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A REPORT PREPARED FOR:
FORMOSA ENVIRONMENTAL AGGREGATES LTD.

DIAMOND DRILL REPORT ON THE MOOSE RIVER CROSSING GYPSUM PROPERTY, CARROLL AND CANFIELD TOWNSHIPS, PORCUPINE DISTRICT, NORTHEAST MINING REGION ONTARIO

2.15868

AUGUST TO DECEMBER, 1993.

REPORT PREPARED BY:
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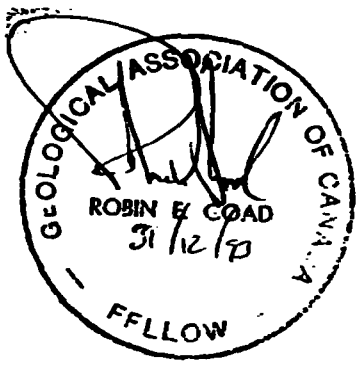
CONSULTING GEOLOGIST



SUMMARY

Formosa Environmental Aggregates Ltd. has 5 contiguous blocks of claims, totalling 976 hectares (2,411.7 acres) in Carroll and Canfield Townships in the Porcupine District of the Ontario Northeast Mining Region. They surround the largely abandoned village of Moose River Crossing, located on the Ontario Northland Rail Road, approximately 70 kilometres south of Moosonee, Ontario. The claims were staked to cover a known flat-lying deposit of white gypsum extending laterally for more than 10 kilometres in outcrop exposures along the banks of the Moose River. Diamond drill hole intersections from earlier exploration of the deposit indicate that the gypsum is greater than 30 metres thick. Geological and market potential studies carried out on behalf of the Ministry of Northern Development and Mines, and its predecessors, suggest that the gypsum deposit exceeds 96% in purity and may be suitable for value-added premium gypsum markets.

Formosa Environmental Aggregates Ltd. carried out a 10 hole, 306.3 mwtre (1,005 foot) diamond drill program on its claims in August and September, 1993. The program confirmed lateral continuity of the deposit over 1.86 kilometres parallel to the Moose River, and vertical continuity over thicknesses exceeding 30 metres. Higher grade portions within the deposit returned average grades up to 95.06 wt.% gypsum over 9.7 metres, and whiteness values averaging 90% over 10 metres. These higher grade portions of the deposit are overlain by at least 16.9 metres of Quaternary glacial drift and gypsum returning lower purity and whiteness grades. The average grade of the deposit determined from the analysis of continuous core samples from 3 of the 10 diamond drill holes drilled by the Company is 90.56 wt.% gypsum and 85.6% whiteness.

Beneficiation and/or selective mining of the Moose River Crossing deposit will be required to achieve a high purity gypsum product of greater than 97% and a whiteness exceeding 90%. The results of the diamond drill program also suggest that the higher grade portions of the deposit occur beneath the ground water table. Surface prospecting and diamond drill hole intersections revealed significant karsting activity in the vicinity of the deposit which might make mining beneath the water table difficult. The results of the 1993 diamond drill program preclude the Company from obtaining a relatively inexpensive, near surface bulk sample of high purity white gypsum. Therefore no further technical evaluation of the Moose River Crossing gypsum deposit is recommended at this time.

TABLE OF CONTENTS

1.0 INTRODUCTION

Formosa Environmental Aggregates Ltd. (hereinafter also referred to as the "Company") has mineral exploration claims surrounding the largely abandoned village of Moose River Crossing in northern Ontario. The village was previously the site of a lumber mill situated along the Ontario Northland Rail Road where it crosses the Moose River, approximately 70 kilometres south of the town of Moosonee (Figure 1).

The Company's Moose River Crossing claims were staked to obtain the mineral rights to a known deposit of gypsum that was first described in a progress report by the Geological Survey of Canada (Bell, 1877). The gypsum deposit is also known from the reports filed for assessment by various mineral exploration companies, and from geological and market potential studies carried out for the Ontario Ministry of Northern Development and Mines and its predecessors. Collectively, this work suggests that a near surface resource of high purity, white gypsum exists on the claims of sufficient quality for use in value-added premium gypsum markets.

The Company staked its Moose River Crossing claims in January, 1993. A diamond drill program was subsequently carried out in August and September, 1993 in order to test the quality of the gypsum, assess its depth and lateral continuity, and determine its mineability with respect to the proposed collection of a 10,000 tonne bulk sample. The diamond drill program was partially funded by an Ontario Mineral Incentive Program (OMIP) grant from the Ministry of Northern Development and Mines.

This report documents the results of the 1993 diamond drill program and the logging and analysis of core obtained thereof. The report was prepared by Robin E. Goad, M.Sc., F.G.A.C., Consulting Geologist (hereinafter also referred to as the "Writer") at the request of the management of the Company.

2.0 PROPERTY

The Moose River Crossing property of Formosa Environmental Aggregates Ltd. is comprised of 5 blocks of claims, totalling 61 claim units or, 976 hectares (2,411.7 acres) (hereinafter also referred to as the "Property") (Figure 2). The claims were staked on January 6 th and 7 th, 1993, and recorded on the latter date. No work has been filed with the Office of the Mining Recorder in Timmins and the claims are therefore in good standing until January 7, 1995.

TWP #'s
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to 1193217,
inclusive,

3.0 LOCATION AND ACCESS

The Company's Property is situated at Moose River Crossing, approximately 70 kilometres south of Moosonee, Ontario.

