. The alternatives considered range from mainly pumping the lake with limited diversion of inflows to mainly diverting inflows with limited pumping of the lake to allow for mine development of both Jay and Cardinal kimberlite pipes. Pumping stations and a sediment control pond are proposed for lake drawdown and construction of dikes and channels are proposed for diversion of the watershed inflows.

Golder identified five alternatives (ALT1 to ALT5) for LDS drawdown which consider pumping the lake and diverting the inflows. Diversion is based on the construction of dikes at up to four locations (Dike JP1, JP2, JP3, and JP4) and an open channel.

Table 2 presents a summary of the dikes, pumping, diversion, initial base drawdown volume and annual inflow volumes for each of the five alternatives which are described in the following sections.

Table 2: Summary of Five Conceptual Lake Drawdown Options [(1)]

Alternative Number	Dike			Pumping				Diverting				Lake E1 Diversion Outlet Channel	Initial Drawdown Volume to EL. 406 m (1,000,000 m^3)	Ongoing Mean Annual Inflow (1,000,000 m^3)
	JP1	JP2	JP3	Duchess Arm	East Arm	South Arm	West Arm	Duchess Arm	East Arm	South Arm	West Arm			
ALT1	yes	no	no	yes	yes	yes	yes	no	no	no	no	yes	487	217
ALT2	yes	yes	no	no	yes	yes	yes	yes	no	no	no	yes	457	150
ALT3	yes	no	yes	yes	no	yes	yes	no	yes	no	no	yes	422	143
ALT4	yes	yes	yes	no	no	yes	yes	yes	yes	no	no	yes	392	38
ALT5	yes	yes	no	no	no	no	yes	yes	yes	yes	no	yes	284	20

Note 1: Planned lake drawdown over one year requires pumping to transfer both the initial base volume plus one year ongoing mean inflow.

4.1 Components Common to All Alternatives

Each of the five alternatives includes access roads, pumping stations, a water management area, and between one and three dikes. The following summarizes the components which are common to all of the five alternatives for lake drawdown.

Dikes, Ponds, and Channels

- Dike JP1:

  The dike separates Sub-basin Ad from the rest of LDS and creates the North Arm Water Management Area (NAWMA).

- North Arm Water Management Area:

  The NAWMA has a number of functions which include: a sediment control pond for turbidity control of pumped water, a pond which manages pumped lake and mine water prior to discharge through the Lake E1 diversion outlet channel and into Paul Lake.

- Lake E1 Diversion Outlet Channel:

  The Lake E1 Diversion Outlet Channel diverts inflow from Sub-basin E to Paul Lake and provides an overflow channel from the NAWMA allowing discharge into Paul Lake.

Roads and Causeways

- Jay Road:

  The road is 6.9 km long and connects the existing Misery Road and Jay Causeway.

- Jay Causeway:

  The Jay Causeway is 1.2 km long and connects Jay Road and Jay Pit. The construction of Jay Causeway is assumed to be part of Jay Pit development.

- JP1 Road:

  The road is 4.5 km long and connects Jay Road and Dike JP1.

- Lake E1 Diversion Outlet Road:

  The road is 7.2 km long and connects JP1 Road and Lake E1 Diversion Outlet Channel and provides access to the channels for construction and maintenance.

- Cardinal Road:

  The road is 5.4 km long and connects the existing Misery Road and Cardinal Causeway.

- Cardinal Causeway:

  The Cardinal Causeway is 4.0 km long and connects Cardinal Road and Cardinal Pit. The construction of Cardinal Causeway is assumed to be part of Cardinal Pit development.

Berms

- Jay Berms:

  Two berms in the area of the proposed Jay Pit development are required and will be constructed of rockfill and lined with locally borrowed lakebed till from pit pre-stripping if possible. The berms will create sumps which collect local seepage flows, groundwater flow, and precipitation and keep the drawn-down lake from the pit area.

- Cardinal Berms:

  Two berms in the area of the proposed Cardinal Pit development are required and will be constructed of rockfill and lined with locally borrowed lakebed till from pit pre-stripping if possible. The berms will create sumps which collect local seepage flows, groundwater flow, and precipitation and keep the drawn-down lake from the pit area.

  An additional pumping station will be required in the isolated pond north of Cardinal Pit and below Dike JP4 North to maintain this area at a drawdown level of EL. 400 m.

Pumping Stations and Pipelines

- PS1 Pump Station and Pipelines:

  The pipeline is 3.5 km long. It pumps water from PS1 Pump Station to the NAWMA during lake drawdown and while maintaining lake drawdown during operations.

- PS2 Pump Station and Pipelines:

  The pipeline is 2.3 km long. It pumps water from PS2 Pump Station to LDG during lake drawdown and maintaining the drawdown level.

- PS3 Pump Station and Pipelines:

  The pipeline is 1.5 km long. It pumps water from the trench along LDS southwest shoreline to PS1 Pump Station.

Power Supply

Power supply for pumping would include a power line from the main Ekati mine site and substations which are located near the proposed pumping stations. Details of power supply and transmission lines are being designed by others.

4.2 Alternative 1 to 5 Components

ALT1 Components Include:

Only the common components are required for ALT1. Figure 6 presents the general arrangement plan for Alternative 1.

ALT2 Components Include:

Figure 7 presents the ALT2 general arrangement plan. In addition to the common components, ALT2 includes the following:

- JP2 Road:

  The road is 6.3 km long and connects Dike JP1 and JP2.

- Dike JP2:

  The dike diverts the inflow from Duchess Arm of LDS to Paul Lake through the Lake E1 Diversion Outlet Channel.

ALT3 Components Include:

Figure 8 presents the ALT3 general arrangement plan. In addition to the common components, ALT3 includes the following:

- Dike JP3:

  Dike JP3 retains water in the Sub-basin Aa. Inflows to the Sub-basin Aa from Sub-basins H, I, and J will overflow Dike JP3 and are diverted to the location of PS2 Pump Station through the Sub-basin Ab channels.

  The dike will be constructed in winter by using stockpiled construction materials and equipment at a JP3 Laydown. The construction materials and equipment will be hauled and mobilized to the Dike JP3 Laydown a few months to one year earlier through Dike JP3 Winter Road.

- JP3 Laydown and JP3 Winter Road:

  The laydown provides storage for Dike JP3 construction material and equipment.

  The winter road is 7.3 km long and connects Cardinal Road and JP3 Laydown.

- Sub-Basin Ab Channel:

  The channels connect the isolated pond at EL. 406 m for the spilled water discharge to the PS2 Pump Station.

- Ab Pumping Station:

  The station is to maintain drawdown level in the east arm area of the lake.

ALT4 Components Include:

Figure 9 presents the ALT4 general arrangement plan. In addition to the common components, ALT 4 includes the following:

- JP2 Road:

  It is 6.3 km long and connects Dike JP1 and JP2.

- Dike JP2:

  The dike diverts the inflow from Duchess Arm to Paul Lake through the Lake E1 Diversion Outlet Channel.

- Dike JP3:

  The dike holds water in Sub-basin Aa and allows the inflow from Sub-basins H, I, and J to spill over it. The spilled water will then be diverted to the location of PS2 Pump Station through the Sub-basin Ab channels.

  The dike will be constructed in winter by using stockpiled construction materials and equipment at the Dike JP3 Laydown. The construction materials and equipment will be hauled and mobilized to the Dike JP3 Laydown a few months to one year earlier through JP3 winter road.

- JP3 Laydown and JP3 Winter Road:

  The lay-down provides storage for Dike JP3 construction material and equipment.

  The winter road is 7.3 km long and connects Cardinal Road and JP3 Laydown.

- Sub-Basin Ab Channel:

  The channels connect the isolated pond at EL. 406 m for spilled water discharge to the PS2 Pump Station.

  The station is to maintain drawdown in the east arm area of the lake.

ALT5 Components Include:

Figure 10 presents the ALT5 general arrangement plan. In addition to the common components, ALT5 includes the following:

- JP2 Road:

  It is 6.3 km long and connects Dike JP1 and JP2.

- Dike JP2:

  The dike diverts the inflow from Duchess Arm to Paul Lake through the Lake E1 Diversion Outlet Channel.

- Dike JP4:

  Dike JP4 is divided into two sections: JP4 North and JP4 South, and includes a 0.8 km JP4 Road which is constructed on an existing island in LDS to connects the two sections of this dike.

  Dike JP4 is a the largest of the proposed dikes for all alternatives considered, however there are a number of major advantages to the construction of a Dike JP4 which include:

  - with the Dike JP4 in place, about 40% of LDS including the south and east arms does not required drawdown to access the Jay and Cardinal Pits.
  - with the Dike JP4 in place, the total annual inflows reporting to all the south and east arms will continue to report to the existing LDS outflow.

