Assessment Report of 2012 Reverse Circulation Exploration at the Martison Phosphate Project

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TECHNICAL REPORT

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1.0 SUMMARY

A multipurpose 9-hole drilling program was carried out between January and March 2012 on the Martison Phosphate Project, located approximately 70 km northeast of Hearst, Ontario. The purpose of the program was to: 1) test the residuum geology to bedrock; 2) conduct borehole geophysical surveys to further refine the subsurface geological units, and 3) install well screen and casing for future hydrogeological studies. The program was conducted by AMEC Environment and Infrastructure (AMEC) of Sudbury, Ontario, generally along the margin of the main Phosphate deposit (Anomaly A) (See Figure 8-1 for Borehole Locations). A Foremost DR-12 dual rotary and compressed air truck-mounted drill supplied by Davidson Well Drilling Ltd. (Davidson) of Wingham, Ontario was used. This method was preferred, as it has proven to provide superior material recovery in challenging hydrogeological conditions. Overburden/residuum logging and sampling were conducted over approximately 3 m lengths (see Appendix B and C for Borehole Logs and Sampling lengths). Samples were sent to ALS Canada Ltd. (ALS) of Timmins, Ontario for element and whole rock analysis. Gamma ray borehole geophysics was conducted on all holes by Lotowater Technical Services Inc. of Paris, Ontario, during March 2012. Given the remote location and ground conditions the program was required to be conducted during the winter freeze up. As such, a winter camp and winter trail construction was required to facilitate this project.

The information contained in Sections 2.0 to 7.0 has been based on excerpts from the 2008 N.I. 43-101 Technical Report: Martison Phosphate Project Preliminary Feasibility Study by Spalding et al.

2.0 PROPERTY DESCRIPTION AND LOCATION

The proposed mine site is located about 70 km northeast of the town of Hearst, Ontario, and 15 km southwest of Martison Lake in the James Bay Lowlands. The project is located in the "South of Ridge Lake" area and centered about 50° 18' 52" N, 83° 24' 52" W, as shown on Figure 2-1.





Figure 2-1: Martison Phosphate Project Location Map (Spalding et al, 2008)



The property consists of three (3) mining leases P1201625 (granted in September 2002), 108638 (Clm 477) and 108639 (Clm 478) (both granted May 1, 2011) and 19 unpatented contiguous mineral claims, totalling 250 units, which together comprise approximately 8,256 hectares. The mineral lease and all claims are located within the "South of Ridge Lake" area, Porcupine Mining Division, Cochrane Land Titles & Registry Division, Province of Ontario, as shown on Claim Map G-1716 on record at the Provincial Recording Office, Sudbury, Ontario. The claims are registered in the name of PhosCan Chemical Corporation (PhosCan) and Baltic Resources Inc. (Baltic). Each company owns title to 50 per cent of such lease and claims. PhosCan owns all of the issued and outstanding shares of Baltic, such that it owns, directly or indirectly, 100 per cent of the Martison Phosphate Project. A complete claim listing is presented in Table 2-1 and depicted on Figure 2-2.

Number	Туре	Status	Due Date	Claim units	Hectares
4208272	Claim	Active	June 27, 2012	16	256
4204292	Claim	Active	March 15, 2013	10	160
4214675	Claim	Active	March 15, 2013	16	256
4214676	Claim	Active	March 15, 2013	16	256
4214677	Claim	Active	March 15, 2013	16	256
4214678	Claim	Active	March 15, 2013	12	192
4214679	Claim	Active	March 15, 2013	6	96
4214680	Claim	Active	March 15, 2013	4	64
4214681	Claim	Active	March 15, 2013	16	256
4214682	Claim	Active	March 15, 2013	15	240
4202109	Claim	Active	April 10, 2013	15	240
4202112	Claim	Active	April 10, 2013	6	96
4202113	Claim	Active	April 10, 2013	15	240
4208263	Claim	Active	April 10, 2013	15	240
4214327	Claim	Active	April 16, 2013	9	144
4214328	Claim	Active	April 16, 2013	15	240
3002450	Claim	Active	June 27, 2013	16	256
3002451	Claim	Active	June 27, 2013	16	256
4202964	Claim	Active	August 11, 2013	16	256
CLM477	Lease	Active	April 30, 2032	130	2079
CLM478	Lease	Active	April 30, 2032	122	1951
p1201625	Lease	Active	July 31, 2023	14	226
				Total	8256

Table 2-1: Martison Pl	nosphate Project	Claim Status	(5/23/2012)
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Note: CLM 477 and 478 represent leases that are in the process of having their Assessment number granted.

Within the mining lease, up to 10 per cent of the surface rights are withheld for future public transportation routes. Also withheld are unspecified areas for the future development of hydropower infrastructure, power transmission, and hydrocarbon pipeline corridors, as well as free use and passage upon all navigable waterways including access.



The mineral claims withhold surface rights up to 122 m around all lakes and rivers, including land under water, as well as reserving all sand, gravel, and peat deposits.



Figure 2-2: Martison Phosphate Project Claim Location Map



The properties controlled by PhosCan and its subsidiary, Baltic, are subject to certain royalty payments. These royalties are to be paid to Donald D. McKinnon of Timmins Ontario, his heirs and permitted assigns. A Net Sales Returns (NSR) royalty of 1 per cent of net sales returns on phosphate concentrate is in place as well as a Production royalty which varies with the price of phosphoric acid and is payable on each tonne of phosphate concentrate produced. Prior to the commencement of commercial production, PhosCan may elect to acquire the 1 per cent NSR royalty for a payment of CAD \$ 3,000,000. Further, a NSR for Special Products of 2 per cent of all special products sold is in place. "Special products" does not include any "ores" sold on the basis of their phosphate content, phosphate concentrate, any and all products manufactured downstream of the phosphate beneficiation plant, or any aggregate used for the purposes of the Martison Phosphate Project.

The Martison Phosphate Project property is located on lands which a First Nation asserts are its traditional lands and in respect of which the First Nation asserts it holds constitutionally protected rights. PhosCan expects to enter into an agreement with the First Nation regarding exploration and development of the Martison Phosphate Project.

3.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

There are two preliminarily identified access roads to the mine site area. One, identified as Bannerman Township Road, has been examined in past project studies. The total length of this access between Hearst and the deposit is 90 km comprised of 8 km on Highway 11, 38 km on the Bannerman Township Road, and 44 km of "path" which is used for winter access to the deposit.

The second access route, which has been the main access to the deposit during past exploration programs, is Fushimi Lake Road. This access route has been extended and upgraded by the timber industry in recent years. The total length of this route from Hearst to the Martison deposit is about 112 km comprised of 26 km on Highway 11, 48 km on Fushimi Lake Road, and 38 km of "path" which could be used for winter access to the deposit. Please see Figure 4.1 for road locations.

The terrain at the deposit consists of spruce forest, wet muskeg, and numerous small lakes and rivers. The maximum reported depth for the lakes in the area is 4 m. Local relief is minimal with variations of only a few metres, making the ground very poorly drained, alternating between wet and drier. The maximum relief over the deposit itself is reported to be 1.4 m. These conditions currently limit access to the site for field activities to only the winter season. This necessitates the use of local construction contractors to maintain winter roads. The Martison deposit is located astride a major drainage divide with generally the western portion draining into the Albany River System and the eastern portion draining into the Moose River System.

The weather in the project area is typical of a mid-continental climate with cold winters and short warm summers. Temperatures vary dramatically over short time intervals. The region experiences five months of often very cold winter and four months of warm summer.

The nearest national weather station with a long period of data is located at Kapuskasing about 125 km SE of the Martison Phosphate Project site. The period of record is from 1971 through 2000. At that location the average annual temperature is 0.8° C ranging from an average daily temperature of -18.7° C in January to 17.2° C in July. The average annual rainfall is 83.2 cm with the most occurring in July and the least in February. The average annual wind velocity is 12.6 km/h from the SW. Sea level atmospheric pressure averages 101.6 kPa.





Medical and emergency facilities are available at Hearst which has hospital facilities and is about one-half hour away by helicopter.

Local socio-economic resources are generally limited due to the paucity of population in the region. Basic food, lumber, exploration supplies, fuel, etc. can be purchased in Hearst, while other more technical supplies can be obtained in Timmins, Ontario (a long-established mining center). The residents of Hearst are favourably committed to the responsible development of the natural resources of the region and are eager for new employment opportunities. In the last several years, the First Nation peoples have expressed a keen interest in developing the Martison Phosphate Project.

The Martison Phosphate Project is located approximately 70 km by air from Hearst, and is in close proximity to rail, power, highway and other industrial infrastructure. It is believed, pending further study, that sufficient water is available nearby the site for anticipated mining and industrial use.

4.0 HISTORY

Carbonatite complexes occur in several parts of northern Ontario and some of them have been explored for minerals for many years. The Martison Carbonatite Complex was located by an airborne magnetic-electromagnetic survey in 1965. In 1965, ground surveys indicated a conductive zone about 500 m long with a coincident magnetic anomaly. This work, along with a hole drilled in the anomaly, was conducted by a consortium that included Falconbridge Nickel Mines, Uranium Ridge Mines Limited, and Matachewan Consolidated Mines Limited.

The Martison Carbonatite Complex was originally and incorrectly referred to as the Martison Lake Carbonatite Complex. Martison Lake is located 15 km NE of the carbonatite complex. The Martison Carbonatite Complex is named after N.W. Martison, a Shell Canada Resources Limited (Shell Canada) geologist, who explored the area for petroleum in 1946.

In 1967, the large northern magnetic anomaly (Anomaly A) was covered by 98 claims staked by an unknown party, probably Goldray Mines Ltd. An airborne magnetometer survey was performed and the resulting anomaly was recommended for testing by drilling. This work was never performed and the claims were allowed to lapse. The aeromagnetic surveys were completed by the Ontario Geological Survey and Geological Survey of Canada.

The existence of the Martison Carbonatite Complex was first formally interpreted in 1970 by the Ontario Department of Mines and Northern Affairs partly on the basis of the 1965 drill hole.

In 1980, Shell Canada staked 222 mining claims in a single contiguous block over the interpreted Martison Carbonatite Complex. In order to more precisely map the complex, which is completely buried by overburden and contains no rock outcrops, an airborne geophysical survey was completed in February 1981. In March and April of 1981, five drill holes were completed and were centered on Anomaly A (three) and Anomaly B (two). Based on the interpreted results from this work, a large field campaign was planned for the 1982 winter season. An additional 124 contiguous claims were staked in 1981 by Shell Canada. In late 1981, seismic and DC resistivity test surveys were completed on Anomaly A (between hole 81-03 and 81-04) to evaluate the methods for determining the thickness of the residuum. The tests were successful in outlining the carbonatite but unsuccessful in determining residuum thickness.



In February 1982, Shell Canada made the decision to sell the Martison property to Eastern Petroleum Corporation and Camchib Mines Incorporated (Camchib) with Camchib being the operator for the joint-venture. However, pending the completion of the sale, the field program was conducted under the direction of Shell Canada. The program consisted of 38 drill holes (1 re-drill) completed between January 19 and April 5 using hole-spacings of 200 to 400 m. A total of 32 holes were completed using reverse-circulation methods and 6 using sonic drilling techniques. Lakefield Research of Canada Limited conducted beneficiation tests for the production of phosphate and niobium concentrates using sonic core from holes 82-32, 82-34, and 82-36.

The divestiture of the Martison property by Shell Canada was completed in December 1982. The 1983 field program, under the direction of Camchib, began on February 9 and drilling operations were complete by March 29. A total of 29 drill holes were completed using a mixture of sonic drilling techniques and reverse-circulation techniques, where drilling conditions dictated. The sonic drilling methods permitted the collection of core for use in lithologic descriptions and beneficiation testing. Additionally, geological, geochemical, geophysical, and geotechnical studies were completed in 1983. During 1983, comprehensive beneficiation batch and closed-cycle bench tests for phosphate and niobium concentrate production and additional residuum microscopic studies were completed.

In January 1984, Kilborn Limited completed a "Preliminary Capital and Operating Cost Estimate for an Open-Pit Mine/Mill Complex" at the Martison deposit. This work was completed for Camchib.

From January 13 through March 29, 1984, a total of 37 drill holes were completed (including four re-drills) by two drilling contractors. Of this total, 15 holes were completed using a combination of a standard diamond-drill penetrating through the glacial till and Cretaceous sediments using a tri-cone bit and NQ coring through the residuum. Sonic drilling techniques were used to recover core from 17 holes. Five holes were completed using reverse-circulation methods. Unfortunately, the program generally called for drilling to a predetermined depth of 76.2 m, regardless of the geology, and 22 of the drill holes were "stopped" in the residuum of economic interest for this reason. Additionally, drilling problems and/or equipment capacities forced the stoppage of another three holes in the residuum. During the drilling program, a test was completed comparing drill cuttings recovered from the circulating medium with the chemical analyses of the core recovered over the same interval. This test indicated that the cutting's analyses and the core analyses compared favourably, in general. In another program task, two 48-inch diameter (122 cm) churn-drill holes were attempted to collect 110 "tons" of bulk residuum sample for beneficiation pilot-plant studies at Lakefield Research (Lakefield). This location was selected beside the drill hole 83-60 and groundwater problems/program design forced the abandonment of one hole and completion of the other hole "early". A total of 65 tonnes were sent to Lakefield.

During June to July 1984, a sample of concentrate from Lakefield's work was evaluated at the International Fertilizer Development Center in Muscle Shoals, Alabama. The study tested the viability of producing phosphoric acid from the Martison concentrate by acidulation with sulphuric acid.

During the period from 1985 to 1987, no further fieldwork was completed on the property. Camchib continued to study the merits of various production plans, but was unable to conclude that it could penetrate the fertilizer market without a partner already engaged in the business. Thus, in 1987, Camchib formed a partnership with Sherritt Gordon Limited whereby Camchib contributed the Martison property and Sherritt the Kapuskasing deposit to a new entity in which each company held 50 per cent.

In 1987, under contract to the Ontario Ministry of Northern Development and Mines, Jacobs Engineering and Blue, Johnson & Associates completed a summary evaluation of the prospects for development of the weathered carbonatite phosphate deposits in Ontario. Although the detailed study included both the Kapuskasing and Martison deposits, the study recommended that the Kapuskasing deposit be advanced. This was primarily due to the development stages of both deposits which favoured the Kapuskasing deposit.

In 1989, Camchib sold its 50 per cent interest in Kapuskasing and Martison to Newphos Ltd., a wholly owned subsidiary of Central Capital Corporation (CCC). Work began in earnest on the Kapuskasing deposit following the sale. Due to the pre-occupation with Kapuskasing, interest in the Martison deposit diminished.

During 1993, Sherritt allowed the Martison claim block to expire through lack of timely filing of assessment work. In the same year, McKinnon Prospecting of Timmins, Ontario established a new claim block covering the Martison Carbonatite Complex.

In early 1997, J.H. Reedman & Associates Ltd. completed a computer model and an "open-pit resource" estimate for a mining period of 10 years. This work was completed for McKinnon Prospecting.

Also in early 1997, MCK Mining Corporation (MCK), formerly named Hendricks Minerals Canada Limited, was reorganized to more aggressively pursue advanced mining projects. MCK entered an agreement with Baltic whereby each would earn 50 per cent in the Martison property from Donald McKinnon, principal and owner of McKinnon Prospecting, by completing work and issuing shares pursuant to an option and joint venture agreement. After having met all of the requirements under the option agreement, both MCK and Baltic have since earned their respective 50 per cent ownership interest in Martison. Both parties have signed the Martison Joint Venture Agreement which governs their relationships with respect to Martison and provides for production royalties to McKinnon.

Also, in 1997, MCK engaged MRDI to re-evaluate the previously collected data and to complete a Scoping Study for the Martison property. The Scoping Study evaluated the geology, constructed a computer resource model, presented a "reserves" statement, and completed a project level estimate of capital and operating costs for the development and operation of a mine and beneficiation plant at the Martison property. The final report was issued in May 1998.

Using several contractors in 1997, MCK and Baltic examined fertilizer markets, regional sulphuric acid production and forecasts, regional freight rates, fertilizer manufacturing plant capital and operating costs, and alternative financing and tax handling schemes.

In January 1998, a brief field program by MCK evaluated the use of lake sediment samples as a carbonatite exploration tool. Although the lake sediment samples were collected and analysed, the program was never completed to the point where definitive conclusions were published. In late 1998, an agreement was reached between MCK/Baltic and Cargill Fertilizer, Inc. (Cargill) whereby Cargill would "purchase" six (6) of the 13 drill holes scheduled for drilling in January 1999. Cargill would use the data generated from beneficiation tests on these six holes, as well as other MCK/Baltic data to complete its own evaluation of this deposit.

From February 22 through March 27, 1999, a total of 14 drill holes (including 1 re-drill) were completed under the field supervision of MCK. All holes were continuously cored from the surface to total depth using triple-tube HQ coring technology. The locations of the holes were along the previously defined "economic axis" of Anomaly A and provided some infill drilling, as well as corroboration of earlier work. Cargill's report issued in October 1999



indicated a favourable result and held out the possibility of a simplified beneficiation process flowsheet, as compared to earlier work. The report also generally confirmed earlier MCK resource estimates and recommended a slurry pipeline for concentrate transport to a rail siding at Hearst for drying and load-out prior to transport.

Also, in 1999, an aeromagnetic survey was conducted over the Martison Carbonatite Complex.

From February 17 through April 3, 2001, a total of 12 drill holes (1 re-drill) were completed on Anomaly B of the Martison Carbonatite Deposit. This was the first drilling program on this Anomaly since the very first holes were drilled at Martison in 1981. All holes were continuously cored from the surface to total depth using triple-tube HQ coring technology. The drilling centers on this Anomaly remain at about 200 m. Initial interpretations of this program show geologic conditions and analytical results similar to Anomaly A.

In February 2002, a revised block model and resource re-estimate were completed and reported. This block model and resource estimate include the first use of re-interpreted lithologic units from all previous drilling campaigns and the establishment of the nomenclature used for the 2007 Preliminary Feasibility Study. This re-estimate of resources is discussed further in Section 6.2.

From March 18 through April 2, 2002, a total of six (6) drill holes were completed on the NW fringes of Anomaly A. All holes were continuously cored from the surface to total depth using triple-tube HQ coring technology. The objectives of this program were to test the residuum in this sparsely drilled area and to examine the rare-earth elements and niobium-rich Cretaceous sediments in this location. A re-computation of resources issued in November 2002 includes the results of this program and highlights the significant tonnage of niobium-rich material in the NW sector of Anomaly A and in the Cretaceous sediments. This re-estimate of resources is discussed further in Section 6.2.

In June 2002, Falconbridge Limited formed an alliance with MCK and Baltic for promoting the development of Martison. Falconbridge's interest was solely in the supply of sulphuric acid to the project from its smelters in the Timmins and Sudbury areas.

In January 2006, MCK reorganized its Board of Directors to facilitate the development of the company and of the Project.

In July 2006, MCK changed its name to PhosCan.

In October 2006, PhosCan announced the initiation of a PFS for the Project. This study was completed in May 2008 and the results are summarized and presented in the 2008 N.I. 43-101 Technical Report: Martison Phosphate Project Preliminary Feasibility Study by Spalding et al.

In March 2008, PhosCan acquired all of the issued shares of Baltic, such that PhosCan now owns, directly and indirectly, 100 per cent of the Martison Phosphate Project.

From January through April 2008, PhosCan conducted a major field campaign to collect a bulk sample, to gather geotechnical information, to complete hydrological tests, and to begin the preparation of topographic maps of the Martison Carbonatite Complex. Analysis of the collected data is continuing and will be reported as the evaluation tasks are completed. Over 42 tonnes of residuum material were collected from seven sites and shipped to Jacobs Engineering in Lakeland, Florida for beneficiation-process analysis and pilot-scale beneficiation testing.



5.0 GEOLOGICAL SETTING AND MINERALIZATION

The Martison Carbonatite Complex (Martison Phosphate Project) is situated in the large expanse of "low ground" southwest of Hudson Bay. The property encloses a very gently rolling terrain dominated by muskeg and black spruce swamp. There are no exposures of the carbonatite or its enclosing wall rocks and all geological data result from drilling information and interpretations of geophysical surveys. Most carbonatites in Ontario are of Precambrian age and belong to two (2) age groupings: 1,800 to 1,900 Ma (Paleo-proterozoic) and 1,000 to 1,100 Ma (Meso-Proterozoic). It is currently not established in which grouping the Martison Complex belongs, if either.

The Martison Carbonatite Complex lies about 150 km west of the Kapuskasing Structural Zone which hosts numerous alkalic-carbonatite complexes. The Complex also lies 60 km east of a set of circular aeromagnetic anomalies underlying Paleozoic strata and once interpreted to be carbonatite intrusions. The Martison Complex is too far west to be associated with the Kapuskasing Structural Zone manifestations and current interpretations indicate that the circular anomalies to the west are the result of a different type of magmatic event. Examination of other geological data suggests that the Martison Carbonatite Complex lies along the NE extension of the Garden River fault zone, the western end of which is one of the bounding faults for the NW corner of the Lake Superior basin of Neo-Proterozoic age. The alkalic-carbonatite magmatism lying along the Trans-Superior Tectonic Zone, which bisects the Lake Superior Basin, is dominated by Proterozoic age events. It may ultimately be established that the Martison Carbonatite Complex belongs to this Neo-Proterozoic age grouping.

Differential weathering of the Martison Carbonatite Complex has resulted in an irregular surface of carbonatite the depth of which varies greatly over short distances. Depressions in this carbonatite surface are filled with the weathered carbonatite residuum that represents the bulk of the phosphatic material of economic interest.

The lithology of the deposit is characterized by three main lithologic units, which overlie three separate, but related, carbonatite intrusions over an area of about 56 square km (km²). These intrusions are identified as: Anomaly A, which covers approximately 12.5 km²; Anomaly B, located about five km to the SE and covers about 4 km^2 ; and Anomaly C located about three km to the ESE of Anomaly A, and covers about 2 km^2 .

The surficial material in the project area, overlying the ubiquitous glacial till, is a muskeg deposit varying in thickness from 0.5 to about 4 m and averaging about 2 m.

Within Anomaly A, the overburden is divided into two main sub-units: glacial till and Cretaceous sediments. The glacial till material ranges from coarse gravel size sediment to clay and is competent in a dry condition. The thickness of the glacial till ranges from 30 to 82 m in thickness and averages about 47 m. The Cretaceous sediments range in thickness from "absent" to 135 m in thickness. The lithologies of the sediments range from lignitic peat to highly weathered lateritic material.

Within Anomaly A, the residuum material has been sub-divided into two main units based on lithology: Unit 2A, which is unconsolidated (0.0 to 58.5 m thick); and Unit 2B, which is consolidated (re-cemented) residuum material (0.0 to 91.6 m thick). A third and minor type of material, partially weathered carbonatite, occurs as "lenses" within the residuum.

Within Anomaly A, forming the base of the lithology of economic interest, is the carbonatite. The carbonatite is a massive, white, medium to coarse grained rock, composed mainly of calcite and dolomite with a wide range of other minerals characteristic of carbonatite assemblages.



In the late 1990s, with the advent of computer modelling and statistical analyses at Martison, every previous drill hole geology log was re-interpreted and the lithographic column was assigned number identifiers ("Litho Unit ID") for use with this technology. The use of the Litho Unit codes and correlations was validated, in general, in the drilling programs in 1999, 2001 and 2002. Each of the above Litho Units is further subdivided based on lithologic and petrographic variations. These sub-units are not germane to either past or current work and still need to be validated for future use. Most likely, the sub-unit designations will play a role in quality control for the proposed mining operations.

6.0 DEPOSIT TYPES

Due to the nature of the deposit and nature of the exploration and development programs at the Martison Phosphate Project, extremely few samples of the carbonatite plug exist and have been examined. Almost all mineralogy studies have been focused on the residuum and the components for the various flow streams resulting from beneficiation study programs.

All drill holes that have intersected "bedrock" at the Martison Phosphate Project have recovered material that can be interpreted as being the product of the weathering of sovite or silicocarbonatite rocks. Mineralogical studies and whole rock analyses of this material are extremely limited and only one sample has been interpreted as showing no evidence of weathering. Minerals identified in the least weathered ("freshest") sovite material are phlogopite, magnetite, apatite, and pyrochlore, all associated with a carbonate matrix. Mineralogical studies have been completed by a large number of investigators and all studies should be considered preliminary. The number of minerals present in the weathered carbonatite probably greatly exceeds the number reported in these studies.

As indicated elsewhere in this report, most detailed studies at the Martison Phosphate Project have been completed on material that occurs above the bedrock of the complex.

Heavy minerals identified in the glacial till overlying the Martison Carbonatite Complex include epidote, pyroxene, almandite garnet, hematite, pyrite, sphene, and hornblende, all of which are interpreted as being derived from Archean granites and gneisses located northeast of the complex. Apatite, siderite, ilmenite, pyrochlore, and sphene are all intuited to be derived from the local carbonatite.

Limited mineralogy studies have been completed with samples identified as deriving from the Cretaceous sediments which occur between the glacial till and residuum. Interest was shown in this material and was the focus of the 2002 field campaign on Anomaly A. However, no reports of studies of this material were reviewed specifically for this Assessment Work Report. The chief minerals of economic interest in the sediments are pyrochlore and its daughter weathering products.

The minerals of the residuum fall into three classifications: primary, secondary and detrital. The chief primary minerals are apatite, magnetite, pyrochlore, calcite, dolomite, barite, columbite, and occasional quartz. The secondary minerals are the result of the breakdown of the primary minerals, replacements of the primary minerals, or re-deposition of elements after dissolution of the primary minerals. Chief secondary minerals include francolite, calcite, dolomite, siderite, limonite, goethite, hematite, ilmenite, phlogopite, pyrite, and pyrochlore. The detrital minerals include clay (tentatively identified as kaolin and crandallite), feldspars, and quartz.





Recent XRD analyses from phosphate concentrate derived from the 1999 and 2002 sample material show the following minerals to be present: fluorapatite, crandallite, magnetite, goethite, hematite, ilmenite, chlorite, carbonates, limonite, pyrochlore, anatase, pyrite, mica, quartz, feldspar, and garnet.

Based on work in progress, the phosphate concentrate derived from Litho Unit 2A contains the following mineral quantities:

- 25% to 75% fluorapatite;
- **5%** to 25% crandallite, magnetite, goethite, chlorite;
- 1% to 5% hematite, carbonates, limonite, mica, quartz, feldspar;
- identified ilmenite, pyrochlore, anatase, pyrite, and garnet.

The phosphate concentrate derived from Litho Unit 2B contains the following mineral quantities:

- 25% to 75% fluorapatite;
- **5**% to 25% crandallite, magnetite, chlorite;
- 1% to 5% goethite, hematite, carbonates, limonite, mica, quartz, feldspar;
- identified ilmenite, pyrochlore, anatase, hornblende and garnet.

As currently defined by past drilling campaigns, the phosphatic residuum of Anomaly A (Litho Units 2A and 2B) strikes about N 30° W and is without a definable dip. The currently defined strike length is about 1,700 m with a width varying between 300 and 600 m. As postulated above, the NE and SW edges of this zone are sharp due to the affects of possible faults and the resulting intensive weathering of the carbonatite in this fractured zone. At this time, the area of thickest residuum is open to the NW and to the SE, as well as at depth in the central area.

As stated elsewhere in this report, virtually nothing is known of the primary carbonatite and surrounding country rock into which the carbonatite plug was intruded.

7.0 PREVIOUS EXPLORATION

The Martison Carbonatite Complex was located by a Canada-wide airborne magnetic-electromagnetic survey in 1965. In 1965, ground surveys at Martison indicated a conductive zone about 500 m long with a coincident magnetic anomaly. This work, along with a hole drilled in the anomaly, was conducted by a consortium that included Falconbridge Nickel Mines, Uranium Ridge Mines Limited, and Matachewan Consolidated Mines Limited.

In 1967, the large northern magnetic anomaly (Anomaly A) was covered by 98 claims staked by an unknown party, probably Goldray Mines Ltd. An airborne magnetometer survey was performed and the resulting anomaly was recommended for testing by drilling. This work was never performed and the claims were allowed to lapse. The aeromagnetic surveys were completed by the Ontario Geological Survey and Geological Survey of Canada.

The existence of the Martison Carbonatite Complex was first formally interpreted in 1970 by the Ontario Department of Mines and Northern Affairs partly on the basis of the 1965 drill hole.





Between April 1980 and June 1981, Shell Canada staked 222 mining claims in a single contiguous block over the interpreted Martison Carbonatite Complex. In order to more precisely map the complex, which is completely buried by glacial till and contains no rock outcrops, an airborne geophysical survey was completed in February 1981. In March and April of 1981, five drill holes were completed and were centered on Anomaly A (three) and Anomaly B (two).

In late 1981, seismic and DC resistivity test surveys were completed on Anomaly A (between holes 81-03 and 81-04) to evaluate the methods for determining the thickness of the residuum. The tests were successful in outlining the carbonatite but unsuccessful in determining residuum thickness.

Additional drilling programs focusing on Anomaly A were conducted during the winter seasons of 1982, 1983, 1984, 1999, 2001, 2002, 2008, and 2012.

In 1999, a low-altitude aeromagnetic survey was conducted over the Martison Carbonatite Complex on behalf of the Martison Joint Venture.

8.0 CURRENT EXPLORATION DRILLING

Two drilling programs ran concurrently during the 2012 Winter season. One utilized sonic coring methods within the aforementioned Anomaly A, while the other (the purpose of this report) focused on the more hydrogeologically challenging perimeter of Anomaly A.