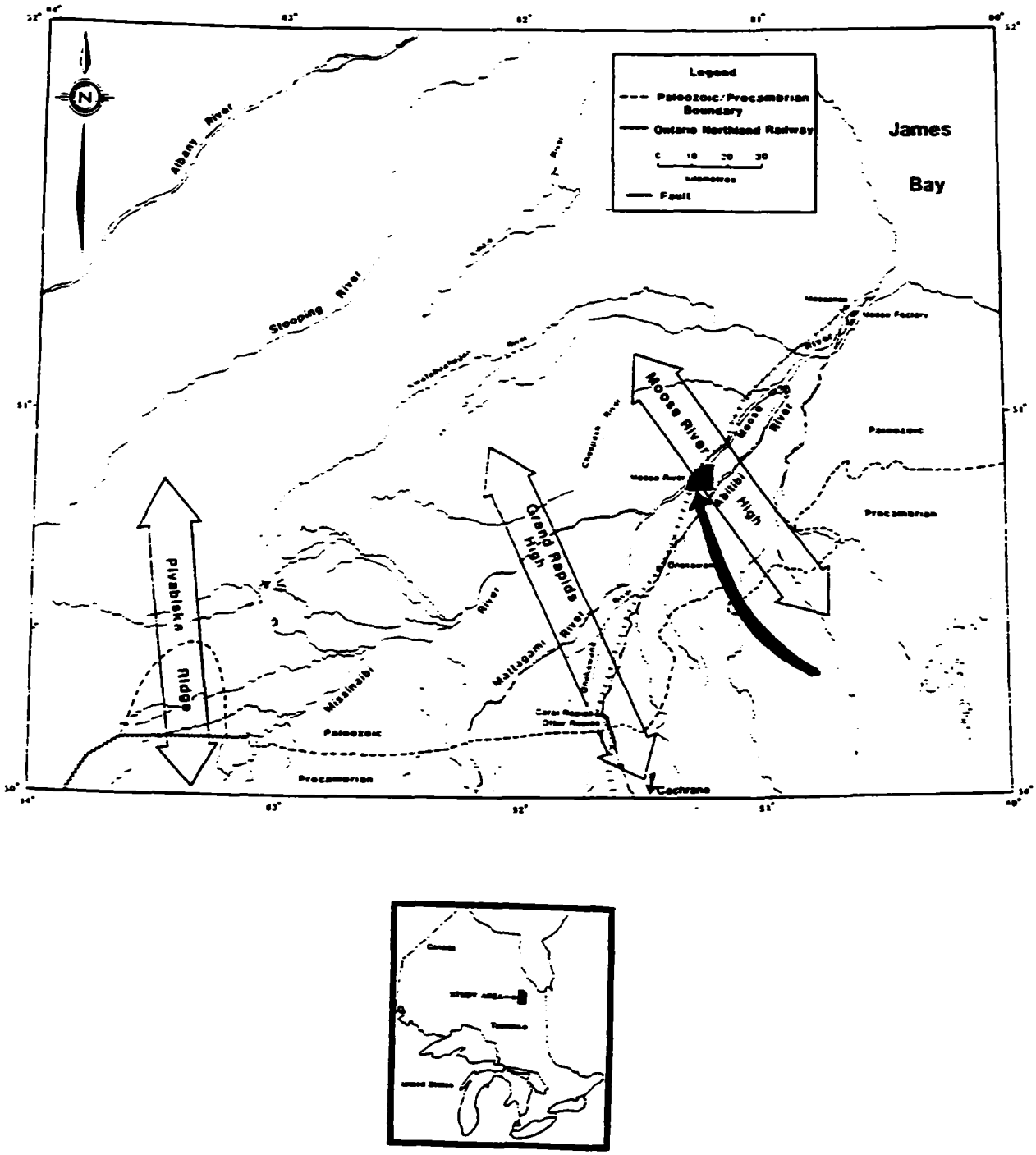


FIGURE 1 GENERAL LOCATION OF THE MOOSE RIVER CROSSING PROPERTY

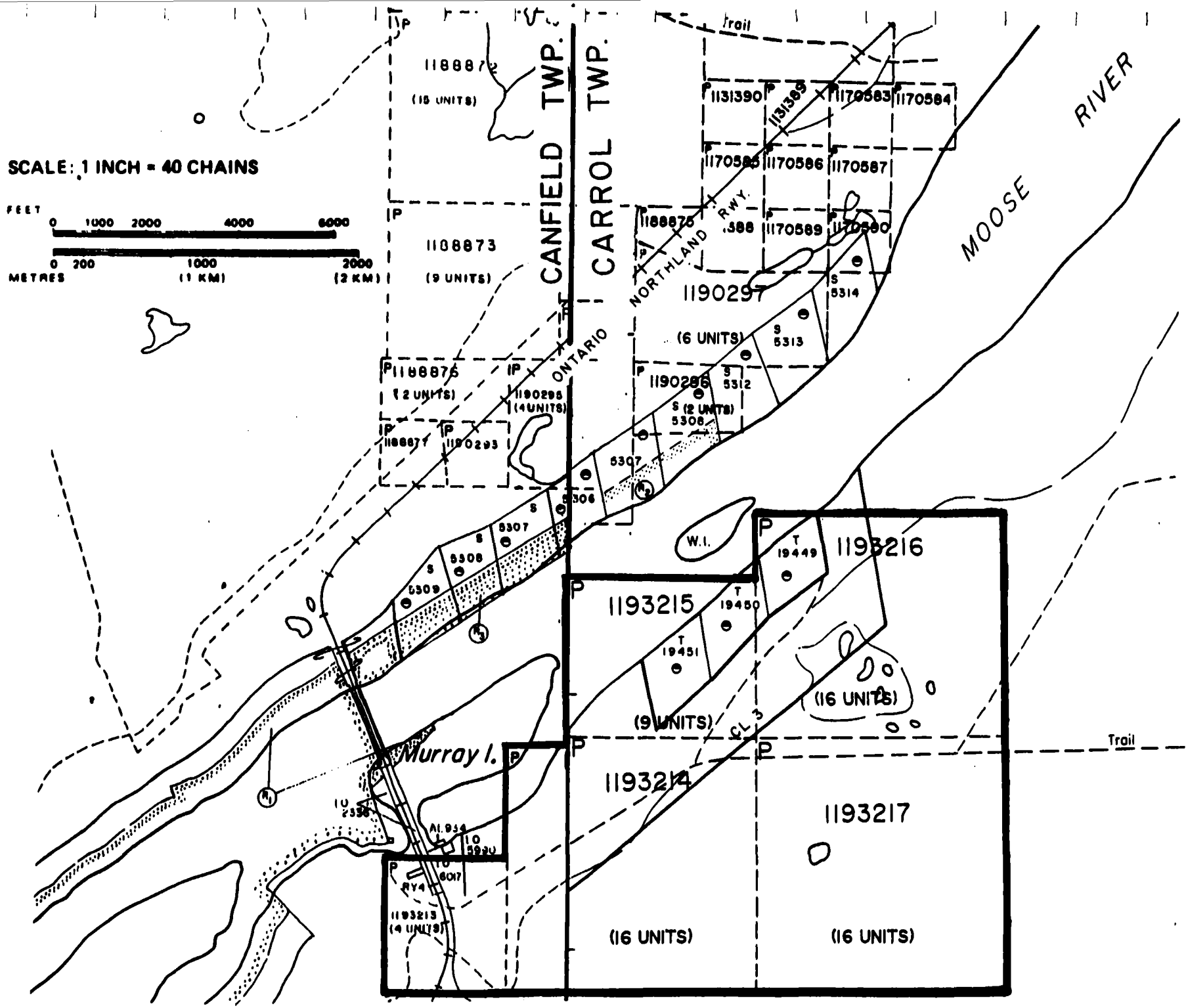


FIGURE 2 PLAN OF THE MOOSE RIVER CROSSING PROPERTY CLAIMS

Specifically, the claims are located straddling the boundary between Carroll and Canfield Townships, in the Porcupine District of the Ontario Northeast Mining Region. They are located on the southeast side of the Moose River where it is crossed by the Ontario Northland Rail Road. Geographically, the claims are located in the 42/I-14 NTS quadrant, centred at approximately 81 degrees, 20 minutes, 24 seconds west longitude, and 50 degrees, 53 minutes, 39 seconds north latitude.

Best access to the Property is by rail from the Ontario Northland Rail Road which maintains a line between Cochrane and Moosonee. Maintenance crews for the railway are housed in buildings at Moose River Crossing, and a rail siding and other infrastructure exist at the village. Otherwise, the Property can be accessed by chartered fixed wing or rotary aircraft.

4.0 PREVIOUS WORK

The gypsum deposits of the Moose River Basin have been periodically explored since their discovery in 1875 by Robert Bell while mapping for the Geological Survey of Canada (Bell, 1877). The Moose River and Gypsum Mountain deposits were later described in detail for the Ontario Bureau of Mines (Bell, 1904), and then subsequently with the Cheepash River sites for the Ontario Department of Mines (Dyer, 1929).

The earliest private sector work on the deposits was in 1911 when Mr. W. Tees Curran staked the Moose River deposit (Bezys, 1990). His claims were reportedly allowed to lapse and were later re-staked twice before carrying out any significant exploration. In 1923, Mr. Curran's company drilled 4 short holes to depths of between 7.6 and 14.3 metres, and a patent was granted in 1928 (ibid). In 1929, Mr. Curran's Company was reorganized as the James Bay Basin Oil Company Limited and an additional 3 diamond drill holes were drilled on Murray, Mike and Grey Goose Islands (ibid). The hole drilled on the southwestern end of Mike Island intersected 53.7 metres of mottled gypsum interbedded with shale and limestone starting at a depth of 73.2 metres. The hole drilled at the head of Murray Island intersected 19.6 metres of gypsum interbedded with shale and limestone at a depth of 22 metres. The Grey Goose Island hole failed to intersect any appreciable thicknesses of gypsum.

In 1955, R.E. Parkes staked 32 claims in Carroll and Canfield Townships adjoining the James Bay Basin Oil Company Limited patents. A total of 19 kilometres of linecutting and geological surveys were later completed (Parkes, 1956). The claims were transferred to the Atlas Gypsum Company in 1956 but were allowed to lapse in 1957 after no further work was carried out. The claims were re-staked by the Atlas Gypsum Company before being allowed to lapse again in 1960.

A series of recurring Exploratory Licenses of Occupation (ELO's) were granted to the Moosonee Gypsum and Exploration Company beginning in April, 1960. The ELO's included both the Moose River and Cheepash River sites. In 1963, an 18 hole, 528 metre diamond drill program was completed over a distance of 5 kilometres along the Cheepash River (Bullis, 1963). The drilling indicated that the gypsum continued to a depth of 40 metres. No further work was carried out by the Moosonee Gypsum and Exploration Company and the ELO along the Cheepash River expired in 1970.

The Ontario Department of Mines later published their Industrial Mineral Report No. 18, entitled "Gypsum in Ontario" by Guillet (1964). It documents the occurrences of Gypsum in the Moose River Basin with specific references to the Moose River, Cheepash River, and Gypsum Mountain sites. In his report, Guillet (1964) summarized the work that had previously been carried out in the area. He also mapped the exposures of gypsum occurring along the banks of the Moose River extending sporadically for approximately 7 miles (11.7 kilometres) downstream from Moose River Crossing. The report indicates the heights of the Moose River banks (up to 45 feet or, 13.7 metres on the Property) and the gypsum outcrops. It also differentiates between the types of gypsum observed (gypsum breccia, and white, brown and selenitic gypsum), as well as the thickness and type of glacial drift overlying the deposit. Generally, higher grades of massive, white gypsum were noted beneath the gypsum breccia. Guillet (1964) collected 3 channel samples of gypsum from the Moose River banks between 8 and 13 feet in length (2.4 and 4.0 metres). The samples returned whole rock chemical compositions indicating gypsum grades of between 95.51 and 97.04 wt.% and. anhydrite concentrations of between 1.36 and 1.69 wt.%.

In 1974, the mining rights to the James Bay Basin Oil Company Limited patents were forfeited to the crown, however, the surface rights are still owned by J.W. Haley of Fredonia, Wisconsin (Bezys, 1990).

In 1978, an ELO was granted to Kerr Addison Mines Limited as part of its exploration program for uranium deposits hosted in clastic sedimentary rocks. The ELO included the area in the vicinity of the Moose River gypsum deposit but expired after only 1 diamond drill hole was drilled in Ebbitt Township.

The Moose River gypsum deposit was staked again in 1985 by E. Jerome who transferred the claims to E. Ivall. They were allowed to lapse in 1986.

In 1988, James Bay Travel Limited (Moosonee) and associates apparently made notice of their intent to procure an ELO on the Cheepash River gypsum deposit (ibid). They reportedly hired a consultant to prepare an evaluation of the Cheepash River and Moose

River gypsum deposits, although there is no record of this work (ibid).

In 1990, 2 reports were published by the Ontario Ministry of Northern Development and Mines on the geology and market potential of the Moose River Basin gypsum deposits. They include Open File Report 5728, entitled "Geology of Gypsum Deposits in the James Bay Lowland" by Bezys (1990), and Industrial Mineral Background Paper 12, entitled "Gypsum in Northern Ontario: Resources and Market Potential" by Hains and Bezys (1990). Geological work on the Moose River Basin gypsum deposits by Bezys (1990) included a comprehensive description of the regional geological setting, a summary of the work that had previously been carried out in the area, and descriptions of the Gypsum Mountain, Moose River and Cheepash River outcrop exposures. Bezys (1990) also collected a total of 115 samples from the 3 areas (presumably grab samples as no sample lengths are reported), including 33 samples from the Moose River gypsum outcrops. They were analyzed for a suite of whole rock major element oxides, selected trace elements, carbon dioxide, total carbon, and moisture. No whiteness or other colour tests were reported. The results of the analysis of the Moose River samples indicate a range in gypsum composition of between 92.35 and 98.57 wt.%, averaging 96.44 wt.%. Chemical data together with the mineralogy indicates that impurities within the gypsum are largely carbonates (0.22 to 7.05 wt.%, averaging 2.87 wt.%), and anhydrite (0.00 to 4.29 wt.%, averaging 0.51 wt.%). Similar results were achieved in the analysis of samples from the Cheepash River and Gypsum Mountain sites. Theoretical mineral concentration calculations from the analytical work were later re-confirmed from the results of petrographic work.

Market potential studies by Hains and Bezys (1990) indicate that the Moose River Basin gypsum deposits average greater than 96 wt.% gypsum and occur in widths up to 33 metres. The chemical and mineralogical compositions suggest that the gypsum may be able to meet industrial specifications for the production of building and industrial plasters and certain filler grades in addition to lower grade gypsum products such as wall board, gypsum particle board, fibre board, cement, and soil stabilizers and conditioners.