4.3 Pumping and Diverting Volumes for Each Alternative

Table 3 presents a summary of the initial base drawdown volume to reach elevation EL. 406 m and the diverted annual inflow by Alternative.

Table 3: Pumping and Diverting Volume of Five Alternatives

Alternative Number	Base Volume for Pumping to EL. 406 m (Mm^3)	Pumping Ratio[(a)] (%)	Diverted Annual Inflow (Mm^3)	Diverting Ratio[(b)] (%)
ALT1	487	97	42	14
ALT2	457	91	108	42
ALT3	422	84	116	45
ALT4	392	78	222	86
ALT5	284	57	239	92

[(a)] Pumping ratio: base volume for pumping to EL. 406 m divided by LDS total base volume between EL. 416 m to EL. 406 m (500 Mm^3).

[(b)] Diverting ratio: diverted annual inflow divided by total inflow to LDS basin (259 Mm^3).

ALT1 has the highest pumping requirements and lowest diversion structures where ALT5 has the lowest pumping requirements and largest diversion structures.

5.0 ALTERNATIVE SELECTION

Following preparation of a general arrangement for the five alternatives, a conceptual design was prepared for each required dike, outlet channel, pumping and pipeline systems. Based on quantity estimates for the conceptual designs, a cost estimate for each ALT1 to ALT5 was prepared. Relative capital and annual operating costs were used in the Alternatives selection.

Table 4 presents a summary of the Alternative considered in terms construction quantities and relative costs.

Table 4: Comparison of the Five Alternatives for Lake Drawdown

Alternatives			ALT1	ALT2	ALT3	ALT4	ALT5
Dikes			JP1	JP1, JP2	JP1, JP3	JP1, JP2, JP3	JP1, JP2, JP4
Length of Access Roads		km	22	27	22	27	27
Area	Lake drawdown	km^2	94.4	76.7	80	62.3	46.3
	Catchment	km^2	1,176	817	736	168	90
	% Diversion		14	42	45	86	92
Volume	Dike(1)	Mm^3	0.57	0.58	0.62	0.63	2.33
	Year 1 pumping	Mm^3	743.2	607.6	565.2	429.6	305
	Operational pumping	Mm^3	256	150.8	142.7	37.5	20.5
Relative Capital costs (including initial drawdown) (2)			1.0	1.04	1.09	1.12	1.33
Relative Annual Operational pumping costs (2)			6.2	3.8	5.9	3.6	1.0
Relative Capital with ten years of Operational pumping Costs			1.1	1.0	1.2	1.0	1.1

(1) includes outlet channels.
(2) based on 2013 conceptual level costs estimates assuming the lowest cost is one cost unit.
M= 1,000,000.

Cost estimates in Table 4 do not include contingency and mining costs.

The relative capital costs which include the initial drawdown pumping were found to increase from the lowest costs for ALT 1 up to the highest cost for ALT 5 as the total length and volume of dikes to construct increased. The relative annual operating pumping costs were found to increase from the lowest for ALT 5, to similar costs for ALT 2 and 4, up to the highest costs for ALT 1 and 3. For a ten year mine life (estimated Jay open pit only mine life) the relative capital costs with ten years of operational pumping costs, all alternatives resulted in similar undiscounted costs when the accuracy was considered. ALT5 presented the lowest lake drawdown area and retained the outflow of about 40% of LDS through the existing outflow channel. Based on these considerations, ALT5 is the preferred option to advance to pre-feasibility study including geotechnical investigations to be started in winter 2014.

Figure 11 presents the general arrangement plans with lake drawdown to El. 406 m during operations for the ALT5.

6.0 REPORT CLOSURE

We trust that this report meets with your current requirements. Please do not hesitate to contact either of the undersigned if you require any additional information.

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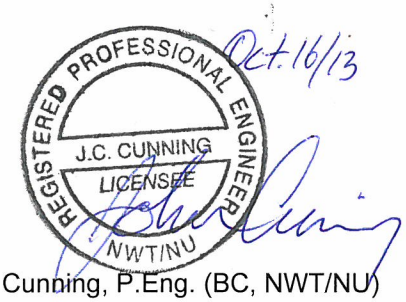

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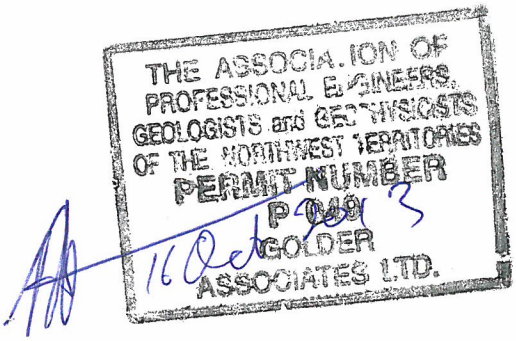

REFERENCE

Aurora Geosciences Ltd. (Aurora), 2013. Re: Lac du Sauvage - Topographic and Bathymetric Surveys, submitted to Dominion Diamond Corporation, dated July 20, 2013.

Golder Associates Ltd. (Golder), 2013. Lac Du Sauvage 2013 Basin Study, submitted to Dominion Diamond Corporation, dated May 23, 2013.

Ikaluktutik (Cambridge Bay)

Queen Maud Gulf

Coronation Gulf

Umingmaktuuq

Bathurst Inlet

ARCTIC CIRCLE

Coppermine River

Hood River

Kingaalk (Bathurst Inlet)

Napaktulik Lake

NUNAVUT

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LUPIN MINE

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Back River

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GIANT MINE

Yellowknife (Sombak'e)

T'e ehda (Dettah)

Lutsel k'e

CON MINE

Nonacho Lake

Great Slave Lake

Zhahti Kue (Fort Providence)

Mills Lake

Ekagee (Kakisa)

Xátl'odehchee (Hay River)

Deninu Kue (Fort Resolution)

Enterprise

Buffalo Lake

ALBERTA

Tthebacha (Fort Smith)

0 100 200 300

SCALE KILOMETRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT

DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE

KEY PLAN

Golder Associates

PROJECT No.	13-1328-0031.2130.50		FILE No.	1313280031-2130-50-01	
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN	
CADD	JD	2013-10-07	FIGURE		
CHECK	DYH	2013-10-15		1	
REVIEW	JCC	2013-10-15			

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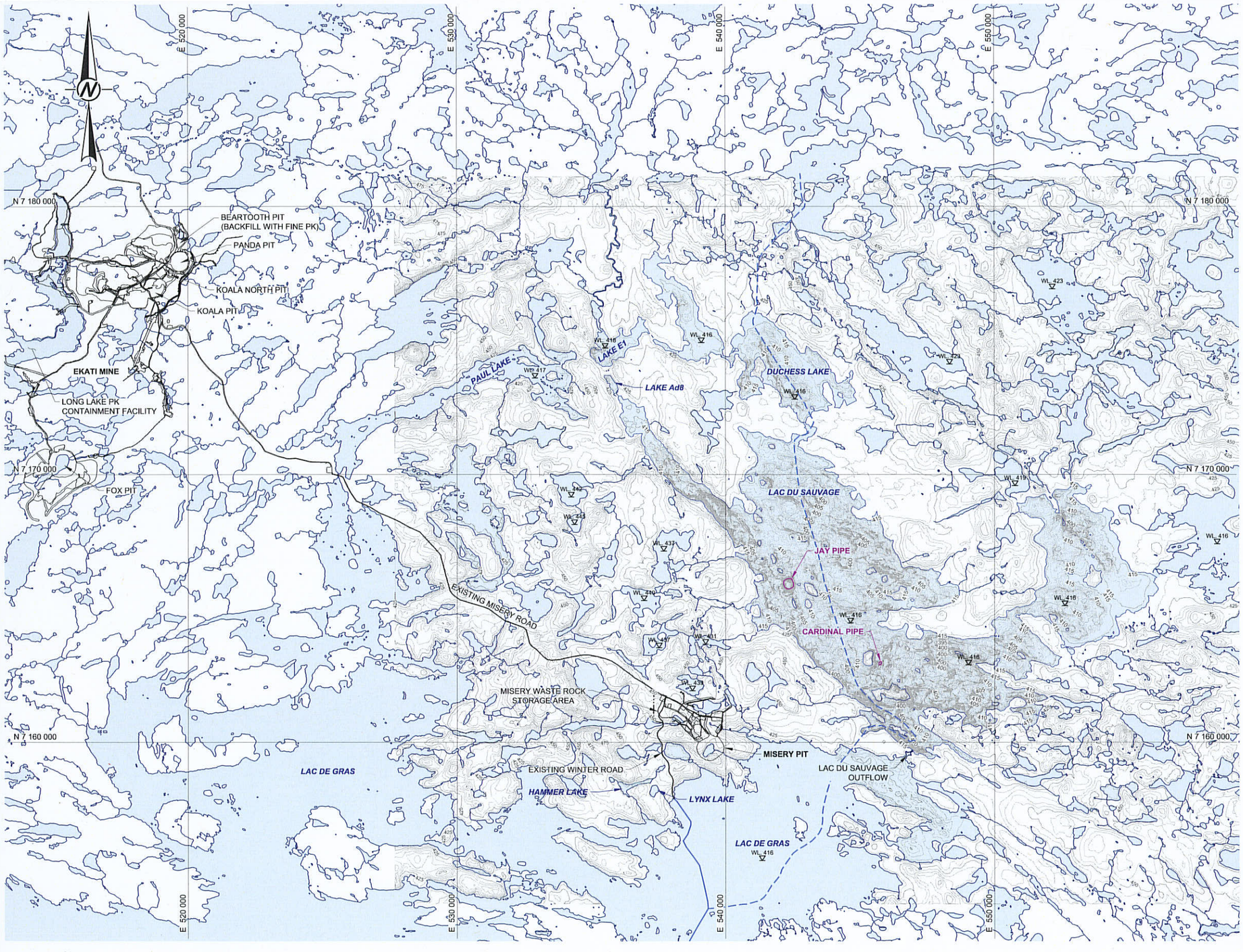