Between January and March 2012, 6 - 6" and 3 - 10" Reverse Circulation (RC) holes were drilled vertically to various depths at various locations generally along the margin of the known deposit (Anomaly A). The program purpose was multi-fold in 1) exploring the boundary geology of the deposit, 2) conducting downhole geophysics, and 3) installing groundwater monitoring and pumping wells for future studies. For the purposes of this report we will only focus on purposes 1 and 2. Davidson Well Drilling of Wingham, Ontario was subcontracted to complete the drilling program. A Foremost DR-12 dual rotary and compressed air truck-mounted drill was used. This method was preferred, as it has proved to provide superior material recovery in challenging hydrogeological conditions. The completion depths of all holes were determined in the field based on the observed stratigraphy and hydrogeological condition. Continuous overburden soil cutting samples (including residuum) were collected with the use of the diverter head for the total depth of the hole. Observations were made on geological material, texture, colour, reaction to a solution of 10% v/v Hydrochloric Acid (HCI) and the amount of water produced by the strata in each interval. All samples were submitted to ALS Assay Labs at their Timmins facility for element and whole rock analysis. See Figure 8-1 for borehole locations relative to claims and Table 8-1 for a list of hole locations and depths.





Figure 8-1: 2012 Borehole Locations Martison Phosphate Project



Hole	Easting	Northing	Elevation	Depth
PW-12-01	328463.95	5576869.13	189.18	100
PW-12-02	328477.56	5576971.48	189.37	65.84
PW-12-03	327873.94	5576803.05	189.88	84.1
TW-12-01	326927.61	5575483.38	191.16	71.9
TW-12-02	327329.18	5577649.96	187.80	139.0
TW-12-03	327990.77	5577384.02	189.14	20.00
TW-12-03A	327996.31	5577382.76	189.23	81.08
TW-12-04	328483.84	5576972.90	189.40	74.98
TW-12-05	328585.74	5576265.28	188.35	148.1
TW-12-06	328476.71	5575545.59	187.92	73.1

Table 8-1: 2012 Borehole Location and Depth at Martison Phosphate Project

Co-ordinates - NAD83 (CSRS)- Zone 17

Note: TW-12-03 was abandoned and replaced in close proximity with TW-12-03A. All Assays, Sections and Logs refer to hole TW-12-03A

9.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Davidson Well Drilling Limited (Davidson) of Wingham, Ontario was subcontracted to complete the well drilling program. A Foremost DR-12 dual rotary and compressed air truck mounted drill was used. Foremost dual rotary drills have two rotary drives: one for advancing an outer steel casing through unconsolidated material; and one for advancing a drill bit out the base of the casing. Drill cuttings of the geologic material are returned to surface by forcing compressed air down through the inside of the drill rods. The pressure created by the injection of air at the drill bit, forces geologic material and formation water back to surface in the space between the drill rod and the steel casing or open hole. Once on surface, the geologic material and formation water captured and feed through cyclone diverter head to separate the formation water and samples. Some fine material is lost in this process along with the drill water. Samples of the geologic material are collected in pails from the discharge from the diverter head. The pails were exchanged as the drill bit advanced in 1.5 m intervals, and their contents decanted of excess water and placed into labelled pairs of sample bags. One bag of each pair was given to PhosCan for further assay analysis while the other (twinned) sample bag was utilized for observations on geological material, texture, colour, reaction to a solution of 10% v/v Hydrochloric Acid (HCI) and the amount of water produced by the strata in each interval. The completion depths of all wells were determined in the field by both field staff and the project hydrogeologist based on the observed stratigraphy and hydrogeological condition.

The representativeness of the samples is controlled by advancing the outer steel casing at the same time as the drill bit, such that the steel casing prevents the collapse of formation material and water into the hole from intervals above the drill bit. The steel casing can be readily advanced at the same rate as the drill bit in the overburden materials allowing for a high degree of control of the sampled material. High water producing zones can also be cut off by the advancing casing, allowing deeper samples to be collected without from higher producing washing down the samples. The steel casing cannot be advanced through competent bedrock. When bedrock is reached, the steel casing is rotated into the top of the rock until it forms a seal on the bedrock. For bedrock intervals, the competent bedrock does not collapse and the hole remains as an open interval, allowing





for sampling of the materials created by the drilling interval only. Where present, water from higher water producing zones in the bedrock will continue to be discharged to surface during sampling and, in extreme cases, can overwhelm the air compressor capacity on surface and prevent the return of samples. This occurred in TW2, TW4 and TW5 at the base of the holes. Other holes were terminated when a sufficient depth into the bedrock was reached

The duplicate samples given to PhosCan were rebagged and tagged with a single identifying sample ticket with each individual bag secured with a cable tie. A duplicate of the sample ticket was retained in the sample book for reference. The individual sample bags were collected in batches (typically by borehole) and placed in a larger "rice bag" which was also secured with a strong cable tie. The samples were then crated and shipped to ALS Laboratories in Timmins via Manitoulin Transport.

A total of 117 samples from this field campaign were submitted to ALS. Five samples were used as QA/QC samples (2 Blanks, 3 Standards) spread over the various holes (see Table 9.1). No discrepancies were observed with the results. The remaining samples are from 112 intervals and were analysed for La, Ce, Nb, and other minor elements by mass spectral ICP methods and reported as ppm. P2O5, TiO2, Fe2O3, and other metals were analysed by atomic emission spectral ICP methods and reported as oxide percents. Fusion XRF was utilized for determining Nb ore grade and reported as a per cent (see Appendix C for assay results by depth and lithology). The signed certificates of analysis can be found in Appendix A.

Sample Number	QA/QC Type	Location
L010159	Blank	TW 12-04
L010169	Standard	TW 12-01
L010241	Standard	TW 12-05
L010250	Standard	TW 12-05
L010260	Blank	TW 12-05

Table 9-1: QA/QC Type and Location

10.0 DISCUSSION AND RECOMMENDATIONS

The drilling program was successful in as much as the project objectives were accomplished. There was good sample recovery via this drilling method with borehole logs produced and subsequent whole rock and element analyses (please see Appendices A, B, and C). Borehole geophysics (gamma) was completed in all holes and displayed on the borehole logs relative to the Lithology (please see Appendix B). Casing and screen were installed in all holes for future hydrogeological testing. The residuum thickness with Length Weighted P2O5 % and Nb % results are displayed in Table 10-1 and Figure 10-1.



BHID	Residuum Thickness (m)	P2O5 %	Nb%
PW 12-02	24.4	5.16	0.22
PW 12-03	36.5	17.02	0.39
TW 12-01	32.6	1.06	0.04
TW 12-02	24.1	12.91	0.35
TW 12-03	42.7	7.11	0.24
TW 12-04	33.5	10.64	0.39
TW 12-05	78.0	10.76	0.27
TW 12-06	18.2	2.26	0.52

Table 10-1: 2012 Martison Phosphate Project Drill Program: Residuum Thickness and Assay Results

The downhole geophysical responses are coincident with the residuum intersections. Higher gamma responses visually appear to show a reasonable correlation to higher P2O5 grades.

The results of the 2012 Reverse Circulation exploration program should be integrated into the larger historical database to better define the limits of the deposit. This compilation could then be used to better plan future exploration programs. The results of the geophysical data should be further investigated to ascertain the relationship between P2O5 and Gamma response.





Figure 10-1: 2012 Martison Phosphate Project Borehole Residuum Thickness with Length Weighted Assay Data



Report Signature Page

The report was prepared and signed by James McDonald, B.Sc., P.Geo., and Paul Palmer, P.Eng., P.Geo., of Golder. The signature and effective date of this Assessment Work report is (*insert date*).

GOLDER ASSOCIATES LTD.

James McDonald, B.Sc., P.Geo. Senior Resource Geologist

JM/PGP/cl

Paul Palmer, P.Eng., P.Geo. Associate/Senior Geological Engineer

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11.0 REFERENCES

2008 N.I. 43-101 Technical Report: Martison Phosphate Project Preliminary Feasibility Study. May 16, 2008. Spalding, James S., Sprott, David, Waters, Paul S., Demidovich, Joe and Jennings, Milton.







Certificate of Assays







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

t

Page: 1 Finalized Date: 17- APR- 2012 Account: PCANCC

CERTIFICATE TM12065153

Project: P.O. No.

This report is for 39 Soil samples submitted to our lab in Timmins, ON, Canada on 23- MAR- 2012.

The following have access	to data associated with this	s certificate:
STEVE CASE TIM HORNER	BRUCE DAVIS ROBERT SIM	RAY DUJARDIN

SAMPLE PREPARATION								
ALS CODE	DESCRIPTION							
WEI- 21	Received Sample Weight							
LOG- 22	Sample login - Rcd w/o BarCode							
PUL- QC	Pulverizing QC Test							
CRU- 31	Fine crushing - 70% < 2mm							
SPL- 21	Split sample - riffle splitter							
PUL- 31	Pulverize split to 85% < 75 um							
LOG- 23	Pulp Login - Rcvd with Barcode							
	ANALYTICAL PROCEDUR	ES						
ALS CODE	DESCRIPTION	INSTRUMENT						
ME- ICP06	Whole Rock Package - ICP- AES	ICP- AES						
OA- GRA05	Loss on Ignition at 1000C	WST- SEQ						
ME- MS81	38 element fusion ICP- MS	ICP- MS						
TOT-ICP06	Total Calculation for ICP06	ICP- AES						
ME- XRF10	Fusion XRF - Ore Grade	XRF						
OA- GRA06	LOI for ME- XRF06	WST- SIM						

TO: PHOSCAN CHEMICAL CORP. ATTN: STEVE CASE 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Colin Ramshaw, Vancouver Laboratory Manager 2







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

Page: 2 - A Total # Pages: 2 (A - D) Finalized Date: 17- APR- 2012 Account: PCANCC

)								U	KIIFIC	ATEU	r Anal	1313	TIMITZO	03133	0
Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS81 Ag ppm 1	ME- MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.5	ME- MS81 Co ppm 0.5	ME-MS81 Cr ppm 10	ME-MS81 Cs ppm 0.01	ME-MS81 Cu ppm 5	ME-MS81 Dy ppm 0.05	ME- MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.03	ME- MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME- MS81 Hf ppm 0.2	ME- MS81 Ho ppm 0.01
L010151 L010152 L010153 L010154		0.66 0.34 1.02 0.31	5 5 5 5 5 5 5	4460 5880 1845 344	3100 3680 1050 40.5	14.9 67.4 18.5 6.0	70 280 130 40	1.50 5.77 1.25 1.31	18 93 16 11	38.8 66.4 19.95 1.71	15.30 25.5 7.78 0.95	31.1 50.7 14.80 0.67	19.8 33.8 12.8 8.6	68.7 118.5 35.1 2.16	3.0 14.1 5.8 2.8	6.50 11.00 3.32 0.33
L010155 L010156 L010157 L010158 L010159 L010160		0.42 0.44 0.46 0.56 0.36 0.45	ব ব ব ব ব ব ব ব ব ব ব ব ব ব	448 1650 5120 20.8 5130	37.2 37.0 356 4040 13.7 7620	6.4 6.3 7.7 14.5 <0.5 35.6	40 60 50 10 100	1.49 1.49 1.59 1.37 0.21 1.85	14 12 22 18 <5 29	1.70 1.75 5.51 45.2 0.69 118.5	0.91 0.95 2.32 18.20 0.39 47.7	0.62 0.68 3.93 37.2 0.13 90.2	9.3 9.3 11.1 21.7 1.7 40.8	1.98 2.17 9.62 84.0 0.69 210	2.8 3.0 3.2 3.0 1.3 6.5	0.32 0.34 0.96 7.60 0.13 19.80
L010161 L010162 L010163 L010164 L010165		0.31 1.78 1.66 0.47 0.72	2 <1 <1 <1	5000 3120 1895 >10000 >10000	4430 2930 1175 6370 2490	53.6 15.2 9.2 20.4 8.7	190 80 80 50 30	4.50 1.07 0.72 0.34 0.37	79 10 9 5 5	64.7 50.3 15.45 72.0 27.9	25.5 21.0 6.32 28.6 10.90	52.2 35.0 11.85 51.3 22.7	34.8 17.1 9.1 22.9 11.0	120.0 84.3 27.9 119.5 51.7	12.8 2.2 1.9 2.4 1.5	10.70 8.70 2.65 12.10 4.64
L010166 L010167 L010168 L010169 L010170		0.47 0.48 0.61 0.02 0.26	ব ব ব ব ব ব ব ব	8180 6710 292 >10000 723	1660 1550 54.3 9880 116.0	4.2 14.8 4.5 118.0 14.1	10 290 30 390 90	0.13 0.90 1.02 1.85 2.80	<5 11 11 148 26	29.2 24.1 1.65 206 3.88	11.40 9.68 0.84 78.3 2.00	21.0 17.60 0.78 149.5 1.79	7.2 9.6 6.5 56.5 16.4	50.0 41.3 2.22 360 5.35	1.4 2.0 2.0 15.2 4.5	4.91 4.03 0.31 33.7 0.73
L010171 L010172 L010173 L010174 L010175		0.27 0.48 0.17 0.17 0.16	ব ব ব ব ব ব ব ব ব	1555 2680 2410 2640 1770	473 301 325 185.0 209	30.2 21.7 16.2 9.5 19.2	120 70 20 10 60	4.69 3.84 3.83 1.83 2.60	75 49 47 44 65	13.00 8.10 7.90 3.89 7.97	5.64 3.63 3.78 1.77 4.23	7.31 4.75 5.17 2.33 3.78	22.5 27.1 23.6 34.0 24.2	19.70 12.20 12.70 5.78 10.35	15.5 11.9 6.9 7.1 7.7	2.31 1.44 1.48 0.70 1.56
L010176 L010177 L010178 L010179 L010180		0.19 0.46 0.93 0.64 0.22	ত ত ত ত ত ত ত ত	2310 2870 3720 3690 3530	313 831 356 398 351	16.1 10.5 10.2 9.5 8.1	10 20 <10 10 10	4.66 2.36 9.10 4.35 3.36	58 31 34 28 29	7.42 14.05 7.87 8.27 6.60	3.17 6.31 3.32 3.78 2.96	4.59 10.30 5.30 5.51 4.43	26.2 18.6 17.3 24.3 25.4	11.85 24.9 13.25 13.45 10.95	7.8 5.8 6.0 6.7 6.5	1.30 2.46 1.38 1.48 1.15
L010181 L010182 L010183 L010184 L010185		1.07 1.60 2.27 2.04 0.81	ম ম ম ম ম ম ম ম ম ম ম ম ম ম ম ম ম ম ম	5250 1950 1635 1800 3090	367 430 482 525 678	11.3 25.0 35.2 36.5 37.2	30 80 70 10 370	4.68 1.91 2.39 3.95 2.82	25 266 151 164 110	6.68 11.15 18.10 20.6 15.00	2.80 4.35 7.13 8.75 5.95	4.68 7.35 11.35 12.90 10.10	26.7 15.8 21.0 24.2 16.6	10.60 18.20 28.3 32.0 24.4	6.5 4.4 7.0 5.4 6.1	1.14 1.93 3.20 3.69 2.64
L010186 L010187 L010188		0.83 1.23 0.97 1.13	1 ব ব	1660 1845 2450 1970	436 473 405	37.4 36.0 34.2	90 10 10	2.94 3.04 3.43	159 146 148	13.95 18.40 14.80	5.27 7.49 5.99	9.39 10.70 9.81	18.8 22.5 22.0	22.9 27.6 24.3	4.1 6.7 5.9	2.42 3.24 2.61

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To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6 Page: 2 - B Total # Pages: 2 (A - D) Finalized Date: 17- APR- 2012 Account: PCANCC

									C	ERTIFIC	CATEO	FANAL	YSIS	TM120	065153	
Sample Description	Method	ME-MS81	ME- MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME- MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	5	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
L010151		1895	1.82	11	1915	981	81	133	311	27.0	129.5	4	2500	18.1	8.32	72.7
L010152		1925	2.70	17	>2500	1365	216	173	398	111.5	206	12	2980	83.8	14.35	269
L010153		569	0.85	9	1070	375	51	55	111.0	50.9	56.0	3	1625	16.5	4.35	62.0
L010154		21.7	0.14	≪2	12.2	15.9	16	9	4.53	46.7	2.83	<1	259	0.5	0.30	5.36
L010155		19.8	0.13	≪2	8.1	14.9	18	9	4.21	51.0	2.75	<1	270	0.4	0.30	5.45
L010156		19.5	0.14	<2	7.3	15.2	18	9	4.25	49.9	2.82	<1	258	0.4	0.30	5.51
L010157		226	0.28	3	237	113.0	33	17	35.6	51.8	15.25	1	520	2.5	1.19	14.10
L010158		2550	2.13	13	2140	1245	65	183	398	23.7	156.0	4	2600	21.4	9.82	82.6
L010159		8.2	0.07	<2	2.6	4.7	<5	≪5	1.43	10.3	0.81	<1	25.8	0.2	0.11	3.27
L010160		4400	5.79	33	>2500	2580	121	419	797	24.9	352	8	3160	36.0	25.3	263
L010161		2560	2.78	17	>2500	1455	150	221	455	71.1	198.5	10	2410	45.4	14.25	257
L010162		1740	2.58	38	>2500	947	47	93	296	20.7	132.0	4	3170	17.7	10.50	78.8
L010163		725	0.75	14	981	362	30	49	117.5	26.8	46.8	2	2920	3.2	3.37	24.0
L010164		4220	3.00	18	>2500	1795	18	290	595	13.3	213	7	4320	15.9	15.00	110.0
L010165		1540	1.21	18	2020	746	12	87	243	14.2	93.0	3	4030	10.2	6.12	57.5
L010166		906	1.26	42	1640	533	<5	87	165.5	5.7	78.9	3	5380	4.2	6.22	52.2
L010167		813	1.10	13	≥2500	490	85	69	153.5	26.2	68.0	4	4560	6.2	5.10	45.0
L010168		30.8	0.12	<2	27.1	19.5	13	7	5.76	34.0	3.19	<1	200	0.5	0.32	4.79
L010169		5390	8.62	18	≥2500	3510	212	374	>1000	1.3	547	19	≻10000	255	44.5	≻1000
L010170		65.2	0.29	<2	68.3	43.0	38	15	12.60	84.7	7.30	1	316	1.9	0.74	12.80
L010171 L010172 L010173 L010174 L010175		294 179.0 175.0 117.5 133.0	0.66 0.47 0.49 0.22 0.56	3 4 5 7 6	375 439 348 468 405	160.0 104.0 120.5 56.6 71.8	37 21 9 <5 16	22 13 7 13 13	49.3 31.4 35.3 18.20 21.6	92.1 136.0 96.4 178.5 128.5	26.4 16.50 18.65 8.38 12.15	3 2 1 1	709 628 1760 948 1580	11.7 13.2 9.3 9.9 9.3	2.62 1.63 1.62 0.78 1.47	26.7 18.45 21.1 11.95 14.75
L010176 L010177 L010178 L010179 L010180		202 535 195.0 240 225	0.36 0.79 0.41 0.48 0.37	8 7 10 34 12	473 255 333 511 415	102.0 263 131.5 136.5 111.0	\$ 9 \$ \$ 5 \$	14 29 6 20 14	31.8 83.6 39.1 41.5 35.3	124.0 78.7 63.4 120.5 124.0	15.80 38.3 19.45 20.00 16.00	1 1 1 1	1625 2160 4720 2850 2500	14.9 7.0 15.4 16.1 11.0	1.52 2.99 1.63 1.66 1.36	16.05 34.7 21.1 23.6 15.50
L010181		221	0.36	46	449	125.5	10	23	38.7	118.5	17.00	1	2530	11.7	1.37	15.00
L010182		271	0.43	18	144.0	145.0	27	20	43.7	50.7	24.2	1	1220	3.7	2.35	14.30
L010183		292	0.73	33	288	179.0	27	20	51.0	52.3	34.8	2	1800	11.0	3.73	21.9
L010184		334	0.94	94	208	197.0	<5	56	55.5	50.7	40.2	2	1595	7.9	4.15	18.65
L010185		421	0.60	13	198.0	229	93	21	69.0	68.2	34.5	2	2360	10.0	3.13	27.9
L010186		247	0.54	16	317	167.5	24	14	47.4	69.3	30.0	2	1865	11.3	2.97	19.30
L010187		279	0.77	22	304	175.5	<5	15	50.5	48.0	33.1	3	1625	12.8	3.69	15.40
L010188		254	0.62	24	237	149.0	5	16	41.7	43.9	30.6	2	1575	8.6	3.10	14.00
L010189		426	0.93	42	248	231	<5	30	67.1	44.9	49.0	2	1705	7.6	5.20	31.7





ALS Canada Ltd. 2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6 Page: 2 - C Total # Pages: 2 (A - D) Finalized Date: 17- APR- 2012 Account: PCANCC

M Sample Description L010151 L010152 L010153 L010154 L010155 L010156 L010157 L010158	Method Analyte Units LOR	ME- MS81 TI ppm 0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	ME- MS81 Tm ppm 0.01 2.08 3.36 1.04 0.14 0.14 0.13 0.21	ME- MS81 U ppm 0.05 39.4 70.5 13.15 1.27 1.37	ME- MS81 V ppm 5 313 1005 302 38 41	ME- MS81 W ppm 1 6 28 5	ME- MS81 Y ppm 0.5 192.5 310	ME- MS81 Yb ppm 0.03 12.00	ME- MS81 Zn ppm 5	ME-MS81 Zr ppm 2	ME- ICP06 SiO2 % 0.01	ME- ICP06 AI2O3 % 0.01	ME- ICP06 Fe2O3 % 0.01	ME- ICP06 CaO %	ME- ICP06 MgO %	ME- ICP06 Na2O %
L010151 L010152 L010153 L010154 L010155 L010156 L010157 L010158 L010158		<0.5 1.1 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 0.6	2.08 3.36 1.04 0.14 0.14 0.13 0.21	39.4 70.5 13.15 1.27 1.37	313 1005 302 38 41	6 28 5	192.5 310	12.00	079					0.01	0.01	0.01
L010158		0.6		2.32	41	1	91.5 9.3 9.6 9.4 26.2	18.45 5.67 0.87 0.86 0.86	853 213 30 31 32	191 763 259 103 109 107 131	18.65 15.65 40.3 39.9 43.1 41.9	5.31 8.33 5.99 7.16 7.88 7.61 7.72	9.12 25.4 5.93 2.37 2.55 2.64 2.41	28.3 11.90 18.20 20.5 18.80 19.55 19.55	2.05 4.28 4.14 4.65 4.63 4.64	0.59 0.28 1.60 1.51 1.60 1.56
L010159 L010160		<0.5 1.3 1.0	2.43 0.07 6.58 3.33	3.33 45.6 1.02 67.8 67.8	298 <5 1050 830	6 <1 13 15	20.3 211 4.2 557 283	1.87 13.95 0.44 38.8 18.70	991 6 1280 843	207 43 349 631	40.4 17.45 96.9 10.30 18.55	5.35 1.15 4.12 8.07	9.14 0.60 20.2 22.3	19.35 29.4 0.27 23.5 14.60	4.14 1.65 0.16 1.18 2.96	0.60 0.01 0.39 0.51
L010162		0.5	2.86	23.9	392	3	255	16.80	708	98	9.82	2.45	9.00	36.4	2.05	0.52
L010163		<0.5	0.84	7.09	142	1	75.0	5.04	215	82	24.3	3.75	4.57	30.8	3.95	1.06
L010164		<0.5	3.66	36.6	402	5	347	20.2	1170	167	3.85	0.63	9.94	39.0	1.24	0.53
L010165		<0.5	1.42	20.1	237	3	125.5	8.09	385	100	8.79	1.43	5.35	38.3	3.04	0.52
L010166 L010167 L010168 L010169 L010170		<0.5 <0.5 <0.5 2.1 <0.5	1.53 1.28 0.12 10.30 0.29	6.55 6.33 1.16 144.0 2.99	254 36 1430 105	3 5 1 28 2	134.5 114.5 8.9 944 21.0	8.65 7.44 0.75 56.7 1.81	277 243 25 1050 77	83 117 79 948 198	1.43 5.46 28.1 2.68 52.3	0.24 1.02 5.02 11.65 12.10	5.30 2.00 45.2 5.21	42.3 42.3 22.4 2.92 10.25	5.69 3.87 10.70 0.71 3.20	0.25 0.46 0.89 0.09 1.82
L010171		0.5	0.77	7.02	416	15	60.3	4.50	151	836	53.5	13.10	14.55	2.59	1.69	0.49
L010172		<0.5	0.49	5.47	360	12	39.7	3.02	138	821	50.1	15.05	11.40	3.58	1.81	1.06
L010173		<0.5	0.54	4.04	422	24	41.8	3.18	136	438	38.2	13.30	8.72	14.85	2.42	1.04
L010174		<0.5	0.24	4.99	234	10	20.8	1.47	122	613	49.0	15.60	5.55	7.56	1.49	0.76
L010175		0.6	0.64	6.06	415	30	46.1	3.70	138	427	37.6	11.05	8.00	14.95	3.02	0.54
L010176		<0.5	0.44	7.77	346	10	36.8	2.39	139	578	39.3	12.90	7.93	15.40	2.84	1.06
L010177		<0.5	0.89	4.58	370	27	71.0	5.26	166	327	32.8	9.81	6.93	17.75	5.02	0.80
L010178		<0.5	0.46	6.64	385	10	38.0	2.62	120	395	30.0	10.35	7.37	22.4	2.67	2.01
L010179		<0.5	0.52	20.7	315	13	41.6	3.02	144	537	36.8	12.40	6.31	15.85	3.90	1.74
L010180		<0.5	0.40	7.61	319	9	33.5	2.36	134	499	39.3	14.00	6.03	14.15	3.02	1.47
L010181		<0.5	0.38	9.65	336	8	31.0	2.38	149	474	37.1	13.25	6.88	14.45	3.14	1.68
L010182		<0.5	0.53	3.22	262	5	51.7	2.98	118	218	37.0	6.72	7.05	20.7	5.51	1.44
L010183		<0.5	0.91	5.79	423	11	83.0	5.19	168	500	27.7	7.01	11.35	22.3	7.56	0.69
L010184		0.5	1.14	5.18	388	8	99.0	6.69	224	479	29.8	9.30	12.00	21.4	6.09	1.36
L010185		<0.5	0.74	9.09	396	9	70.4	4.23	162	368	21.5	5.66	9.03	25.4	8.11	0.53
L010186		<0.5	0.65	7.29	495	12	62.2	3.68	145	254	25.9	6.80	11.10	22.5	7.23	0.74
L010187		<0.5	0.95	5.10	378	11	87.1	5.47	198	576	30.1	7.95	12.10	21.6	6.72	0.91
L010188		<0.5	0.74	5.05	387	7	69.8	4.38	164	453	31.0	7.72	11.35	22.6	6.87	0.92
L010189		<0.5	1.19	4.15	427	15	111.5	6.71	191	371	25.6	6.57	10.55	21.9	7.36	0.91







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

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marcia									CI	RTIFIC	CATE OF ANALYS	SIS TM12065153
Sample Description	Method Analyte Units LOR	ME- ICP06 K20 % 0.01	ME- ICP06 Cr2O3 % 0.01	ME- ICP06 TiO2 % 0.01	ME- ICP06 MnO % 0.01	ME- ICP06 P2O5 % 0.01	ME- ICP06 SrO % 0.01	ME- ICP06 BaO % 0.01	OA- GRA05 LOI % 0.01	TOT-ICP06 Total % 0.01	Nb-XRF10 Nb % 0.01	
L010151 L010152 L010153 L010154 L010155		0.68 1.66 1.66 1.51 1.67	0.01 0.04 0.02 0.01 0.01	0.63 3.33 0.76 0.25 0.27	1.20 2.14 0.44 0.04 0.04	16.65 10.90 4.29 0.09 0.09	0.27 0.34 0.19 0.03 0.03	0.47 0.64 0.21 0.04 0.04	11.55 11.10 13.70 21.9 20.1	95.48 95.99 97.43 99.96 100.81	0.23 0.40 0.13 0.01 0.01	
L010136 L010157 L010158 L010159 L010160		1.59 0.65 0.30 0.47	0.01 0.01 <0.01 <0.01 0.01	0.32 0.59 0.03 1.13	0.00 0.13 1.27 0.01 3.72	1.54 18.45 0.02 17.70	0.03 0.06 0.31 <0.01 0.36	0.03 0.19 0.59 <0.01 0.59	19.55 10.50 0.75 10.15	100.09 95.96 100.20 93.82	0.03 0.27 0.01 0.59	
L010161 L010162 L010163 L010164 L010165		1.18 0.55 0.92 0.30 0.40	0.03 0.01 0.01 0.01 <0.01	2.64 0.33 0.22 0.37 0.30	1.93 1.76 0.62 1.72 1.27	11.15 23.4 5.18 24.7 7.24	0.29 0.35 0.34 0.48 0.48	0.61 0.35 0.22 1.22 1.34	11.80 8.74 23.2 8.72 27.5	96.62 95.73 99.14 92.71 95.96	0.42 0.63 0.14 1.32 0.28	
L010166 L010167 L010168 L010169 L010170		0.17 0.73 1.24 0.04 2.38	<0.01 0.04 <0.01 0.05 0.01	0.19 0.54 0.22 3.27 0.54	0.90 1.07 0.04 3.03 0.13	4.01 3.60 0.12 8.31 0.30	0.63 0.52 0.02 1.56 0.04	0.94 0.78 0.03 1.34 0.08	35.5 33.0 29.6 12.35 12.45	96.02 98.69 100.38 93.20 100.81	0.25 0.33 0.01 1.58 0.02	
L010171 L010172 L010173 L010174 L010175		1.82 4.88 3.89 8.49 5.61	0.02 0.01 <0.01 <0.01 0.01	2.35 1.55 1.09 0.64 1.41	0.14 0.20 0.45 0.22 0.41	1.14 1.02 1.75 0.76 1.38	0.08 0.08 0.20 0.11 0.18	0.18 0.33 0.28 0.31 0.21	9.40 7.71 14.05 9.39 15.60	101.05 98.78 100.24 99.88 99.97	0.04 0.05 0.04 0.05 0.04	
L010176 L010177 L010178 L010179 L010180		5.52 3.80 2.47 5.18 5.54	<0.01 <0.01 <0.01 <0.01 <0.01	1.20 0.82 1.05 0.78 0.76	0.32 0.46 0.30 0.34 0.30	1.25 1.01 1.22 0.95 0.77	0.19 0.26 0.55 0.33 0.29	0.27 0.34 0.43 0.44 0.42	12.15 18.35 17.65 15.00 14.45	100.33 98.15 98.47 100.02 100.50	0.05 0.03 0.03 0.05 0.04	
L010181 L010182 L010183 L010184 L010185		5.18 1.86 2.11 2.24 2.07	<0.01 0.01 0.01 <0.01 0.05	0.70 1.08 2.24 2.09 1.79	0.31 0.24 0.37 0.38 0.41	0.82 2.48 2.32 2.37 2.38	0.28 0.14 0.21 0.18 0.27	0.58 0.22 0.18 0.20 0.34	14.10 14.25 15.10 10.90 20.6	98.47 98.70 99.15 98.31 98.14	0.04 0.01 0.03 0.03 0.04	
L010186 L010187 L010188 L010189		2.75 1.85 1.78 2.24	0.01 <0.01 <0.01 <0.01	2.32 2.63 2.04 1.98	0.33 0.36 0.37 0.45	2.23 2.12 2.00 2.49	0.22 0.19 0.19 0.20	0.19 0.21 0.28 0.22	16.10 11.90 11.50 17.60	98.42 98.64 98.62 98.07	0.05 0.04 0.03 0.03	







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

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Page: 1 Finalized Date: 21- APR- 2012 Account: PCANCC

CERTIFICATE TM12065154

Project: P.O. No.:

This report is for 47 Drill Core samples submitted to our lab in Timmins, ON, Canada on 23-MAR- 2012.