In 1991, claims were staked on the northwest and southeast sides of the Moose River by Ray Meikle, who later transferred them to I. Martinello of North Bay, Ontario. Claims were subsequently staked on the northwest side of the river by James Bay Travel (Moosonee) and associates. In 1992, Martinello optioned his claims to Val D'Or Resources who allowed them to lapse in January, 1993. The Val D'Or Resources claims on the northwest side of the Moose River were re-staked by David Jones on January 5 th, 1993, reportedly for James Bay Travel (Moosonee) and associates. The claims on the southeast side of the river were staked by Formosa Environmental Aggregates Ltd. on the following 2 days.

5.0 POTENTIAL MARKETS FOR HIGH PURITY WHITE GYPSUM

A comprehensive analysis of the gypsum industry and the potential markets for the Moose River Basin gypsum deposits is presented in the report entitled "Gypsum in Northern Ontario: Resources and Market Potential" by Hains and Bezys (1990). They suggest that the North American market for "specialty" or, high purity gypsum and calcined gypsum products was 1,000,000 tons in 1987. These value-added premium markets include building plasters (25%), industrial plasters (50%), and various filler and extender applications (25%). Hains and Bezys (1990) projected no growth in the building plaster market, but an annual growth rate of between 2 and 3.5% in the other premium gypsum markets. They also estimate that the gross margins achieved by the 2 principle North American producers in 1987 were between 50 and 100% for premium gypsum products priced at between 35 and 400 $US per ton.

Hains and Bezys (1990) suggest that gypsum from the Moose River Basin deposits might find markets in the mineral filler industry for pharmaceuticals, cosmetics, food preparation, plastics, salt cake, and the pulp and paper industry. They also suggest that the gypsum may be suitable for use as dental, surgical, bedding, moulding and building plasters. Its use in lower specification (high volume low margin) products, such as cement, wall board, gypsum fibre board and gypsum particle board will be sensitive to the costs of extraction and its transportation to markets.

Hains and Bezys (1990) conclude that because the premium gypsum market in North America is highly fragmented and controlled by 2 major producers, successful entry by a new producer will be difficult. However, a potential market of approximately 100,000 tons may be available for a new entrant from Ontario, provided that they establish an extensive sales, marketing and technical support network (ibid).

6.0 REGIONAL GEOLOGY

The Moose River Basin gypsum deposits are located within a physiographic region of relatively low relief referred to as the Hudson Bay Lowland. It is underlain by 2 Palaeozoic and Mesozoic, intracratonic, sedimentary basins unconformably overlying Precambrian basement rocks. They are referred to as the Hudson Bay and Moose River Basins and are separated by a structural high called the Cape Henrietta Maria Arch (Figure 3).

The Company's Property is located on the southeast side of the Moose River Basin near its fault contact with Neo- to Meso-Archean migmatites. The basin is up to 1,000 metres thick near its depocentre and is comprised of Upper Ordovician to Upper Devonian clastic, carbonate and other evaporite rocks overlain by Middle Jurassic and Lower Cretaceous unconsolidated clays, lignite, and

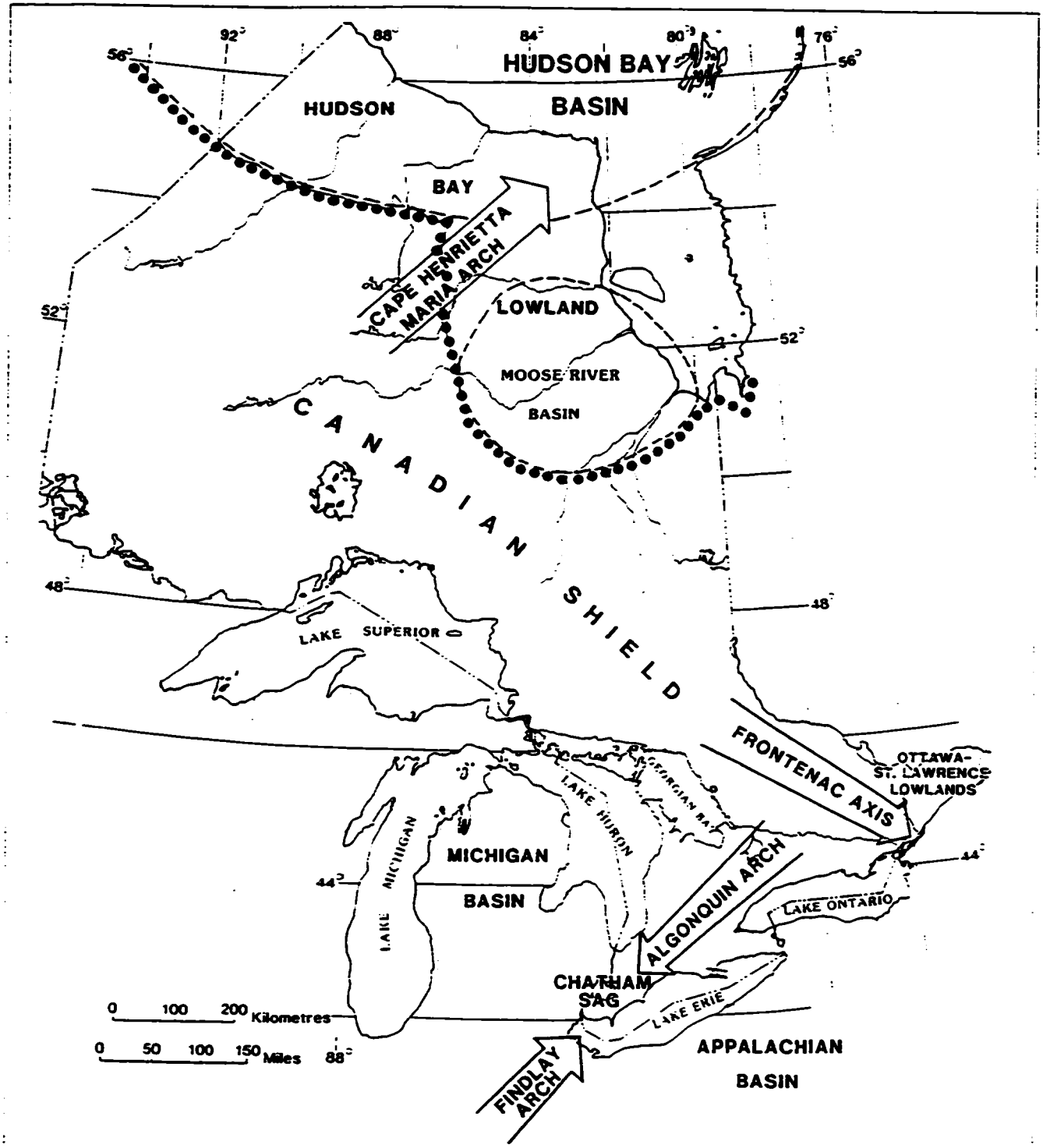


Figure 3:
Sedimentary Basins, Physiographic Elements, and Structural Features in Ontario. Basins are outlined with dashes and the lowlands are outlined with dots.

sands and gravels (Figure 4).

Surface and subsurface bedrock exposures in the vicinity of the Property include rocks from the Middle Devonian Murray Island and Moose River Formations. The Murray Island Formation is approximately 15 metres thick and composed of a banded sequence of calcareous dolostone and limestone, and argillaceous limestone (ibid). The Murray Island Formation disconformably overlies a non-fossiliferous sequence of limestone, dolomitic limestone, dolostone, brecciated carbonates, gypsum, with minor amounts of anhydrite, shale and secondary selenite of the Moose River Formation (ibid). The Moose River Formation attains thicknesses of approximately 40 to 80 metres near the Company's Property.

The Quaternary geology of the Moose River Basin is dominated by at least 5 distinct till sheets, separated by non glacial and interglacial sediments, including glaciolacustrine deposits and the interglacial Missinaibi Formation (ibid).

7.0 CURRENT WORK

Formosa Environmental Aggregates Ltd. carried out a 10 hole, 306.3 metre (1,005 foot) diamond drill program in August and September, 1993. All of the holes were drilled vertically to depths of between 21.3 metres (70 feet) and 39.6 metres (130 feet), and their collar locations are shown on the following figure (Figure 5). The elevations of the static levels of the ground water was measured in some drill holes when completed. Measurements were collected with a Solinst Canada water metre from the drill hole collars. Core from the drill program was logged briefly in the field at the time of the drilling, and then later in greater detail at the Petroleum Resources Laboratory of the Ministry of Natural Resources in London. Logs for each of the diamond drill holes are presented in Appendix 13.1 of this report (Appendix).

Upon completion of the core logging, 3 of the 10 diamond drill holes were selected as representative of the better quality gypsum intersections (MR-93-4, -5, and -8). The core from these holes was then sampled by facies and/or hydraulic alteration products in continuous core lengths of between 1.0 and 4.8 metres. Samples were collected by sawing the core along its long axis with a diamond impregnated blade in order to obtain 2 representative splits. Half of the core was retained for reference purposes and the other half sent for chemical analysis and whiteness tests. Chemical analytical work was carried out by Chemex Labs Ltd. and included whole rock major element oxide concentration determinations, moisture content, water of crystallization, and 3 samples for sulphate. The pulps from the chemical analyses were then sent to a private laboratory for spectrographic whiteness tests. In order to provide a medium for comparison to samples of low-grade, off-white, crude gypsum currently available on the

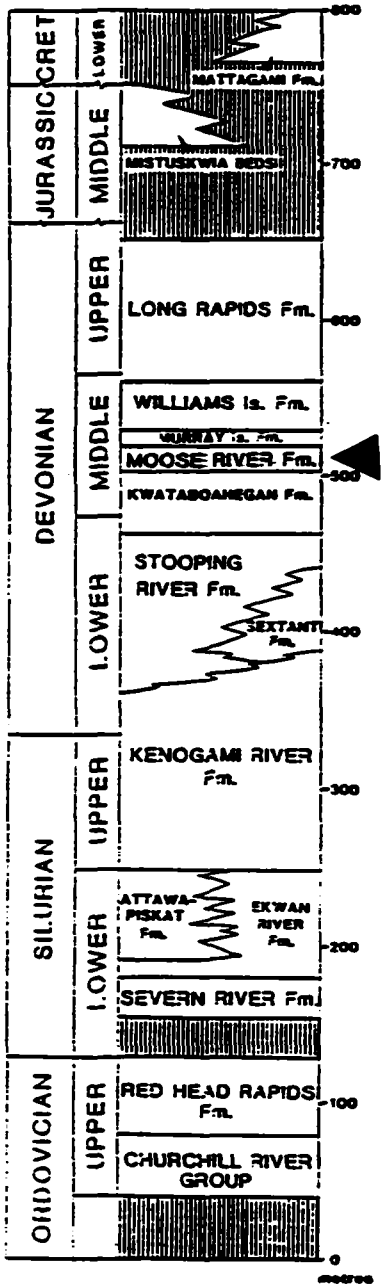


Figure 4: Stratigraphy of the Paleozoic and Mesozoic units in the Moose River Basin. The Moose River Formation is highlighted.