LEGEND

- WATER BODY
- WATER COURSE
- EXISTING ROAD
- WINTER ROAD - ON DEMAND CONSTRUCTION
- WINTER ROAD - YEARLY CONSTRUCTION
- PIPE LOCATION
- WL WATER LEVEL ELEVATION

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. CARDINAL PIPE LOCATION RECEIVED FROM DOMINION DIAMOND CORPORATION, FILE: cardinal_polyline.dxf, DATED: AUGUST 6, 2013.
3. JAY PIPE LOCATION RECEIVED FROM DOMINION DIAMOND CORPORATION, FILE: jay_kimberlite_pipe_OL.dxf, DATED: JULY 19, 2013.

0 3,000 6,000 9,000
SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE

GENERAL LOCATION PLAN

Golder Associates

PROJECT No.	13-1328-0031 .2130.50		FILE No.	1313280031-2130-50-02	
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN	
CADD	JD	2013-10-07	FIGURE		
CHECK	DYH	2013-10-15		2	
REVIEW	JCC	2013-10-15			

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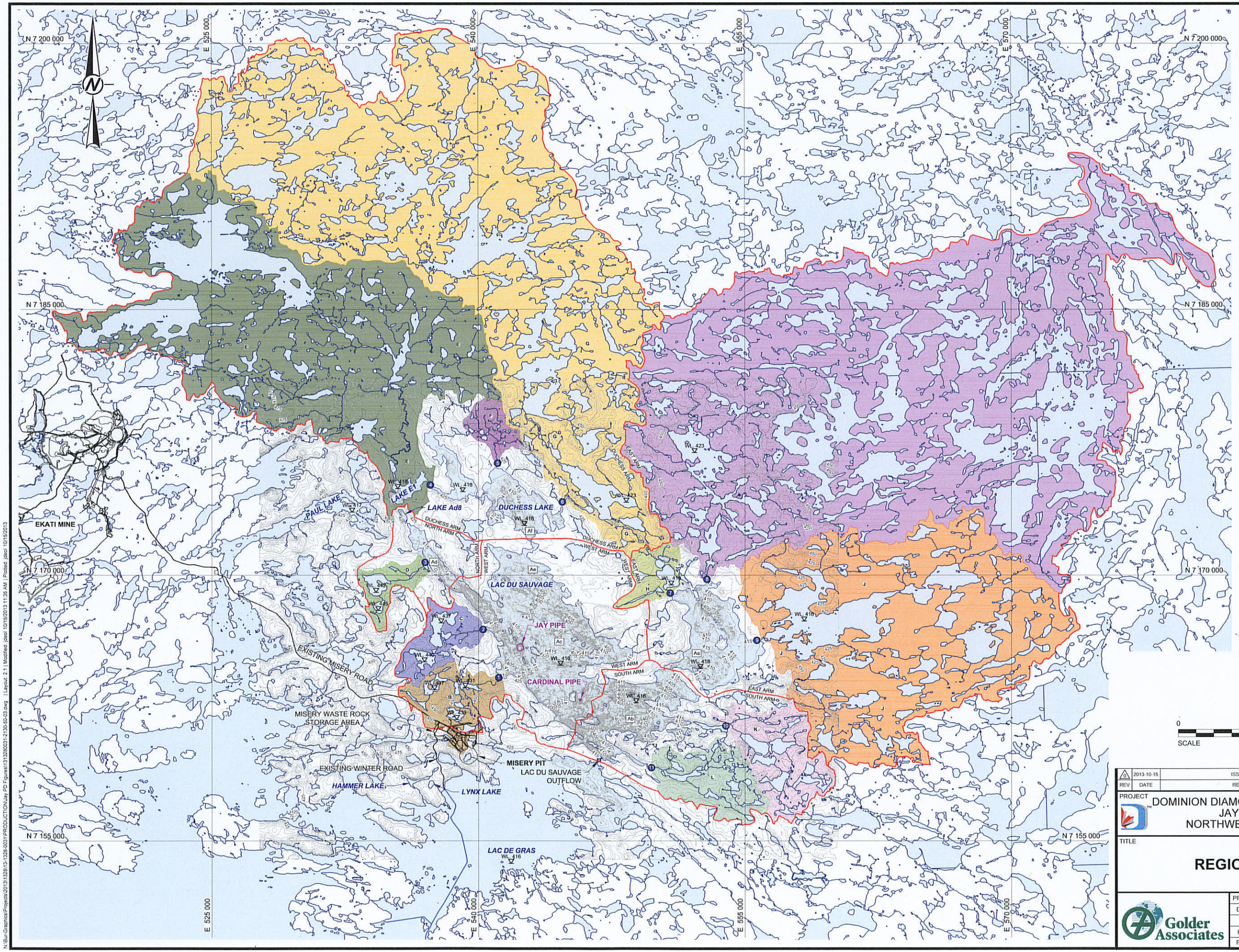

LEGEND

- SUB-BASIN OUTFLOWS
- WATER BODY
- WATER COURSE
- EXISTING ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- SUB-BASIN BOUNDARY
- PIPE LOCATION
- WATER LEVEL ELEVATION

SUB-BASIN LEGEND

B	Ac	WEST ARM
C	Ae	
D	Ad	NORTH ARM
E		
F	Af	DUCHESS ARM
G		
H		
I	Aa	EAST ARM
J		
K	Ab	SOUTH ARM
L		

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12.

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
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3. JAY PIPE LOCATION RECEIVED FROM DOMINION DIAMOND CORPORATION, FILE: jay_kimberlite_pipe_OL.dxf, DATED: JULY 19, 2013.