The following have access	to data associated with this	certificate:
STEVE CASE TIM HORNER	BRUCE DAVIS ROBERT SIM	RAY DUJARDIN

ALS CODE DESCRIPTION											
ALS CODE	DESCRIPTION										
WEI- 21	Received Sample Weight										
LOG- 22	Sample login - Rcd w/o BarCode										
CRU- QC	Crushing QC Test										
CRU- 31	Fine crushing - 70% < 2mm										
PUL- QC	Pulverizing QC Test										
SPL-21	Split sample - riffle splitter										
PUL- 31	Pulverize split to 85% < 75 um										
		FC									
	ANALT IICAL PROCEDUR	E3									
ALS CODE	DESCRIPTION	INSTRUMENT									
ME- ICP06	Whole Rock Package - ICP- AES	ICP- AES									
OA- GRA05	Loss on Ignition at 1000C	WST- SEQ									
ME- MS81	38 element fusion ICP- MS	ICP- MS									
TOT- ICP06	Total Calculation for ICP06	ICP- AES									
ME- XRF10	Fusion XRF - Ore Grade	XRF									
OA- GRA06	LOI for ME- XRF06	WST- SIM									
OA- GRA06 Nb- XRF10	LOI for ME- XRF06 Fusion XRF - Nb Ore Grade	WST- SIM XRF									

To: PHOSCAN CHEMICAL CORP. ATTN: ROBERT SIM 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Colin Ramshaw, Vancouver Laboratory Manager 1







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

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minera	IS								C	RTIFIC	ATE O	FANAL	YSIS	TM120	65154	
Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS81 Ag ppm 1	ME- MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.5	ME-MS81 Co ppm 0.5	ME-MS81 Cr ppm 10	ME-MS81 Cs ppm 0.01	ME-MS81 Cu ppm 5	ME-MS81 Dy ppm 0.05	ME- MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.03	ME- MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME- MS81 Hf ppm 0.2	ME-MS81 Ho ppm 0.01
L010190 L010191 L010192 L010193 L010194		0.95 0.73 0.34 0.27 0.40	<1 <1 2 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	400 5380 4140 3640 3080	40.8 1490 2510 2560 1830	6.7 18.2 28.3 42.8 53.5	50 120 220 600 370	1.41 3.26 0.93 1.99 2.11	10 28 25 51 56	1.70 27.5 44.7 38.2 35.7	0.91 10.95 18.20 15.40 12.05	0.69 19.40 33.1 28.7 30.0	9.7 16.4 17.0 21.1 19.8	2.13 44.5 73.5 61.5 68.8	2.8 2.9 4.1 3.8 5.0	0.33 4.65 7.56 6.58 5.64
L010195 L010196 L010197 L010198 L010199		0.65 0.42 0.90 0.33 0.44	1 1 2 1 1	2800 2250 1445 1945 24.1	1640 1565 957 1120 18.3	21.8 13.6 10.5 5.6 0.5	110 70 30 10 10	0.90 0.37 0.18 0.11 0.20	19 8 <5 <5 <5	28.6 27.6 21.6 16.80 0.78	11.65 10.05 8.30 6.76 0.43	20.9 22.0 15.45 13.20 0.22	11.3 8.6 6.1 6.6 2.1	47.8 50.1 36.0 28.9 0.86	2.0 2.0 1.0 2.1 1.2	4.86 4.46 3.58 2.86 0.15
L010200 L010201 L010202 L010203 L010204		0.24 0.18 0.34 0.28 0.51	ব ব 1 1	670 960 1500 1685 3420	66.1 362 1195 1485 2200	9.5 11.3 8.2 13.6 20.3	60 60 40 50 60	1.90 1.53 0.41 0.84 1.12	15 14 7 11 13	2.57 7.07 26.1 25.0 36.0	1.38 2.57 7.17 7.59 11.60	1.04 5.91 28.2 24.2 32.8	12.0 11.7 8.4 13.0 16.3	3.31 13.45 61.8 53.7 73.8	3.6 3.6 1.9 3.4 3.4	0.49 1.14 3.77 3.73 5.56
L010205 L010206 L010207 L010208 L010209		0.42 0.36 0.58 1.44 1.39	1 ব ব ব	1280 1540 1390 1170 1345	1040 1300 1160 791 1200	11.4 11.3 10.5 7.2 10.6	30 60 40 30 30	0.55 0.67 0.43 0.37 0.41	5 8 6 6	17.15 21.4 19.00 13.75 20.8	5.44 6.63 5.96 4.31 6.61	16.45 20.3 18.05 12.30 18.90	7.5 11.8 10.4 8.7 9.6	34.7 46.0 39.9 27.1 41.5	1.4 3.5 2.9 3.0 2.9	2.59 3.26 2.87 2.08 3.17
L010210 L010211 L010212 L010213 L010214		1.36 0.39 0.52 0.18 0.68	1 1 1 1	1410 1340 1160 1295 940	1120 1160 783 783 908	12.4 11.6 9.5 7.2 8.6	50 40 30 30 20	0.51 0.33 0.58 0.37 0.37	16 32 9 7 8	17.60 18.90 14.80 16.40 20.3	5.69 5.99 4.40 4.87 5.86	16.20 17.65 14.05 14.85 19.25	10.8 8.6 11.7 9.6 9.8	36.1 38.7 31.1 33.3 43.2	3.1 2.7 2.4 2.4 2.4	2.66 2.88 2.17 2.44 2.99
L010215 L010216 L010217 L010218 L010219		0.63 0.47 0.55 1.05 0.60	ণ ণ ণ ণ	803 914 891 481 780	728 846 748 53.4 153.5	4.1 5.2 3.8 9.1 18.0	<10 10 <10 60 110	0.11 0.12 0.14 1.79 3.16	<5 <5 <5 18 22	12.25 10.60 13.30 2.39 5.60	4.32 3.68 4.63 1.29 2.80	10.05 9.38 10.90 0.92 2.48	5.3 4.9 4.6 11.9 16.9	22.4 19.95 23.8 2.96 7.24	1.0 0.5 0.9 3.5 7.4	1.95 1.67 2.10 0.47 1.05
L010220 L010221 L010222 L010223 L010224		0.35 0.12 0.39 0.08 0.41	<1 <1 4 2 2	1260 1830 3350 3120 4000	938 1745 3820 3880 3160	20.0 16.8 15.5 18.6 16.2	130 210 300 290 460	0.54 0.84 0.63 0.60 0.65	19 49 58 51 69	31.6 68.2 110.5 105.5 180.5	10.45 21.2 43.7 39.1 55.3	19.00 33.1 65.7 70.3 124.0	26.2 35.8 68.4 59.7 55.6	58.3 109.0 173.0 179.5 337	9.4 15.8 21.8 21.1 22.3	4.74 10.25 19.15 17.55 27.9
L010225 L010226 L010227 L010228 L010229		0.68 0.26 0.15 0.28 0.18	14 3 3 6 4	>10000 4600 6820 6440 6920	7020 4170 4520 4270 1865	481 46.5 69.4 93.6 140.0	440 220 240 270 130	1.07 0.60 0.65 0.77 0.38	179 79 91 94 86	173.5 61.2 77.4 87.7 41.3	80.9 25.3 34.7 39.7 18.75	104.0 46.3 54.9 57.1 26.9	75.3 56.4 54.2 55.0 26.2	276 105.0 129.0 141.0 67.4	20.9 20.0 17.4 16.1 7.4	32.5 10.50 13.75 15.85 7.51
Comments: Samples	with high	rare earth	elemente v	ill have low	whole rov	k totale										

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To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

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minera	15								C	RTIFIC	CATE O	F ANAL	YSIS	TM120	065154	
Sample Description	Method	ME-MS81	ME- MS81	ME- MS81	ME-MS81	ME-MS81	ME- MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tib	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	S	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
L010190		21.5	0.14	√2	13.4	16.9	18	10	4.61	50.6	2.93	1	259	0.7	0.31	6.10
L010191		831	1.25	4	2290	516	95	62	150.5	44.4	72.7	3	2150	16.0	5.73	126.0
L010192		1470	2.19	5	>2500	879	164	102	262	7.8	122.0	4	3410	32.6	9.48	208
L010193		1365	1.80	5	1940	871	230	55	264	28.1	110.0	5	2750	8.3	7.87	156.5
L010194		886	1.15	8	>2500	746	174	70	208	59.0	112.5	6	2780	161.0	8.22	90.3
L010195 L010196 L010197 L010198 L010198 L010199		914 846 567 630 10.7	1.34 0.99 0.94 0.77 0.07	5 3 3 2 2	2050 1390 933 732 8.4	556 557 374 388 6.6	44 21 38 <5 <5	37 23 36 15 <5	169.0 167.0 101.5 110.0 1.94	22.5 9.1 2.2 3.2 11.2	77.0 79.8 53.5 48.9 1.08	3 2 1 3 <1	5480 5850 2190 6390 38.3	38.6 86.4 18.5 34.5 0.5	6.09 6.20 4.66 3.68 0.14	114.0 311 96.5 121.0 3.90
L010200		35.7	0.19	<2	34.2	26.5	26	12	7.32	63.8	4.44	1	243	1.3	0.49	9.24
L010201		191.0	0.27	<2	594	146.0	23	22	40.1	53.2	22.2	2	839	4.5	1.59	33.2
L010202		606	0.50	3	1080	512	10	40	133.0	9.4	100.5	2	3800	4.9	6.65	74.9
L010203		794	0.62	4	2260	565	18	39	159.0	24.8	89.4	3	3170	17.5	5.98	84.0
L010203		1160	1.02	6	>2500	821	26	64	234	10.9	121.5	4	5270	28.8	8.48	130.0
L010205 L010206 L010207 L010208 L010208		520 669 592 404 603	0.49 0.53 0.47 0.37 0.56	3 3 2 3	1150 2200 2180 1700 1940	419 493 466 315 470	9 17 11 10 10	25 36 29 21 34	110.5 139.5 124.5 84.1 125.0	9.4 23.2 20.0 22.5 10.8	60.9 74.8 66.5 45.3 68.9	2 3 2 3	4820 3050 3270 2950 4270	8.7 25.0 22.9 21.1 28.2	3.96 5.15 4.53 3.15 4.88	61.2 93.6 91.8 90.8 152.0
L010210 L010211 L010212 L010213 L010214		572 576 394 387 440	0.47 0.48 0.35 0.39 0.41	4 8 4 3 3	2470 2170 2130 1925 2030	439 461 329 331 405	18 20 10 9 8	28 26 17 26 21	116.5 123.0 85.5 89.1 100.5	20.3 10.4 29.4 22.8 20.3	62.0 65.0 50.3 53.5 66.5	4 2 2 2	3060 4150 2770 2600 3320	26.8 25.9 14.2 9.2 11.0	4.08 4.46 3.53 3.86 4.89	100.0 116.5 69.5 88.5 57.9
L010215 L010216 L010217 L010218 L010219		377 519 383 29.2 90.4	0.44 0.37 0.49 0.19 0.40	3 2 <2 2	1850 803 1455 22.8 119.0	261 274 274 22.2 61.6	<5 <5 25 38	10 12 25 11 21	75.4 83.3 79.5 6.05 17.35	6.5 3.8 3.0 63.2 86.4	35.9 34.3 38.9 3.84 9.78	2 1 2 1 2	6000 6340 5260 229 315	3.3 1.9 2.7 1.0 2.9	2.71 2.38 2.95 0.44 1.05	24.0 16.00 44.1 8.00 17.40
L010220		498	1.04	7	762	289	30	58	85.2	38.8	51.6	5	978	9.4	7.43	71.6
L010221		927	1.70	13	710	515	55	101	155.5	22.8	88.1	7	1985	9.7	14.90	139.5
L010222		2150	4.32	17	>2500	1420	53	166	377	3.1	239	9	5790	72.0	22.4	283
L010223		2310	3.81	17	>2500	1590	54	154	421	6.3	263	8	6350	84.3	22.9	299
L010224		2070	4.08	16	1735	2130	73	137	472	4.9	433	7	4290	47.3	40.3	211
L010225		3710	9.49	44	>2500	2420	348	197	713	1.3	396	16	>10000	199.0	35.3	553
L010226		2240	3.92	11	>2500	1345	84	124	396	2.7	186.5	13	4700	138.0	12.90	335
L010227		2450	5.25	13	>2500	1530	142	137	447	3.6	221	10	8200	120.5	16.20	357
L010228		2320	5.99	11	>2500	1470	121	137	419	8.7	220	8	6820	100.5	18.20	322
L010229		990	2.93	23	2060	673	184	86	198.5	11.7	103.5	7	5020	42.4	8.61	142.0







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

Page: 2 - C Total # Pages: 3 (A - D) Finalized Date: 21- APR- 2012 Account: PCANCC

									C	RTIFIC	CATE O	ANAL	YSIS	TM120	65154	é.
Sample Description	Method Analyte Units LOR	ME-MS81 TI ppm 0.5	ME-MS81 Tm ppm 0.01	ME- MS81 U ppm 0.05	ME-MS81 V ppm 5	ME-MS81 W ppm 1	ME-MS81 Y ppm 0.5	ME-MS81 Yb ppm 0.03	ME-MS81 Zn ppm 5	ME-MS81 Zr ppm 2	ME- ICP06 SiO2 % 0.01	ME- ICP06 AI2O3 % 0.01	ME- ICP06 Fe2O3 % 0.01	ME- ICP06 CaO % 0.01	ME- ICP06 MgO % 0.01	ME- ICP06 Na2O % 0.01
L010190 L010191 L010192 L010193 L010194		<0.5 <0.5 <0.5 0.7 0.9	0.14 1.44 2.45 2.05 1.48	1.32 31.0 30.0 21.9 24.2	42 279 398 526 460	<1 8 8 6	9.7 128.0 204 184.5 140.0	0.85 8.32 14.75 12.30 8.13	30 536 779 657 509	109 156 315 202 355	41.1 23.3 8.91 11.70 13.20	7.38 6.47 2.40 3.42 2.97	2.41 8.62 11.05 13.65 12.20	19.60 25.5 36.0 30.8 32.2	4.91 3.44 1.83 3.74 5.51	1.50 0.87 0.36 0.25 0.25
L010195 L010196 L010197 L010198 L010199		0.6 ⊄0.5 ⊄0.5 ⊄0.5 ₹0.5	1.55 1.24 1.09 0.89 0.07	30.4 57.4 74.3 38.6 1.27	224 192 383 127 <5	3 2 <1 <1	132.0 114.0 101.0 76.4 4.7	9.17 6.91 6.40 5.29 0.45	307 223 598 71 8	131 109 70 136 39	5.36 2.64 1.48 0.75 96.3	1.44 0.71 0.38 0.22 1.24	5.53 5.11 5.90 3.50 0.52	42.5 44.0 47.6 45.4 0.41	3.45 4.27 0.60 4.44 0.18	0.21 0.18 0.08 0.11 0.01
L010200 L010201 L010202 L010203 L010203		<0.5 <0.5 <0.5 <0.5 0.8	0.20 0.33 0.78 0.87 1.36	1.98 6.18 18.70 19.85 39.8	65 85 113 131 188	1 2 2 4	14.2 30.4 90.6 93.0 134.0	1.25 1.90 3.84 4.38 7.21	45 119 399 333 733	141 156 118 188 193	48.3 44.2 10.30 28.6 10.65	8.75 7.56 1.82 4.60 3.63	3.32 4.14 5.39 5.68 9.86	16.10 17.95 35.8 25.7 30.4	3.49 3.49 6.05 3.45 5.43	1.36 1.25 0.34 0.94 0.32
L010205 L010206 L010207 L010208 L010208		0.5 0.5 ⊄0.5 ⊄0.5 ≪0.5	0.65 0.78 0.68 0.51 0.77	24.8 24.4 21.7 16.05 34.4	62 122 134 105 277	1 2 1 1	65.3 80.3 70.8 52.0 80.0	3.42 3.97 3.45 2.70 4.04	388 273 231 163 302	69 183 146 143 150	7.14 36.6 32.8 38.7 16.60	1.23 4.39 3.73 3.91 2.08	4.37 4.68 4.42 3.34 5.96	36.6 22.9 25.1 24.8 35.4	8.41 4.00 4.41 2.97 3.33	0.25 1.04 0.93 1.00 0.48
L010210 L010211 L010212 L010213 L010214		<0.5<0.50.5<0.5<0.5<0.5	0.65 0.69 0.50 0.56 0.65	27.0 27.9 19.85 13.05 12.95	222 193 77 79 85	2 2 1 1 1	67.6 72.2 54.9 60.0 72.8	3.39 3.63 2.49 2.84 3.17	289 314 238 198 208	159 143 126 118 130	33.9 15.25 40.0 35.9 31.8	3.80 1.90 4.68 4.22 3.65	7.14 8.31 3.81 3.70 3.81	24.3 34.0 22.1 23.8 27.7	3.58 4.25 4.02 4.69 3.85	0.88 0.50 1.29 1.16 1.03
L010215 L010216 L010217 L010218 L010219		 ₹0.5 ₹0.5 ₹0.5 ₹0.5 ₹0.5 	0.54 0.46 0.59 0.19 0.41	5.01 4.32 6.99 1.66 3.92	144 119 29 66 134	<1 1 1 3	52.1 44.6 55.4 13.5 29.7	2.99 2.59 3.37 1.20 2.56	44 169 91 41 82	40 22 38 140 297	1.98 0.98 0.98 51.3 67.1	0.33 0.17 0.20 9.06 12.00	2.38 2.91 1.98 3.47 4.84	44.4 41.4 45.4 15.10 2.33	5.69 8.53 5.79 3.18 1.46	0.14 0.09 0.10 1.49 1.31
L010220 L010221 L010222 L010223 L010224			1.33 2.51 5.43 4.80 6.04	23.7 44.1 103.0 97.3 90.9	630 845 1255 1070 846	16 27 42 36 40	104.0 212 470 413 525	7.73 13.65 30.9 27.7 32.7	97 87 119 115 121	505 872 1180 1210 1210	47.1 30.4 14.00 17.70 26.5	15.65 25.8 26.2 23.7 25.7	17.25 19.85 35.8 33.3 26.7	2.40 1.42 0.61 1.32 0.50	0.55 0.47 0.12 0.28 0.12	1.27 0.43 0.11 0.17 0.11
L010225 L010226 L010227 L010228 L010229		2.3 0.6 0.8 1.2 1.4	10.50 3.54 4.76 5.50 2.61	165.5 112.0 134.0 125.0 101.0	1615 1210 914 717 842	37 43 43 47 21	925 290 413 458 222	63.6 22.7 30.3 35.6 16.65	675 389 500 323 901	1650 1350 1110 972 564	6.14 21.6 23.7 27.9 17.00	13.15 19.30 19.25 21.6 5.94	49.7 38.6 29.1 24.8 25.9	1.13 0.94 3.59 2.21 21.2	0.59 0.36 0.29 0.45 0.50	0.18 0.14 0.18 0.38 0.51
Comments: Samples	with high	rare earth	elements w	vill have low	whole rou	k totals										







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6 Page: 2 - D Total # Pages: 3 (A - D) Finalized Date: 21- APR- 2012 Account: PCANCC

minera	15								CE	RTIFIC	ATE OF ANALYSIS	TM12065154
Sample Description	Method Analyte Units LOR	ME- ICP06 K2O % 0.01	ME- ICP06 Cr2O3 % 0.01	ME- ICP06 TiO2 % 0.01	ME- ICP06 MnO % 0.01	ME-ICP06 P2O5 % 0.01	ME- ICP06 SrO % 0.01	ME- ICP06 BaO % 0.01	OA- GRA05 LOI % 0.01	TOT-ICP06 Total % 0.01	Nb-XRF10 Nb % 0.01	
L010190 L010191 L010192 L010193 L010194		1.65 1.21 0.22 0.78 1.60	0.01 0.01 0.03 0.08 0.05	0.26 0.61 0.60 1.28 1.22	0.04 0.71 1.61 1.74 1.14	0.10 12.45 25.0 22.3 23.6	0.03 0.25 0.40 0.33 0.32	0.04 0.61 0.48 0.45 0.36	21.0 14.10 7.78 6.72 3.99	100.03 98.15 96.67 97.24 98.61	0.01 0.29 0.35 0.41 0.78	
L010195 L010196 L010197 L010198 L010199		0.61 0.26 0.05 0.09 0.34	0.01 0.01 0.01 <0.01 <0.01	0.59 0.24 0.14 0.07 0.03	1.15 0.89 0.49 0.70 0.01	8.92 9.75 33.1 3.08 0.05	0.64 0.70 0.26 0.76 0.01	0.32 0.26 0.17 0.23 <0.01	28.0 30.0 6.03 38.8 0.82	98.73 99.02 96.29 98.15 99.92	0.28 0.22 0.17 0.14 0.01	
L010200 L010201 L010202 L010203 L010204		1.93 1.68 0.31 0.83 0.25	0.01 0.01 ⊲0.01 0.01 0.01	0.35 0.34 0.15 0.31 0.35	0.06 0.20 0.96 0.81 1.16	0.22 1.90 6.84 9.84 12.05	0.03 0.10 0.45 0.36 0.61	0.08 0.12 0.17 0.19 0.39	16.80 16.75 29.6 15.40 21.4	100.80 99.69 98.18 96.72 96.51	0.01 0.07 0.19 0.28 0.34	
L010205 L010206 L010207 L010208 L010209		0.26 0.85 0.76 0.84 0.36	<0.01 0.01 <0.01 <0.01 <0.01	0.12 0.36 0.28 0.23 0.28	0.93 0.44 0.46 0.32 0.62	5.50 10.45 9.35 5.39 8.35	0.56 0.36 0.38 0.35 0.49	0.15 0.18 0.16 0.14 0.16	33.6 12.95 15.80 17.75 24.2	99.12 99.21 98.58 99.74 98.31	0.20 0.26 0.26 0.19 0.29	
L010210 L010211 L010212 L010213 L010214		0.73 0.38 0.98 0.84 0.74	0.01 0.01 <0.01 <0.01 <0.01	0.39 0.28 0.33 0.22 0.28	0.69 0.62 0.38 0.40 0.40	8.34 9.50 6.73 5.89 8.21	0.36 0.49 0.32 0.31 0.39	0.17 0.16 0.13 0.16 0.12	15.25 23.0 14.90 18.25 17.75	99.54 98.65 99.67 99.54 99.73	0.27 0.30 0.24 0.22 0.24	
L010215 L010216 L010217 L010218 L010219		0.15 0.09 0.07 2.00 2.35	<0.01 <0.01 <0.01 0.01 0.01	0.09 0.05 0.03 0.37 0.67	0.37 0.57 0.46 0.06 0.11	3.51 1.96 2.61 0.12 0.30	0.71 0.76 0.62 0.03 0.04	0.09 0.11 0.11 0.06 0.09	37.9 40.4 40.5 15.50 6.41	97.74 98.02 98.85 101.75 99.02	0.31 0.14 0.25 0.01 0.02	
L010220 L010221 L010222 L010223 L010224		1.39 0.64 0.03 0.14 0.09	0.02 0.03 0.04 0.04 0.06	1.69 2.75 3.66 3.13 3.30	0.59 0.10 0.11 0.10 0.13	0.77 1.17 2.51 2.58 2.33	0.13 0.25 0.68 0.72 0.49	0.15 0.22 0.42 0.40 0.48	9.05 15.25 14.85 15.20 12.55	98.01 98.78 99.14 98.78 99.06	0.12 0.17 0.41 0.43 0.28	
L010225 L010226 L010227 L010228 L010229		0.01 0.05 0.08 0.27 0.40	0.06 0.03 0.03 0.03 0.02	3.21 3.04 2.53 2.35 1.23	3.58 0.51 0.81 1.00 2.59	5.78 2.72 5.59 3.92 14.95	1.13 0.54 0.92 0.79 0.57	1.54 0.55 0.80 0.78 0.84	11.20 11.40 11.95 12.50 7.18	97.40 99.78 98.82 98.98 98.83	1.09 0.51 0.58 0.54 0.36	







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6 Page: 1 Finalized Date: 20- APR- 2012 Account: PCANCC

Project: P.O. No.:

This report is for 32 Soil samples submitted to our lab in Timmins, ON, Canada on 23-MAR- 2012.