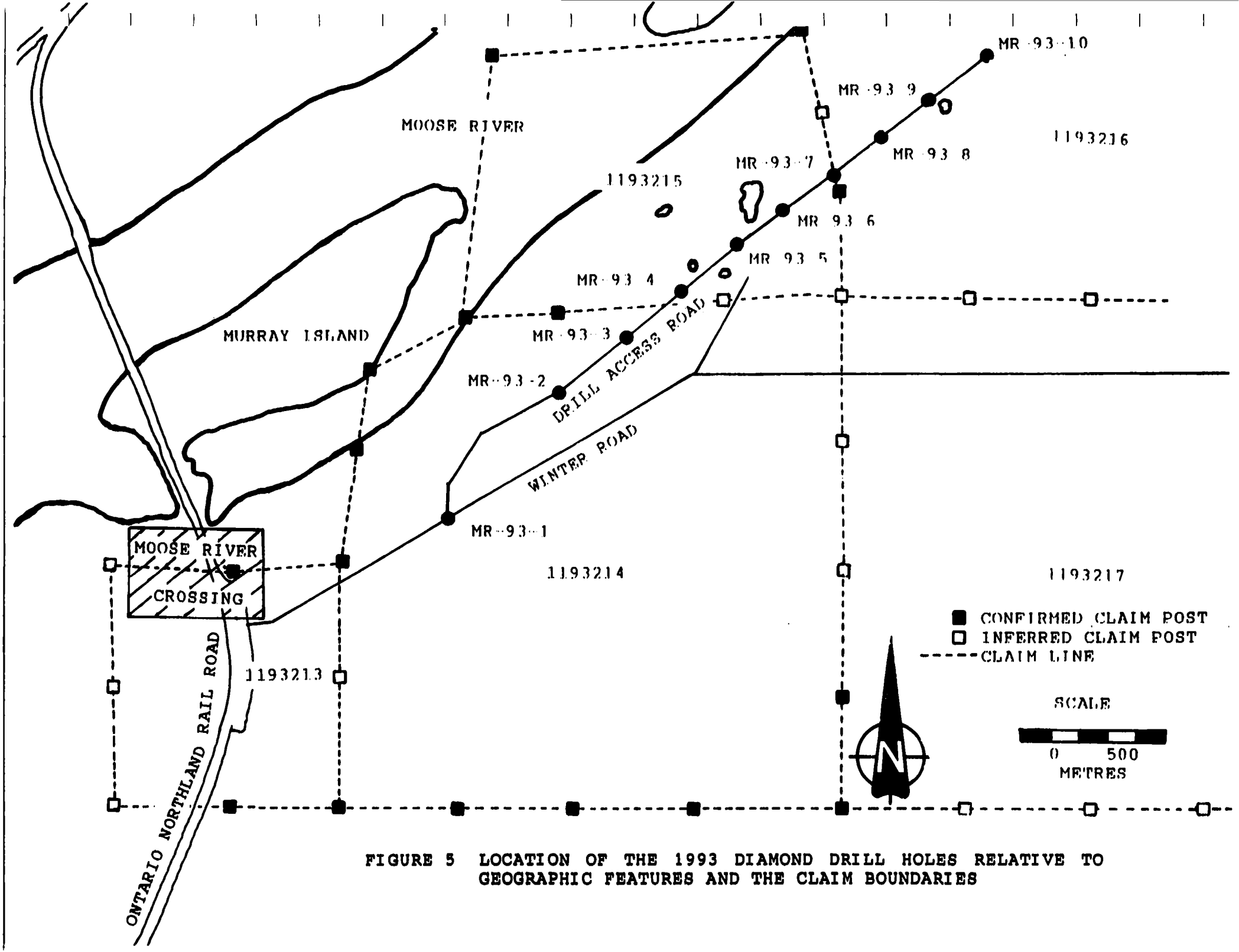


FIGURE 5 LOCATION OF THE 1993 DIAMOND DRILL HOLES RELATIVE TO GEOGRAPHIC FEATURES AND THE CLAIM BOUNDARIES

market in southern Ontario, 4 samples (DSP-BULK-RK, MSP-BULK-RK, MSP-HG, AND MSP-POWDER) were also collected from a gypsum mine in southwestern Ontario. A sample of by-product gypsum (FGDG) was also obtained for comparative purposes from the mine.

The results of the chemical analytical work is presented in Appendix 13.2, and the results of the whiteness tests are presented in Appendix 13.3 of this report (Appendix).

8.0 PROPERTY GEOLOGY

The geology of the Moose River gypsum deposit is known from the results of the 1993 diamond drill program, and the earlier work carried out in the vicinity of the Property and described in the reports by Guillet (1964) and Bezys (1990). Outcrop exposure on the Property is only known to occur along the banks of the Moose River adjacent to the northeast tip of Murray Island and extending approximately 6 kilometres downstream on either side of the river. Outcrops of gypsum and limestone also occur along the banks of the Moose River approximately 11.7 kilometres downstream from Moose River Crossing (northeast of the Company's Property) (Guillet, 1964; Bezys, 1990). They also exist northwest of the property at the southwest tip of Murray Island where flat-lying argillaceous dolostone of the Murray Island Formation is exposed. These rocks contain limestone pebbles from the underlying Moose River Formation and indicate the erosional disconformity contact between the 2 formations (Bezys, 1990).

Outcrops exposed along the banks of the Moose River and the rocks intersected in 8 of the 10 holes drilled by the Company in 1993 are comprised of various facies of flat lying gypsum of the Moose River Formation. The other 2 diamond drill holes (MR-92-1 and MR-93-9 were abandoned in overburden and failed to intersect bedrock. The uppermost gypsum facies intersected in the diamond drill holes is a 0 to 9 metre thick unit of gypsum and dolostone solution breccia. It is comprised of angular and rounded clasts of apparently primary, bedded gypsum, dolostone, secondary satinspar gypsum and crystalline selenite. The matrix is comprised of secondary, fibrous, snow-white satinspar gypsum and calcite, the latter forming travertine-like laminar bedding. This breccia is interpreted as reflecting the dissolution of the gypsum underlying dolostone of the Murray Island Formation at or above the water table (karsting activity), and the resulting collapse of the overlying dolostone.

The solution breccia is locally underlain by or, grades laterally into a 1 to 4 metre thick dull gray-white, bedded rock composed of dolomitic gypsum. It is typically located above or slightly below the water table and is commonly cut by irregular-shaped patches and linear fracture-filling snow-white, fibrous satinspar gypsum +/- disseminated blade and augen-shaped crystals of transparent selenite (0.5 to 2cm in size). The selenite and

satinspar are commonly rimmed by tan to dark brown patches and rhombs of ferroan dolomite. The rock is interpreted as primary bedded dolomitic gypsum which is locally altering to satinspar, selenite and ferroan dolomite as the result of hydration near the ground water table. Ground water elevation measurements collected upon completion of some of the diamond drill holes confirmed the location of the static water level near the elevation of the gypsum alteration products.

The solution breccias and primary bedded gypsum grade down section into a completely recrystallized rock composed of massive and nodular, snow-white, fibrous satinspar gypsum up to greater than 20 metres thick. It typically contains approximately 5 to 10% disseminated transparent blade-shaped crystals of selenite, and is cut by 0-20% conjugate brown, ferroan dolomite laminae defining a coarse, chicken wire-like, nodular texture. The satinspar locally grades in and out of 1.5 to 3 metres of completely recrystallized gray selenite breccia. It is composed of blade and augen-shaped selenite crystals rimmed by anastomosing laminae of calcitic, gray, gypsiferous shale and snow-white satinspar gypsum. The satinspar is also locally interbedded at depth with up to 20% gray calcitic shale. Ground water elevation measurements collected upon completion of some diamond drill holes indicate that these rocks only occur below the static water level. They are therefore interpreted as hydraulic alteration products.

Drill hole intersections from the 1993 diamond drill program confirmed lateral continuity of the flat lying gypsum unit over a width of 1.86 kilometres between holes MR-93-2 and MR-93-10 (Figure 5). Outcrop exposures along the banks of the Moose River suggest there is even greater lateral continuity of the gypsum deposit up to 10 kilometres. None of the 1993 diamond drill holes intersected the lower contact of the gypsum deposit. However, a hole drilled earlier at the south tip of Murray Island by the James Bay Basin Oil Company Ltd. intersected 99 feet (30.2 metres) of gypsum overlying gypsum and limestone and then only limestone (Guillet, 1964). The maximum thicknesses of gypsum intersected in the 1993 diamond drill program were 28.65 and 31.39 metres. This coupled with the increase in shale interbeds in some of the deeper 1993 drill hole intersections indicates proximity to the lower contact of the gypsum unit.

The Palaeozoic rocks exposed in the subsurface of the Property are overlain by 5 to greater than 23 metres of unconsolidated glacial and post glacial drift. The 1993 diamond drill program determined that most of this drift is comprised of thick deposits of glaciolacustrine silt and clay. They locally overlie a more bouldery clay deposit (likely till) and a drillable, clayey basal till which may be the interglacial carbonaceous claystone described by Bezys (1990) as the Missinaibi Formation.

The Palaeozoic gypsum and Quaternary drift deposits have been affected by a protracted karsting event in areas marginal to the Moose River. Sink holes, drainage rills and other karst features were commonly observed extending up to 750 metres inland from the river, and up to 400 metres in width measured parallel to the banks of the river. In addition to the obvious development of sink holes, karsted areas are also defined by a preponderance of dead mature trees typically broken mid way up their trunks. These areas are also commonly overgrown by dense underbrush such as raspberry brines. The dead trees in these areas are dominated by spruce and balsam which are commonly survived by less water sensitive poplar and birch species. The demise of the spruce and balsam trees has clearly resulted from a catastrophic drop in the ground water table as the result of a breach in the integrity of the glaciolacustrine drift deposits upon dissolution and collapse of the underlying gypsum formation. The karst activity is consistent with the Writers interpretation of the development of gypsum solution breccias in the drill core. It is also consistent with the interpretation of the hydraulic alteration of primary bedded dolomitic gypsum to secondary snow-white, fibrous satinspar, transparent selenite crystals and ferroan dolomite laminae. It also explains the caves up to 3 metres in height intersected in some diamond drill holes and the irregular depth to bedrock encountered in some drill hole localities.