0 4,000 8,000 12,000
SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

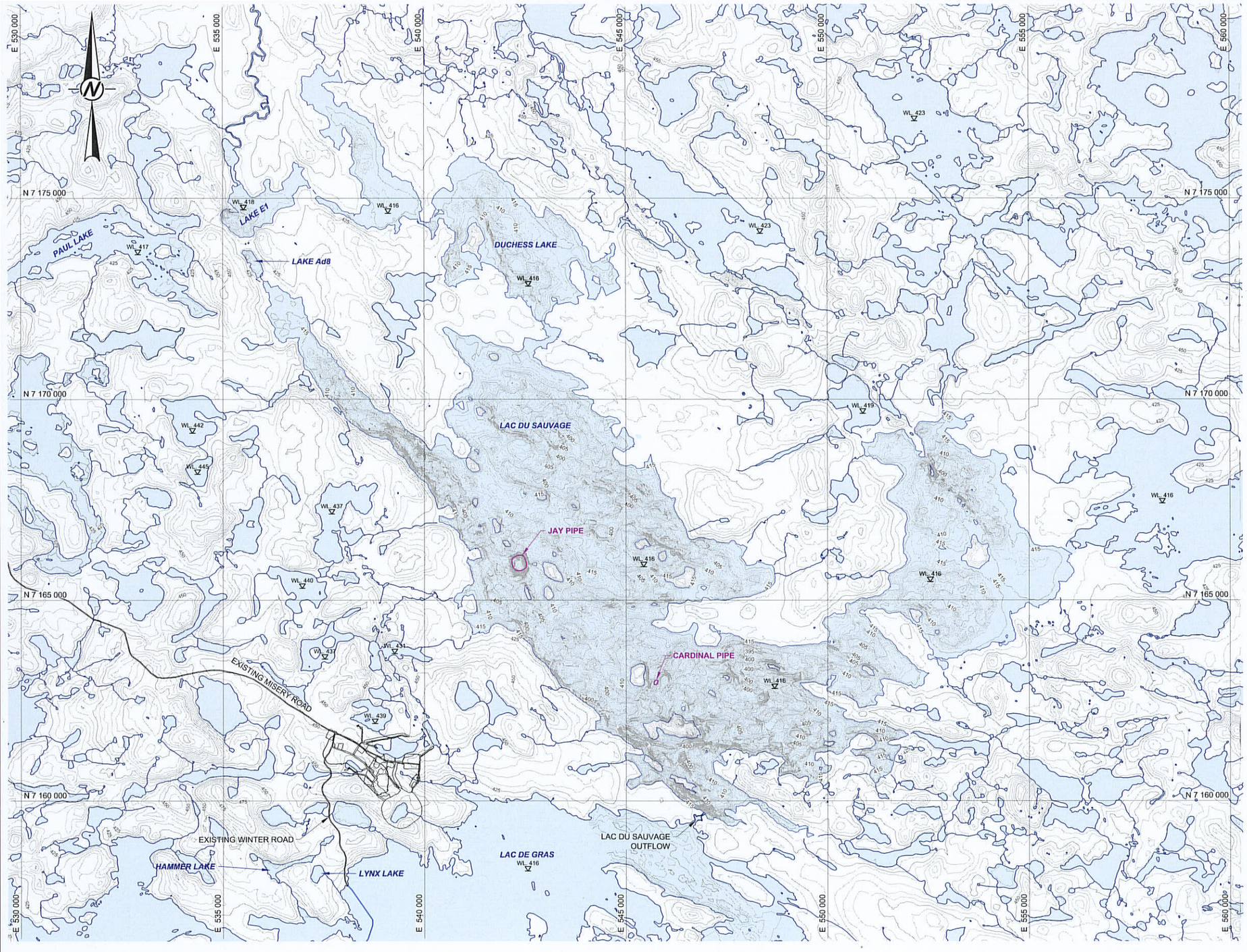
PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE

REGIONAL HYDROLOGY

Golder Associates

PROJECT No.	13-1328-0031.2130.50		FILE No.	1313280031-2130-50-03
DESIGN	DYH	2013-10-11	SCALE	AS SHOWN
CADD	JD	2013-10-11	FIGURE	3
CHECK	DYH	2013-10-15		
REVIEW	JCC	2013-10-15		



LEGEND

- WATER BODY
- WATER COURSE
- EXISTING ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PIPE LOCATION
- WATER LEVEL ELEVATION

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013. IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. CARDINAL PIPE LOCATION RECEIVED FROM DOMINION DIAMOND CORPORATION, FILE: cardinal_polyline.dxf, DATED: AUGUST 6, 2013.
3. JAY PIPE LOCATION RECEIVED FROM DOMINION DIAMOND CORPORATION, FILE: jay_kimberlite_pipe_OL.dxf, DATED: JULY 19, 2013.

0 2,000 4,000 6,000

SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT

DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE

2013 LDS BATHYMETRY AND PROJECT AREA TOPOGRAPHY

Golder Associates

PROJECT No.	13-1328-0031.2130.50		FILE No.	1313280031-2130-50-04	
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN	
CADD	JD	2013-10-07	FIGURE		
CHECK	DYH	2013-10-15		4	
REVIEW	JCC	2013-10-15			

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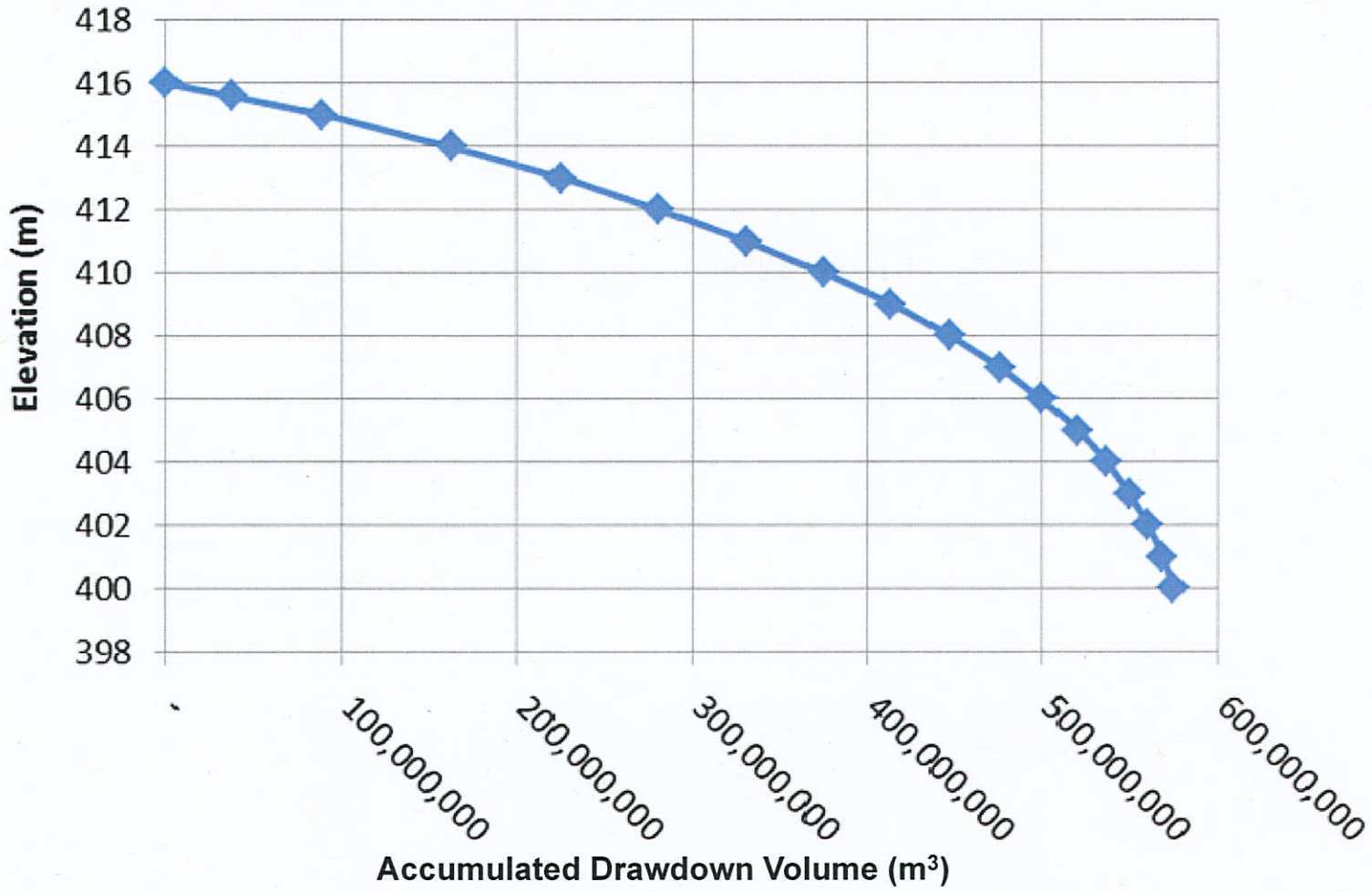


Notes: 1, Assumes normal lake surface at EL. 416 m.
2, Drawdown volume includes East, South, West, North, and Duchess Arms of LDS