CERTIFICATE TM12065155

The following have access to data associated with this certificate: STEVE CASE TIM HORNER
BRUCE DAVIS ROBERT SIM
RAY DUJARDIN

ALS CODE	DESCRIPTION	
WEI-21	Received Sample Weight	
LOG- 22	Sample login - Rcd w/o BarCode	
CRU-QC	Crushing QC Test	
CRU- 31	Fine crushing - 70% < 2mm	
PUL- QC	Pulverizing QC Test	
SPL- 21	Split sample - riffle splitter	
PUL- 31	Pulverize split to 85% < 75 um	
LOG-23	Pulp Login - Rcvd with Barcode	

ANALYTICAL PROCEDURES									
ALS CODE	DESCRIPTION	INSTRUMENT							
ME- ICP06	Whole Rock Package - ICP- AES	ICP- AES							
OA- GRA05	Loss on Ignition at 1000C	WST- SEQ							
ME- MS81	38 element fusion ICP- MS	ICP- MS							
TOT-ICP06	Total Calculation for ICP06	ICP- AES							
ME- XRF10	Fusion XRF - Ore Grade	XRF							
OA- GRA06	LOI for ME- XRF06	WST- SIM							
Nb- XRF10	Fusion XRF - Nb Ore Grade	XRF							

TO: PHOSCAN CHEMICAL CORP. ATTN: STEVE CASE 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Colin Ramshaw, Vancouver Laboratory Manager







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6 Page: 2 - A Total # Pages: 2 (A - D) Finalized Date: 20- APR- 2012 Account: PCANCC

minera			C	RTIFIC	CATE O	F ANAL	YSIS	TM120)65155	1						
Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS81 Ag ppm 1	ME- MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.5	ME-MS81 Co ppm 0.5	ME-MS81 Cr ppm 10	ME-MS81 Cs ppm 0.01	ME-MS81 Cu ppm 5	ME-MS81 Dy ppm 0.05	ME- MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.03	ME-MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME-MS81 Hf ppm 0.2	ME-MS81 Ho ppm 0.01
L010237 L010238 L010239 L010240 L010241		0.81 0.84 0.84 0.97 0.02	र र र र र	370 3700 2720 2020 >10000	34.7 1900 1890 1520 9590	7.1 27.5 46.4 14.1 111.5	50 80 40 70 370	1.32 3.35 7.71 0.80 1.55	13 82 87 23 143	1.62 36.2 38.6 42.4 212	0.91 14.50 16.20 20.6 81.1	0.61 23.7 24.5 23.3 150.5	9.5 24.4 31.5 12.5 60.2	2.10 58.9 60.7 59.9 374	2.8 6.8 14.3 4.0 16.5	0.34 6.25 6.84 8.04 35.5
L010242 L010243 L010244 L010245 L010246		0.20 0.67 0.36 0.34 0.30	র হ হ হ হ	1590 4190 1875 1890 1725	1030 1565 1930 1350 1475	51.4 29.3 25.7 40.3 26.3	20 30 30 320 20	10.15 6.43 1.15 4.13 7.57	118 120 48 90 104	21.1 29.6 184.5 35.7 38.0	9.12 12.80 92.2 15.25 15.90	13.75 19.45 58.4 22.1 22.9	24.8 23.9 18.0 24.4 23.9	33.4 50.0 182.0 56.2 58.9	24.3 13.8 7.5 16.9 22.0	3.65 5.29 35.8 6.32 6.74
L010247 L010248 L010249 L010250 L010251		0.88 0.52 0.15 0.02 0.04	ন ন ন ন ন ন	2310 2210 1455 3410 1605	1385 1910 1340 2470 1325	27.3 30.5 27.8 54.8 22.4	100 30 20 350 660	8.49 4.61 4.14 1.36 4.71	123 109 117 72 82	49.7 40.2 32.2 45.2 36.4	23.2 16.25 13.10 16.70 16.25	26.4 26.2 20.5 34.5 21.8	23.8 27.6 23.4 22.3 18.5	69.1 65.7 52.7 82.1 56.2	16.7 17.3 14.1 7.2 13.5	9.27 7.00 5.61 7.38 6.62
L010252 L010253 L010254 L010255 L010256		1.57 0.43 1.31 0.83 1.55	ণ ণ ণ ণ	1600 1095 1240 1490 905	1325 1325 1015 1630 1130	24.7 20.7 17.0 26.7 18.7	380 150 60 110 110	1.76 1.48 1.47 5.40 1.11	60 48 35 69 37	28.9 29.0 22.5 31.4 26.1	11.60 11.15 9.32 12.15 10.30	19.30 20.00 14.70 23.5 18.70	14.0 13.8 13.2 25.2 15.5	48.3 50.4 37.1 55.4 45.1	6.1 6.6 6.5 9.7 4.0	5.01 4.93 3.95 5.14 4.31
L010257 L010258 L010259 L010260 L010261		0.21 0.23 0.44 0.57 0.40	ব ব ব ব ব	864 1710 1360 79.6 1560	1280 1285 969 54.6 1140	23.0 20.8 23.0 1.1 29.6	40 40 50 10 50	1.16 1.93 2.61 0.24 1.33	43 55 52 6 57	26.9 25.5 23.7 1.36 31.6	10.30 10.10 8.98 0.69 12.40	19.70 19.05 16.90 0.68 21.5	15.9 18.7 20.4 2.1 18.3	47.1 45.1 40.5 1.86 52.8	6.9 7.7 11.3 1.6 7.1	4.36 4.19 3.86 0.26 5.28
L010262 L010263 L010264 L010265 L010266		0.41 0.20 0.57 0.54 0.23	ণ ণ ণ ণ	1705 2170 1675 1405 1890	1335 1350 1095 1100 1225	25.2 23.8 22.1 26.7 18.5	40 90 90 50 70	1.05 1.78 0.84 2.54 1.95	44 47 39 74 43	34.1 31.5 27.6 30.4 29.4	13.70 12.60 11.30 11.75 11.65	22.3 22.0 18.10 20.2 20.7	16.4 18.4 14.8 22.3 16.6	56.2 54.5 44.7 50.1 50.3	5.6 6.3 4.4 10.4 7.0	5.67 5.30 4.63 4.99 4.85
L010267 L010268		0.25 0.38	<1 <1	3100 3070	1145 843	21.2 19.5	80 20	2.08 1.15	56 46	26.5 19.25	10.15 7.72	18.50 13.50	19.2 17.3	44.4 32.0	7.9 7.6	4.36 3.24







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

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	Method ME-MS81 Mi Analyte La Units ppm								C	ERTIFIC	CATE O	F ANAL	YSIS	TM120	65155	i.
Sample Description	Method Analyte Units LOR	ME- MS81 La ppm 0.5	ME-MS81 Lu ppm 0.01	ME- MS81 Mo ppm 2	ME-MS81 Nb ppm 0.2	ME-MS81 Nd ppm 0.1	ME-MS81 Ni ppm 5	ME-MS81 Pb ppm 5	ME-MS81 Pr ppm 0.03	ME-MS81 Rb ppm 0.2	ME-MS81 Sm ppm 0.03	ME-MS81 Sn ppm 1	ME-MS81 Sr ppm 0.1	ME-MS81 Ta ppm 0.1	ME-MS81 Tb ppm 0.01	ME- MS81 Th ppm 0.05
L010237 L010238 L010239 L010240 L010241		18.7 1140 1125 927 5340	0.13 1.70 1.94 2.74 9.02	<2 4 5 4 16	7.9 2050 2190 >2500 >2500	14.9 638 623 566 3650	21 57 54 43 185	8 56 30 365	4.13 203 197.5 176.0 ≥1000	49.0 50.5 47.8 6.5 0.9	2.59 88.1 87.9 83.2 532	<1 4 10 4 17	259 2180 1890 2500 ≥10000	0.4 16.5 27.8 7.1 241	0.28 7.45 7.88 8.08 45.7	4.90 94.4 122.0 68.3 ≥1000
L010242 L010243 L010244 L010245 L010246		602 932 1145 762 882	1.09 1.56 10.80 1.66 1.91	3 8 11 4 4	293 1065 1420 598 1625	352 529 768 506 524	83 34 18 95 13	24 36 79 36 39	107.5 161.0 218 146.5 163.5	53.6 49.1 19.5 43.1 80.2	50.4 73.8 160.5 79.2 80.9	7 5 5 5 9	1140 1515 6110 1950 1355	1.3 22.6 18.2 11.1 25.7	4.28 6.23 31.4 7.31 7.72	40.2 179.5 359 103.5 92.6
L010247 L010248 L010249 L010250 L010251		831 1100 774 1405 838	2.96 1.93 1.46 1.68 2.27	7 7 5 9 5	686 1395 1010 1730 1085	501 657 487 891 512	9 15 17 197 107	52 42 26 68 49	147.0 198.0 144.5 261 152.0	65.6 41.9 45.4 14.4 49.5	84.0 94.3 73.6 129.0 77.7	6 8 5 8	1995 1645 1735 2930 1875	9.1 15.4 8.0 63.8 11.3	9.51 8.41 6.77 10.10 7.40	127.5 118.5 69.8 251 88.7
L010252 L010253 L010254 L010255 L010256		767 735 592 919 699	1.35 1.24 1.07 1.27 1.14	5 4 4 5	1925 2380 1590 2080 1475	489 504 381 598 469	116 36 25 31 31	29 26 18 33 22	144.5 146.5 112.0 180.0 131.5	24.2 15.7 19.4 44.4 15.3	70.6 74.6 54.5 88.8 66.7	5 4 3 5 3	1710 2200 2330 2520 2610	19.8 19.2 15.7 25.4 10.8	6.00 6.16 4.67 6.86 5.70	90.4 88.4 73.8 98.3 62.1
L010257 L010258 L010259 L010260 L010261		745 801 572 33.5 641	1.11 1.13 1.01 0.11 1.30	6 5 4 <2 5	1250 1125 1455 37.9 1340	469 459 398 19.1 460	27 18 20 <5 19	27 33 21 <5 21	140.0 137.0 109.5 5.78 129.0	14.5 27.2 49.4 10.7 23.2	71.0 67.7 59.2 2.74 73.7	3 4 <1 5	2310 1650 1590 65.9 1680	15.8 11.8 13.4 0.6 17.0	5.96 5.61 5.07 0.26 6.86	51.4 58.7 55.9 4.84 76.0
L010262 L010263 L010264 L010265 L010266		781 786 659 632 709	1.49 1.30 1.23 1.21 1.27	7 7 6 5 5	1855 1565 849 1260 1410	487 483 413 445 443	12 21 18 13 17	33 37 27 23 32	147.5 145.0 114.5 122.5 133.0	20.2 34.6 27.9 40.6 28.9	76.2 73.9 59.5 67.2 69.9	5 5 3 6 5	2540 2700 2650 2050 2650	22.2 23.7 17.1 14.5 24.5	7.29 7.02 5.88 6.51 6.44	97.0 101.5 84.4 65.4 104.5
L010267 L010268		656 487	1.14 0.90	11 28	1725 943	442 322	17 5	32 27	123.0 88.3	39.6 62.9	63.3 46.2	6	2420 2510	21.9 19.1	5.61 4.13	83.5 56.9







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

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									C	ERTIFIC	ALEO	ANAL	4515	IMI20	065155	
Sample Description	Method	ME-MS81	ME-MS81	ME- MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME- ICP06	ME- ICP06	ME- ICP06	ME- ICP06	ME- ICP06	ME- ICP06
	Analyte	TI	Tm	U	V	W	Y	Yb	Zn	Zr	SiO2	AI2O3	Fe2O3	CaO	MgO	Na20
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
	LOR	0.5	0.01	0.05	5	1	0.5	0.03	5	2	0.01	0.01	0.01	0.01	0.01	0.01
L010237		<0.5	0.13	1.14	46	1	9.0	0.90	33	101	41.1	7.78	2.56	20.0	4.66	1.55
L010238		0.5	1.88	13.15	571	34	161.5	11.50	676	372	25.7	7.95	14.20	18.95	3.20	0.73
L010239		0.5	2.14	10.25	777	31	182.0	13.15	952	768	23.3	9.42	22.4	13.75	3.02	0.35
L010240		<0.5	2.81	23.5	368	9	245	17.80	785	223	4.60	1.71	9.84	42.2	0.57	0.23
L010241		1.8	10.25	133.0	1315	28	902	59.5	964	900	2.59	11.55	45.0	2.96	0.67	0.13
L010242 L010243 L010244 L010245 L010246		<0.5 <0.5 <0.5 <0.5 <0.5 0.6	1.19 1.71 12.50 1.89 2.06	8.21 14.80 37.4 13.35 9.59	463 403 494 628 533	20 14 27 19 30	96.2 137.0 1125 170.5 174.0	7.67 10.65 75.1 11.65 12.55	1150 775 374 415 338	884 606 425 866 1080	23.7 19.50 6.87 17.45 27.9	9.10 8.16 2.35 6.84 10.00	20.4 13.80 11.10 20.1 16.60	14.10 21.5 39.4 20.6 13.10	4.06 4.67 0.99 5.67 5.10	0.19 0.24 0.31 0.25 0.22
L010247		0.6	3.16	12.90	484	24	252	19.65	356	869	23.2	8.15	14.25	17.85	6.79	0.24
L010248		<0.5	2.11	10.60	577	26	181.5	12.75	476	868	21.0	7.18	16.95	17.95	7.88	0.32
L010249		<0.5	1.63	10.10	459	18	150.0	10.15	428	754	19.90	7.07	15.35	20.4	7.61	0.23
L010250		0.6	2.02	29.9	605	14	186.5	11.75	801	421	8.72	5.16	18.20	28.1	5.64	0.20
L010251		<0.5	2.21	14.55	480	21	186.5	14.25	560	670	16.25	5.61	15.95	23.5	5.31	0.28
L010252		<0.5	1.51	8.26	427	16	128.5	9.03	295	314	9.42	3.31	12.95	34.7	4.01	0.15
L010253		<0.5	1.42	8.13	307	12	126.0	8.40	284	369	8.76	3.07	10.75	36.7	4.78	0.20
L010254		<0.5	1.17	9.52	321	13	102.5	7.10	242	357	10.25	3.30	9.62	37.3	4.10	0.20
L010255		<0.5	1.56	8.51	402	19	129.0	8.86	389	569	16.30	5.67	12.00	26.0	7.98	0.22
L010256		<0.5	1.32	7.46	397	16	111.5	7.74	275	226	8.06	2.21	9.46	38.9	2.85	0.13
L010257		<0.5	1.35	7.74	354	23	111.0	7.62	281	389	8.46	2.57	10.80	36.1	4.15	0.15
L010258		<0.5	1.34	7.19	339	24	109.0	7.76	315	525	12.05	3.94	10.25	32.6	5.51	0.18
L010259		<0.5	1.19	5.80	379	23	100.0	6.69	274	659	19.70	5.94	11.50	26.3	4.54	0.36
L010260		<0.5	0.11	1.30	14	1	7.3	0.68	18	57	94.8	1.18	0.74	1.18	0.31	0.02
L010261		<0.5	1.59	7.26	383	25	133.5	8.95	290	430	11.55	3.80	10.85	33.4	4.82	0.19
L010262		<0.5	1.79	9.28	384	23	148.0	10.05	243	321	8.69	2.47	9.97	38.3	2.26	0.17
L010263		0.6	1.60	9.68	384	24	134.0	9.13	244	361	11.75	3.46	9.31	36.3	2.78	0.22
L010264		<0.5	1.50	12.25	364	25	118.0	8.45	214	239	10.90	2.58	7.38	39.2	1.82	0.15
L010265		<0.5	1.52	5.84	423	25	126.0	8.50	306	609	19.45	5.74	12.25	25.1	5.54	0.42
L010265		<0.5	1.52	10.55	360	21	123.0	8.74	238	424	12.30	3.46	9.17	34.8	3.37	0.32
L010267		0.5	1.37	19.85	417	23	111.0	7.69	252	462	15.50	4.45	9.75	29.6	6.22	0.41
L010268		0.7	1.03	19.70	497	30	89.1	6.04	220	432	16.25	4.59	8.13	24.7	8.47	0.34







To: PHOSCAN CHEMICAL CORP. 1 ST. CLAIR AVENUE WEST SUITE 501 TORONTO ON M4V 1K6

Page: 2 - D Total # Pages: 2 (A - D) Finalized Date: 20- APR- 2012 Account: PCANCC

15								C	RTIFIC	ATE OF	ANALYSIS	TM12065155	
Method Analyte Units LOR	ME- ICP06 K2O % 0.01	ME- ICP06 Cr2O3 % 0.01	ME- ICP06 TIO2 % 0.01	ME- ICP06 MnO % 0.01	ME- ICP06 P2O5 % 0.01	ME- ICP06 SrO % 0.01	ME- ICP06 BaO % 0.01	OA- GRA05 LOI % 0.01	TOT- ICP06 Total % 0.01	Nb- XRF10 Nb % 0.01			
	1.63 1.54 1.47 0.19 0.01	0.01 0.01 0.01 0.01 0.05	0.27 1.55 2.71 0.68 3.09	0.04 0.98 0.90 1.20 2.90	0.09 9.41 8.52 29.5 8.33	0.03 0.25 0.21 0.29 1.54	0.04 0.41 0.30 0.23 1.29	20.7 13.40 11.75 7.68 12.35	100.46 98.28 98.11 98.93 92.46	0.01 0.25 0.27 0.46 1.58			
	1.12 1.32 0.96 1.29 2.90	<0.01 <0.01 <0.01 0.04 <0.01	4.92 1.93 1.60 3.02 3.98	0.67 1.39 0.71 0.52 0.58	9.65 14.10 27.5 12.85 8.18	0.14 0.17 0.68 0.22 0.15	0.20 0.51 0.22 0.23 0.19	10.65 9.95 4.11 8.32 9.38	98.90 97.24 96.80 97.40 98.28	0.13 0.23 0.30 0.16 0.19			
	2.26 1.76 1.65 0.47 1.67	<0.01 <0.01 <0.01 0.05 0.10	3.06 2.92 2.50 1.93 2.70	1.39 1.25 0.70 1.86 0.69	12.60 12.15 13.50 20.3 15.85	0.25 0.19 0.20 0.36 0.22	0.30 0.28 0.17 0.44 0.20	8.54 8.78 8.27 8.21 8.21	98.88 98.61 97.55 99.64 96.54	0.18 0.27 0.24 0.32 0.24			
	0.95 0.58 0.88 1.22 0.60	0.05 0.02 0.01 0.01 0.01	1.47 1.41 1.39 2.23 1.00	0.87 0.59 0.67 0.69 0.67	7.11 8.56 6.66 8.83 7.26	0.20 0.25 0.27 0.30 0.29	0.18 0.13 0.14 0.18 0.11	23.4 23.3 25.1 16.95 26.6	98.77 99.10 99.89 98.58 98.15	0.24 0.30 0.21 0.25 0.18			
	0.56 1.13 2.34 0.33 1.03	0.01 ⊲0.01 0.01 ⊲0.01 0.01	1.96 1.70 2.46 0.07 2.03	0.72 1.05 0.62 0.04 1.02	7.80 6.09 5.60 0.12 7.75	0.27 0.19 0.18 0.01 0.19	0.11 0.21 0.16 0.01 0.18	25.0 24.1 19.45 1.62 22.9	98.66 99.00 99.16 100.43 99.72	0.15 0.14 0.18 0.01 0.16			
	0.99 1.66 1.66 1.82 1.45	<0.01 0.01 0.01 0.01 0.01	1.58 1.59 1.19 2.58 1.51	0.96 1.17 0.67 0.68 0.60	9.40 7.11 4.40 6.62 6.63	0.28 0.30 0.30 0.24 0.30	0.20 0.25 0.19 0.17 0.22	22.8 24.0 29.0 17.85 24.6	98.07 99.91 99.45 98.47 98.74	0.22 0.19 0.11 0.16 0.18			
	1.86 3.31	0.01 <0.01	1.76 1.98	0.58 0.56	5.55 3.26	0.27 0.28	0.36 0.36	22.4 23.8	98.72 96.03	0.21 0.12			
	Method Analyte Units LOR	Method Analyte Units ME-ICP06 K20 % 1.63 1.54 1.63 1.54 1.47 0.19 0.01 1.12 1.32 0.96 1.29 2.26 1.76 1.65 0.47 1.65 0.47 1.65 0.47 1.65 0.47 1.65 0.43 0.33 0.95 0.56 1.13 2.34 0.33 1.03 1.66 1.66 1.66 1.66 1.82 1.45 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.66 3.31	Method Analyte Units ME-ICP06 K2O % ME-ICP06 Cr2O3 % ME-ICP06 Cr2O3 % 1.63 0.01 1.54 0.01 1.63 0.01 1.54 0.01 1.47 0.01 0.05 1.63 0.01 0.01 0.01 0.01 1.47 0.01 0.05 1.12 0.01 0.05 0.01 1.29 0.96 <0.01	Method Analyte Units ME-ICP06 k20 % ME-ICP06 Cr203 % ME-ICP06 TIO2 % ME-ICP06 TIO2 % 1.63 0.01 0.01 1.63 0.01 0.27 1.54 0.01 1.55 0.01 0.01 0.01 1.12 -0.01 4.92 1.32 -0.01 1.93 0.96 -0.01 3.06 1.76 -0.01 3.98 2.20 -0.01 3.98 1.65 -0.01 2.90 1.65 -0.01 2.90 1.65 -0.01 2.90 1.65 -0.01 2.90 1.65 0.01 1.09 0.66 0.01 1.09 1.67 0.10 2.70 0.95 0.05 1.47 0.58 0.02 1.41 0.24 0.01 1.00 2.34 0.01 1.00 1.03 0.01 2.03 1.66 0.01	Method Analyte Urits ME:ICP06 X20 X ME:ICP06 Cr203 X ME:ICP06 TO2 ME:ICP06 X ME:ICP06 X <td>Method Analyte Units ME-ICP06 K20 % ME-ICP06 % ME-ICP06 %</td> <td>Method Viris ME-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-IC</td> <td>Method Analyte Urits ME:ICP06 % <</td> <td>Method Nahyte Urits ME-ICP06 % MI = 200 % <t< td=""><td>Metiod Units ME-ICP06 x 0 ME-ICP06 cr203 x x ME-ICP06 x 0 ME-ICP0</td><td>No. CERTIFICATE OF Method Analyte Units Method % Method %</td><td>CERTIFICATE OF ANALYSIS Method Analysis Met.ICP00 M</td><td>Image: Construction ME:CR06 ME:CR06</td></t<></td>	Method Analyte Units ME-ICP06 K20 % ME-ICP06 % ME-ICP06 %	Method Viris ME-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-ICP06 % MI-IC	Method Analyte Urits ME:ICP06 % <	Method Nahyte Urits ME-ICP06 % MI = 200 % MI = 200 % MI = 200 % MI = 200 % MI = 200 % <t< td=""><td>Metiod Units ME-ICP06 x 0 ME-ICP06 cr203 x x ME-ICP06 x 0 ME-ICP0</td><td>No. CERTIFICATE OF Method Analyte Units Method % Method %</td><td>CERTIFICATE OF ANALYSIS Method Analysis Met.ICP00 M</td><td>Image: Construction ME:CR06 ME:CR06</td></t<>	Metiod Units ME-ICP06 x 0 ME-ICP06 cr203 x x ME-ICP06 x 0 ME-ICP0	No. CERTIFICATE OF Method Analyte Units Method % Method %	CERTIFICATE OF ANALYSIS Method Analysis Met.ICP00 M	Image: Construction ME:CR06 ME:CR06







Record of Boreholes





RECORD OF BORE	HOLE N	o. I	PW1	2-01 Co-Ord. 03284	64 E, 5	576869 N		an	nec [®]
Project Number: TY860021				Driling Location:	Martison	Phosphate Project		Logged by:	AS/AP
Project Client: PhosCan Chemi	cal Corperatio	n		Drilling Method:	250 mm	Dual Rotary Drill		Compiled by:	KKJ
Project Name: 2012 Hydrogeold	xgy Study			Drilling Machine:	Truck Mo	unted Drill, DR 12		Reviewed by:	AJS
Project Location: Hearst, Ontario				Date Started:	7 Feb 12	Date Completed: 8 Feb 1	12	Revision No.:	0, 4/5/12
LITHOLOGY PROFIL	E			GAMMA		CALIPER		COMMENTS	
DESCRIPTION	2 m	DEPTH (m)	BLEVATION (m)	Gamma (gai) 2000 4000 5000	8000	Calper(cm) 10 20 30 40		timated Water Pr Acid Reactivity	oduction Test
GRUANCS over trownah grey SLTY CLAY some sand and gravel (BI) grey grey GRAVEL	174 <u>2</u> 15.0	- 5.0 - 10.0 - 15.0	185				Very	itie water	
 enve sand and sit, wet gray SLTY CLAY some sand and gravel, moist to wet 	172 <u>2</u> 173	- 20.0	170				Very	itio wator	
CLAY CLAY some silt, gravel and sand (81), wet	29.0	- 30.0	180						
brown SAND and GRAVEL some organics, wet	149.7 39.5	40.0	150				Vary	ittio wator	
		- 45.0					10 gr	we water	
		50.0	19				10-1	i0 gal/min	
Erown SAND and GRAVEL wet, (possible residuum)	135.2 54.0	- 55.0	135				10-! 50 gi	80 galimin Il/min	
AMEC Environment & Infrastructure A division of AMEC Americas Limited 131 Fielding Road Lively, Ontario Create B2X 11.7	∑ No ground	water w	as observ	red on completion of drilling.					
Continued on Next Page Continued on Next Page	Borshole details from a qualified (commissioned an	at present lected in id the acc	rted, do no kai Engine companyin	t constitute a thorough undentanding of all pob er. Also, borehole information should be read in g'Explanation of Bonehole Log'.	ential conditions 1 conjunction wit	present and requires interpretative assi to the geotechnical report for which it w	istance st	S Pr	cale: 1 : 315 age: 1 of 2





							cogges of .
_	LITHOLOGY PROFILE			GAMMA	CALIPER		COMMENTS
uthdogy Plot	DESCRIPTION	(m) HT 430	BLEVATION (m)	Germa (cps)	Caliper (cm)	NSTRUMENTATION	Estimated Water Production
ŝ	brown SAND and GRAVEL	-	_				40 gaumn
	wet (possible residuum)	- 85.0	125				40 gal/min
X	white / grey 66.0 BEDRIOCK rock chies					μ	Low acid reaction, 5 - 10 gal/mi Casing Set at 67 m
Ś		- 70.0	120				Low acid reaction, <5 gal/min
9							<5 gal/min
Ì		- 75.0	115				<5 galimin
Ì		-	110				5 gal/min
G		- 80.0					5 gal/min
9		- 85.0	105				5 galimin
8							5 galimin
Ì		- 90.0	100				5 galimin
ģ		-	95				5 gal/min
9	92.7 END OF BOREHOLE 96.5	- 95.0				-	3 - 5 gal/min





REC	Number: TY860021	HOLE N	o. <u>I</u>	PW1	2-02 Co-Ord. 03284	79 E, 5	576971 N Phosphate Project	1		
Project	Client: PhosCan Chemic	al Corperation	n		Drilling Method:	250 mm	Dual Rotary Drill		compiled by:	KKJ
Project	Name: 2012 Hydrogeolo	gy Study			Drilling Machine:	Truck Mo	unted Drill, DR 12	F	Reviewed by:	AJS
Project	Location: Hearst, Ontario				Date Started:	8 Feb 12	Date Completed: 19 Fel	512 F	levision No.:	0, 4/5/12
	LITHOLOGY PROFIL	E			GAMMA		CALIPER	C	OMMENTS	
Indogr Pd	DESCRIPTION		(m) HT430	LEVATION (m)	Germa (pe)		Calper (cm)		i casing n nated Water Pro	aduction
78	GANICS over	• •	-	-					the reacting t	
gre Sal	y Ay No and GRAVEL ce silt, moist to wet	185.4 4.0	50	185						
			- 10.0	180				5 gal/mi	n	
gre GR son	y AVEL me sand, trace silt, wet y	175.4 14.0 172.4 17.0	- 15.0	175				5 gal/mi 5 gal/mi	n	
SA	ND ne gravel, trace sit, wet		- 20.0	170				5 gal/mi	n, driller adding	foam
			- 25.0	185				5 gal/mi 5 gal/mi	n	
			- 30.0	180				<5 galin	sin	
1 80	y to brown	153.9 36.5	- 38.0	15				5 gavm	n	
South	ne day and gravel, moist		- - - 40.0	150						
			48.0	10						
			- 50.0	140						
			- 55.0	13						
AMEC E A division 131 Field Lively, O	Invironment & Infrastructure In of AMEC Americas Limited ding Road Infario D20(4) 7		water w	as observ	red on completion of drilling.					
Tel +1(7) Fax +1(7) www.am	05) 682-2632 705) 682-2260 ec.com	Borehole debils a from a qualified 0 commissioned an	as preser lected ni nd the acc	rted, do no kal Engline companyin	t combine a thorough understanding of all pob er. Also, borehole information should be read in g'Esplanation of Borehole Log.	ntal conditiona conjunction wit	present and requires interpretative as In the geotechnical report for which it w	alatance vas	Sc Pa	cale:1:315 ge:1 of 2





			<u></u>			
LINOLOGT PROFILE			GAMIMA	CALIPER	₹ П	1 steel casing
		Ē			£s ∎	Screen
DESCRIPTION	Ē	NOL			MBN	
	HE.	EM1	Gamma (cps)	Calper (cm)	STRU	Estimated Water Production
arey to brown	8	8	2000 4000 6000 8000	10 20 30 40	22	Acid Reactivity Test 00 150 gal/min
SILTY SAND Iome day and gravel, moist	Ę					-
	ŀ	Ξ			20	00 gal/min
	65.0	125				ND OF CASING at 65 m
brown to grey	23.4	-			- 8	CREEN TO 78 m 200 gailmin
wet, (possible residuum)	F				HI	
	70.0	120			A	pprox. 300 gal/min
	F	1				
	F	=				pprox. 400 gal/min
	-	115			HI.	
	- 75.0	-				pproc. 400 gavmin
1	11.4	Ξ			\square	
END OF BOREHOLE no refusal)	78.0					





Project Number: 1Y860021	HOLE N	o. <u>I</u>	PW1	2-03 Co-Ord. 0327	874 E, 55	576803 N Phosphate Project		Logged by: AP
Project Client: PhosCan Chemic	cal Corperation	1		Drilling Method	250 mm l	Dual Rotary Drill		Compiled by: KKJ
Project Name: 2012 Hydrogeolo	xgy Study			Drilling Machine	: Truck Mou	inted Drill, DR 12		Reviewed by: AJS
Project Location: Hearst, Ontario				Date Started:	19 Feb 12	Date Completed: 21 Feb	12	Revision No.: 0, 4/5/12
LITHOLOGY PROFIL	E			GAMMA		CALIPER		COMMENTS
전 DESCRIPTION		TH (m)	(M TION (m)				RUMENTATION	1 deel cashg Screen
Local Ground Surface Elevation: 189.	9 m	6	i i	2000 4000 6000	8000	Caliper (cm) 10 20 30 40	INST	Estimated Water Production Acid Reactivity Test
PEAT over Trown CLAY and SILT some sand, moist SAND Some sit and gravel, moist	184 <u>9</u> 5.0	50	18					r1 galimin
grey SAND some sit, clay and gravel (80), moist	178.9 11.0	10.0	180	=				=1 gallmin
SAND and GRAVEL	172.9 17.0	15.0	178					:1 gailmin
		20.0	170					r1 gal/min r1 gal/min
		25.0	165					=1 galimin
		30.0	160					1 galimin
		- 35.0	155					=1 gal/min =1 gal/min
		-	11111	-				=1 gal/min
Grey to brown SAND and GRAVEL Some silt and clay (III), wet, (possible	149.9 40.0 residuum)	- 40.0	150	2			,	Approx. 5 gal/min
		45.0	148	Ş				Approx. 5-10 gailmin
SANDY SILT trace gravel, (possible residuum)	48.0	- 50.0	140					Approx. 10-20 galmin
	133.0	55.0	135	ξ				Approx. 40 galimin
brown SAND trace gravel, (possible residuum)	56.0	-		Ş				Approx. 40 galimin
AMEC Environment & Infrastructure A division of AMEC Americas Limited 131 Fielding Road Lively, Ontario	≌ No ground	water w	sao as observ	ved on completion of drilling.		· · · § ·		operation and gavenet
Canada P3Y 1L7 Tel +1(705) 682-2632 Fax +1(705) 682-2260 www.amec.com	Borshole details a from a qualified 0 commissioned an	e preser lectedni d the acc	rted, do no ical Englise companyin	ot compliate a thorough understanding of all eer. Also, borehole information should be rea ng Explanation of Borehole Log.	potential conditions d in conjunction with	present and requires interpretative ass the geotechnical report for which it w	latance aa	Scale: 1 : 315 Page: 1 of 2