9.0 GEOCHEMISTRY AND WHITENESS TESTS

Whole rock major element oxide analysis of 21 samples from the 3 diamond drill holes analyzed from the Property, detected a range in CaO concentrations of between 31.19 and 33.33 wt.%, averaging 32.35 wt.%. The samples demonstrated little variation in their CaO concentrations except that the more shaly gray selenitic breccia intervals and shaly massive and nodular satinspar intervals are typically those with the lower CaO concentrations (31.19 to 31.60 wt.% CaO). The exception is the sample interval 5-34.50-36.63 of shaly selenitic and nodular gypsum which returned a 33.06 wt.% CaO concentration.

The 21 core samples from the Property returned a range in +H2O (water of crystallization) concentrations of between 15.75 and 20.10 wt.%, averaging 18.93 wt.%. These concentrations were used to theoretically calculate the amount of gypsum present in the samples because gypsum (calcium sulphate dihydrate) is the only significant hydrous mineral recognized from visual examination of the outcrop and drill core specimens. The gypsum concentrations were therefore calculated to range between 75.36 and 96.18 wt.%, averaging 90.56 wt.% (Table 1). However, 9.7 metres of gypsum in hole MR-93-4 returned an average grade of 95.06 wt.% commencing at a vertical depth of 20.20 metres. A 10 metre section of hole MR-93-5 returned an average gypsum grade of 92.67 wt.% commencing at a vertical depth of 17.75 metres. A 9.55 metre interval of hole

MR-93-8 returned an average grade of 91.87 wt.% gypsum commencing at a vertical depth of 16.90 metres.

The principle accessory minerals recognized in the diamond drill core samples are calcite, dolomite, and minor clay and silicate minerals. Theoretical calculations from the analytical data determined that the magnesium carbonate concentrations range between 0.48 and 6.38 wt.%, averaging 2.46 wt.% (Table 1). The calcium carbonate concentrations were determined to range between 1.97 and 15.48 wt.%, averaging 5.37 wt.% (Table 1). The minor Fe_2O_3 variation is interpreted to reflect iron cation substitution within carbonate minerals. The local presence of shale in the drill core is reflected by local minor increases in the Al_2O_3 concentrations (range = 0.01 to 0.47 wt.%, averaging 0.12 wt.%). They correspond to minor increases in the K_2O and Na_2O concentrations which collectively with the alumina are likely present in clay and silicate minerals. Samples with greater alumina and alkali element concentrations are also typically slightly enriched in silica (0.02 to 1.78 wt.%, averaging 0.49 wt.%). Greater concentrations of silica correspond to the samples containing greater amounts of shale attributed to increases in the silicate minerals.

The Writer did not analyze the samples collected from the southern Ontario gypsum mine or, the by-product gypsum sample, for $+H_2O$. It was therefore not possible to calculate the gypsum purity of these samples. However, ore from the mine that was sampled by the Writer apparently averages 85% gypsum, and the by-product gypsum is apparently 90 to 95% pure. These grades are supported by the major element oxide concentrations achieved from analysis of samples collected by the Writer. Samples from the mine returned CaO concentrations of between 31.21 and 32.17 wt.%, averaging 31.57 wt.%. However, it should be noted that sample MSP-HG which returned the grade of 32.17 wt.% CaO was a sample of high grade white gypsum deliberately hand cobbed by the Writer. This higher grade gypsum sample was analyzed in order to assess the potential for achieving a higher purity, white gypsum product from the southern Ontario mine through beneficiation and/or selective mining. The mine samples, particularly the homogenized bulk rock samples, are generally less enriched in CaO than the samples collected from the Moose River Crossing drill core. Samples collected from the mine are also more enriched in MgO than the Moose River Crossing drill core samples, returning concentrations typically greater than 2%. These reflect $MgCO_3$ concentrations exceeding 4.45%, excluding the high grade mine sample. Mine samples also returned generally higher concentrations of SiO_2, Al_2O_3, Fe_2O_3, K_2O, and Na_2O than the Moose River Crossing samples reflecting greater amounts of carbonate and silicate mineral impurities.

The by-product gypsum sample conversely, returned a higher (32.45 wt.%) CaO concentration, generally lower MgO concentrations,

and marginally lower SiO2 and Al2O3 concentrations than the Moose River Crossing drill core samples. The major element oxide concentrations of the by-product gypsum are consistent with the reported 90 to 95% purity.

Colour analysis of the Moose River Crossing drill core samples returned a range in whiteness of between 74.3 and 90.5%, averaging 85.6%. The whiteness of the samples was directly proportional to the amount of gray shaly material in the samples. The whitest samples were those collected from the massive and nodular, snow-white, fibrous satinspar gypsum with selenite and ferroan dolomite. It is noteworthy that the entire 9.7 metres of gypsum analyzed in hole MR-93-4 returned an average whiteness of 89.2%, although the lower grade, off-colour portions of this hole were not analyzed. The 10 metre high grade section of hole MR-93-5 returned an average whiteness grade of 90%. The 9.55 metre higher grade portion of hole MR-93-8 returned an average whiteness grade of 88.8%.

Samples collected from the southwestern Ontario gypsum mine returned a colour analysis range of between 65 and 83.8%, averaging 70.8% white. The highest whiteness (83.8%) was achieved in sample MSP-HG, which was previously described as a hand cobbed high grade sample. The range in whiteness of gypsum collected from the mine was otherwise 65 to 67.5% white. The colour of the gypsum from the southwestern Ontario mine, even when highgraded, is therefore indicated to be inferior to the average of the Moose River Crossing samples (85.6% white). Although the flue gas desulphurization by-product gypsum sample indicated a relatively high purity, its whiteness was measured at only 57.9% white. Therefore this product can likely only be sold to off-colour markets such as construction products and gray Portland cement.

TABLE 1 MINERALOGY THEORETICAL CALCULATIONS FROM ANALYSES

SAMPLE NUMBER	GYPSUM	CO2	CaCO3	MgCO3	TOTALS
4-20.20-24.00	95.70	2.23	2.22	2.39	100.31
4-27.50-32.30	93.31	3.34	5.77	1.53	100.61
4-32.30-33.40	96.18	1.90	2.63	1.41	100.22
5-12.10-15.40	93.31	2.80	3.20	2.65	99.16
5-15.40-17.75	89.00	3.83	4.15	3.82	96.97
5-17.75-20.75	94.98	1.75	3.02	0.80	98.80
5-20.75-23.75	92.59	2.79	5.15	0.99	98.73
5-23.75-27.75	90.44	3.88	6.74	1.74	98.92
5-27.75-30.75	89.72	4.01	5.67	2.88	98.27
5-30.75-34.40	91.63	3.26	5.49	1.60	98.72
5-34.40-36.62	75.36	10.16	15.48	6.38	97.22
5-36.62-39.62	90.67	2.97	3.63	2.62	96.92
8-11.58-13.40	95.70	1.53	1.97	1.26	98.93
8-13.40-14.40	85.41	6.06	6.95	5.73	98.09
8-14.40-16.90	89.72	3.43	4.38	2.86	96.96
8-16.90-18.30	94.26	1.86	3.65	0.48	98.39
8-18.30-21.30	93.55	2.09	3.56	0.99	98.10
8-21.30-24.30	89.00	4.34	7.99	1.57	98.56
8-24.30-26.45	90.67	3.52	4.90	2.60	98.17
8-26.45-27.65	82.06	6.67	8.17	5.86	96.09
8-27.65-30.48	88.52	4.32	8.01	1.51	98.04
AVERAGES	90.56	3.65	5.37	2.46	98.39
DSP-BULK-RK				4.45	
MSP-BULK-RK				6.15	
MSP-HG				0.78	
MSP-POWDER				4.68	
AVERAGES				4.01	
FGDG				0.40	

NOTE: CaSO4.2H2O = +H2O X 4.785
CO2 = LOI - (+H2O + -H2O)
MgCO3 = MgO X 2.1
CaCO3 = MgCO3 X 0.524 = CO2 in MgCO3 - CO2 = CO2 in CaCO3 x 2.27 = CaCO3
8-21.30-24.30 = Moose River Crossing 1993 drill hole number - down hole depth interval in metres.
DSP-BULK-RK = homogenized bulk sample of gypsum from the southwestern Ontario mine plant stockpile.
MSP-BULK-RK = homogenized bulk sample of gypsum from the southwestern Ontario mine stockpile.
MSP-HG = hand cobbed, high grade sample of white gypsum from the southwestern Ontario mine stockpile.
MSP-POWDER = homogenized sample of southwestern Ontario mine plant stockpile gypsum fines.
FGDG = flue gas desulphurization by-product gypsum from the southwestern Ontario mine plant site.

10.0 CONCLUSIONS AND RECOMMENDATIONS

1) The results of the 1993 diamond drill program determined that a flat lying gypsum deposit exceeding 31.39 metres in thickness exists at Moose River Crossing. Diamond drill hole intersections between MR-93-2 and MR-93-10 confirmed lateral continuity of the gypsum unit over a distance exceeding 1.86 kilometres parallel to the Moose River. Outcrop exposures along the banks of the river between 1.7 and 11.7 kilometres northeast and downstream from Moose River Crossing indicate potential lateral continuity of the deposit of more than 10 kilometres. The deposit consists of an upper facies of gypsum and dolostone solution breccia. It grades laterally and at depth into primary, bedded dolomitic gypsum, partially altered to snow-white, fibrous, satinspar gypsum, ferroan dolomite and transparent selenite crystals near the static elevation of the ground water table. Beneath the ground water table, the rock is completely hydraulically altered to massive, fibrous, snow-white satinspar gypsum and transparent selenite crystals, locally rimmed by ferroan dolomite laminae defining a coarse chicken wire-like nodular texture. It contains local sections of massive aggregates of transparent selenite crystals rimmed by gray calcitic and gypsiferous shale laminae. The deepest intersections of satinspar and selenite gypsum are locally interbedded with minor a gray shale.