PROJECT

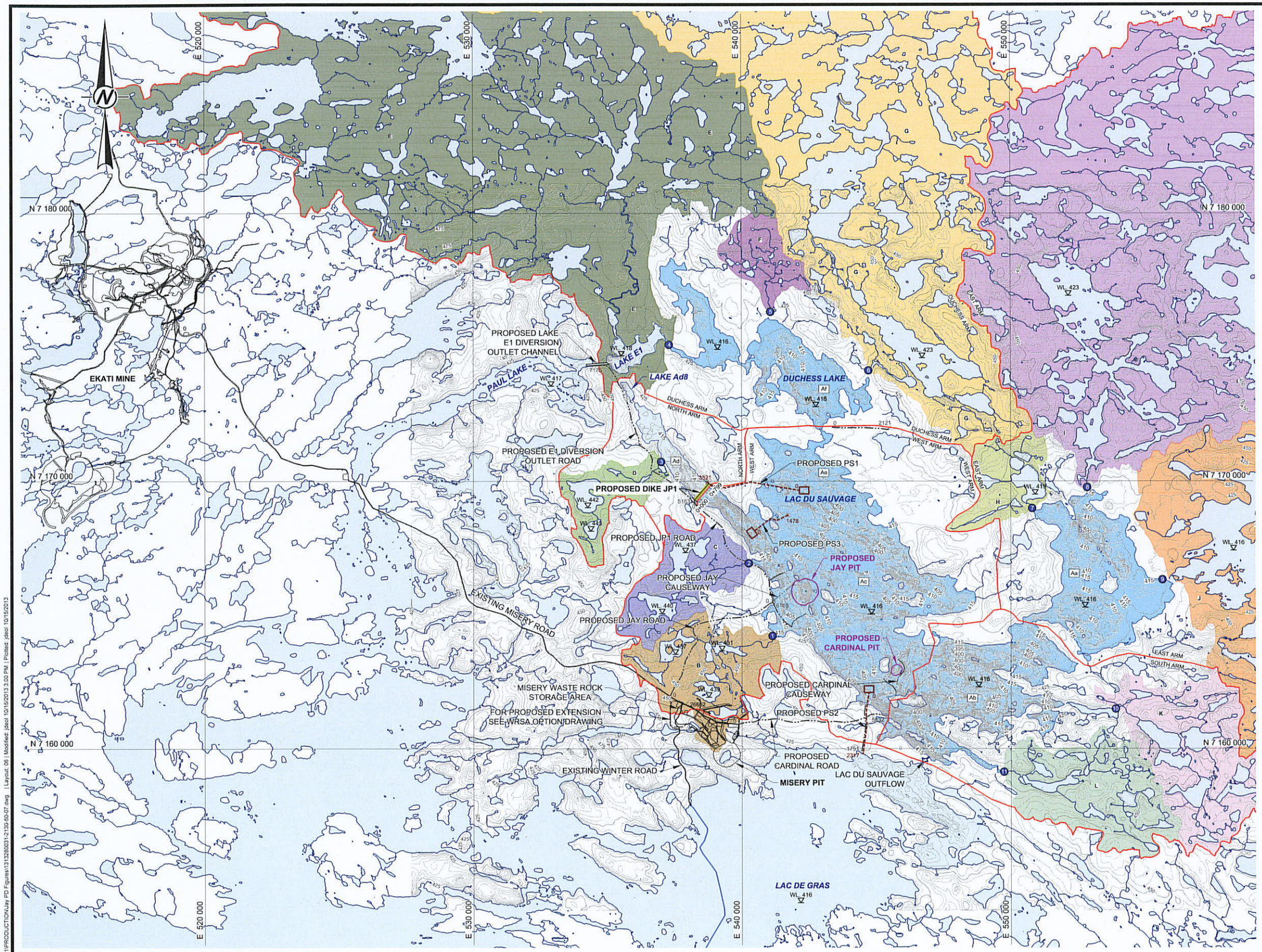
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE

LAKE DRAWDOWN VOLUME VS. ELEVATION

Golder Associates

PROJECT No. 13-1328-0031			PHASE No. 2130	
DESIGN	CM	2013-10-10	SCALE NTS	REV. 0
CADD	LS	2013-10-10		
CHECK	DYH	2013-10-15	FIGURE 5	
REVIEW	JCC	2013-10-15		



LEGEND

- SUB-BASIN OUTFLOWS
- WATER BODY
- DRAWDOWN AREA
- PROPOSED DIKE LOCATION
- WATER COURSE
- EXISTING ROAD
- PROPOSED ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PROPOSED PUMPING SYSTEM
- PS PUMPING SYSTEM
- SUB-BASIN BOUNDARY
- PROPOSED PIT LOCATION
- WATER LEVEL ELEVATION

SUB-BASIN LEGEND

B, C	Ac, Ae	WEST ARM
D	Ad	NORTH ARM
E, F, G	Af	DUCHESS ARM
H, I, J	Aa	EAST ARM
K, L	Ab	SOUTH ARM

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. JAY PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - JAY PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 3, 2013. REFERENCE NO: 1313280031-003-R-REV0-4000. (FILE NAME: Jay_CAT793_str.dxf)
3. CARDINAL PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - CARDINAL PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 8, 2013. REFERENCE NO: 1313280031-008-R-REVB-4001. (FILE NAME: Cardinal_pitshell_design_str.dxf).

0 3,000 6,000 9,000
SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
2	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE
GENERAL ARRANGEMENT PLAN - ALT1

Golder Associates

PROJECT No.	13-1328-0031.2130.50		FILE No.	1313280031-2130-50-07
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN
CADD	JD	2013-10-07	FIGURE	6
CHECK	DYH	2013-10-15		
REVIEW	JCC	2013-10-15		

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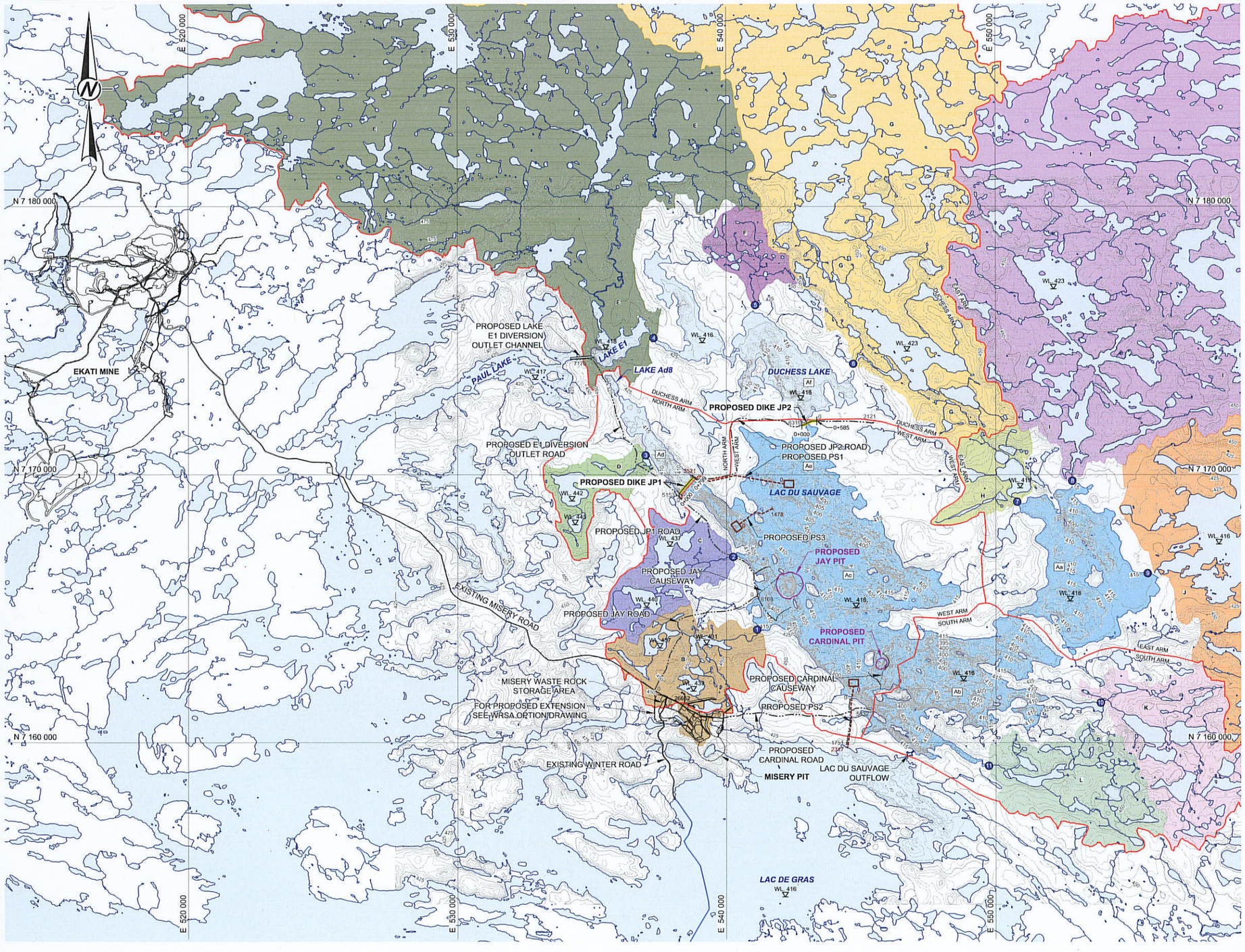


LEGEND

- SUB-BASIN OUTFLOWS
- WATER BODY
- DRAWDOWN AREA
- PROPOSED DIKE LOCATION
- WATER COURSE
- EXISTING ROAD
- PROPOSED ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PROPOSED PUMPING SYSTEM
- PS PUMPING SYSTEM
- SUB-BASIN BOUNDARY
- PROPOSED PIT LOCATION
- WATER LEVEL ELEVATION

SUB-BASIN LEGEND

B, C	Ac, Ae	WEST ARM
D	Ad	NORTH ARM
E, F, G	Af	DUCHESS ARM
H, I, J	Aa	EAST ARM
K, L	Ab	SOUTH ARM

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. JAY PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - JAY PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 3, 2013. REFERENCE NO: 1313280031-003-R-REV0-4000. (FILE NAME: Jay_CAT793_str.dxf)
3. CARDINAL PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - CARDINAL PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 8, 2013. REFERENCE NO: 1313280031-008-R-REVB-4001. (FILE NAME: Cardinal_pitshell_design_str.dxf).