RECORD OF BOREHOLE No. PW12-03 Co-Ord. 0327874 E, 5576803 N Project Number: 1Y860021 Drilling Location: Martison Phosphate Project Logged by: AP												
LITHOLOGY PROFILE			GAMMA	CALIPER	COMMENTS							
DESCRIPTION	DEPTH (m)	BLEVATION (m)	Germa (ga) 2050 4000 6500 8600	NOLLY THUSSEN Caliper (sm) 10 20 30 40 M	Estimated Water Production Acid Reactivity Test							
brown SAND trace gravel (possible residuum)	-				Approx. 200 gailmin							
	- 65.0	13			Approx. 300 gal/min END OF CASING at 68 m SCREEN TO 86 m							
117.9 ROCK 72.0 some sand	- 70.0	120	\sum		Short small acid reaction, Approx. 800 gailmin							
	75.0	115			Short small acid reaction, Approx. 800 gal/min Short small acid reaction, Approx. 800 gal/min							
108.9 white / brown / grey 81.0 BEDROCK rock chips	80.0	110			Moderate acid reaction, Approx. 300 gal/min							
102.9 END OF BOREHOLE 87.0	- 85.0	105	}		Approx. 300 garmin							
Bonencie debils a from a qualified 0 commissioned an	e prese lectedra d the ac	kal Engine companyin	 wavecus a correction uncernancing of all potential condition en. Also, bonehole information should be read in conjunction w gltsplanation of Bonehole Log. 	a present and requires interpretative assistance (In the geolechnical report for which it was	Scale: 1:315 Page: 2 of 2							





RE	ECORD	OF BOREH	HOLE N	o. 1	W1	-01 Co-Ord. 03269 Driling Location	28 E, 5	575483 N Phosphate Project		Logged by:	
Proj	ect Client:	PhosCan Chemic	al Corperatio	n		Driling Method:	150 mm	Dual Rotary Drill		Compiled by:	KKJ
Proj	ect Name:	2012 Hydrogeolog	gy Study			Drilling Machine	Truck Mor	unted Drill, DR 12		Reviewed by:	AJS
Proj	ect Location:	Hearst, Ontario				Date Started:	4 Feb 12	Date Completed: 4 Feb	12	Revision No.:	0, 4/5/12
	LITH	OLOGY PROFIL	F			GAMMA		CALIPER		COMMENTS	
\vdash	2		-			Continue (OF LIVER	δI	1 steel casing	
Lihdogy Pd	Local Ground St	DESCRIPTION		(m) HT 4BO	BLEVATION (m)	Germme (spe) 2000 4000 6000	8000	Calper(cm) 10 20 30 40	INSTRUMENTATI INSTALLATION	Estimated Water Pro Acid Reactivity 1	iduction
	ORGANICS ov	0r		-	190 -						
	grey SILTY SAND some gravel & r	clay (91), moist		- 5.0 	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
				- - - - 15.0 -	180						
				- 20.0	170						
	grey .		157.7 33.5	- 30.0 3	1211					High acid reaction	
11	SILTY CLAY some sand and grey SANDY SILT some gravel an	l gravel, dry d clay, moist	155.7 36:5 151.7	- 35.0	155						
	SILTY CLAY some gravel brown and grey SAND and GRU some silt, trace	WEL clay, moist	1587 40.5	- 40.0	150						
				- 45.0	145						
	brown		137.2 54.0	-	140					Moderate acid reaction	
	SAND and GR/ moist grey / white BEDROCK rock chips	WEL	134.2 57.0	- 55.0	135	5				Low acid reaction, Appr gal/min	аж. 10
AME A divi 131 F Lively	C Environment ision of AMEC / Fielding Road y, Ontario	& Infrastructure Imericas Limited	Groundwat	er depth	recorded	on completion at a depth of 30 m					
Cana Tel + Fax + www.	ida P3Y 1L7 1(705) 682-263 1(705) 682-228 amec.com	2 50 upd.co.Next Page	Borshole details : from a qualified 0 commissioned an	as presen Geotechni nd the acc	ted, do no cal Engine companyin	constitute a thorough understanding of all p . Also, borehole information should be read Explanation of Borehole Log.	otential conditions i in conjunction wit	present and requires interpretative as h the geotechnical report for which it	alstance exa	Sc Pa	ale:1:315 ge:1 of 2





RECORD OF BOREHOLE No. TW12-01 Co-Ord. 0326928 E, 5575483 N Image: Control of the second seco											
LITHOLOGY PROFILE		GAMMA	CALIPER	COMMENTS							
DESCRIPTION	DEPTH (m) ELEVATION (m)	Gamma (gas) 3550 4000 8000 8000	Calper(m)	NOLL V THV Estimated Water Production Acid Reactivity Test							
BERIOCK No.d chips Image: State of the s		a thorough understanding of all potential condition	Depresent and requires integrabitive assistion								
from a qualified commissioned a	Geotechnical Engineer. Also, bo nd the accompanying Explanation	rehole information should be read in conjunction w on of Bonehole Log'.	In the geotechnical report for which it was	Scale: 1 : 315 Page: 2 of 2							





RECORD OF BOREHOLE N Project Number: 17860021	o .	TW1	2-02 Co-Ord. 03273	29 E, 5	577650 N Phosphate Project		Logged by: AS/AP
Project Client: PhosCan Chemical Corporation	n		Drilling Method:	150 mm	Dual Rotary Drill		Compiled by: KKJ
Project Name: 2012 Hydrogeology Study			Drilling Machine:	Truck Mo	unted Drill, DR 12	40	Reviewed by: AJS
Project Location: Hearst, Ontano			Date Started:	5 Feb 12	Date Completed: 6 Feb	12	Revision No.: 0, 4/5/12
LITHOLOGY PROFILE			GAMMA		CALIPER	z	
DESCRIPTION	(m) HT 480	BLEVATION (m)	Gamma (qai) 2000 4000 6000	8000	Caliper(cm) 10 20 30 40	INSTRUMENTATIC INSTALLATION	Estimated Water Production Acid Reactivity Test
ORGANICS over brownish gray SILTY CLAY some aand, trace gravel (50), moist	- - - 5.0						
Grey 1788 RoAND and GRAVEL 90 grey SILT some day, sand and gravel, moist 172.3	- 10.0	175					Approx. 2 gal/min
BLTY CLAY BLTY CLAY BLTY CLAY BLTY CLAY BLTY SAND SULTY	- 20.0	2 2					
	- 25.0	1000					
	- - - - 35.0 -	5 5					
	- 40.0	ž.					
	- 45.0	19					
	- 55.0	135					
AMEC Environment & Infrastructure A division of AMEC Americas Limited 131 Fiekling Road Lively, Ontario Canada P3Y 117	ter dept	h recorded	d on completion at a depth of <u>4.3 m</u>				Ι
Tel +1(705) 682-2632 Fax +1(705) 682-260 www.amec.com Continued on Next Page	as press Geotechi nd the ac	naid, do no ical Englis companyir	 constate a therough undentanding of all pob ser. Also, borshole information should be read in gExplanation of Bonshole Log. 	endel conditions i conjunction wi	I present and requires interpretative as the geotechnical report for which its	alatanos est	Scale: 1:315 Page: 1 of 3











R	RECORD OF BOREHOLE No. TW12-02 Co-Ord. 0327329 E, 5577650 N Image: Co-Ord. Operation of the second												
⊢	LITHOLOGY PROFILE				GAMMA		CALIPER		COMMENTS				
Uthdagy Plat	DESCRIPTION	(m) HTTED	ELEVATION (m)	2000	Gamma (qua)	8000	Calper (cm)	NSTRUMENTATION NSTALLATION	1 stand cealing Screen Estimated Water Production Acid Reactivity Test				
Ē	reddish brown to brown GRAVEL and SAND		_	2000	400 000	0000	10 20 30 40		Plant to a company to a				
Ę	trace silt, wet, (possible residuum)	- 130.0	, , , , , , , , , , , , , , , , , , , ,	3					5 gal/min				
	54.8 brown 133.0 SAND some silt, trace gravel, wet, (possible residuum)	- 1350	8	3					25 gal/min				
		-	50	{					40 gal/min				
	48.8 Reddish brown 139.0 SAND and GRAVEL 139.0 some silt, wet, (possible residuum)	- 140.0	\$	5					END OF CASING at 140 m SCREEN TO 143 m 10 gailmin 100 - 200 gailmin				
<u>دي</u>	43.3 END OF BOREHOLE 144.5			5		-		-					
					gh understanding of eli	polarifai contilion							
	from a qualified (commissioned a	Geoteche nd the ac	companyle	er. Also, borehole in g'Explanation of Bo	formation should be re whole Log.	ed in conjunction wi	th the geotechnical report for which	it was	Scale: 1:315 Page: 3 of 3				



RECORD OF BOREHOLE	No.	TW1	2-03A Co-Ord. 0327	996 E, Martison	5577383 N Phosphate Project	
Project Client: PhosCan Chemical Corpora	tion		Driling Method:	200 mm	Dual Rotary Drill	Compiled by: KKJ
Project Name: 2012 Hydrogeology Study			Drilling Machine:	Track Mo	unted Drill	Reviewed by: AJS
Project Location: Hearst, Ontario			Date Started:	31 Jan 12	2 Date Completed: 3 Feb 12	Revision No.: 0, 4/5/12
LITHOLOGY PROFILE		1	GAMMA		CALIPER	COMMENTS
	-		Granine.		3	1 steel casing
DESCRIPTION	(W) HL da	LEVA TION (m)	Gamma (cps)		Calper (m)	Estimated Water Production
Local Ground Surface Elevation: 189.2 m black ORGANICS over	6		2000 4000 5000	8000	10 20 30 40 ≦≦	Acid Reactivity Test
brown SAND some gravel, trace to some silt, moist	- 5.0	ġ				
· • • • • •	- 10.0	180				
SILTY CLAY Some sand and gravel, moist	10 - 15.0 -	178				
grey 2 SAND some gravel and sit, moist	12 1.0 -	170				
	- 25.0	165				
	- 30.0	ğ				
15 reddish brown 3 SAND and GRAVEL	- 35.0 - 1.0					5 gailmin
some obbie and boulders, trace silt, wet, (possib residuum)	e - 40.0	1	}			Approx. 5 gal/min
	- 48.0	1				Approx. 5 gal/min 5 gal/min
	- 50.0	140				10 - 25 gailmin
	- 55.0	138				25 gal/min
12	2	130				100 gai/min
AMEC Environment & Infrastructure A division of AMEC Americas Limited 131 Fielding Road Lively, Ontario Canada P37 L7	undwater	was obser	ved on completion of drilling.			
Tel +1(705) 682-2632 Fax +1(705) 682-260 www.amec.com	ed Geotech d and the a	nical Engin companyli	or constants a thorough undentanding of all pob ser. Also, borehole information should be read is ng'Explanation of Bonehole Log'.	endal conditions conjunction wi	s present and requires interpretative assistance its the geotechnical report for which it was	Scale: 1 : 315 Page: 1 of 3









RECORD OF BOREHOLE N Project Number: 19860021	о.	TW1	2-03A Co-Ord. 0327996 E. Drilling Location: Martisor	5577383 N Phosphate Project	Logged by: AS(AP									
LITHOLOGY PROFILE			GAMMA	CALIPER	COMMENTS									
DESCRIPTION	0EPTH (m)	ELEVATION (m)	Gamma (ga) 2000 4000 9000 1000	Caliper (cm)	Control of the set of the se									
white / grey / orange / brown					gaimin									
nock chips	- 130.	,	2		Mild acid reaction, Approx. 60 gai/min									
	-	8	{		Mild acid reaction, Approx. 60 gailmin									
	E				Mild acid reaction, Approx. 60 gailmin									
	140.0	. *			Mild acid reaction, Approx. 60 gal/min									
	E		}		Mild acid reaction, Approx. 60 gal/min									
	- 145/	, *	<pre>{</pre>		Mild acid reaction, Approx. 60 gal/min									
	-	4	<u>}</u>		Mild acid reaction, Approx. 60 gal/min									
	Ē				Mild acid reaction, Approx. 60 gal/min									
36 155.0 Mild acid reaction, Approx. 60 gailmin														
BND OF BOREHOLE 158.5														
END OF BUREHOLE 106.5														
Borehole deballa	as press	mbed, dio no	t constitute a thorough undentanding of all potential condition	a present and requires interpretative ass	datance Conduct - 345									
trom a qualified i commitationed a	nd the ac	companyle	g'Explanation of Bomhole Log'.	ear or geoeconical report for which it w	Page: 3 of 3									



R Pro	ECORD OF BOREHOL	E No.	<u>TW1</u>	2-04 Co-Ord. 03284	54 E, 5	576973 N Phosphate Project		Logged by: AS/AP
Pro	ject Client: PhosCan Chemical Co	rperation		Drilling Method:	200 mm	Dual Rotary Drill		Compiled by: KKJ
Pro	ject Name: 2012 Hydrogeology Stu	ybu		Drilling Machine:	Track Mo	unted Drill		Reviewed by: AJS
Pro	ject Location: Hearst, Ontario			Date Started:	29 Jan 12	Date Completed: 31 Jan	n 12	Revision No.: 0, 4/5/12
	LITHOLOGY PROFILE			GAMMA		CALIPER		COMMENTS
thidogy Pld	DESCRIPTION	(m) HT TEO	aleva Tion (m)	Germa (qu)	2000	Calper (cm)	NSTRUMENTATION	t steel carry Estimated Water Production Acid Reactivity Test
••	ORGANICS over							Ped roading toa
	brown SAND some to trace silt, moist	-	105					a aulimin
:	brown	178.4 10 11.0	.0 180	=			<	gal/min
	some gravel, trace sit	- 15	0 175					gal/min
		-	. 170					
:. :	grey SAND	166.4 23.0						
	some silt, moist grey SAND some gravel, trace silt, moist	163.4 26.0						
	grey SAND some gravel, silt and clay (till), moist	29.0 30	0 160	=				
		- - 38 - -	. 155					
	grey SILTY CLAY some to trace sand and gravel (till), moist to	147.9 41.5 wet	. 150					
		- 48	0 145				м	ld acid reaction
		135.4	0 140	}			M	id acid reaction
	reddish brown to brown SAND and GRAVEL damp, (possible residuum)	54.0 58	o 138 138				M 94	ld acid reaction, approx 50 Mmin
AM Ad 131 Live	EC Environment & Infrastructure vision of AMEC Americas Limited Fielding Road ty, Ontario	io groundwater	was obser	ved on completion of drilling.				
Tel Fax www	H1(705) 682-2832 trom a +1(705) 682-2832 commi vamec.com	ole details as pre qualified Geotec issioned and the	sented, do no finical Engin accompanyli	ot constitute a thorough undentanding of all pot eer. Also, borehole information should be read in ng Explanation of Borehole Log.	ential conditions 1 conjunction wi	present and requires interpretative ass th the geotechnical report for which it w	alatance eas	Scale: 1 : 315 Page: 1 of 2





LITHOLOGY PROFILE COMMENTS DESCRIPTION	roduction Test X0 - 100 5 m sprox. 200
DESCRIPTION Image: second constraints Image: second co	roduction Test 0 - 100 5 m oprox. 200
Machine Count is Drown BAND and CRAVEL approx.300-3 garmin damp, (possible msiduum) 124.4 es.0 125 grey, while, brown and some orange 66.0 125 Sight acid reaction, 200 garmin BEDROCK chips 70.0 120 Fill Count of the count of th	0 - 100 5 m oprax. 200
END OF BOREHOLE 111.0	a) - 300 on, >300 on, >300 on, >300 on, >300 30 gailmin Inguish Enguish Enguish Enguish much water



R	ECORD OF BOREHOL	LE No.	TW1:	2-05 Co-Ord. 03285	B6 E, 5	576265 N Phosphate Project		Logged by: ASIAP
Pro	et Client: PhosCan Chemical Co	rperation		Drilling Method:	150 mm	Dual Rotary Drill		Compiled by: KKJ
Pro	eject Name: 2012 Hydrogeology St.	udy		Drilling Machine:	Truck Mo	unted Drill, DR 12		Reviewed by: AJS
Pro	eject Location: Hearst, Ontario			Date Started:	27 Jan 12	Date Completed: 29 Jan	12	Revision No.: 0, 4/5/12
	LITHOLOGY PROFILE			GAMMA		CALIPER		COMMENTS
Lindogy Plat	DESCRIPTION	(m) HT-BO	ELEVATION (m)	Camma (cpa) 2000 4000 6000	8000	Calper (cm) 10 20 30 40	INSTRUMENTATION INSTALLATION	Estimated Water Production Acid Reactivity Test
, * Z	Grovy CLAY, trace sand brown	185.4 3.0 183.4 5.0	185					
	SAND trace silt, moist		180					
		- 15.0	175					
		- 20.0 -	170					
•		159.4	180					20 gal./min.
X	GRÁVEL trace sand, wet	- 30.0	15					
	grey SAND AND SILT trace gravel and organics, dry	151.9 36.5 148.4 40.0 40.0	1					
	eventr GRAVEL with sit and cobbies, dry	- 45.0	38					
		- 50.0	140					
		- 55.0	135					
AM Ad 131	EC Environment & Infrastructure Vision of AMEC Americas Limited Fielding Road	io groundwater w	as observ	ed on completion of drilling.	1			
Car Tel Fax www	eg, containing tada P3Y 1L7 Bondh +1(705) 682-2632 bond +1(705) 682-2260 commi wamec.com	cie debils as prese qualified Geotechn issioned and the ac	nted, do no Ical Engine companyin	t constitute a thorough understanding of all pot er. Also, borshole information should be read in g'Explanation of Bonshole Log'.	ential conditions 1 conjunction wi	present and requires interpretative assists the geotechnical report for which it was	dance a	Scale: 1 : 315 Page: 1 of 3





				The aphate Tropect	
LITHOLOGY PROFILE			GAMMA	CALIPER	COMMENTS
DESCRIPTION	08PTH (m)	BLEVATION (m)	Germa (que) 2000 4000 8000 8000	Caliper (cm)	CLUE COLUMN THE STRATEGY Water Production
1.	27.4	1	}		
SILTY CLAY with gravel, wet	È	1	}		
brown 1	24.4 64.0	125			
GRAVEL with rock chips, 1	21.4	1			50 gal/min
brown SILTY CLAY	67.0	120			
with gravel, wet	18.4 70.0	1	2		
GRAVEL with weathered rock chips and mice.		=	2		
	F	115	5		
1 brown	13.4 75.0	-	5		
SILT with sand, gravel and unweathered rock, wet	Ę	Ē	8		
brown SAND AND GRAVEL	10.4	110	}		
some silt, (possible residuum)	- 80.0	-			
	F	1	5		
	F	105	ć		
	85.0	1			
	F	-			
	F	100	>		
	- 90.0	1	5		
	Ę	_	1		
	- 95.0	*	5		
	-	1			
	F	90	S		
	100.0	E	2		30 gal/min, no acid reaction
	Ł	-	(
	Ł	85	}		
	105.0	=	}		
	F				
	ţ	80	\mathbf{b}		
	110.0				
	Ł	1	3		
	F	75	2		
	115.0		(
	ţ	_=			
	- 120.0	70			
	- 1200		>		5 gal/min
	F)		
	125.0				moderate acid reaction
	Ę	=	>		
		1			<u>11 11 </u>





RECOR Project Numb		lo.	TW1	<u>2-05</u> C	o-Ord. 03	28586 E, 5	576265 N Phosphate Project		
L	THOLOGY PROFILE				GAMMA		CALIPER		COMMENTS
Lthdogy Pict	DESCRIPTION	DEPTH (m)	BLEVATION (m)	2000	Gamma (qas) 4000 80	00 8000	Calper(m) 10 20 30 40	INSTRUMENTATION	I see certing Estimated Water Production Acid Reactivity Test
EL DOF 5	0 GRAVEL possible residuum) 				Gamma (pa)			AND	Estimated Water Production Acid Reactivity Test
	Borshole debil from a qualified commissioned	So press Geotechr and the ac	nted, do no Ical Engine companyir	ot constitute a the wer. Also, boreho ng Explanation of	rough understanding a information should i Bomhole Logi.	of all potential conditions be read in conjunction w	present and requires integrebables a the geotechnical report for which i	usistance twas	Scale: 1:315 Page: 3 of 3





R Pro	ECORD OF BORE sject Number: <u>1Y860021</u> sject Client: <u>PhosCan Chem</u>		o. :	TW1:	<u>2-06</u> Co-	Ord. 03284	77 E, 58 Martison	575546 N Phosphate Project Dual Rotary Drill		Logged by: AS/AP Compiled by: KKJ
Pro	oject Name: 2012 Hydrogeol	ogy Study				Drilling Machine:	Track Mox	unted Drill		Reviewed by: AJS
Pro	oject Location: Hearst, Ontario					Date Started:	25 Jan 12	Date Completed: 26 Ja	n 12	Revision No.: 0, 4/5/12
	LITHOLOGY PROFI	LE				GAMMA		CALIPER	_	COMMENTS
Indogy Pld	DESCRIPTION	1	(m) HL40	LEVATION (m)		Gerrma (cpa)		Calper (cm)	NSTRUMENTATION NSTALLATION	Estimated Water Production
ī.	Coal Ground Surface Elevation: 187	.9 m	0		2000	400 800		10 20 30 40		Pod reactivity test
	GRAVEL some sand, dry	195.9	- 5.0 - 10.0 - 15.0 - 20.0	185 180 175						
ē	grey	21.0	-							
¢.	GRAVEL some sand, silt and clay, dry	164.9		165						
	grey SAND some sit, trace gravel, wet	253	- 25.0 - 30.0 - 30.0 - 35.0	10 10						Hole plugged due to sand
•	block	151.4	-	-	2					Medium acid reaction (120' - 170')
	SAND trace gravel moint	36.5	Ę	150						,,
	black SAND some gravel, wet	147.9 40.0 144.9 43.0	- - 40.0 -	2						High water output
i i	GRAVEL and SAND wet		45.0							
¢		138.9	t	140						No water output
	grey GRAVEL some sand, moist	49.0	- 50.0	13						
9	grey/green	133.9	L	3)					High acid reaction, 50 gal/min
	NUUK (chips) wet	129.9 58.0	- 55.0	130						END OF CASING at 57 m No water output, high acid reaction
M 131	EC Environment & Infrastructure Mision of AMEC Americas Limited Fielding Road	을 No ground	water w	as observ	ved on completion of	of drilling.	7			
Car	ada P3Y 1L7 +1(705) 682-2632	Borshole debils	as prese	nted, do no	t constitute a thoroug	h understanding of all pot	ntal conditions	present and requires interpretative as	alatance	Scale: 1 - 244
a	(+1(705) 682-2260 w.amec.com	commissioned ar	d the ac	companyin	g Explanation of Bon	hole Log.	- angunason wa	and a generative report for writch it		Page: 1 of 2





UITHOLOGY PROFILE GAMMA CALIFER OCMMENTS DESCRIPTION Total Section (set) Total Section (s
PERCENT 90 MOD ONE HOL BY - -