2) Major element oxide concentrations analyzed from the drill core samples were used to calculate the gypsum grade of the Moose River Crossing deposit. They indicate a range in gypsum concentrations of between 75.36 and 96.18 wt.%, averaging 90.36 wt.% for the deposit. This average grade is 6.08% lower than the average purity of the grab samples of gypsum collected by Bezys (1990), and 5.66% lower than the average purity of the chip samples of gypsum collected by Guillet (1964) from the Moose River bank outcrop exposures. However, the average grade of the deposit is 5% greater in purity than the gypsum mines operating in southern Ontario. Colour analysis of the Moose River Crossing drill core samples of gypsum returned whiteness values of between 74.3 and 90.5%, averaging 85.6%. Higher grade sections exist within the Moose River Crossing deposit that returned average gypsum grades up to 95.06 wt.% over 9.7 metres, and average whiteness grades up to 90% over a 10 metre thickness. These higher grade portions of the deposit occur commencing at vertical depths of at least 16.9 metres. They are overlain by thick deposits of Quaternary glacial drift and gypsum with lower purity and whiteness grades. Beneficiation and/or selective mining of the gypsum is therefore required to produce a high purity product of greater than 97% gypsum and exceeding 90% in whiteness.

3) The 1993 diamond drill program determined that the highest quality gypsum of the Moose River Crossing deposit is beneath the static elevation of the ground water table. It is also typically located beneath at least 8 metres of Quaternary glacial drift and several metres of lower purity and whiteness gypsum. Prospecting and the results of the 1993 diamond drill program determined that the surface of the area overlying the gypsum deposit has been affected by karst activity. Features intersected in the drill program included caves up to 3 metres in height, irregular depths to the bedrock subsurface while driving the casing, and solution breccias and hydraulic alteration products of the gypsum in the drill core samples. The Karst activity suggests that there is risk of communication between the ground water table and the Moose River. Such communication might cause prohibitive pumping of any excavation beneath the water table. The thick deposits of overburden overlying higher grade portions of the Moose River Crossing gypsum deposit and potential water problems preclude the Company from obtaining a relatively inexpensive near surface bulk sample of high purity, white gypsum. Therefore no further technical evaluation of the Moose River Crossing gypsum deposit is warranted at this time.

11.0 REFERENCES

1) Bell, J.M. (1904) Economic Resources of the Moose River Basin; Ontario Bureau of Mines, Annual Report for 1904, Volume 13, Part 1, pp. 135-197.

2) Bell, R. (1877) Report on an Exploration in 1875 Between James Bay and Lakes Superior and Huron; Geological Survey of Canada, Report on Progress 1875-1876, pp. 294-342.

3) Bezys, R.K. (1990) Geology of Gypsum Deposits in the James Bay Lowland; Ontario Geological Survey, Open File Report 5728, 109 P.

4) Bullis, A. (1963) Diamond Drill Logs for the Moosonee Gypsum and Exploration Company; Assessment File at the Mining Recorders Office # 83.1-20, 17 P.

5) Dyer, W.S. (1929) Geology and Economic Deposits of the Moose River Basin; Ontario Department of Mines, Annual Report for 1928, Volume 37, Part 6, pp. 1-80, accompanied by Map 37p.

6) Guillet, G.R. (1964) Gypsum in Ontario; Ontario Department of Mines, Industrial Mineral Report No. 18, 126 P.

7) Hains, D.H. and Bezys R.K. (1990); Muir, J.E. Ed.; Gypsum in Northern Ontario: Resources and Market Potential; Ministry of Northern Development and Mines, Industrial Mineral Background Paper, No. 12; 56 P.

8) Parkes, R.E. (1956) Correspondences with the Atlas Gypsum Company; Assessment File at the Mining Recorders Office # 63A.315, 6 P & Maps.

12.0 CERTIFICATE

I, Robin E. Goad, M.Sc., F.G.A.C., Consulting Geologist, of 163 Pine Valley Drive, Unit 55, London, Ontario, N6J 4R2, certify as follows concerning my report entitled, "Diamond Drill Report on the Moose River Crossing Gypsum Property, Carroll and Canfield Townships, Porcupine District, Northeast Mining Region, Ontario", for Formosa Environmental Aggregates Ltd., dated December 31, 1993:

1) That I am a graduate of the Department of Geology at the University of Western Ontario with a Masters degree obtained in 1987 and a Bachelors Degree obtained in 1981.

2) That I am a member in good standing of the Geological Association of Canada, the Canadian Institute of Mining, Metallurgy, and Petroleum (national and Toronto branches), the Northwest Territories Chamber of Mines and the Prospectors and Developers Association of Canada.

3) That I have more than 17 years of experience in the mining and exploration industry and have been practising my profession as a geological and mining consultant in Canada, the United States and Mexico continuously since 1985.

4) That this report was prepared as the result of: my supervision of the 1993 diamond drill program, logging and sampling of the core obtained thereof, and review of published and unpublished technical data from the Property, including data filed for assessment purposes with the Office of the Mining Recorder of the Ontario Ministry of Northern Development and Mines.

5) That I am also the President of Formosa Environmental Aggregates Ltd., and the President and a shareholder of Fortune Minerals Limited who manage and are shareholders in the former company.

dated this 31 day of December, 1993,

Robin E. Goad, M.Sc., F.G.A.C.,
Consulting Geologist.

APPENDIX 13.1 DIAMOND DRILL LOGS

DIAMOND DRILL NAME: MR-93-1.

PROPERTY: Moose River Crossing.

LOCATION: On claim 1193214 approximately 950 metres northeast along the existing 60 degree winter logging road from the Ontario Northland Rail Road. The hole is located at the intersection of the road with a north-south cut line in the vicinity of the boundary between Canfield and Carroll Townships (possibly the boundary).

DATE DRILLED: August 28, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 21.34 metres (70.0 feet).

CASING: 21.34 metres (70.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	**DESCRIPTION**
0.00-21.34M **0.0-70.0'**	**CASING**
0.00-7.62M 0.0-25.0'	Clay.
7.62-19.81M 25.0-65.0'	Brown sandy till.
19.81-21.34M 65.0-70.0'	Compact clayey, gray hardpan, basal till (drillable).

21.34M (70.0') END OF HOLE

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED FROM THIS HOLE.

DIAMOND DRILL NAME: MR-93-2.

PROPERTY: Moose River Crossing.

LOCATION: In Carroll Township, on claim 1193214 approximately 100 metres due north, then approximately 200 metres at azimuth 30 degrees, then approximately 300 metres at azimuth 60 degrees from MR-93-1 along a drill road constructed from the existing winter logging road. The hole is approximately 1.4 kilometres northeast of the Ontario Northland Rail Road and the village of Moose River Crossing, 400 metres southeast of the Moose River.

DATE DRILLED: August 28, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 27.43 metres (90.0 feet).

CASING: 10.67 metres (35.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-10.67M	**CASING**
0.0-35.0'	
0.00-7.62M	Clay.
0.0-25.0'	
7.62-10.67M	Bouldery clay.
25.0-35.0'	
10.67-27.43M	**MOOSE RIVER FORMATION**
35.0-90.0'	

DEPTH	DESCRIPTION
10.67-16.56M	GYPSUM AND DOLOSTONE SOLUTION BRECCIA
35.0-54.33'	A solution breccia comprised of angular clasts of buff and pink dolostone, and cream coloured primary gypsum, and clear to gray selenite up to 15cm in size in a fine-grained, gray matrix of clayey gypsum and calcite. The breccia varies between clast and matrix supported. Contains local zones of massive white and brown gypsum. 11.67-12.19M Non brecciated interval of interlaminated light gray dolostone and bedded gypsum with brown secondary dolomite/ferroan dolomite between the dolostone and gypsum layers. 12.19M Water exits the hole (core barrel struck rock when dropped down the tubes). 14.00-14.70M Reprecipitated interlaminated white satinspar gypsum and brown and cream calcite forming a travertine-like rock with contacts 80 degrees to the core axis (CA). The rock is locally brecciated with white satinspar gypsum infilling the voids.
16.56-18.00M	MASSIVE WHITE SATINSPAR GYPSUM
54.33-59.0'	Massive, white, fibrous satinspar gypsum containing blotchy patches of secondary brown dolomite in first 85cm of the interval. Locally grades in and out of bedded creamy white primary gypsum at the bottom of the interval. The satinspar i believed to be a secondary alteration product of the primary gypsum likely the result of hydration and recrystallization of primary gypsum. The blotchy dolomite/ferroan dolomite is believed to reflect precipitation of the carbonate and other impurities.
18.00-19.70M	BEDDED PRIMARY GYPSUM LOCALLY ALTERED TO SATINSPAR
59.0-64.6'	Bedded creamy white and gray primary gypsum (75%) cut by veinlets and patches of snow-white, fibrous satinspar gypsum (25%). The latter is interpreted as a hydraulic recrystallized alteration product.
19.70-21.85M	GRAY SELENITE GYPSUM BRECCIA
64.6-71.7'	Gradational contact to gray selenite gypsum breccia comprised of transparent to translucent crystals of selenite 2mm to 1cm in size (typically 5mm) in size in a matrix of fine, fibrous, satinspar gypsum, and gray calcitic clay anastomosing around the selenite. Contains zones up to 70cm in thickness of massive white satinspar gypsum. particularly between 20.80 and 21.50M.

DEPTH	DESCRIPTION
21.85-27.43M	MASSIVE AND NODULAR WHITE SATINSPAR GYPSUM
71.7-90.0'	Sharp contact normal to the CA to massive, snow-white, fibrous, satinspar gypsum with disseminated crystals of transparent selenite up to 5cm, and locally cut by brown dolomite/ferroan dolomite defining a coarse chicken wire-like nodular texture.

27.43M (90.0') END OF HOLE

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED FROM THIS HOLE.

DIAMOND DRILL NAME: MR-93-3.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, on the north part of claim 1193214, approximately 100 metres south of its north boundary and 1 kilometre east of its west boundary. It is also approximately 300 metres at an azimuth of 50 degrees from MR-93-2 along the drill access road, 1.7 kilometres northeast of the Ontario Northland Rail Road and Moose River Crossing, and 500 metres southeast of the Moose River.