0 3,000 6,000 9,000
SCALE METRES

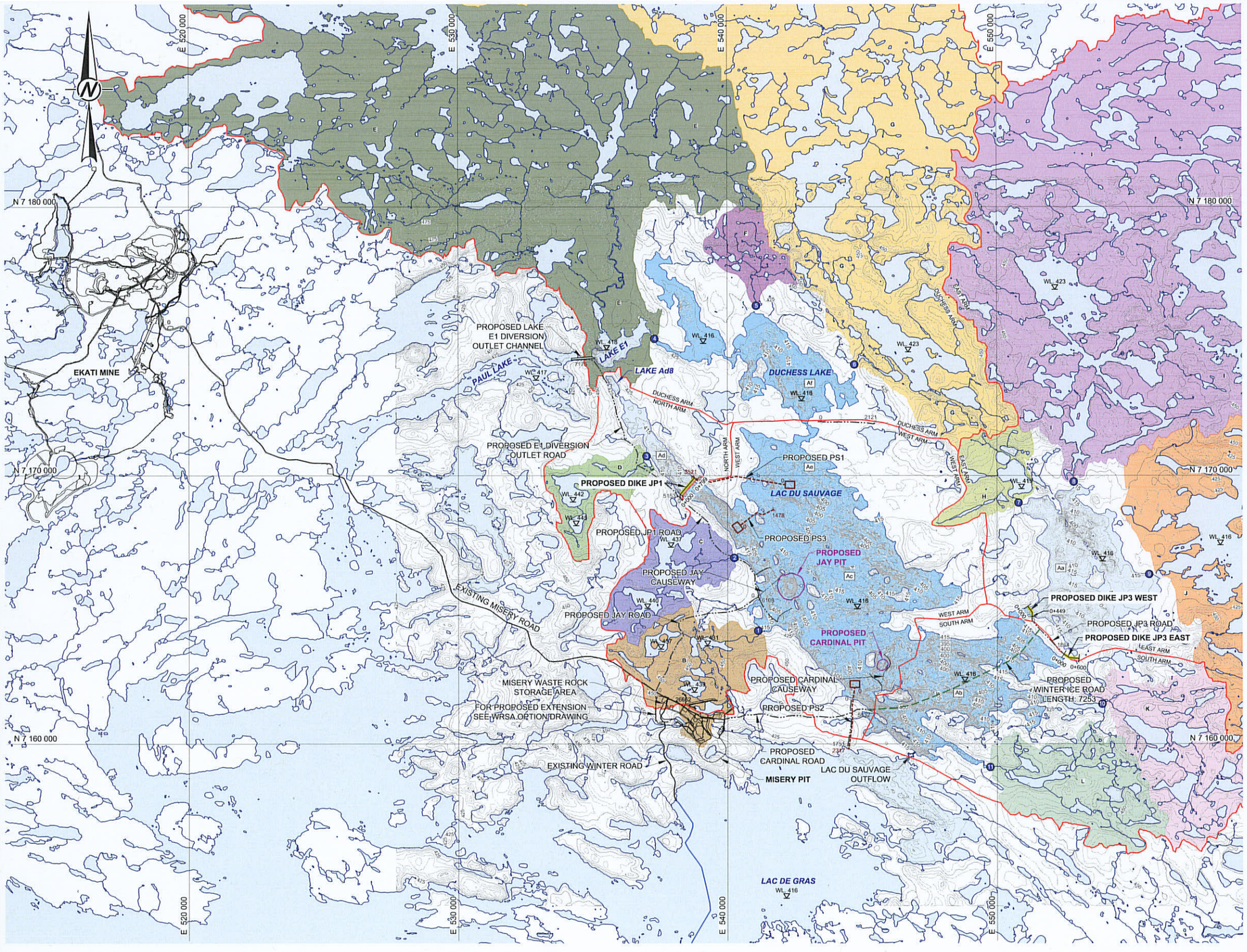
REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE
GENERAL ARRANGEMENT PLAN - ALT2

Golder Associates

PROJECT No.	13-1328-0031.2130.50		FILE No.	1313280031-2130-50-08	
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN	
CADD	JD	2013-10-07	FIGURE		
CHECK	DYH	2013-10-15		7	
REVIEW	JCC	2013-10-15			



LEGEND

- SUB-BASIN OUTFLOWS
- WATER BODY
- DRAWDOWN AREA
- PROPOSED DIKE LOCATION
- WATER COURSE
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED ICE ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PROPOSED PUMPING SYSTEM
- PS PUMPING SYSTEM
- SUB-BASIN BOUNDARY
- PROPOSED PIT LOCATION
- WS WATER LEVEL ELEVATION

SUB-BASIN LEGEND

B, C	Ac	WEST ARM
D	Ad	NORTH ARM
E, F, G	Af	DUCHESS ARM
H, I, J	Aa	EAST ARM
K, L	Ab	SOUTH ARM

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. JAY PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - JAY PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 3, 2013. REFERENCE NO: 1313280031-003-R-REV0-4000. (FILE NAME: Jay_CAT793_str.dxf)
3. CARDINAL PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - CARDINAL PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 8, 2013. REFERENCE NO: 1313280031-008-R-REVB-4001. (FILE NAME: Cardinal_pitshell_design_str.dxf).

0 3,000 6,000 9,000
SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
1	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE
GENERAL ARRANGEMENT PLAN - ALT3

Golder Associates

PROJECT No.	13-1328-0031 2130.50		FILE No.	1313280031-2130-50-09
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN
CADD	JD	2013-10-07	FIGURE	8
CHECK	DYH	2013-10-15		
REVIEW	JCC	2013-10-15		

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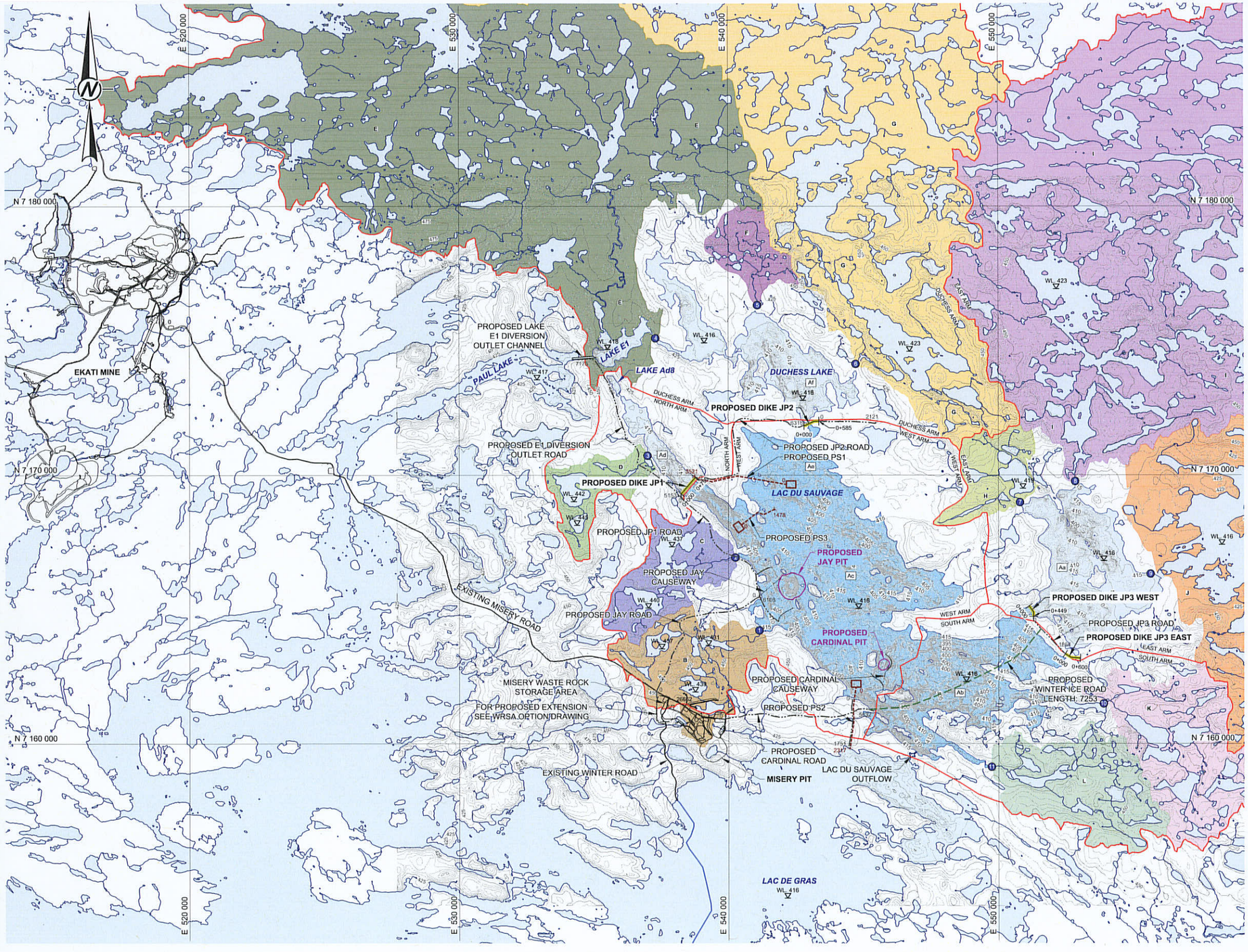