APPENDIX C

Borehole Logs of Geology and Assay Data



			N	lartison Lake Project	Contract	tor	Davidso	on Well I	Drilling		Azm:	0 De	grees																																					
Geological and	Assay Re	sults tan	n-Mar 2	2012	Claim:	478			101110		Dip:	-90 De	grees																																					
0					Litho																														3												3			
Borehole ID	CORE	RUN (m)	Ĕ.	Geo-log Description	Unit	SAMPLE	1									- 1111 - CANA					ME-MS81								and the second											ME-IC	CP06			10		OA-GRAD	5 TOT-ICPO	6 Ce-OG	REE N	6-X RF10
							Ag	Ba	Ce C	o Cr	Cs	Cu D)y Er	Eu	Ga (Gd Hf	Ho	La Lu	Mo	Nb	Nd N	li Pb	Pr	Rb Sm	Sn	Sr Ta	a Tb	Th	TI T	ſm U	V	W	Y Yb	Zn	Zr Si	02 Al20	3 Fe20	3 (a O	MgO N	va 20 K	(20 Cr2	203 Tir	O2 MnC) P2O5	SrO BaC	LOI	Total	Ce		Nb
	Front	To	Lengt	h		č	ppm	ppni	ppm pp	om ppn	ppm	ppm pp	om ppn	1 ppm	ppni p	pm ppm	ppm	ppni ppr	m ppm	ppm	ppm pt	m ppm	ppm p	ppni ppni	n ppm	ppm pp	nı ppr	n bbui t	ppm pp	pm ppi	m ppm	ppm p	pm ppn	n ppm	opm 9	6 %	%	%	%	% (% 9	% %	% %	%	% %	%	%	%	10	%
PW-12-02	(0 4.88	8 4	4.9 Grey, SILTY SAND, trace gravel (TILL)	TILL																														1															
PW-12-02	4.8	8 10.97	7 1	5.1 "	TILL	-									2													1										1				_	_	1		1		1		
PW-12-02	10.9	7 17 07	7	51"	TIL	-	-			-			-		-	-									+ +		-			-	-			1 1		-	-	1		-	+	-		+	\vdash		1	+	_	
PW-12-02	17.0	7 23 16	5	5 1 Grev GRAVELLY SAND trace silt (TILL)	TILL	-				-			-										1	-	+ +	-					-	1	-		-		-	1		-	-	-		1		1	1	-	-	
DW 12.02	22 10	E 20.20		E 1 Cray SILTY SAND trace gravel (TUL)	THE	-	-		-	-		-	-		-	-		-	-	-	-	-		-	+ +	-	-	1	-	-	-	1	-	+ +	-	-	-	-		-	+	+	+	+		<u>+</u>	+	+	-	
PW-12-02	23.10	.0 29.20		e a "	TILL	2	-			-			-		-			-	+ +			-		-	+ +		-	-	-	-	+	4	-	-		-		-			-		_	+			+	-		
PW-12-02	29.20	25 35.36	6	6.1	TILL	-	1 3			-		-	-			-			-		-	-			+ +	-	2.2	2 1 2	-	-	-		-	+ +	35	-	-	-		-		_		+			-	-		
PW-12-02	35.3	41.45	5 1	6.1 Brown, SILTY SAND, tracegravel (Residuum)	RES				Carrier Con						in the second	-			-	- NUCLEY		100 000 000	0.001	1041101000				100000	11.12	1200 1200	1011000		0.01110	-	CLAR ICA				10.000					-					_	101070
PW-12-02	41.49	47.55	5 1	6.1 Brown, SILTY SAND, trace gravel (Residuum)	RES	L010151	<1	4460	3100 14	.9 70	1.5	18 38	3.8 15.3	31.1	19.8 6	8.7 3	6.5	1895 1.8	32 11	1915	981 8	1 133	311	27 130	0 4	2500 18	1 8.3	2 72.7	<0.5 2.	.08 39.	.4 313	6 1	.93 12	978	191 18	3.7 5.31	9.12	28.3	2.05	0.59 0	.68 0.0	01 0.6	63 1.2	16.65	0.3 0.47	11.55	95.48	-	_	0.23
PW-12-02	47.5	5 53.64	4 1	5.1 "	RES	L010152	<1	5880	3680 67	4 280	5.77	93 66	5.4 25.5	5 50.7	33.8 1	.19 14.1	11 3	1925 2.7	7 17	>2500	1365 2	173	398 1	112 206	5 12	2980 83	.8 14.	4 269	1.1 3.	.36 70.	.5 1005	28 3	10 18.	5 853	763 15	7 8.33	25.4	11.9	4.28	0.28 1	66 0.0	04 3.5	33 2.14	10.9	0.3 0.64	11.1	95.99		_	0.4
PW-12-02	53.64	65.84	4 13	2.2 "	RES	L010153	<1	1845	1050 18	8.5 130	1.25	16 2	0 7.78	8 14.8	12.8 3	5.1 5.8	3.32	569 0.8	5 9	1070	375 5	1 55	111 5	50.9 56	3	1625 16	5 4.3	5 62 •	<0.5 1.	.04 13.	2 302	5 9	1.5 5.6	7 213	259 40	.3 5.99	5.93	18.2	4.14	1.6 1	66 0./	02 0.7	76 0.44	4 4.29	0.2 0.21	. 13.7	97.43			0.13
			N	lartison Lake Project	Contract	tor:	Davidso	n Well I	Drilling		Azm:	0 De	grees																																					
Summary of Tes	t Wella	nd Pump	ing We	I Holes 2012	Claim:	P 120162	5		976-507 5 7		Dip:	-90 De	grees																																					
and a second	T			140 MCM	Litho		1			_	2.151																								<i>3</i> 0			_									1	1		
Bo rehole ID	CORE	RUN (m)		Geo-log Description	Unit	SAMPLE															ME-MS81																			ME-IC	CP06					OA-GRAD	i TOT-ICPO	6 Ce-OG	REE	o-XRF10
							Ag	Ba	Ce C	o Cr	Cs	Cu D	y Er	Eu	Ga	Gd Hf	Ho	La Lu	Mo	Nb	Nd	i Pb	Pr	Rb Sm	Sn	Sr Ti	a Tb	Th	TI T	m U	V	W	Y Yb	Zn	Zr Si	02 Al20	3 Fe20	3 Ca O	MgON	Va 20 K	(20 Cr7	203 Tir	O2 MnC) P205	SrO BaC	LOI	Total	Ce		Nb
	From	To	Lengt	h			ppm	DDm			DDU		om non		DDDI D		ppm			DDDI											ni pom					6 %	%	%	%	%	% 0	% 0	% %	%	% %	%	%	%		%
PW-12-03	1	0 293	3 2	9.9	TIL	-	PP	Ppro	PP P1		PP	PP-PP		PP	PP P		PP-0	Prove Pre-	- PP	PP.0	PP PI		PP		PP	PP PP		1111	FI	P PP.		PP P	Pin PPi	- PP			129	1000					-	1			1 10		-	100
DW 12-03	203	2 25 /	1 1	E 1 CREVSAND AND CRAVEL come cilt	THE	1010100	1	400	40.9 5	7 50	1.41	10 1	7 0.01	0.60	07 0	12 29	0.92	21 5 0 1	1 12	124	16.0 1	0 10	1 51 5	50 6 2 03	2 1	250 0	7 0 3	1 61	05 0	14 1 2	22 42	1 1	7 0.9	2 90	100 41	1 7 20	2.41	10.6	1 01	15 1	65 0	01 0	26 0.04	1 01	0.00/	21	100.02		-	0.01
PW-12-03	22.	A 41 A	*	C Desug CUTYCAND same stand trans day (DECIDIUMA)	DEC	1010190	-1	5200	40.0 0.	1 100	2.91	10 1	25 11	10.05	2.3 4	15 2.0	0.55	001 101	F 4	10.4	E1C 0	0 10	4.01	0.0 2.90	7 0	233 0.	5 6.5	1 0.1	0.5 U.	44 01	1 070	0 1	20 0.0	0 50	103 41	1 1.00	0.00	19.0	9.31	1.0 1.	00 0.0	01 0.2	61 0.04	1 10.45	0 0.04	14.1	00.15	+	+	0.01
PW-12-03	35,6	4 41.4		5.0 Drown Sici T SAND, Some graver, crace cray (RESID COM)	RCJ	1010191	1	0000	1490 10	0.2 120	0.20	20 21	1.7 1.0	19.4	10.4 4	4.5 2.9	4.05	001 1.2	0 5	2290	510 9	02	151 4	7.0 1.00		2130 1	0 0.7	5 120	0.5 1.	44 51	2/9	0 1	20 0.5.	2 330	100 20	0.41	0.02	23.3	3.44	3.67 1.	.21 0.1	01 0.0	51 0.71	12.45	0.5 0.01	14.1	26.15		-	0.29
PW-12-03	41.4	4 47.5		5.1 Brown GRAVELLY SAND, trace sit	RES	1010192	1	4140	2510 28	5.3 220	0.95	25 44	1./ 18.	33.1	1/ /	3.5 4.1	1.50 .	1470 2.1	9 5	>2500	8/9 1	04 102	262	7.8 122	2 4	3410 32	.6 9.4	8 208 .	<0.5 2.	.45 30	0 398	8 4	.04 14.0	5 119	315 8.	91 2.4	11.05	30	1.83	J.36 U.	.22 0.1	03 0.	.6 1.61	. 25	0.4 0.48	1.18	96.6/	_	_	0.35
PW-12-03	47.5	.5 53.6	5	5.1	RES	L010193	2	3640	2560 42	8 600	1.99	51 38	3.2 15.4	28.7	21.1 6	1.5 3.8	6.58	1365 1.8	8 5	1940	871 2	30 55	264 2	28.1 110	5	2750 8.	3 7.8	7 157	0.7 2.	.05 21.	.9 526	8 1	.85 12.3	3 657	202 11	.7 3.42	13.65	30.8	3.74	J.25 0	.78 0.1	08 1.7	28 1.74	, 22.3	0.3 0.45	6.72	97.24	_	_	0.41
PW-12-03	53.6	.6 59.7	7 1	5.1	RES	L010194	<1	3080	1830 53	.5 370	2.11	56 35	5.7 12.3	. 30	19.8 6	8.8 5	5.64	886 1.1	.5 8	>2500	746 1	74 70	208	59 113	3 6	2780 16	51 8.2	2 90.3	0.9 1.	.48 24.	.2 460	6 1	.40 8.13	3 509	355 13	1.2 2.97	12.2	32.2	5.51	0.25 1	1.6 0.0	05 1.2	22 1.14	23.6	0.3 0.36	/ 3.99	98.61			0.78
PW-12-03	59.	.7 65.8	8 1	5.1	RES	L010195	1	2800	1640 21	.8 110	0.9	19 28	3.6 11.3	20.9	11.3 4	7.8 2	4.85	914 1.3	4 5	2050	556 4	4 37	169 2	22.5 77	3	5480 38	6 6.0	9 114	0.6 1.	.55 30.	.4 224	3 1	.32 9.1	7 307	131 5.	36 1.44	5.53	42.5	3.45	0.21 0	1.61 0.1	01 0.5	59 1.15	i 8.92	0.6 0.32	. 28	98.73			0.28
PW-12-03	65.8	.8 71.9	9 1	5.1 Brown SAND, trace silt	RES	L010196	1	2250	1565 13	1.6 70	0.37	8 27	7.6 10.1	. 22	8.6 5	0.1 2	4.46	846 0.9	9 3	1390	557 2	1 23	167	9.1 79.8	8 2	5850 86	.4 6.2	311 •	<0.5 1.	.24 57.	.4 192	2 1	.14 6.93	1 223	109 2.	54 0.71	5.11	44	4.27	0.18 0	1.26 0.1	01 0.7	24 0.89	1 9.75	0.7 0.26	<i>i</i> 30	99.02			0.22
PW-12-03	71.	7 78.2	2 1	6.5 Brown GRAVEL, occasional cobble	CARB	L010197	2	1445	957 10	.5 30	0.18	<5 21	L.6 8.3	15.5	6.1	36 1	3.58	567 0.9	4 3	933	374 3	8 36	102	2.2 53.5	5 1	2190 18	.5 4.6	6 96.5 •	<0.5 1.	.09 74.	.3 383	2 1	.01 6.4	598	70 1.	48 0.38	5.9	47.6	0.6	0.08 0	1.05 0.1	.01 0.1	.14 0.49	3 33.1	0.3 0.17	6.03	96.29			0.17
PW-12-03	78.	2 84.1	1	5.9 Brown to grey bedrock	BRCK	L010198	<1	1945	1120 5	6 10	0.11	<5 18	5.8 6.76	13.2	6.6 2	8.9 2.1	2.86	630 0.7	7 <2	732	388 <	5 15	110	3.2 48.9	9 3	6390 34	.5 3.6	8 121 •	<0.5 0.	.89 38.	6 127	<1 7	6.4 5.29	9 71	136 0.	75 0.22	3.5	45.4	4.44	0.11 0	1.09 <0	.01 0./	.07 0.7	3.08	0.8 0.23	38.8	98.15			0.14
			M	lattison Lake Project	Contract	tor	Davidso	n Well	Drilling		Az m.	0 De	areac						_													hanna an					-							·						
SummanuofTe	t Walls	nd Pump	ing We	Il Holes 2012	Claim	477	0 011000	ar treat	e minib		Din	-00 Da	araac																																					
2 annual y of the	- rection	ng rome	THE FAC		titke.	4//	1				o ip.	50 00	BICCO																						-											ř—	1	T	_	
	CODE						3																																								TOTION		-	1
Borehole ID	CORE	KUN (m)		Geo-log Description	Unit	SAMPLE		n	0 0			~ I P		L RO L	0	201 10	L in all	12 1 12		ALL	ME-MS81	d nt		nt le		6. T			71 7				u l ut		2. 01		1 5-00			ME-IC	PUB	202 71	00	a naar		OA-GRAU	TOPICPU	a Ce OG	REE NE	FX RF10
	-	-					Ag	ba	Ce C		us	Cu L	PY Er	EU	Gal	IN DC	HO	La Lu	I MO	ND	NO P	I PD	Pr	KD SM	Sn	Sr Li	a 10	IN	11 11	mU	V	W	Y YD	ZR	21 50	52 AI20	3 1620	3 (20)	Mgo	/a 20 K	20 012	203 110	J2 MINO	J P205	STO BAO	LOI	Iotal	- Ce	_	ND
	Front	To	Lengt	h			ppm	ppn	bbu bt	nı ppn	ppm	ppm pt	om ppn	1 ppn1	ppni p	pm ppm	ppm	ppni ppr	m ppm	ppm	ppm pt	m ppm	ppm p	ppm ppm	n bbu	ppni pp	nı ppr	n bbui t	ppni pt	pm ppi	ni ppni	ppni p	pm ppn	n bbu	opm 9	6 %	%	%	%	%	% %	6 %	6 %	%	% %	%	%	%	<u> </u>	%
TW-12-01	(0 4.88	8 4	4.9 Grey SANDY SILT, trace to some gravel, trace day (TILL)	TILL					-		_	_			_			-			-					-	1			-					-		-		_	_	_	_	+			-	-	_	
TW-12-01	4.8	8 10.97	7 1	6.1 Grey SANDY SILT, trace to some gravel, trace day	TILL														_												_												_	1						
TW-12-01	10.9	7 17.07	7 1	6.1 Grey SANDY SILT, trace to some gravel, trace day	TILL	3																												1													-			
TW-12-01	17.0	07 20.12	2	3.1 Grey SANDY SILT, trace to some gravel, trace day	TILL										(1 -												- 1					1					_				5			
TW-12-01	20.13	2 23.16	6	3.0 Grey SANDY SILT, trace to some gravel, trace day	TILL	6																																												
TW-12-01	29.20	6 32.31	1	3.1 Grey SANDY SILT, trace to some gravel, trace day	TILL	c																										-																		
TW-12-01	32.3	35.36	6 3	3.1 Grev SANDY SILT, trace to some gravel, trace day	TILL	L010168	<1	292	54.3 4	5 30	1.02	11 1	65 0.84	0.78	6.5 2	22 2	0.31	30.8 0.1	2 <2	27.1	19.5 1	3 7	5.76	34 3.19	9 <1	200 0.	5 0.3	2 4.79	<0.5 0.	12 11	6 36	1 1	39 0.7	5 25	79 28	1 5.02	2	22.4	10.7	0.89 1	24 <0	01 0.1	22 0.04	4 0 12	0 0.07	29.6	100.38			0.01
TW-12-01	35 3	6 39 30	2	4.0 Grev SANDY SILT, trace to some gravel, trace day	TIL		-																																					1		1		-		
TW-12-01	39.3	40.51	1	1.2 Dark brown SILTY SAND, trace gravel, trace clay (RESIDI)	DES	1010170	<1	729	115 14	1 90	28	26 3	88 2	1 70	164 5	35 45	0.73	65 2 0 2	0 <2	683	43 3	8 15	125 9	817 73	1	316 1	9 07	4 128 .	050	20 2 0	105	2	21 1 8	77	108 53	9 121	5 21	10.3	32	1.82 2	38 0	01 0	54 0.12	3 0.3	0 0.05	12.45	100.81	-	-	0.02
TW-12-01	40.5	1 41 45		1.2 Dark brown SILTYSAND, trace graver, trace clay (RESIDU	DEC	1010170	-1	125	110 14	10 100	4.00	75 1	00 2	1.75	20.4 3	0.7 155	0.75	00.2 0.2	0 14	00.0	40 0	7 00	12.0 0	04.1 7.5	1 2	700 11	7 0.7	1 2.0	0.5 0.	77 7 0	103	15 5	0.0 4.5	151	190 J2	E 191	14 50	10.5	1.60	0.40 1	00 0.0	02 0.5	25 0.14	1 1 1 4	0 0.00	12.45	100.01			0.02
100-12-01	40.5	41.45		o.9 Daik brown Sich Y SAND, crace graver, crace cray	RES	1010171	~1	1222	475 50	7 720	4.09	15 1	.5 5.04	1.51	22.5 1	9.7 15.5	2.51	294 0.0	0 0	0/0	160 5	1 22	49.5 5	92.1 20.4	+ 2	709 11	.1 2.0	2 20.7	0.5 0.	.11 1.0	12 410	15 0	0.5 4.5	151	000 02	1.5 15.1	14.5	2.59	1.09	1.95 4	.82 0.1	02 2.5	55 0.14	1.14	0.1 0.18	9.4	101.05	+	+	0.04
1W-12-01	41.4	44.5		3.1 Dark brown SILLYSAND, trace gravel, trace clay	RES	1010172	<1	2680	301 21	./ 70	3,84	49 8	1 3.63	4.75	27.1 1	2.2 11.9	1.44	1/9 0.4	1 4	439	104 2	1 13	31.4	136 16.5	2	628 13	2 1.6	5 18.5	Q.5 0.	.49 5.4	+/ 360	12 3	9.7 3.0	2 138	821 50	1 15.0	5 11.4	3.58	1.81	1.06 4	.88 0.1	01 1.5	55 0.2	1.02	0.1 0.33	1.71	98.78		_	0.05
IW-12-01	44.5	47.55		3.1 Dark brown SILTY SAND, trace gravel, trace clay	RES	L010173	<1	2410	325 16	.2 20	3.83	47 7	.9 3.78	5.17	23.6 1	2.7 6.9	1.48	175 0.4	9 5	348	120.5	7	35.3 9	96.4 18.7	/ 1	1760 9.	3 1.6	2 21.1	<0.5 0.	.54 4.0	4 422	24 4	1.8 3.1	3 136	438 38	3.2 13.3	8.72	14.9	2.42	1.04 3	.89 <0.	.01 1.0	09 0.45	1.75	0.2 0.28	14.05	100.24		_	0.04
TW-12-01	47.5	5 51	1	3.5 Dark brown SILTY SAND, trace gravel, trace clay	RES	L010174	<1	2640	185 9	5 10	1.83	44 3.	89 1.7	2.33	34 5	.78 7.1	0.7 1	17.5 0.2	2 7	468	56.6 <	5 13	18.2	179 8.38	8 1	948 9.	9 0.7	8 12 .	<0.5 0.	.24 4.9	99 234	10 2	0.8 1.4	7 122	613 4	9 15.6	5.55	7,56	1.49	J.76 8	.49 <0	.01 0.6	64 0.22	0.76	0.1 0.31	9.39	99.88		-	0.05
TW-12-01	53	1 53.64	4 :	2.6 Dark brown SILTY SAND, trace gravel, trace clay	RES	L010175	<1	1770	209 19	.2 60	2.6	65 7.	97 4.23	3.78	24.2 1	0.4 7.7	1.56	133 0.5	6 6	405	71.8 1	6 13	21.6 1	129 12.2	2 1	1580 9.	3 1.4	7 14.8	0.6 0.	.64 6.0	06 415	30 4	6.1 3.7	138	427 37	.6 11.0	5 8	15	3.02	0.54 5	.61 0./	01 1.4	41 0.41	1.38	0.2 0.21	. 15.6	99.97	-		0.04
TW-12-01	53.64	4 56.69	9	3.1 Brown SAND AND GRAVEL	RES	L010176	<1	2310	313 16	1 10	4.66	58 7.	42 3.1	4.59	26.2 1	1.9 7.8	1.3	202 0.3	6 8	473	102 <	5 14	31.8	124 15.8	8 1	1625 14	.9 1.5	2 16.1	<0.5 0.	.44 7.7	77 346	10 3	6.8 2.3	9 139	578 39	.3 12.9	7.93	15.4	2.84	1.06 5	.52 <0	.01 1	.2 0.32	1.25	0.2 0.27	12.15	100.33			0.05
TW-12-01	56.65	59.74	4 1	3.1 Brown SAND AND GRAVEL	RES	L010177	<1	2870	831 10	.5 20	2.36	31 14	1.1 6.33	10.3	18.6 2	4.9 5.8	2.46	535 0.7	9 7	255	263	29	83.6 7	78.7 38.3	3 1	2160 7	2.9	9 34.7	<0.5 0.	.89 4.5	58 370	27	71 5.26	5 166	327 32	.8 9.81	6.93	17.8	5.02	0.8 2	3.8 <0	.01 0.1	.82 0.45	i 1.01	0.3 0.34	18.35	98.15			0.03
TW-12-01	59.74	4 62.79	9	3.1 Brown SAND AND GRAVEL	RES	L010178	<1	3720	356 10	.2 <10	9.1	34 7.	87 3.32	5.3	17.3 1	3.3 6	1.38	195 0.4	1 10	333	131.5 <	5 6	39.1 6	63.4 19.5	5 1	4720 15	4 1.6	3 21.1 .	<0.5 0.	46 6.6	54 385	10	38 2.63	2 120	395 3	0 10.3	5 7.37	22.4	2.67	2.01 2	2.47 <0	.01 1.	.05 0.3	1.22	0.6 0.45	17.65	98.47	1		0.03
TW-12-01	62.7	9 65.84	4	3.1 Brown SAND AND GRAVEL	RES	L010179	<1	3690	398 9	5 10	4.35	28 8	27 3.78	5.51	24.3 1	3.5 6.7	1.48	240 0.4	8 34	511	136.5 <	5 20	41.5	121 20	1	2850 16	1 1.6	6 23.6	<0.5 0.	.52 20	7 315	13 4	1.6 3.0	2 144	537 36	.8 12.4	6.31	15.9	3.9	1.74 5	18 <0	.01 0.	78 0.34	4 0.95	0.3 0.4/	4 15	100.02		-	0.05
TW-12-01	65.8	4 68.8	8	3.0 Brown SAND AND GRAVEL	RES	1010180	<1	3530	351 8	1 10	3.36	29 6	6 2 96	4.43	25.4	11 65	1.15	225 0.3	7 12	415	111	5 14	35.3	124 15	1	2500 1	1 13	6 155	0.5 0	14 7 5	51 319	9 9	3.5 2.3	5 134	499 30	3 14	6.03	14.2	3.02	1.47 5	54 <0	01 0	76 03	0.77	0.3 0.4	14.45	100.5	-	-	0.04
TW-12-01	60 C	82 71 05	3	31 Brown GRAVELLY SAND trace ellt	pre	1010101	1	5250	367 11	9 90	4 69	25 6	58 20	4 69	25.7 1	06 65	114	221 0.9	E DE	449	125 5 1	0 20	387 1	119 17	1	2530 11	7 1 9	7 15	050	38 0 6	5 396	8	31 2.0	8 149	474 97	1 190	5 6 99	14 5	314	169 5	18 20	01 0	17 0.91	1 0.97	03 05	14.1	09.47	+	-	0.04
TO. TT AN	1 00.0	~ 11.32	1	experent and teter and e, trace alle	nLa	COLOTOI	1.1	2630	201 11	.0 00	14.00	23 0.	00 20	14.00	NO.1 1	0.0 0.0	4.44	U.J	9 40	772	10.01	- 23	00.1	1	4	*220 II	of Try	44	-J. J U.		000 000	0	- L.D	- 142	114 11	- 10.L	0.88	14.3	0.14	1.00 3	120 20.	.va 0.	10.01	10.02	10.0 0.00	4 19.1	20.47	- 12 ·		0.04



		Martison Lake Project	Contractor:	Davi	dson Well	Drilling	A	zm: 0	Degrees																																				
Summary of	Test Well and Pun	ping Well Holes 2012	Claim: 4	77			[)ip: -90) Degrees																																				
Borehole ID	CORE RUN (m)	Geo-log Description	Litho Unit SAM	APLE		191 - 1914	11-1				0.5				-		ME-MS81												a taja	×				940	ME-ICF	206				0	DA-GRA05	TOT-ICP06	Ce-OGR	EE Nb-X	XRF10
				A	g Ba	Ce C	0 G	Cs Qu	Dy	Er E	u Ga	Gd	Hf Ho	La	Lu Mo	Nb	Nd Ni	Pb Pr	Rb	Sm Sr	n Sr	Ta	Tb	Th	TI T	m U	V	W	Y Yb	Zn Zr	SiO2 Al	203 Fe	2 03 C	aO MgO Na	a20 K20) Cr2O3	tio2 N	AnO P2O	5 SrO 1	BaO	LOI	Total	Ce	N	٩b
	From To	Length		рр	m ppm	ppm pp	m ppm p	pm ppn	n ppm	ppm pp	m ppm	ppm	ppm ppr	n ppm	ppm ppn	ppm	ppm ppm p	opm ppn	n ppm	ppm ppr	m ppm	ppm	ppm	ppm	ppm pp	om ppn	n ppm	ppm p	ppm ppm	ppm ppi	n %	% 9	% 9	% %	% %	%	%	% %	%	%	%	%	%	9	%
TW-12-02	0 4.88	4.9 Grey, SILTY SAND, trace gravel, trace clay (TILL)	TILL	1211	-				1.000	in ann				1000		1				terter i districe	v vest	0 110	(a a									1											-	
TW-12-02	4.88 7.92	3.0 Grey, SAND and GRAVEL (TILL)	TILL																																										
T₩-12-02	7.92 8.84	0.9 Grey, SILTY SAND, trace gravel, trace clay (TILL)	TILL		1		1				20					2 B														1		1						_							_
TW-12-02	8.84 10.97	2.1 "	TILL																																_										
TW-12-02	10.97 14.02	3.1 "	TILL					_	1																-	_						_		-											
TW-12-02	14.02 17.07	3.1 "	TILL																																										
TW-12-02	17.07 20.12	3.1 "	TILL	_			-		1									_								_												_						_	
TW-12-02	20.12 23.16	3.0 "	TILL																																			_							
T₩-12-02	23.16 26.21	3.1 "	TILL		1								() () () () () () () () () ()					- 10											1	L.	1		_					_					1		
TW-12-02	26.21 29.26	3.1 "	TILL		4			_	100				_								-				_	-	-						-		_			_		_				10	
T₩-12-02	29.26 32.31	3.1 "	TILL	_	_			_		-	_							_			-	_						_				_	_		_		_	_		_				_	
T₩-12-02	32.31 35.96	3.7 "	TILL								100			-					-			1				5											1						k.k.	_	
T₩-12-02	35.96 38.4	2.4 "	TILL	_	_		-	_		_	_				_			_		_	_					_			_			_	_		_		_	_		_					
TW-12-02	38.4 41.45	3.1 "	TILL	_		-	1		-	-	-		_			-					-					_					-	_	-		_	-			_						
TW-12-02	41.45 44.5	3.1 "	TILL		_						_				_					_		_			_	_	+	_				_	_		_		_	<u> </u>	++	_			<u> </u>		
TW-12-02	44.5 47.55	3.1	TILL		-		-	_		_	-	-			-	-		-		-	-	_			_	_	-	_	-			_	_		_			_	+	\rightarrow			-	_	
TW-12-02	47.55 50.6	3.1"	TILL		_		-				_							_	_							_						_	_				_	—	+	\rightarrow			4		
TW-12-02	50.6 53.64	3.0 "	TILL	_	-		-	_	-	_	_			-				_		_	-	_		-	_	-			_			_	-		_		-	—	++	_			<u> </u>	_	
TW-12-02	53.64 56.7	3.1"	TILL	-	-		-	_		_	_		_		_	-		-		_	-	_			_	_			-			_	-		-		\rightarrow	_		_			4		
TW-12-02	56.7 59.74	3.0	TILL	_	-		-	_		_	-							_			-	_	-		_	-	-				-	_	-		_	-		_		_			<u> </u>		_
TW-12-02	59.74 62.79	3.1"	TILL	-	-	-	-	_	+ +	-	-		-	-	_			_	-	_	-	-	-	-	-	-	-	-	_		-		-		_		_	—	++	_				_	_
TW-12-02	62.79 65.84	3.1	TILL	2010	104	501 0	1 00 0	70 40	0.00			0.05			0.10	00.0	00.0					-	5.11			10 1.00							17 4		10 0	0.04	0.07	0.05		2.00	145.5	101.75	-	-	
TVV-12-02	05.84 08.88	3.0 "	TILL LO1	0218 <1	481	53.4 9.	1 60 1	.79 18	2.39	1.29 0.	92 11.9	2.96	3.5 0.4	1 29.2	0.19 <2	22.8	22.2 25	11 6.03	5 63.2	3.84 1	229	1	0.44	8	<0.5 0.	.19 1.66	60	1 .	13.5 1.2	41 14	51.3 9	.05 3.	.4/ 1:	5.1 3.18 1.	.49 Z	0.01	0.37 0	.06 0.12	1 0.03 (0.06	15.5	101.75	-	0.0	.01
		Reddish brown, SLTY SAND,																																											
TVV-12-02	68.88 71.93	3.1trace gravel, trace clay (Laterite)	LAT LO1	0219 <1	780	153.5 1	8 110 3	.16 22	5.6	2.8 Z.	48 16.9	7.24	7.4 1.0	5 90.4	0.4 2	119	61.6 38	21 17.3	5 86.4	9.78 2	315	2.9	1.05	17.4	0.5 0.	41 3.92	134	3 3	29.7 2.56	82 29	7 67.1	12 4.	.84 2.	33 1.46 1.	.31 2.3	0.01	0.67 0	.11 0.3	0.04 0	0.09	6.41	99.02		0.0	.02
TW-12-02	71.93 74.98	3.1"	LAT LO1	0220 <1	1260	938 2	0 130 0	1.54 19	31.6	0.45 1	9 26.2	58.3	9.4 4.7	4 498	1.04 /	762	289 30	58 85.	2 38.8	51.6 5	9/8	9.4	7.43	/1.6	<0.5 1.	33 23./	630	16	104 7.73	97 50	5 47.1 1	5.65 17	.25 2	.4 0.55 1.	.27 1.3	0.02	1.69 0	.59 0.77	0.13	0.15	9.05	98.01	-	0.1	.12
TW-12-02	74.98 78.02	3.0	LAT LUI	0221 <1	1830	1/45 15	0.8 210 0	.84 49	68.2	21.2 33	3.1 35.8	109	15.8 10.2	5 927	1.7 13	/10	515 55	101 155.	.5 22.8	88.1 7	1985	9.7	14,9	139.5	<0.5 2.	51 44.1	845	21	212 13.65	8/ 8/	2 30.4 2	5.8 19	.85 1.	42 0.47 0.	.43 0.54	4 0.03	2.75 1).1 1.1/	0.25 (0.22	15.25	98.78	<u></u>	0.1	.17
TW-12-02	78.02 81.08	3.1	LAT	0000	0.0000	2000 15	F 000 /	60 50	1105	10.7	7 00 4	170	01.0 10.1	5 0150	1 00 17	- 05 00	1400 50	1.00			5700		00.4	000		10 100	1055	10	170 00.0	110 110	0 11 0	c		<i>c</i> 1 0.10 0	11 0.0		0.00 1		1 0.00	0.40	1105	00.11	+	-	
TW-12-02	81.08 84.13	3.1	LAT LO1	0222 4	3350	3820 15	5 300 0	1.63 58	110.5	43./ 05	0.7 68.4	1/3	21.8 19.1	5 2150	4.32 17	>2500	1420 53	100 3/1	3.1	239 9	5790	1 12	22.4	283	<0.5 5.	43 103	1255	42	470 30.9	119 118	0 14 2	0.2 3	5.8 0.	61 0.12 0.	.11 0.0:	5 0.04	3.66 0	.11 2.51	. 0.58 (0.42	14.85	99.14		0.4	.41
TW4-12-02	84.13 87.17	3.0	LAT LOI	0223 2	3120	3880 18	0 400	0.0 51	103.5	39.1 /0	1.3 39.7	1/9.5	21.1 17.5	2310	3.81 1/	22500	1590 54	154 421	1 0.3	203 8	0350	47.0	42.9	299	<0.5 4	.8 97.3	1070	30	413 27.7	115 121	0 17.7 2	3./ 3:	3.3 1.	32 0.28 0.	.17 0.14	1 0.04	3.13 1	2.38	0.72	0.4	15.2	98.78		0.4	43
TW-12-02	87.17 90.22	3.1	LAT LOI	0224 2	4000	3160 16	0.2 400 U	07 170	180.5	00.0 1/	24 55.0	33/	22.3 27.	9 2070	4.08 10	1/35	2130 73	107 712	2 4.9	433 /	4290	47.3	40.3	211	<0.5 0.	04 90.9	840	40	525 32.7	121 121	0 20.5 2	5.7 Z	0.7 0	.5 0.12 0.	10 0.05	0.06	3.3 0	.13 2.33	0.49 1	1.48	12.55	99.06		0.7	28
TW/ 12 02	90.22 93.27	3.1	LAT LUI	0225 14	1 >10000	1020 48	51 440 1	.07 1/5	5 173.5	80.9 10	J4 73.3	270	20.9 32.	5 3/10	9.49 44	>2500	2420 348	19/ /13	3 1.3	390 10	>1000	10 199	33.3	223	2.3 1	7.2 102.	2 1012	3/	923 03.0	0/3 103	0 0.14 1	5.15 43	9./ 1.	13 0.59 0.	.18 0.0.	0.06	3.21 3	.38 3./8	5 1.13	1.54	11.2	97.4	-		.09
TW/ 12-02	93.27 90.32	3.1	LAT		-					-				-		-			-		-		-			-	-				+ +			-		+			+-+				<u> </u>		
TW-12-02	90.32 99.30	3.0	LAT 101	0006 0	4600	A170 46	5 220	16 70	61.2	25.2 46	2 56 4	105	20 10	5 2240	2 02 11	>2500	1245 04	104 204	5 37	1065 10	1700	1 1 20	12.0	3.05	06 2	54 112	1210	12	200 227	200 126	0 216 1	0.2 .20	0 6 0	04 0 26 0	14 0.00	0.02	2.04 1	151 27	0.54	0.55	114	00.70	+	- 0	51
TW 12-02	102.41 105.46	3.1 9.1"	LAT LOI	0220 3	4000	4170 40	1 240 0	165 01	77.4	23.5 40	19 54 2	100	17 / 127	5 2450	5.52 11	>2500	1520 142	124 550	7 26	221 10	9200	1205	12.5	257	0.0 5.	76 124	914	43	412 20.2	500 111	0 22.0 1	2.3 30	0.0 0.	59 0.29 0	10 0.0	0.03	2.52 (101 550	0.04	0.9	11.4	00.00	-	0.0	50
TW 12-02	105.46 109.51	3.1	LAT LOI	0227 3	6440	4320 03	6 270 0	77 04	97.7	207 5	7 1 55	141	16.1 15.9	5 2930	5 00 11	>2500	1470 121	107 410	0 07	221 10	69200	100.5	10.2	302	12 5	5 125	717	43	413 30.3	272 97	2 27 9 2	16 2	40 2	21 0.45 0	30 0.00	7 0.03	2.35 0	1 20'	2 0.79	0.79	125	00.02	-	0.	54
TW 12-02	109.91 111.56	2 Proven SAND and GRAVE	DES 101	0220 0	6920	1965 1/	10 120 0	100 OF	41.2	0 75 06	0 262	67.4	74 75	1 000	2.02 22	2060	670 104	06 100	5 117	1025 7	5020	1 424	0.61	142	14 2	61 101	040	21	222 16.65	901 56	A 17 5	04 25	50 2	12 0.45 0	51 0.4	0.03	1.00 1	2 50 14 0	5 0 57	0.04	7 10	00.00			.34
TW-12-02	111.56 114.6	2.0 Beddich brown SAND and GRAVEL	RES LOI	0223 4	2460	2210 22	1 50 0	24 25	527	22 1 25	2 16 7	27.5	72 92	5 1100	2.53 23	>2500	796 72	52 223	2 12	103.3 7	4420	965	11 15	242	1.4 2.	27 102	5 190	12	256 17 15	791 56	n 275	16 12	25 2	25 0.22 0	17 0.4	2 20.01	0.74 (192 29 (2 0.51	0.22	4.51	90.03		0.0	12
TW 12.02	114.6 117.65	2 1	PES 101	0230 5	2400	1015 22	6 50 0	17 10	14	7 05 21	5 15 1	70	55 75	1 964	1.0 10	>2500	717 04	20 211	1 17	116 5	2020	706	0.67	245	10.5 2	/0 110	5 205	24	101 11.05	202 20	2.7.0 1	42 1	15 4	12 0 26 0	10 0.0	= 0.01	0.14 0	160 21	0.51	0.25	4.01	04.70	-	0.4	40
TW-12-02	120 7 122 75	3.1 Brown SAND and GRAVE	RES 101	0231 3	19/5	2470 23	5 30 0	147 7	517	20.9 20	1 22 0	28	92 90	6 1290	2.0 10	>2500	909 22	A1 275	2 11	1975 10	3020	1 1455	1111	459	(0.5 2	54 52 4	1215	5	249 14 9	555 50	9 245 0	84 5	27 2	11 0.79 0	17 20.0	1 0.01	158	12 22	1 0 37	0.23	4.51	96.35	<u> </u>	0,4	73
TW-12-02	123.75 125.75	3.1 DIOWN, 3440 and GRAVEL	REG	02.52 1	1545	2470 32		.47 7	311	20.5 50	1.4 23.5	00	3.2 3.0	0 1230	2.24 2	2200	505 20	41 275	5 1.1	137.3 10	1 51/4	143.5	11.1	435	NU.J Z.	.04 .00.4	1213	3	243 14.0	333 35	2.43 0	.04 2	1 5	+.1 U.15 U.	.17 40.0	1 0.01	1.00 1		. 9.57 0	3.23	4.51	50.55	-		15
TW-12-02	125.0 120.0	30"	RES 101	0233 2	1175	1950 25	1 30 0	16 2	486	8 55 25	5 17 1	89.4	53 83	8 1055	1.81 5	1640	783 46	34 226	5 06	126 9	2960	716	10.75	203	<0.5 2	21 53 9	655	7	215 124	542 22	5 1 21 0	78 16	5.6 2	38 0.75 0	13 20.0	1 <0.01	0.91 7	161 29 1	2 0 34	0.14	37	94 17	-		12
TW-12-02	120.0 123.04	30	PES LOI	0233 2	1000	2290 23	22 40 0	12 10	527	19.2 40	26 19	105	6 26	2 11000	152 5	2040	961 62	24 270	5 0.0	1525 0	2500	1 122	12.75	203	(0.5 2	09 220	552	5	205 10.0	515 25	2 2 06	11 14	65 2	26 1 22 0	14 20.0	1 0.01	0.76 /	146 29.2	2 0.21	0.12	3.02	92.67	<u> </u>	0.	12
TW-12-02	132.89 135.03	31"	RES LOI	0235 1	215	1760 22	4 30 0	121 5	43.4	16.1 22	1 17.6	84.1	62 72	6 917	1.54 9	703	740 55	20 21/	4 24	117 7	2640	665	9.86	169	<0.5 1	89 130	496	3 1	180.5 10.55	430 44	5 3 0 2 1	21 14	55 20	35 234 0	14 0.0	3 <0.01	0.79 /	158 195	5 0 31	0.1	13.8	95.92	1	0.1	11
TW-12-02	135.94 132.99	3.1 Brown, SAND, trace gravel, trace glt	RES LOI	0236 4	1255	1920 34	1 40 0	123 6	4014	15.4 20	1.9 17.6	77.6	7 60	978	1.53 5	>2500	719 68	40 215	3 26	111.5 5	2500	1 84.9	9.26	207	<0.5 1	83 36 6	450	4	177 10.4	420 52	7 3.94 1	35 1/	4.5 20	12 2.87 0	16 0.0	5 0.01	0.69 (155 16.9	5 0 29	0.17	15.95	96.68	-	0.	37
TW-12-02	100.04 100.00	0.0	RES	4 102.00	1000	1020 34		.20 0		1014 36		110	2 0.5	270		-2000	710 00	-0 210	2.0	1110 0	2000		5.20	201	101.0 1.	0010		-	10.4	120 52	. 5.54 1	-20 I		2.07 0.				10.00		**A2	10100	50100	t	0.5	51
140-12-02		0.0	NE3		-		1		E 21		1	-	100		2	2		12	51			5		1 3				2	2	1			3		1	1							<u></u>		_