DATE DRILLED: August 29, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 30.48 metres (100.0 feet).

CASING: 13.72 metres (45.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	**DESCRIPTION**
0.00-13.72M	**CASING**
0.0-45.0'	
0.00-7.62M	Clay.
0.0-25.0'	
7.62-13.72M	Boulder clay.
25.0-45.0'	
13.72-30.48M	**MOOSE RIVER FORMATION**
45.0-100.0'	
13.72-16.10	GYPSUM AND DOLOSTONE SOLUTION BRECCIA
45.0-52.8'	Matrix and clast supported breccia comprised of angular clasts of satinspar, bedded and selenite gypsum, and dolostone up to 15cm in size, although most are less than 2cm in a greyish white, fine matrix of clay, calcite and gypsum.

DEPTH	DESCRIPTION
16.10-19.50M	MASSIVE SNOW-WHITE SATINSPAR GYPSUM WITH SELENITE
52.8-64.0′	Massive, snow-white, fibrous, satinspar gypsum with disseminated coarse crystals of selenite commonly rimmed by orange-brown patches of dolomite/ferroan dolomite.
19.50-20.90M	INTERBEDDED PRIMARY GYPSUM AND SATINSPAR GYPSUM
64.0-68.6′	Same as above but interbedded with greyish-white to cream coloured, primary gypsum which is locally cut by secondary snow-white, fibrous satinspar gypsum indicative of hydraulic alteration.
20.90-24.00M	GRAY SELENITE BRECCIA
68.6-78.7′	Gradational contact to gray crystalline selenite breccia comprised of 30-70%, averaging 50%, selenite crystals up to 2cm in size in a matrix of snow-white, fibrous satinspar gypsum and gray calcitic clays anastomosing around the selenite.
24.00-30.48M	MASSIVE SNOW-WHITE SATINSPAR GYPSUM
78.7-100.0′	Gradational contact to massive, snow-white, fibrous gypsum with a faint to distinct, nodular texture of 5% yellow-brown dolomite/ferroan dolomite defining a chicken wire-like texture. 10-15%, 2-5mm transparent selenite crystals in the first 2 metres grading down hole into occasional coarse crystals of selenite.

30.48M (100.0′) END OF HOLE

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED FROM THIS HOLE.

DIAMOND DRILL NAME: MR-93-4.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193215 approximately 250 metres at an azimuth of 53 degrees from MR-93-3 along the drill access road. The hole is also approximately 50 metres north of the south boundary of the claim and 400 metres east of the east boundary of the claim, 1.95 kilometres northeast of the Ontario Northland Rail Road and 500 metres southeast of the Moose River.

DATE DRILLED: August 30, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 33.53 metres (110.0 feet).

CASING: 17.68 metres (58.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-17.684M	**CASING**
0.0-58.0′	
0.00-8.53M	Clay.
0.0-28.0′	
8.53-17.68M	Clayey basal till (drillable hard pan).
28.0-58.0′	
17.68-33.53M	**MOOSE RIVER FORMATION**
58.0-110.0′	
17.68-20.20M	GYPSUM AND DOLOSTONE SOLUTION BRECCIA
58.0-66.3′	Matrix supported breccia comprised of clasts of gray, buff and pink coloured carbonate rocks (mostly dolostone), cream and white gypsum, and transparent selenite crystals in a finer-grained, gray groundmass of clays, calcite and gypsum. Areas of less intense brecciation and

DEPTH	DESCRIPTION
	microbrecciation are typically comprised of bedded primary, cream coloured gypsum locally partially altered to snow-white, fibrous satinspar and brown dolomite/ferroan dolomite.
	17.68-18.29M Partially altered primary cream coloured gypsum as 58.0-60.0' previously described.
20.20-24.00M	PRIMARY BEDDED GRAY-WHITE GYPSUM
66.3-78.7'	Sharp contact at 45 degrees to the core axis (CA) to primary, bedded cream to gray-white gypsum partly altered to patches and laminations of snow-white, fibrous satinspar gypsum and 1cm. The rock is also locally cut by 2-5%, brown patches of dolomite/ferroan dolomite, locally defining a nodular, chicken wire-like texture.
	20.20-21.34M 15%, coarse, 0.5-1cm transparent selenite crystals.
24.00-27.50M	GYPSUM AND DOLOSTONE SOLUTION BRECCIA
78.7-90.2'	Sharp contact at 60-70 degrees to the CA to fine breccia comprised of angular clasts up to 1cm in size of dolostone and bedded, primary gypsum in a gray, clayey calcitic gypsum matrix.
	24.30-27.50M Solution cavity (cave) with occasional blocky core fragments of buff coloured dolostone up to 10cm thick, and travertine-like interbedded calcite and satinspar gypsum.
27.50-33.53M	MASSIVE AND NODULAR SNOW-WHITE SATINSPAR GYPSUM
90.2-110.0'	Sharp contact at 90 degrees to the CA to massive, snow-white, fibrous satinspar gypsum with disseminated coarse crystals of selenite up to 5mm and cut by 5-15% tan and brown patches and laminae of dolomite/ferroan dolomite defining a chicken wire-like nodular texture.
	30.00-31.25M 15% dolomitic laminae defining the nodular texture.
	30.60M Locally blocky core.
	32.15-32.30M Same as above.
	32.30-33.40M Massive, pure, snow-white satinspar gypsum.
	33.40-33.53M 30% yellow-brown dolomite/ferroan dolomite interbeds up to 3cm thick.

33.53M (110.0') END OF HOLE

SAMPLE INVENTORY LIST

4-20.20-24.00
4-27.50-32.30
4-32.30-33.40

DIAMOND DRILL NAME: MR-93-5.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193215 approximately 350 metres at an azimuth of 53 degrees along the drill access road from MR-93-4. The hole is also approximately 200 metres north of the south boundary of the claim and approximately 400 metres west of the east boundary of the claim. It is 2.15 kilometres northeast of the Ontario Northland Rail Road at the village of Moose River Crossing, and 500 metres from the river.

DATE DRILLED: August 31, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 39.62 metres (130.0 feet).

CASING: 8.23 metres (27.0 feet) removed from hole.

STATIC WATER LEVEL: 17.20 metres (56.4 feet) Upon completion of the hole.
17.20 metres (56.4 feet) 15 minutes after completion of the hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-8.23M 0.0-27.0'	CASING
0.00-8.23M 0.0-27.0'	Silty clay glaciolacustrine sediments.
8.23-39.62M 27.0-130.0'	MOOSE RIVER FORMATION

8.23-12.10M GYPSUM AND DOLOSTONE SOLUTION BRECCIA

27.0-39.7' Matrix and clast supported breccia composed of angular clasts of dolostone, primary bedded gypsum, snow-white satinspar gypsum, and selenite crystals up to 5cm in a matrix of fine snow-white fibrous satinspar gypsum, gray clays and calcite. The breccia locally grades into unbrecciated intervals of primary, bedded, gray-white gypsum locally altered to satinspar up to 15cm thick. A 40cm interval is comprised of coarse selenite crystals rimmed by brown ferroan dolomite.

12.10-15.40M PRIMARY BEDDED GYPSUM PARTLY ALTERED TO SNOW-WHITE

39.7-50.5' SATINSPAR

Sharp contact near normal to the core axis (CA) to greyish-white, finely bedded to massive primary gypsum locally cut by irregular patches and fractures of snow-white, fibrous, satinspar gypsum with disseminated eye shaped transparent selenite crystals (up to 3cm). Brown dolomite to ferroan dolomite rhombs and patches locally rim or occur adjacent to the selenite.

15.40-17.75M GRAY SHALY SELENITE BRECCIA

50.5-58.2' Sharp contact normal to the CA to a completely recrystallized rock composed of augen-shaped selenite crystals 3mm to 2cm in size surrounded by anastomosing fine, gray clays and snow-white fibrous satinspar gypsum. Contains intervals up to 20cm thick of massive, fine, snow-white, fibrous satinspar gypsum.

17.75-34.40M MASSIVE AND NODULAR SNOW-WHITE GYPSUM

58.2-112.9' Sharp contact normal to the CA to massive, fine, fibrous snow-white, satinspar gypsum containing 2 to 80%, averaging 10%, transparent augen-shaped crystals of selenite. The satinspar is cut by up to 10%, averaging 3 to 5% tan and light brown fractures of ferroan dolomite defining a coarse, chicken wire-like, nodular texture (nodules are 2 to 5cm in size). Local brecciated zones up to 25cm thick. Variations referred to more specifically hereafter:

26.7M 15cm interval of brecciated interbedded dolostone and satinspar gypsum.

28.7-29.5M Same as above but also containing disseminated crystals of selenite rimmed by gray clay.

27.3M 10cm gray shale interbed.

28.7-29.5M 25% interbedded gray shale with snow-white satinspar gypsum.

DEPTH	DESCRIPTION
	29.5-33.3M 50% coarse selenite crystals up to 4cm and commonly greater than 1cm, typically associated with brown rhombs and patches of dolomite, locally defining the previously described nodular texture.
34.40-39.62M	SHALY SELENITIC AND NODULAR GYPSUM
112.9-130.0'	Same as previously described massive and nodular satinspar gypsum interval but also containing up to 30%, averaging 20% gray calcitic shale as interbeds and also defining the matrix of small brecciated intervals until 35.25M, and thereafter, averaging 5 to 10% shale.
	35.5-36.1M Microbrecciated and brecciated with 15 to 20% shale in matrix and as fracture fillings.
	37.8M 15cm locally very shaly and brecciated.
	38.35-39.19M Locally 40% shale, microbrecciated and brecciated as previously described but also containing occasional patches of pink calcite in the most intensely brecciated areas.

39.62M (130.0') END OF HOLE

SAMPLE INVENTORY LIST

5-12.10-15.40
5-15.40-17.75
5-17.75-20.75
5-20.75-23.75
5-23.75-27.75
5-27.75-30.75
5-30.75-34.40
5-34.40-36.62
5-36.62-39.62

DIAMOND DRILL NAME: MR-93-6.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193215 approximately 180 metres along the drill access road from MR-93-5 at an azimuth of 53 degrees. The hole is also approximately 200 metres west of the east boundary of the claim and approximately 300 metres north of the south boundary of the claim. It is 2.35 kilometres from the Ontario Northland Rail Road at the village of Moose River Crossing and 500 metres southeast of the river.