LEGEND

- SUB-BASIN OUTFLOWS
- WATER BODY
- DRAWDOWN AREA
- PROPOSED DIKE LOCATION
- WATER COURSE
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED ICE ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PROPOSED PUMPING SYSTEM
- PS PUMPING SYSTEM
- SUB-BASIN BOUNDARY
- PROPOSED PIT LOCATION
- WATER LEVEL ELEVATION

SUB-BASIN LEGEND

B, C	Ac, Ae	WEST ARM
D	Ad	NORTH ARM
E, F, G	Af	DUCHESS ARM
H, I, J	Aa	EAST ARM
K, L	Ab	SOUTH ARM

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. JAY PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - JAY PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 3, 2013. REFERENCE NO: 1313280031-003-R-REV0-4000. (FILE NAME: Jay_CAT793_str.dxf)
3. CARDINAL PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - CARDINAL PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 8, 2013. REFERENCE NO: 1313280031-008-R-REVB-4001. (FILE NAME: Cardinal_pitshell_design_str.dxf).

0 3,000 6,000 9,000
SCALE METRES

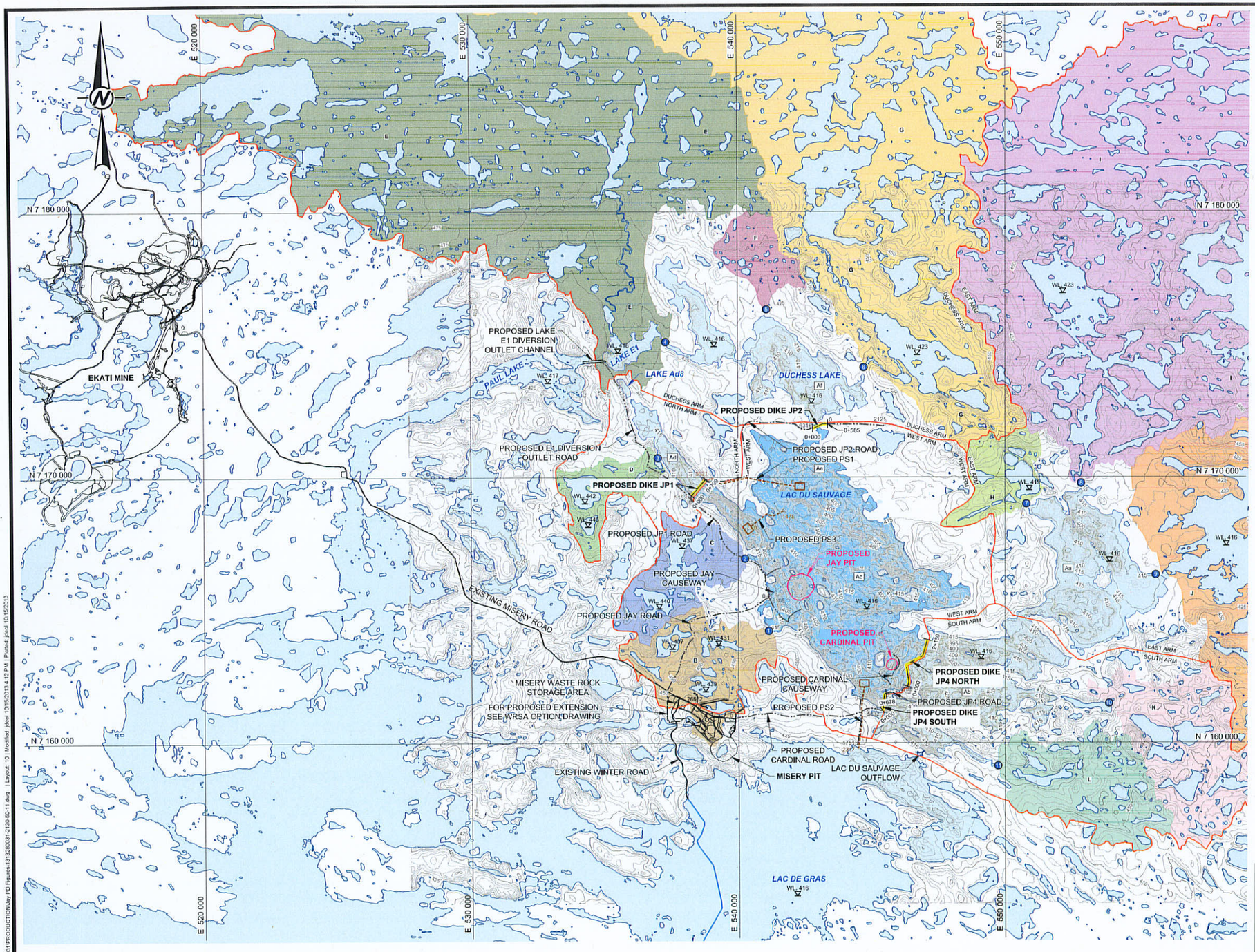
REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE
GENERAL ARRANGEMENT PLAN - ALT4

Golder Associates

PROJECT No.	13-1328-0031.2130.50		FILE No.	1313280031-2130-50-10
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN
CADD	JD	2013-10-07	FIGURE	9
CHECK	DYH	2013-10-15		
REVIEW	JCC	2013-10-15		



LEGEND

- SUB-BASIN OUTFLOWS
- WATER BODY
- DRAWDOWN AREA
- PROPOSED DIKE LOCATION
- WATER COURSE
- EXISTING ROAD
- PROPOSED ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PROPOSED PUMPING SYSTEM
- PS PUMPING SYSTEM
- SUB-BASIN BOUNDARY
- PROPOSED PIT LOCATION
- WL WATER LEVEL ELEVATION

SUB-BASIN LEGEND

B	Ac	WEST ARM
C	Ae	
D	Ad	NORTH ARM
E	Af	DUCHESS ARM
F		
G		
H	Aa	EAST ARM
I		
J		
K	Ab	SOUTH ARM
L		

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. JAY PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - JAY PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 3, 2013. REFERENCE NO: 1313280031-003-R-REV0-4000. (FILE NAME: Jay_CAT793_str.dxf)
3. CARDINAL PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - CARDINAL PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 8, 2013. REFERENCE NO: 1313280031-008-R-REVB-4001. (FILE NAME: Cardinal_pitshell_design_str.dxf).