	Martison Lake Project	Contractor:	Davidsor	1 Well Drillir	ng	Azm:	0 Degr	ees																															
Summary of Test Well ar	and Pumping Well holes 2012	Claim:P 12016	525			Dip:	-90 Degr	ees																			100									- 04	10.0		
Borehole ID CORE RUN	N (m) Geo-log Description	Litho Unit SAMPI	LE											ME	-MS81																M	IE-ICP06				OA-GRA05	TOT-ICP0	6 Ce-OGRE	E Nb-XRF10
			Ag	Ba Ce	Co C	r Cs	Cu Dy	Er E	J Ga	Gd H	lf Ho	La Lu	Mo N	b No	I Ni Pł) Pr	Rb Sm	Sn S	r Ta	Tb	Th TI	Tm	UV	W N	Yb Yb	Zn Z	r SiO2	AI203	Fe2 03	CaO M	gO Na2	0 K20 Cr20	3 TiO2 M	nO P2O	5 SrO BaO	LOI	Total	Ce	Nb
From	To Length		ppm	ppm ppm	ppm pp	m ppm	ppm ppn	n ppm pp	m ppm	ppm pp	pm ppm	ppm ppr	n ppm pp	m ppr	n ppm ppi	m ppm	ppm ppm	ppm pp	m ppm	ppm	ppm ppm	n ppm p	pm ppm	ppm pp	m ppm	ppm pp	m %	%	%	% 9	6 %	% %	% 9	6 %	% %	%	%	%	%
TW-12-03 0 4	4.88 4.9 Brownish grey, SANDY SLT, trace gravel, trace clay (TI	LL) TILL		-																																			
TW-12-03 4.88	7.92 3.0 "	TILL												1							1						1												
TW-12-03 7.92 1	10.97 3.1 "	TILL									_		1								- 1						1											1	
TW-12-03 10.97 1	14.02 3.1 "	TILL																									1												
TW-12-03 14.02 1	17.07 3.1 "	TILL																																					
TW-12-03 17.07 2	20.12 3.1 "	TILL													11						1						2												
TW-12-03 20.12 2	23.16 3.0 Grey, SLTY SAND, trace gravel, trace clay (TILL)	TILL								i i																	i.												
TW-12-03 23.16 2	26.21 3.1 "	TILL																																				-	
TW-12-03 26.21 2	29.26 3.1 "	TILL									1												_						_				1000					4	
TW-12-03 29.26 3	32.31 3.1 "	TILL					-																																
TW-12-03 32.31 3	35.36 3.1 "	TILL L01020	00 <1	670 66.1	9.5 6	0 1.9	15 2.5	1.38 1.0	4 12	3.31 3	8.6 0.49	35.7 0.1	9 <2 34	.2 26.	5 26 12	7.32	63.8 4.44	1 24	13 1.3	0.49	9.24 <0.5	5 0.2 1	.98 65	1 14	.2 1.25	45 14	1 48.3	8.75	3.32	16.1 3.4	49 1.36	5 1.93 0.0	0.35 0.	J6 0.27	1 0.03 0.08	16.8	100.8	5	0.01
TW-12-03 35.36	38.4 3.0 "	TILL L01020	01 <1	960 362	11.3 6	0 1.53	14 7.0	2.57 5.9	1 11.7	13.45 3	3.6 1.14	191 0.2	7 <2 59	94 140	5 23 22	40.1	53.2 22.2	2 83	39 4.5	1.59	33.2 <0.5	5 0.33 6	.18 85	1 30	.4 1.9	119 15	6 44.2	7.56	4.14	17.95 3.4	49 1.25	5 1.68 0.0	0.34 0	.2 1.9	0.1 0.12	16.75	99.69	3	0.07
TW-12-03 38.4 4	41.45 3.1 Brown, SAND and GRAVEL (Residuum)	RES L01020	02 1	1500 1195	8.2 4	0 0.41	7 26.	1 7.17 28	2 8.4	61.8 1	.9 3.77	606 0.5	5 3 10	80 513	2 10 40	133	9.4 100.5	2 38	00 4.9	6.65	74.9 <0.5	5 0.78 1	8.7 113	2 90	.6 3.84	399 11	8 10.3	1.82	5.39	35.8 6.1	05 0.34	4 0.31 <0.0	1 0.15 0.	96 6.84	0.45 0.17	29.6	98.18		0.19
TW-12-03 41.45	44.5 3.1 Brown, SILTY SAND, trace gravel, trace clay	RES L01020	03 1	1685 1485	13.6 50	0 0.84	11 25	7.59 24	.2 13	53.7 3	3.4 3.73	794 0.6	2 4 22	60 565	5 18 39	159	24.8 89.4	3 31	70 17.5	5.98	84 <0.5	5 0.87 19	9.85 131	2 9	3 4.38	333 18	8 28.6	4.6	5.68	25.7 3.4	45 0.94	4 0.83 0.0	0.31 0.	81 9.84	0.36 0.19	15.4	96.72		0.28
TW-12-03 44.5 4	47.55 3.1 Dark brown to black, SAND, trace gravel, trace silt	RES L01020	04 1	3420 2200	20,3 6	0 1.12	13 35	11.6 32	.8 16.3	73.8 3	.4 5.56	1160 1.0	2 6 >25	500 82	1 26 64	234	10.9 121.5	4 52	70 28.8	8.48	130 0.8	1.36 3	9.8 188	4 13	34 7.21	733 19	3 10.65	3.63	9.86	30.4 5.4	43 0.32	2 0.25 0.0	0.35 1.	16 12.05	5 0.61 0.39	21.4	96.51		0.34
TW-12-03 47.55	50.6 3.1 "	RES 101020	05 1	1280 1040	11.4 30	0 0.55	5 17.1	5 5.44 16.	45 7.5	34.7 1	.4 2.59	520 0.4	9 3 11	50 419	9 9 25	5 110.5	9.4 60.9	2 48	20 8.7	3.96 1	61.2 0.5	0.65 2	4.8 62	1 65	3.42	388 6	7.14	1.23	4.37	36.6 8.	41 0.25	5 0.26 <0.0	1 0.12 0.	33 5.5	0.56 0.15	33.6	99.12	ő	0.2
T₩-12-03 50.6 5	53.64 3.0 "	RES L01020	06 1	1540 1300	11.3 6	0 0.67	8 21.4	6.63 20	.3 11.8	46 3	3.5 3.26	669 0.5	3 3 22	00 493	3 17 36	5 139.5	23.2 74.8	3 30	50 25	5.15	93.6 0.5	0.78 2	4.4 122	2 80	3.97	273 18	3 36.6	4.39	4.68	22.9	4 1.04	4 0.85 0.0	0.36 0.	44 10.4	5 0.36 0.18	12.95	99.21	1	0.26
TW-12-03 53.64 5	56.69 3.1 Brown, SAND, trace gravel, trace silt	RES L01020	07 <1	1390 1160	10.5 4	0 0.43	6 19	5.96 18.	05 10.4	39.9 2	.9 2.87	592 0.4	7 3 21	80 460	5 11 29	124.5	20 66.5	3 32	70 22.9	4.53	91.8 <0.5	5 0.68 2	1.7 134	1 70	.8 3.45	231 14	6 32.8	3.73	4.42	25.1 4.4	41 0.93	3 0.76 <0.0	1 0.28 0.	46 9.35	j 0.38 0.16	15.8	98.58		0.26
TW-12-03 56.69 5	59.74 3.1 "	RES L01020	08 <1	1170 791	7.2 3	0 0.37	6 13.7	5 4.31 12	3 8.7	27.1	3 2.08	404 0.3	7 2 17	00 315	5 10 21	84.1	22.5 45.3	2 29	50 21.1	3.15	90.8 <0.5	5 0.51 16	5.05 105	1 5	2 2.7	163 14	3 38.7	3.91	3.34	24.8 2.	97 1	0.84 < 0.0	1 0.23 0.	32 5.39	0.35 0.14	17.75	99.74		0.19
TW-12-03 59.74 6	62.79 3.1 "	RES L01020	09 <1	1345 1200	10.6 3	0 0.41	6 20.8	3 6.61 18	.9 9.6	41.5 2	.9 3.17	603 0.5	6 3 19	40 470	0 10 34	125	10.8 68.9	3 42	70 28.2	4.88	152 <0.5	5 0.77 3	4.4 277	1 8	0 4.04	302 15	0 16.6	2.08	5.96	35.4 3.3	33 0.48	3 0.36 < 0.0	1 0.28 0.	52 8.35	0.49 0.16	24.2	98.31		0.29
TW-12-03 62.79 6	64.01 1.2 "	RES L0102:	10 1	1410 1120	12.4 5	0 0.51	16 17.0	5 5.69 16	.2 10.8	36.1 3	1 2.66	572 0.4	7 4 24	70 439	9 18 28	3 116.5	20.3 62	4 30	60 26.8	4.08	100 <0.5	5 0.65	27 222	2 67	.6 3.39	289 15	9 33.9	3.8	7.14	24.3 3.	58 0.88	3 0.73 0.0	0.39 0.	59 8.34	0.36 0.17	15.25	99.54		0.27
TW-12-03 64.01 6	65.53 1.5 "	RES L0102:	11 1	1340 1160	11.6 40	0 0.33	32 18.9	9 5.99 17.	65 8.6	38.7 2	2.7 2.88	576 0.4	8 8 21	70 46	1 20 26	5 123	10.4 65	4 41	50 25.9	4.46 1	16.5 <0.5	5 0.69 2	7.9 193	2 72	.2 3.63	314 14	3 15.25	1.9	8.31	34 4.	25 0.5	0.38 0.0	0.28 0.	52 9.5	0.49 0.16	23	98.65	3	0.3
TW-12-03 65.53 6	68.88 3.3 "	RES L0102	12 1	1160 783	9.5 3	0 0.58	9 14.8	3 4.4 14.	05 11.7	31.1 2	.4 2.17	394 0.3	5 4 21	30 32	9 10 17	85.5	29.4 50.3	2 27	70 14.2	3.53	69.5 0.5	0.5 19	9.85 77	1 54	.9 2.49	238 12	6 40	4.68	3.81	22.1 4.0	02 1.29	9 0.98 <0.0	1 0.33 0.	38 6.73	0.32 0.13	14.9	99.67	2	0.24
TW-12-03 68.88 7	71.93 3.1 "	RES L0102:	13 <1]	1295 783	7.2 30	0 0.37	7 16.4	4 4.87 14.	85 9.6	33.3 2	2.4 2.44	387 0.3	9 3 19	25 33:	1 9 26	6 89.1	22.8 53.5	2 26	00 9.2	3.86	88.5 <0.5	5 0.56 13	8.05 79	1 6	0 2.84	198 11	8 35.9	4.22	3.7	23.8 4.1	69 1.16	5 0.84 <0.0	1 0.22 0	.4 5.89	0.31 0.16	18.25	99.54		0.22
T₩-12-03 71.93 7	73.46 1.5 "	RES L0102.	14 <1	940 908	8.6 20	0 0.37	8 20.3	3 5.86 19.	25 9.8	43.2 2	.4 2.99	440 0.4	1 3 20	30 405	5 8 21	100.5	20.3 66.5	2 33	20 11	4.89	57.9 <0.5	5 0.65 12	2.95 85	1 72	.8 3.17	208 13	0 31.8	3.65	3.81	27.7 3.	85 1.03	3 0.74 <0.0	1 0.28 0	.4 8.21	. 0.39 0.12	17.75	99.73	1	0.24
TW-12-03 73.46 7	74.98 1.5 Beige, medium to coarse SAND, trace gravel	RES L0102	15 <1	803 728	4.1 <1	10 0.11	<5 12.2	5 4.32 10.	05 5.3	22.4	1 1.95	377 0.4	4 3 18	50 26	1 <5 10	75.4	6.5 35.9	2 60	00 3.3	2.71	24 <0.5	5 0.54 5	.01 144	<1 52	2.1 2.99	44 4	1.98	0.33	2.38	44.4 5.0	69 0.14	4 0.15 <0.0	1 0.09 0.	37 3.51	. 0.71 0.09	37.9	97.74		0.31
TW-12-03 74.98 7	78.03 3.1 Brown, medium to coarse SAND, trace gravel	RES L0102	16 <1	914 846	5.2 10	0 0.12	<5 10.0	3.68 9.3	8 4.9	19.95 0	1.5 1.67	519 0.3	7 3 80	3 274	4 <5 12	83.3	3.8 34.3	1 63	40 1.9	2.38	16 < 0.5	5 0.46 4	.32 119	1 44	.6 2.59	169 2	2 0.98	0.17	2.91	41.4 8.	53 0.09	9 0.09 <0.0	1 0.05 0.	57 1.96	0.76 0.11	40.4	98.02	-	0.14
TW-12-03 78.03 8	81.08 3.1 "	RES 10102	17 1	891 748	3.8 <1	10 0.14	<5 13.	3 4.63 10	.9 4.6	23.8 0	.9 2.1	383 0.4	9 2 14	55 274	4 <5 25	5 79.5	3 38.9	2 52	60 2.7	2.95	44.1 <0.5	5 0.59 6	.99 29	1 55	.4 3.37	91 3	3 0.98	0.2	1.98	45.4 5.	79 0.1	0.07 <0.0	1 0.03 0.	46 2.61	. 0.62 0.11	40.5	98.85	2	0.25



			Contracto	or: D	widson Wel	Drilling		Azm:	0 Degree	s																																	
Summary of	Test Well	and Pumping	Claim: 478 Dip: -90 Degrees																										18														
Borehole ID	CORE RU	N (m)	Geo-log Description	Litho Unit S	AMPLE	1.14	ME-MS81													ay.	04 D		N	AE-ICPO	6	4		OA-GRA05	TOT-ICP06	Ce-OGREE	Nb-XRF10												
			an an the array of a car of the second second			Ag Ba	Ce	Co Ci	Cs (u Dy	Er I	Eu Ga	Gd	Hf Ho	La Lu	Mo	Nb Nd	d Ni	Pb	Pr Rb	Sm 3	Sn Sr	Ta	Tb Th	TI Tm	UV	W	YY	'b Zn	Zr SiO	2 Al2O3	Fe2O3	CaO N	gO Na2	0 K20	Cr203 T	iO2 MnO	P205	SrO BaO	LOI	Total	Ce	Nb
	From	To Lengt	th		-	pm ppm	ppm	ppm pp	m ppm p	om ppm	ppm p	opm ppm	ppm p	pm ppm	ppm pp	m ppm p	pm ppn	m ppm p	ppm p	pm ppm	ppm p	pm ppm	ppm p	pm ppm	ppm ppm	ppm ppn	n ppm j	ppm p	om ppm	ppm %	%	%	%	% %	%	%	% %	%	% %	%	%	%	%
TW-12-04	0	4.88 4.9	Grey, CLAYEY SILT, tracegravel, trace sand (TILL)	TILL																																							
TW-12-04	4.88	7.92 3.0		TILL																																					_		
TW-12-04	7.92	10.97 3.1	Grey, SANDY SLT, trace gravel, trace silt (TILL)	TILL																																							
TW-12-04	10.97	14.02 3.1		TILL																											1			, in the second se									
TW-12-04	14.02	17.07 3.1	ů.	TILL																																							
TW-12-04	17.07	20.12 3.1		TILL													1												- V					1									
TW-12-04	20.12	23.16 3.0	Grey, SAND and GRAVEL (TILL)	TILL													Ĩ			1									Ĵ.		1												
TW-12-04	23.16	26.21 3.1	Grey, SANDY SLT, trace gravel, trace clay (TILL)	TILL																																							
TW-12-04	26.21	29.26 3.1	1 1	TILL						_							- K.												1				į_	6						<u></u>			
TW-12-04	29.26	32.31 3.1	0.	TILL																																							
TW-12-04	32.31	35.36 3.1	4	TILL L	010154	<1 344	40.5	6 40	1.31	1 1.71	0.95 0	.67 8.6	2.16	2.8 0.33	21.7 0.1	.4 <2 1	2.2 15.9	9 16	9 4	.53 46.7	2.83	<1 259	0.5 (.3 5.36	<0.5 0.14	1.27 38	1	9.3 0.	87 30	103 39.	7.16	2.37	20.5 4	.65 1.5	1 1.51	. 0.01 C	J.25 0.04	0.09	0.03 0.04	21.9	99.96		0.01
TW-12-04	35.36	38.4 3.0		TILL L	010155	<1 384	37.2	6.4 40	1.49	4 1.7	0.91 0	.62 9.3	1.98	2.8 0.32	19.8 0.1	3 <2	8.1 14.9	9 18	9 4	.21 51	2.75	<1 270	0.4 ().3 5.45	<0.5 0.14	1.37 41	1	9.6 0.	86 31	109 43.	1 7.88	2.55	18.8 4	.63 1.6	5 1.67	0.01 0	J.27 0.04	0.09	0.03 0.04	20.1	100.81		0.01
TW-12-04	38.4	41.45 3.1	Grey, CLAYEY SILT, trace gravel, trace clay	TILL L	010156	<1 448	37	6.3 40	1.49	2 1.75	0.95 0).68 9.3	2.17	3 0.34	19.5 0.1	.4 <2	7.3 15.2	2 18	9 4	.25 49.9	2.82	<1 258	0.4 ().3 5.51	<0.5 0.13	1.32 41	1	9.4 0.	86 32	107 41.	9 7.61	2.64	19.55 4	64 1.5	6 1.66	0.01 0).26 0.06	0.09	0.03 0.05	20.7	100.76		0.01
TW-12-04	41.45	44.5 3.1	Brown, SANDY SILT, trace gravel, trace clay (Residuum)	RES L	010157	<1 1650	356	7.7 60	1.59	2 5.51	2.32 3	8.93 11.1	9.62	3.2 0.96	226 0.2	8 3 3	237 113	3 33	17 3	5.6 51.8	3 15.25	1 520	2.5 1	.19 14.1	<0.5 0.31	3.33 70	1	26.3 1.	87 137	131 40.	4 7.72	3.41	19.55 4	.14 1.4	8 1.59	0.01 0	J.32 0.13	1.54	0.06 0.19	19.55	100.09		0.03
TW-12-04	44.5	47.55 3.1	n	RES L	010158	<1 5120	4040	14.5 50	1.37	8 45.2	18.2 3	37.2 21.7	84	3 7.6	2550 2.1	.3 13 2	140 124	15 65	183 3	398 23.7	156	4 2600	21.4 9	.82 82.6	0.6 2.43	45.6 298	3 6	211 13	.95 991	207 17.4	5 5.35	9.14	29.4 1	.65 0.6	5 0.65	0.01 0).59 1.27	18.45	0.31 0.59	10.5	95.96		0.27
TW-12-04	47.55	50.6 3.1	Brownish red, SANDY SLT, trace gravel, trace clay (Residuum)	RES L	010160	2 5130	7620	35.6 10	0 1.85 2	9 118.5	47.7 9	0.2 40.8	210	5.5 19.8	4400 5.7	9 33 >2	2500 258	30 121	419 7	797 24.9	352	8 3160	36 2	5.3 263	1.3 6.58	67.8 105	0 13	557 3	3.8 1280	349 10.	3 4.12	20.2	23.5 1	.18 0.3	9 0.47	0.01 1	1.13 3.72	17.7	0.36 0.59	10.15	93.82		0.59
TW-12-04	50.6	53.64 3.0		RES L	010161	2 5000	4430	53.6 19	0 4.5	9 64.7	25.5 5	52.2 34.8	120 1	2.8 10.7	2560 2.7	'8 17 ×	2500 145	55 150 1	221 4	55 71.1	198.5	10 2410	45.4 14	1.25 257	1 3.33	67.8 830	15	283 18	3.7 843	631 18.5	5 8.07	22.3	14.6 2	.96 0.5	1 1.18	0.03 7	2.64 1.93	11.15	0.29 0.61	11.8	96.62		0.42
TW-12-04	53.64	56.69 3.1	Reddish brown, SAND and GRAVEL, trace silt (Residuum)	RES L	010162	<1 3120	2930	15.2 80	1.07	0 50.3	21	35 17.1	84.3	2.2 8.7	1740 2.5	i8 38 🔀	2500 947	7 47	93 2	296 20.7	132	4 3170	17.7 1	0.5 78.8	0.5 2.86	23.9 392	2 3	255 16	5.8 708	98 9.8	2 2.45	9	36.4 2	.05 0.5	2 0.55	0.01 C	J.33 1.76	23.4	0.35 0.35	8.74	95.73		0.63
TW-12-04	56.69	59.74 3.1		RES L	010163	1 1895	1175	9.2 80	0.72	9 15.45	6.32 11	1.85 9.1	27.9	1.9 2.65	725 0.7	5 14 9	981 362	2 30	49 11	17.5 26.8	46.8	2 2920	3.2 3	.37 24	<0.5 0.84	7.09 142	2 1	75 5.	04 215	82 24.	3 3.75	4.57	30.8 3	.95 1.0	6 0.92	0.01 0	J.22 0.62	5.18	0.34 0.22	23.2	99.14		0.14
TW-12-04	59.74	52.79 3.1	1	RES L	010164	<1 >1000	0 6370	20.4 50	0.34	5 72	28.6 5	51.3 22.9	119.5	2.4 12.1	4220 3	18 >2	2500 179	95 18 3	290 5	595 13.3	3 213	7 4320	15.9	15 110	<0.5 3.66	36.6 402	2 5	347 20).2 1170	167 3.8	5 0.63	9,94	39 1	.24 0.5	3 0.3	0.01 C	J.37 1.72	24.7	0.48 1.22	8.72	92.71		1.32
TW-12-04	62.79	55.84 3.1	Brown, Fine to Coarse SAND and GRAVEL	RES L	010165	<1 >1000	0 2490	8.7 30	0.37	5 27.9	10.9 2	2.7 11	51.7	1.5 4.64	1540 1.2	1 18 2	020 746	6 12	87 2	243 14.2	93	3 4030	10.2 6	.12 57.5	<0.5 1.42	20.1 237	3 1	125.5 8.	09 385	100 8.7	3 1.43	5.35	38.3 3	.04 0.5	2 0.4	<0.01	0.3 1.27	7.24	0.48 1.34	27.5	95.96		0.28
T₩-12-04	65.84	58.88 3.0		RES L	010166	<1 8180	1660	4.2 10	0.13	5 29.2	11.4	21 7.2	50	1.4 4.91	906 1.2	6 42 1	640 533	3 <5	87 16	55.5 5.7	78.9	3 5380	4.2 6	.22 52.2	<0.5 1.53	6.55 180	3 1	134.5 8.	65 277	83 1.4	3 0.24	3.77	42.3 5	69 0.2	5 0.17	<0.01 (J.19 0.9	4.01	0.63 0.94	35.5	96.02		0.25
TW-12-04	68.88	71.93 3.1	n	RES		The Party and the Party of the			-											Contraction.						Const Constant																	
T₩-12-04	71.93	74.98 3.1	11	RES L	010167	<1 6710	1550	14.8 29	0 0.9	1 24.1	9.68 1	.7.6 9.6	41.3	2 4.03	813 1.	1 13 >2	2500 490	0 85	69 15	53.5 26.2	68	4 4560	6.2 5	5.1 45	<0.5 1.28	6.33 254	1 5 1	114.5 7.	44 243	117 5.4	5 1.02	5.3	42.3 3	.87 0.4	6 0.73	0.04 0	J.54 1.07	3.6	0.52 0.78	33	98.69		0.33



			Martison Lake Project	Contra	actor: D	Davidson	Well Drilling		Azm: (Degrees																															
Summary of	Test We	ll and Pu	umping Well holes 2012	Claim	: 478		0		Dip: -9	0 Degrees																															
				Litho						10 - C																												1 7		ſ	1
Borehole ID	CORE	RUN (m)	n) Geo-log Description	Unit	SAMPLE												ME-MS81																ME-ICF	206				OA-GRA05	TOT-ICP06	Ce-OGREE	Nb-XRF10
						Ag	Ba Ce	Co Cr	Cs C	u Dy I	Er Eu	Ga	id Hf	Ho La	Lu Mo	Nb M	Vd Ni	Pb Pr	Rb	Sm Sn	Sr	Ta T	b Th	TI Tm	U	V W	Y Yb	Zn Z	r SiO2	Al2O3 Fe	203 CaO	MgO N	la20 KZ	10 01207	3 TiO2 Mn	O P2O5	SrO BaO	LOI	Total	Ce	Nb
	From	To	Length			ppm p	opm ppm p	ppm ppm	ppm pp	om ppm p	om ppm	ppm pp	om ppm	ppm ppm	n ppm ppm	ppm p	pm ppm	ppm ppn	n ppm	ppm ppm	ppm p	ppm pp	om ppm p	ppm ppm	ppm p	pm ppm	ppm ppm	ppm pp	m %	%	% %	%	% %	6 %	% %	%	% %	%	%	%	%
TW-12-05	0	3.05	5 3.1 Dark grey clayey SILT, with organics, trace sand, trace rootletts, mo	ist TILL		1																																5			1
TW-12-05	3.05	6.1	3.1 Grey silty fine SAND with sub angular gravel, dry to moist (TILL)	TILL				8																													3		()		
TW-12-05	6.1	9.14	3.0 Grey silty fine to medium SAND with sub angular gravel, moist (TILL	L) TILL																			_																		
TW-12-05	9.14	12.19	9 3.1 Grey silty fine to medium SAND with sub angular gravel, moist (TILL	L) TILL					-	1		1							3						2 - U			11	6	1 <u> </u>		3	1								(
			Grey silty fine SAND, with sub angular/																																				(
TW-12-05	12.19	15.24	4 3.1 sub rounded gravel, moist (TILL)	TILL																																					
			Grey silty fine SAND, with sub angular/		-												-															-						1	[]		
TW-12-05	15.24	18.29	9 3.1 sub rounded gravel, moist (TILL)	TILL			-	-							-				-									-			-	-		_		-	-	-			
			Grey silty fine SAND, with sub angular/																																						
TW-12-05	18.29	21.34	4 3.1 sub rounded gravel, moist (TILL)	TILL																																					
			Grey silty fine SAND, with sub angular/									1-3																1-1-											(7	í I	
TW-12-05	21.34	24.38	8 3.0 sub rounded gravel, moist (TILL)	TILL							_															_					_			_							
			Grey silty fine SAND, with sub angular/																																				('''''''''''''''''''''''''''''''''''''		
TW-12-05	24.38	27.43	3 3.1 sub rounded gravel, moist (TILL)	TILL							1	1. 2							4			_						5-1-1-			- 4	-		- 4			- 4 <u></u>				(
T₩-12-05	27.43	30.48	8 3.1 Grey GRAVEL, with medium-coarse sand, trace silt, moist (TILL)	TILL																																			('		
TW-12-05	30.48	33.53	3 3.1 Darkgrey silty GRAVEL trace clay, trace sand, moist (TILL)	TILL																																					
			Grey clayey SILT, with gravel, trace sand,																																				(
TW-12-05	33.53	36.58	8 3.1 trace peat/organics, moist (TILL)	TILL							_						_		-				-								_			_					<u> </u>		
TW-12-05	36.58	39.62	2 3.0 Grey silty fine SAND, with sub angular gravel, moist (TILL)	TILL				-	5 1		-	0	_						4				_		0 0	_		2-1-		2		0.3	_	_	2				ļ'		-
TW-12-05	39,62	42.67	7 3.1 Grey silty fine SAND, with sub angular gravel, moist (TILL)	TILL					-		_									_		_	-	_					_		_		_	_							
TW-12-05	42.67	45.72	2 3.1 Grey silty fine SAND, with sub angular gravel, moist (TILL)	TILL			_				-	-		-					-			_	-				-	-	-		-	-	_	_							-
T₩-12-05	45.72	48.77	7 3.1 Grey silty fine SAND, with sub angular gravel, moist (TILL)	TILL	-	-	_			-	-		-			-		_	-			_	-	-		-	_		-		-			_	-	-		-			-
TW-12-05	48.77	51.82	2 3.1 Grey GRAVEL, trace sand, trace silt, moist (TILL)	TILL							_	-	_				_		-	_		-	_	_		-			_	<u> </u>	_	-		_	-				'		-
TW-12-05	51.82	54.86	6 3.0 Grey GRAVEL, trace sand, trace silt, moist (TILL)	TILL																																			('		
TW-12-05	54.86	57.91	1 3.1 Grey GRAVEL, trace sand, trace silt, moist (TILL)	TILL	L010237	<1	370 34.7	7.1 50	1.32	13 1.62	0.91 0.6	1 9.5	2.1 2.8	0.34 18.	7 0.13 <2	7.9 1	4.9 21	8 4.	13 49	2.59 <1	259	0.4 0.	.28 4.9 <	0.5 0.13	1.14	46 1	9 0.	3 33 1	01 41.1	7.78	2.56 2	4.66	1.55 1.	.63 0.01	1 0.27 0.0	/4 0.09	0.03 0.04	20.7	100.46		0.01
TW-12-05	57.91	60.96	6 3.1 Brown silty SAND, with gravel, moist (TILL)	TILL	L010238	<1	3700 1900	27.5 80	3.35	82 36.2	14.5 23.	7 24.4 5	8.9 6.8	6.25 114	0 1.7 4	4 2050 1	638 57	56 20	03 50.5	88.1 4	2180	16.5 7.	45 94.4	0.5 1.88	13.15	571 34	161.5 11.	676 3	72 25.7	7.95	14.2 18.9	5 3.2	0.73 1.	.54 0.01	1 1.55 0.9	/8 9.41	0.25 0.41	13.4	98.28		0.25
TW-12-05	60.96	64.01	 Brown silty CLAY, trace sand, trace gravel, green/grey mottled, moi 	ist RES	L010239	<1	2720 1890	46.4 40	7.71	87 38.6	16.2 24.	5 31.5 6	0.7 14.3	6.84 112	5 1.94 5	5 2190 1	623 54	56 197	7.5 47.8	87.9 10	1890	27.8 7.	.88 122	0.5 2.14	10.25	777 31	182 13.1	5 952 7	68 23.3	9.42	22.4 13.7	5 3.02	0.35 1.	.47 0.01	1 2.71 0.	.9 8.52	0.21 0.3	11.75	98.11		0.27
TW-12-05	64.01	67.06	6 3.1 Brown medium-coarse SAND, with sub angular gravel, moist	RES	L010240	<1	2020 1520	14.1 70	0.8	23 42.4	20.6 23.	3 12.5 5	9.9 4	8.04 92	7 2.74	4 >2500	566 43	30 1	76 6.5	83.2 4	2500	7.1 8.	.08 68.3 <	0.5 2.81	23.5	368 9	245 17.	3 785 2	23 4.6	1.71	9.84 42.	2 0.57	0.23 0.	.19 0.0?	1 0.68 1.	.2 29.5	0.29 0.23	7.68	98.93		0.46
TW-12-05	67.06	70.1	1 3.0 Brown clayey SILT, trace sand, trace gravel, wet	RES	L010241	<1 >1(0000 9590 1	111.5 370	1.55 1	43 212	31.1 150.	5 60.2 3	374 16.5	35.5 534	0 9.02 16	5 > 2500 3	650 185	365 >100	0.0	532 17	>10000	241 45	5.7>1000	1.8 10.25	133 1	315 28	902 59.	5 964 9	00 2.59	11.55	45 2.9	6 0.67	0.13 0.	.01 0.05	5 3.09 2	.9 8.33	1.54 1.29	12.35	92.46		1.58
TW-12-05	70.1	73.15	5 3.1 Brown GRAVEL, trace sand, moist	RES	L010242	<1	1590 1030	51.4 20	10.15 1	18 21.1	9.12 13.7	5 24.8 3	3.4 24.3	3.65 60.	2 1.09 3	3 293	352 83	24 107	7.5 53.6	50.4 7	1140	1.3 4.	28 40.2 <	0.5 1.19	8.21	463 20	96.2 7.6	1150 8	84 23.7	9.1	20.4 14.	1 4.06	0.19 1.	.12 <0.01	4.92 0.6	7 9.65	0.14 0.2	10.65	98.9		0.13
TVV-12-05	73.15	76.2	2 3.1 Brown clayey SILT, trace sand, trace gravel, moist	RES	L010243	<1	4190 1565	29.3 30	6.43 1	20 29.6	12.8 19.4	5 23.9	50 13.8	5.29 93	2 1.56 8	3 1065	529 34	36 10	61 49.1	73.8 5	1515	22.6 6.	23 179.5 <	0.5 1./1	14.8	403 14	137 10.6	5 775 t	06 19.5	8.16	13.8 21.	5 4.6/	0.24 1.	,32 <0.01	1.93 1.3	19 14.1	0.17 0.51	9.95	97.24	<u> </u>	0.23
TW-12-05	76.2	78.03	3 1.8 Brown gravelly SAND, trace silt, moist to wet	RES	L010244	<1	1875 1930	25.7 30	1.15	48 184.5	32.2 58.	4 18 1	182 7.5	35.8 114	5 10.8 1	1 1420	768 18	79 2	18 19.5	160.5 5	6110	18.2 31	1.4 359 <	0.5 12.5	37.4	494 27	1125 75.	3/4 4	25 6.87	2.35	11.1 39.	4 0.99	0.31 0.	.96 <0.01	1.6 0.7	1 27.5	0.68 0.22	4.11	96.8		0.3
TW-12-05	78.03	81.1	 Brown clayey SILT, trace sand, trace gravel, mottled red, wet 	RES	L010245	<1	1890 1350	40.3 320	4.13	90 35.7 1	5.25 22.	1 24.4 5	6.2 16.9	6.32 76	2 1.66 4	4 598	506 95	36 146	5.5 43.1	79.2 5	1950	11.1 7.	31 103.5 <	0.5 1.89	13.35	528 19	170.5 11.6	415 8	66 17.45	6.84	20.1 20.	5.67	0.25 1.	.29 0.04	4 3.02 0.5	12 12.85	0.22 0.23	8.32	97.4		0.16
144-12-05	81.1	84.1	3.0 Brown sandy SiLT, trace gravel, wet	RES	LU10246	<1	1/25 14/5	20.3 20	7.5/ 1	04 38	15.9 22.	9 23.9 5	8.9 22	0,74 88.	2 1.91 4	4 1625 :	524 13	39 103	5.5 80.2	80.9 9	1355	25./ /.	12 92.0	0.6 2.06	9.59	33 30	1/4 12.5	338 10	80 27.9	10	10.0 13.	1 5.1	0.22	2.9 40.01	3.98 0.5	.8 8.18	0.15 0.19	9,38	98.28	\vdash	0.19
TIAL 10.05		07.0	Brown dayey Sich, trace sand, trace sub angular graver,	DEC	010047		0010 1005	07.0 100											17 05 0	-	1005		F1 107 F		100		050 10.0	050 0	~ ~ ~		105 170	6 6 70			0.00	10 10 0	0.05		00.00		0.40
TW/ 12-05	84.1	87.2	2 3.1 mottled red, moist	KES	1010247	<1	2310 1385	27.3 100	8.49 1	23 49.7	23.2 20.	4 23.8 0	9.1 10.7	9.2/ 83	1 2.96	1005	501 9	52 1	4/ 05.0	84 0	1995	9.1 9.	51 127.5	0.0 3.10	12.9	484 24	252 19.0	330 8	69 23.2	8.15	4.25 17.8	5 6./9	0.24 2	26 40.01	3.06 1.3	9 12.0	0.25 0.3	8.54	98.88	<u> </u>	0.18
TW-12-05	07.2	90.2	2 3.0 Brown dayey SL1, with sub angular gravel, trace sand, moist	RES	L010248	<1 (1	2210 1910	30.5 30	4.01 1	17 20.2 I	2.23 20.	2 27.0 0	0.7 1/.3	7 110	1.93	1395	107 15	42 1	98 41.9	94.3 8 70.0 C	1045	15.4 8.	41 118.5	2.11	10.0	10 10	161.5 12.7	4/0 8	08 Z1	7.16	0.95 17.9	1.88	0.32 1.	.76 40.01	2.92 1.2	3 12.15	0.19 0.28	0.78	96.01		0.27
TW-12-05	90.2	93.3	3 3.1 Brown dayey Sich, with sub angular gravel, trace sand, moist	RES	1010249	41	2410 2470	27.0 20	4.14 1	70 45 0	13.1 20.	5 23.4 5	2./ 14.1	7.00 140	4 1.40 3	1720	487 17	20 144	61 14 4	13.0 0	1/35	0 0.	09.8	0.5 1.03	20.0	105 14	100 10.1	426 /	04 19.9	T.07 1	10.0 00	4 7.01	0.23 1.	10.02 0.01	Z.J U.	1 13.3	0.2 0.17	0.2/	97.33	\vdash	0.24
TW 12.05	93.3	90.3	3.0 Brown dayey SiLL, with sub angular gravel, trace sand, moist	RES	1010250	<1	1605 1225	22.4 660	1.30	72 43.2 02 26 4 1	5.25 21	0 105 5	2.1 7.2	7.38 140	0 2 27 4	1/30	512 107	10 ZI	52 495	777 0	1075	11.2	7 4 007	0.0 2.02	14 55	100 14	1065 14.2	5 560 6	21 8.72	5.10	18.2 28.	5 5 21	0.2 0.	67 0.02	1 27 0	EQ 15.05	0.30 0.44	0.21	99,04	<u> </u>	0.32
TW 12-05	90.3 00.4	102.4	3.1 Brown sity SAND, with sub angular grave, moist	RE3	1010251	×1	1600 1325	24.4 000	4.71	60 20.4 1	116 10	0 10.0 0	0.2 13.3	5.01 76	7 1 25 3	1005	A00 116	49 14	5Z 43.5	706 5	1710	10.0	6 00.4	0.5 2.21	0.06	400 21	100.5 14.2	2 205 2	14 0.40	2.01 1	2.55 23.	7 4 01	0.15 0	07 0.1	5 1 47 0.0	27 7 11	0.22 0.2	0.21	90.34	\vdash	0.24
TW 12:05	102.4	102.4	 Store Brown Sity fine to medium SAND, trace sub angular gravel, moist Research and the fine to medium SAND, trace sub angular gravel, moist 	DEC	1010252	1	1005 1005	24.7 300	1.70	10 20.5	1 15 2	0 120 5	0.3 0.1	1 92 72	5 1 24	1 2200	504 26	25 144	5 157	74.6 4	2200	10.0 6	16 00 4	05 140	0.20	12/ 10	126.3 5.0	200 3	14 0.4Z	2.07 1	0.75 26	7 4.01	0.13 0.	59 0.00	0 1.47 0.0	1 1.11	0.25 0.10	20.4	20.77		0.24
TW-12-05	102.4	103.5	5 3.0 Brown sity fine SAND, trace sub angular gravel, mulsi	PES	1010255	<1 (1	1030 1015	17 60	1.40	25 225	1.13 2	7 122 2	71 65	4.33 73	2 1 07	1 1590	304 30	12 1	12 19./	545 2	2200	15.7 4	67 73.2	0.5 1.42	9.13	201 12	1025 7	204 3	57 10.25	3.07	9.62 37	4./0	0.2 0	28 0.02	1 1 29 07	57 6 66	0.25 0.15	25.3	99.1		0.3
TW-12-05	100.0	1111.6	5 2.1 Brown ditu fine to medium SAND with sub-angular gravel moist	PEC	1010254	1	1400 1620	26.7 110	5.4	60 21 4 1	0 15 00	5 25 2 5	54 07	514 91	0 1.07	1 2020	500 21	22 1	20 11 1	000 5	2530	25.4 6	06 00 0	05 156	9.52	102 10	120 00	292 3	60 16 2	5.67	12 2	5 7 00	0.22 1	22 0.0	1 2 22 0.0	CO 0 02	0.2 0.14	16.05	00.50		0.21
TW 12.05	1111.6	114.6	S.1 Brown gravely SAND with eit moint	DEC	1010235	×1	005 1100	107 110	1.11	27 26.1	10.2 10	7 155 4	51 4	1 21 60	9 1 14 5	1475	A60 21	22 121	15 15 2	667 2	2520	10.0 0	57 621	05 122	7.46	102 15	1115 77	075 2	26 2.06	2.07	12 2	0 7.50	0.12	0.6 0.0	1 1 0/	57 7.06	0.3 0.10	26.6	00.15	<u> </u>	0.23
TW-12-05	114.6	117.6	6 3.0 Brown gravelly SAND with silt moist	RES	1010250	<1 <1	864 1280	23 40	1.11	43 26.9	10.3 10.	7 159 4	71 69	4.31 03	5 1 11 6	5 1250	405 31	27 1	40 145	71 3	2010	15.8 5	96 514	0.5 1.32	7.74	35/ 10	111.5 7.7	2 281 3	20 8.00	2.21	10.8 36	1 4 15	0.15 0	56 0.0	1 1.96 0.	17 78	0.23 0.11	20.0	98.66		0.10
TW-12-05	117.6	120.7	7 31 Brown gravelly SAND with sit, moist	RES	1010258	21	1710 1285	20 8 40	1.10	55 25.5	10.1 190	5 187 4	51 77	4.30 74	1 1 1 2 4	5 1125	400 27	33 1	37 27 2	67.7 4	1650	11.8 5	61 587	0.5 1.35	7 19	339 24	109 77	5 315 5	25 12.05	394 1	0.25 32	5 5 51	0.12 1	13 (0.01	17 1(2 6.09	0.19 0.21	24.1	QC		0.13
TW-12-05	120.7	120.7	7 3.0 Brown gravelly SAND, with sit, moist	PES	1010250	1	1260 969	20.0 40	2.61	52 23.5	292 16	9 20 4 4	05 11 2	3.26 57	2 1 01	1/155	202 20	21 109	5 191	592 6	1590	124 5	07 559	05 119	5.0	279 22	100 66	2 274 F	59 197	594	11 5 26	2 4 54	0.26 2	34 00	1 246 04	52 56	0.12 0.16	10 /5	99.16		0.19
TW-12-05	123.7	125.7	8 3.1 Brown gravelly SAND, with sit, moist	RES	1010253	<1	1560 1140	29.6 50	1.33	57 31.6	12.4 21	5 18 3 5	2.8 71	5.28 64	1 1.3	5 1340	460 19	21 105	29 23.2	73.7 5	1680	17 6	86 76	0.5 1.59	7.26	383 25	133.5 89	290 4	30 11.55	3.8 1	0.85 33	4 4.82	0.19 1	.03 0.01	1 2.03 11	12 7.75	0.19 0.15	2 22 0	99.72	$ \longrightarrow $	0.16
TW-12-05	126.8	129.0	8 3.0 Brown gravelly SAND, with silt moist	RES	1010262	<1	1705 1335	25.2 40	1.05	44 34 1	13.7 22	3 164 5	6.2 56	5.67 72	1 1.49	7 1855	487 12	33 1/7	7.5 20.2	76.2 5	2540	22.2 7	29 97	0.5 179	9.28	384 23	148 10.0	5 243 9	21 8 69	2.47	9.97 32	3 2,26	0.17 0	99 <0.01	1.58 0.1	96 9.4	0.28 0.1	22.5	98.07		0.10
TW-12-05	129.8	192.9	9 31 Brown gravelly SAND with sitt moist	REG	1010262	c1	2170 1350	23.8 90	1.78	47 31 5	126 2	2 184 5	45 69	53 79	6 13	7 1565	483 21	37 1	45 34.6	739 5	2700	23.7 7	02 101 5	0.6 1.6	9.68	384 24	134 91	3 744 3	61 11 75	3.46	9.31 36	3 2 78	0.22 1	66 0.0	1 1 59 1 1	7 7 11	03 02	22.0	99.01		0.10
TW-12-05	132.9	135.9	9 3.0 Brown gravely SAND, with sit, moist	RES	1010264	<1	1675 1095	22.1 90	0.84	39 27.6	11.3 18	1 14.8 4	4.7 4.4	4.63 65	9 1.23	5 849	413 18	27 114	1.5 27.9	59.5 3	2650	17.1 5	88 84.4	0.5 15	12.25	364 25	118 84	214 3	39 10.9	2.58	7.38 39	2 1.82	0.15 1	.66 0.0	1 1.19 04	57 4.4	0.3 0.15	24	99.45		0.13
TW-12-05	135.9	139	3.1 Brown GRAVEL trace sand, trace silt, mnist	RES	1010265	<1	1405 1100	26.7 50	2.54	74 30 4 1	1.75 20	2 22 3 5	0.1 10.4	4.99 63	2 1.21	1260	445 13	23 123	2.5 40.6	67.2 6	2050	14.5 6	51 654	0.5 152	5.84	123 25	126 8	306 F	09 19 45	5.74 1	2.25 25	1 5.54	0.42 1	82 00	1 2.58 01	58 6.62	0.24 0.17	17.85	98.47	$ \rightarrow $	0.11
TW-12-05	139	142	3.0 Grev BEDROCK	BROK	1010266	<1	1890 1225	18.5 70	1.95	43 29.4 1	1.65 20	7 166 5	0.3 7	4.85 70	9 1.27	1410	443 17	32 1	33 28 9	69.9 5	2650	24.5 6	44 104 5	0.5 1.52	10.55	360 21	123 87	1 238 4	24 12 3	3.46	9,17 34	8 3.37	0.32 1	45 00	1 1.51 0	6 6.63	0.3 0.2	24 F	98.7/	, <u> </u>	0.19
TW-12-05	142	145.1	1 3.1 Grev BEDROCK	BRCK	L010267	<1	3100 1145	21.2 80	2.08	56 26.5 1	0.15 18.	5 19.2 4	4.4 7.9	4.36 65	6 1.14 1	1 1725	442 17	32 1	23 39.6	63.3 6	2420	21.9 5.	61 83.5	0.5 1.37	19.85	417 23	111 7.6	252 4	62 15.5	4.45	9.75 29.	6 6.22	0.41 1	.86 0.0	1 1.76 0.5	58 5.55	0.27 0.36	27.0	98.72		0.21
TW-12-05	145.1	148.1	1 3.0 Grev BEDROCK	BRCK	1010268	<1	3070 843	19.5 20	1.15	46 19.25	7.72 13.	5 17.3	32 7.6	3.24 48	7 0.9 2	3 943	322 5	27 88	3.3 62.9	46.2 6	2510	19.1 4	13 56.9	0.7 1.03	19.7	497 30	89.1 6.0	1 220 4	32 16.25	4.59	8.13 24	7 8.47	0.34 3	31 <0.01	1.98 0.5	36 3.26	0.28 0.36	23.8	96.02	$ \longrightarrow $	0.12
	- /			1		1.00			- set					1	1		-1		1 2000			m			1							The second	1.01					-			



Martison Lake Project						actor: Da	vidson W	ell Drill	ing	Azı	n: 0	Degre	25																																								
Summary of	Test We	ell and	Pumpir	ng Well holes 2012	Claim	: 478				Di	o: -90	Degre	25																																								
Borehole ID	CORE F	RUN (n	n)	Geo-log Description	Litho Unit	SAMPLE																ME-MS	58 1																				N	IE-ICPO	6					OA-GRA()5 TOT-ICPO	6 Ce-OGR	EE N&XRF:
							Ag Ba	Ce	Co	Cr C	s Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho L	a Lu	Mo	Nb	Nd	Ni F	Pb Pr	Rb	Sm	Sn	Sr '	Ta T	b Th	T	Tm	U	VV	IY	Yb	Zn	Zr Si	02 Al20	03 Fe20)3 Ca(O MgC	Na20	K20	Cr203	TiO2	MnO P7	.05 S	O BaO	LOI	Total	Ce	Nb
	From	To	Leng	th			ppm ppr	m ppm	ppm p	pm pp	m ppm	ppm	ppm	ppm	ppm	ppm	ppm p	opm pp	m ppr	n ppm	ppm	ppm p	ppm pp	pm ppr	m ppm	n ppm	ppm p	pm p	pm pp	m ppr	n ppr	ppm	ppm	ppm pp	m ppn	n ppm	ppm	ppm S	% %	%	%	%	%	%	%	%	% (6 9	6 %	%	%	%	%
TW-12-06	0	54.9	9 54.9		TILL																																																
TW-12-06	54.9	55.5	5 0.6	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010182	<1 195	60 430	25	80 1.9	1 266	11.15	4.35	7.35	15.8	18.2	4.4 1	1.93 2	71 0.4	3 18	144	145	27 2	20 43.	7 50.7	24.2	1 1	220 3	3.7 2.	35 14.	3 <0.	0.53	3.22	262 5	51.7	2.98	118	218 3	7 6.7	2 7.0.	5 20.	7 5.51	1.44	1.86	0.01	1.08	0.24 2	.48 0.	14 0.22	14.25	98.7		0.01
TW-12-06	55.5	57.9	9 2.4	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010183	<1 163	35 482	35.2	70 2.3	9 151	18.1	7.13	11.35	21	28.3	7	3.2 2	92 0.7	3 33	288	179	27 2	20 51	52.3	34.8	2 1	800	11 3.	73 21.	9 <0.	0.91	5.79	423 1	1 83	5.19	168	500 27	7.7 7.0	1 11.3	5 22.	3 7.56	0.69	2.11	0.01	2.24	0.37 2	32 0.	21 0.18	15.1	99.15		0.03
TW-12-06	57.9	59.4	4 1.5	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010184	<1 180	0 525	36.5	10 3.9	5 164	20.6	8.75	12.9	24.2	32	5.4 3	3.69 3	34 0.9	4 94	208	197	<5 5	56 55.	5 50.7	40.2	2 1	595 7	7.9 4.	15 18.6	55 0.5	1.14	5.18	388 8	99	6.69	224	479 29	.8 9.3	3 12	21.	4 6.09	1.36	2.24	<0.01	2.09	0.38 2	.37 0.	18 0.2	10.9	98.31		0.03
TW-12-06	59.4	61	1.6	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010185	<1 309	0 678	37.2 3	370 2.8	2 110	15	5.95	10.1	16.6	24.4	6.1 2	2.64 4	21 0.6	5 13	198	229	93 2	21 69	68.2	34.5	2 2	360	10 3.	3 27.	9 <0.	0.74	9.09	396 9	70.4	4.23	162	368 2	.5 5.6	6 9.0	3 25.	4 8.11	0.53	2.07	0.05	1.79	0.41 2	38 0.	27 0.34	20.6	98.14		0.04
TW-12-06	61	64	3.0	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010186	1 166	50 436	37.4	90 2.9	4 159	13.95	5.27	9.39	18.8	22.9	4.1 2	2.42 2	47 0.5	4 16	317	167.5	24 1	4 47.	4 69.3	30	2 1	865 1	1.3 2.	97 19.	3 <0.	0.65	7.29	495 1	2 62.2	3.68	145	254 2	5.9 6.8	3 11.	1 22.	5 7.23	0.74	2.75	0.01	2.32	0.33 2	.23 0.1	22 0.19	16.1	98.42		0.05
TW-12-06	64	67.3	1 3.1	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010187	<1 184	5 473	36	10 3.0	4 146	18.4	7.49	10.7	22.5	27.6	6.7 3	3.24 2	79 0.7	7 22	304 1	175.5	<5 1	15 50.	5 48	33.1	3 1	625 1	2.8 3.	59 15.	4 <0.	0.95	5.1	378 1	1 87.1	5.47	198	576 30).1 7.9	5 12.	1 21.	6 6.72	0.91	1.85	<0.01	2.63	0.36 2	.12 0.	19 0.21	11.9	98.64		0.04
TW-12-06	67.1	70.3	1 3.0	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010188	<1 245	60 405	34.2	10 3.4	3 148	14.8	5.99	9.81	22	24.3	5.9 2	2.61 2	54 0.6	2 24	237	149	5 1	16 41.	7 43.9	30.6	2 1	575 8	3.6 3.	1 14	<0.	0.74	5.05	387 7	69.8	3 4.38	164	453 3	1 7.7	2 11.3	5 22.	6 6.87	0.92	1.78	<0.01	2.04	0.37	2 0.	19 0.28	11.5	98.62		0.03
TW-12-06	70.1	73.3	1 3.0	Grey SAND and GRAVEL CHIPS, trace silt	RES	L010189	<1 197	0 664	31.5	10 1.1	.6 141	24.7	9.56	16.7	21	41.1	5.4 4	4.25 4	26 0.9	3 42	248	231	<5 3	30 67.	1 44.9	49	2 1	705 7	7.6 5.	2 31.	7 <0	1.19	4.15	427 1.	5 111.	5 6.71	191	371 2	5.6 6.5	7 10.5	5 21.	9 7.36	0.91	2.24	<0.01	1.98	0.45 2	.49 0	.2 0.22	17.6	98.07		0.03



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