0 3,000 6,000 9,000

SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT

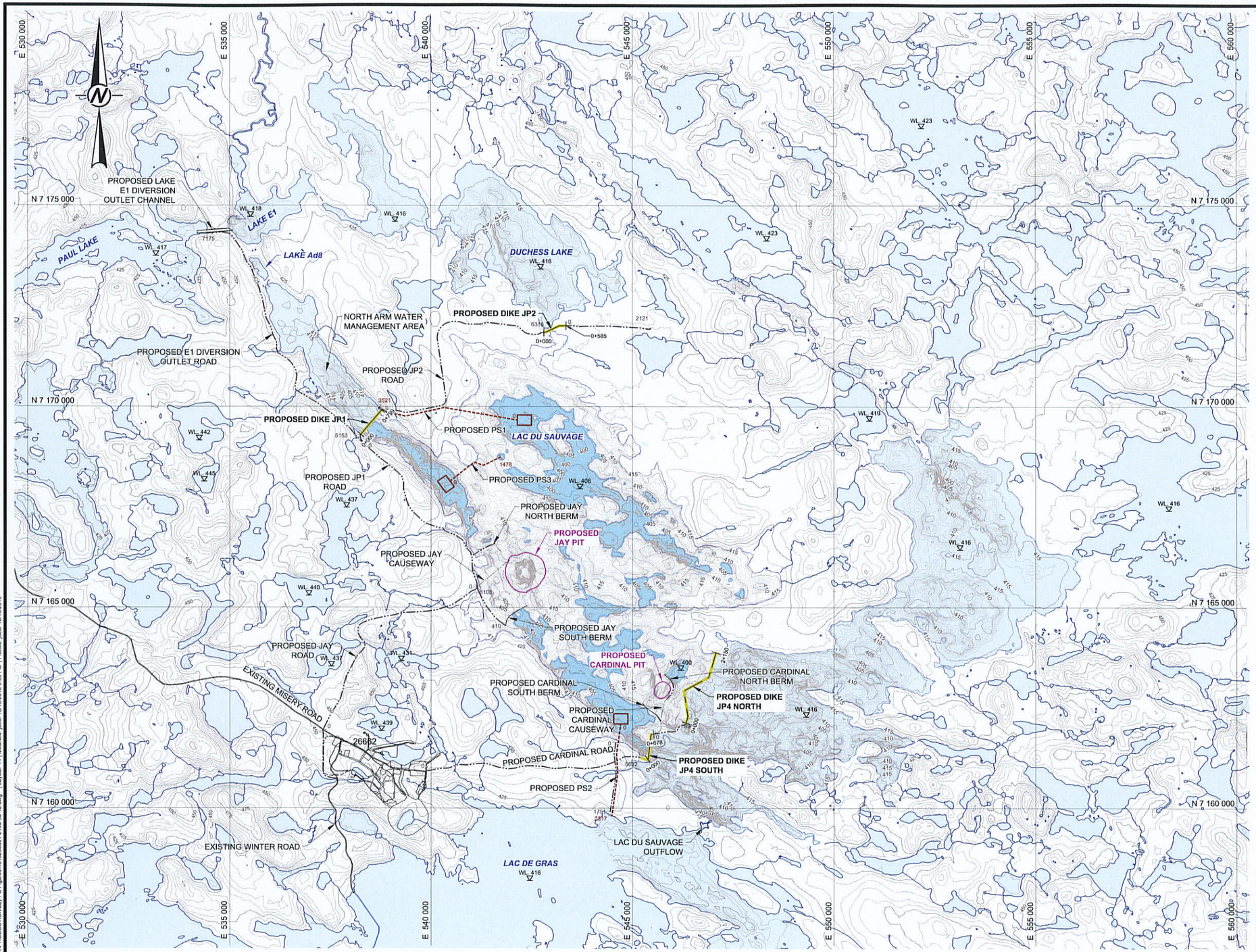
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE

GENERAL ARRANGEMENT PLAN - ALT5

Golder Associates

PROJECT No. 13-1328-0031 2130.50			FILE No.	1313280031-2130-50-11	
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN	
CADD	JD	2013-10-07	FIGURE		
CHECK	DYH	2013-10-15	10		
REVIEW	JCC	2013-10-15			



LEGEND

- WATER BODY
- DRAWDOWN AREA
- PROPOSED DIKE LOCATION
- WATER COURSE
- EXISTING ROAD
- PROPOSED ROAD
- WINTER ROAD - YEARLY CONSTRUCTION
- PROPOSED PUMPING SYSTEM
- PS PUMPING SYSTEM
- PROPOSED PIT LOCATION
- WATER LEVEL ELEVATION

NOTES

1. ALL UNITS ARE IN METRES UNLESS OTHERWISE NOTED.
2. GROUND SURFACE CONTOURS ARE SHOWN AT 5 m INTERVALS AND BATHYMETRY CONTOURS ARE SHOWN AT 1 m INTERVALS.
3. COORDINATES ARE SHOWN IN DATUM: NAD 83, PROJECTION: UTM ZONE 12.
4. PROPOSED PIPELINES, BARGE LOCATIONS, ACCESS ROADS, DIKES AND OUTLET CHANNELS ARE SHOWN FOR ALTERNATIVE 5.

REFERENCES

1. CONTOUR DATA PROVIDED BY AURORA GEOSCIENCES LTD., FILE: compilation_Elev_Gridded.xyz, DATE RECEIVED: JULY 30, 2013, IS BASED ON CANVEC DATA UPDATED WITH 2013 RTK SURVEYS IN SELECTED AREAS.
2. JAY PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - JAY PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 3, 2013. REFERENCE NO: 1313280031-003-R-REV0-4000. (FILE NAME: Jay_CAT793_str.dxf)
3. CARDINAL PIT MODEL: GOLDER ASSOCIATES LTD., 2013. PRELIMINARY MINE DESIGN - CARDINAL PROJECT. SUBMITTED TO DOMINION DIAMOND CORPORATION, DATED OCTOBER 8, 2013. REFERENCE NO: 1313280031-008-R-REVB-4001. (FILE NAME: Cardinal_pitshell_design_str.dxf).

0 2,000 4,000 6,000
SCALE METRES

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0	2013-10-15	ISSUED FOR REPORT 009	DYH	JD	DYH	JCC

PROJECT
DOMINION DIAMOND RESOURCES CORPORATION
JAY-CARDINAL PROJECT
NORTHWEST TERRITORIES, CANADA

TITLE
OPERATION CONDITIONS AT ELEVATION 406 m - ALT5

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PROJECT No.	13-1328-0031 .2130.50		FILE No.	1313280031-2130-50-12
DESIGN	DYH	2013-10-07	SCALE	AS SHOWN
CADD	JD	2013-10-07	FIGURE	11
CHECK	DYH	2013-10-15		
REVIEW	JCC	2013-10-15		

N:\Bur-Graphics\Projects\2013\1328\13-1328-0031\PRODUCTION\Jay PD Figures\1313280031-2130-50-12.dwg | Layout: 11 | Modified: pbed 10/15/2013 5:39 PM | Plotted: pbed 10/15/2013

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Dominion Diamond Jay Pipe Engagement Registry - at August 8, 2013

Phase 3 - Provided Details on Proposed Plans to Lower the Lake to Mine Jay Pipe					
Date	**Stakeholder**	**Title & Name**	**DD Contact**	**Contact Method**	**Relevant Comments**
- to come					
Phase 2 - Provided Information on Some Options Being Considered for Mining Jay Pipe					
Date	**Stakeholder**	**Title & Name**	**DD Contact**	**Contact Method**	**Relevant Comments**
Sept. 20, 2013	Tlicho, AT8, NSMA, KIA, Kugluktuk, IEMA	Laura Duncan Tlicho Executive Officer, Chief Edward Sangris, Chief Ernest Betsina, Chief Dora Enzoe, President Bill Enge, President Charlie Evalik, Mayor Ryan Nivingalok, IEMA Chairperson Bill Ross	ED	Package	Copies of Lynx Project Submission Reports sent to all affected communities and to IEMA.
Sept. 11, 2013	Tlicho, AT8, NSMA, KIA, Kugluktuk	Laura Duncan Tlicho Executive Officer, Chief Edward Sangris, Chief Ernest Betsina, Chief Dora Enzoe, President Bill Enge, President Charlie Evalik, Mayor Ryan Nivingalok	BO	Letter	Letter dated Sept 10, 2013 to notify Aboriginal groups that DDEC will be filing for the Exploration Land Use Permit that will cover the entire Ekati Claim block. The letter was also a reminder that DDEC plans to file a separate application for the Lynx Project by mid-September with the Wek'eezhii Land and Water Board.
Sept. 10, 2013	AT8 - YKDFN	Shannon Gault, Executive Assistant	OW	Call	Shannon Gault, Executive Assistant to Chief Sangris returned call and confirmed that YKDFN is available on Sept 17, 2013 for the Lac du Savage site tour. Chief Sangis, Chief Betsina, staffer Joanne Black and Shannon Gault will be participating.
Sept. 5, 2013	MVEIRB	Richard Edjericon, Sunny Munroe, John Curran, Percy Hardisty, Michael McLeod, Vern Christensen, Simon Toogood, Chuck Hubert, Stacey Menzies, John Donihee	BG, BB, ED	In Person	Provided presentation on Jay Pipe expansion and Lac du Savage site tour.
Sept. 3, 2013	IEMA	Vice Chair Tim Byers, Jessica Simpson	BG, BB, BO, OW	In Person	Provided presentation on Jay Pipe expansion. Refer to meeting notes.