DATE DRILLED: September 1, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 30.48 metres (100.0 feet).

CASING: 10.06 metres (33.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	**DESCRIPTION**
0.00-10.06M	**CASING**
0.0-33.0'	
0.00-10.06M	Clay.
0.0-33.0'	
10.06-30.48M	**MOOSE RIVER FORMATION**
33.0-100.0'	
10.06-18.82M	GYPSUM AND DOLOSTONE SOLUTION BRECCIA
33.0-61.75'	Zone of gypsum and dolostone solution breccias and caving as referred to more specifically hereafter: 10.06-10.50M Solution breccia composed of angular fragments of gypsum and dolostone in a finer-grained matrix of gypsum, calcite and shale.

DEPTH	DESCRIPTION
	10.50-12.19M Coarse transparent crystals of selenite 1mm to 2cm in size in finer-grained groundmass of snow-white, fibrous satinspar gypsum.
	12.19-15.50M Cave with minor blocky core and satinspar gypsum mud.
	15.50-16.40M Bedded primary, gray-white gypsum, partially altered (15%) to snow-white satinspar gypsum and coarse selenite crystals.
	16.40-16.60M Matrix supported breccia composed of clasts of bedded, primary, gray-white gypsum and coarse selenite crystals in a matrix of satinspar gypsum and gray shale.
	16.60-18.20M Cave with blocky core fragments of buff coloured, fine-grained dolostone.
18.82-30.48M	MASSIVE AND NODULAR SATINSPAR GYPSUM
61.75-30.48'	Massive, fine-grained, snow-white, fibrous satinspar gypsum with 5 to 80%, averaging 10%, disseminated, augen-shaped, 3mm to 3cm transparent selenite crystals. The rock is cut by 2 to 20%, averaging 5% fracture filling, tan to brown dolomite/ferroan dolomite defining a chicken wire-like, coarse nodular texture. Significant variations are referred to more specifically hereafter:
	26.80-27.35M Coarse selenite crystals surrounded by 20% brown ferroan dolomite laminae.
	29.60-30.10M 50% black shale interbeds.

30.48M (100.0') END OF HOLE

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED FROM THIS HOLE.

DIAMOND DRILL NAME: MR-93-7.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193215, along the drill access road approximately 105 metres at an azimuth of 53 degrees, then approximately 75 metres at an azimuth of 15 degrees, and then approximately 50 metres at an azimuth of 55 degrees from hole MR-93-6. The hole is also approximately 5 metres west and 45 metres north of the boundary post at 400 metres south of the # 1 post of the claim. It is also 2.6 kilometres northeast of the Ontario Northland Rail Road at Moose River Crossing, approximately 500 metres southeast of the river.

DATE DRILLED: September 2, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 30.48 metres (100.0 feet).

CASING: 9.75 metres (32.0 feet) removed from hole.

STATIC WATER LEVEL: 11.50 metres (37.7 feet) at completion of drilling.
11.90 metres (39.0 feet) 5 minutes after completion of drilling.
12.00 metres (39.4 feet) 10 to 15 minutes after completion of the drilling.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-9.75M	CASING
0.0-32.0'	
0.00-9.75M	Clay.
0.0-32.0'	

DEPTH	DESCRIPTION
9.75-30.48M	**MOOSE RIVER FORMATION**
0.0-32.0'	
30.48-13.12M	GYPSUM AND DOLOSTONE BRECCIA
32.0-43.0'	Matrix and clast supported breccia composed of angular and rounded clasts of gray-white gypsum, and buff coloured fine-grained dolostone 1mm to 2cm, although most are 2 to 5mm in size, in a gray shaly and calcitic gypsum groundmass.
13.12-18.23M	MASSIVE AND NODULAR SATINSPAR GYPSUM
43.0-60.0'	Massive, snow-white, fibrous satinspar gypsum with disseminated transparent, augen-shaped crystals of selenite (typically 3 to 5mm) cut by brown fractures of dolomite/ferroan dolomite defining a coarse, chicken wire-like nodular texture.
18.23-19.90M	PRIMARY BEDDED GYPSUM AND SATINSPAR GYPSUM
60.0-65.3'	Primary, bedded gypsum brecciated to microbrecciated and partly altered to snow-white, fibrous satinspar gypsum.
19.90-28.96M	MASSIVE AND NODULAR SATINSPAR GYPSUM
65.3-95.0'	Massive, snow-white, fibrous satinspar gypsum with disseminated selenite and dolomitic fractures defining a nodular texture as previously described but whiter than the previous interval. 19.90-21.49M Fractured to microbrecciated. 22.86M 15cm interval of gray selenite breccia comprised of augen-shaped selenite crystals surrounded by anastomosing gray shale. 28.65-28.96M Buff coloured dolostone interbed.
28.96-30.48M	SHALY GRAY SATINSPAR GYPSUM
95.0-100.0'	Same as above but containing gray shale interbeds and fractures.

30.48M (100.0') END OF HOLE

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED FROM THIS HOLE.

DIAMOND DRILL NAME: MR-93-8.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193216 approximately 200 metres along the drill access road at an azimuth of 53 degrees from hole MR-93-8. The hole is also approximately 200 metres east and 100 metres north of the boundary post 800 metres south of the # 4 corner post of the claim. It is also 2.8 kilometres northeast of the Ontario Northland Rail Road at Moose River Crossing, approximately 500 metres southeast of the Moose River.

DATE DRILLED: September 3, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 30.48 metres (100.0 feet).

CASING: 11.58 metres (38.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-11.58M	**CASING**
0.0-38.0'	
0.00-11.58M	Glaciolacustrine clay.
0.00-38.0'	
11.58-30.48M	**MOOSE RIVER FORMATION**
38.0-100.0'	
11.58-13.40M	MASSIVE AND NODULAR SATINSPAR GYPSUM
38.0-44.0'	Massive, snow-white, fibrous gypsum with grains up to 3mm containing disseminated coarser-grained selenite crystals up to 1cm. 12.30-13.10M Coarse nodular texture defined by ferroan dolomite (5%) fractures forming a chicken wire-like texture around domains of snow-white, satinspar gypsum.

DEPTH	DESCRIPTION
13.40-14.40M	BEDDED PRIMARY GYPSUM PARTLY ALTERED TO SATINSPAR
44.0-47.2′	Gradational contact over 10 to 15cm to bedded, primary, gray-white gypsum in beds up to 1cm thick. It is cut by 5 to 10% veinlets of snow-white, fibrous satinspar gypsum 1mm to 1cm thick, typically normal to the core axis (CA). Patches up to 5cm thick occur parallel to the CA. The satinspar contains 2 to 5% transparent, augen-shaped selenite crystals 0.5 to 1cm in size.
14.40-16.90M	GRAY SHALY SELENITE BRECCIA
47.2-55.4′	Microbrecciated gradational contact over 10 to 15cm to a matrix supported breccia comprised of 40 to 100%, augen-shaped selenite crystals 3mm to 3cm in size, plus occasional angular clasts of bedded primary gypsum in a groundmass of gray calcitic shale and white satinspar gypsum. Local zones up to 25cm in thickness of massive (100%), transparent selenite crystals. The rock is cut by occasional veinlets of fibrous, snow-white satinspar 1mm to 1cm thick.
16.90-18.30M	MASSIVE GRANULAR CRYSTALLINE SELENITE
55.4-60.0′	Sharp contact normal to the CA to massive (nearly 100%) coarse crystals of selenite up to 2cm in size locally interlocking with brown ferroan dolomite rhombs and patches. The selenite and dolomite are locally rimmed by gray, calcitic clays.
18.30-26.45M	MASSIVE AND NODULAR SATINSPAR GYPSUM
60.0-86.8′	Massive, fibrous, snow-white satinspar gypsum with individual grains typically less than 3mm in length containing 2 to 10% disseminated, augen-shaped coarser-grained crystals of selenite, typically 0.5 to 1cm. The rock is cut by 3 to 5%, yellow-brown dolomite filled fractures defining an orthogonal chicken wire-like nodular texture. Intervals of massive satinspar and devoid of dolomite occur up to 20cm in thickness. 21.82-22.80M Cave. 24.50-24.80M 20% gypsiferous dolostone partly replaced by fibrous snow-white satinspar and selenite crystals.
26.45-27.65M	SHALY SATINSPAR GYPSUM
86.8-90.7′	Massive satinspar gypsum as previously described but containing anastomosing fracture fillings and interbeds of gray and buff coloured calcitic shale.

DEPTH	DESCRIPTION
27.65-30.48M	MASSIVE AND NODULAR SATINSPAR GYPSUM
90.7-100.0'	Gradational contact massive and nodular gypsum as previously described but containing 10%, 5mm to 2cm crystals of selenite and 10% yellow-brown dolomite filled fractures. Also contains some fracture fillings and secondary interbeds of ferroan calcite (travertine-like).

30.48M (100.0') END OF HOLE

SAMPLE INVENTORY LIST

8-11.58-13.40
8-13.40-14.40
8-14.40-16.90
8-16.90-18.30
8-18.30-21.30
8-21.30-24.30
8-24.30-26.45
8-26.45-27.65
8-27.65-30.48

DIAMOND DRILL NAME: MR-93-9.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193216, approximately 200 metres along the drill access road at an azimuth of 53 degrees from hole MR-93-8. It is also 600 metres south and 400 metres east of the northwest (#4) corner post of the claim and 3 Kilometres northeast of the Ontario Northland Rail Road at the village of Moose River Crossing, and 500 metres southeast of the Moose River.

DATE DRILLED: September 3, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 22.86 metres (75.0 feet).

CASING: 22.86 metres (75.0 feet) removed from hole.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-22.86M	CASING
0.0-75.0'	
0.00-22.86M	Glaciolacustrine clay.
0.0-75.0'	

22.86M (75.0') END OF HOLE ABANDONED IN OVERBURDEN

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED.

DIAMOND DRILL NAME: MR-93-10.

PROPERTY: Moose River Crossing.

LOCATION: Carroll Township, claim 1193216, approximately 250 metres along the drill access road at an azimuth of 53 degrees from hole MR-93-9. The hole is also approximately 800 metres east and 450 metres south of the northwest (#4) post of the claim. It is also 3.25 kilometres northeast of the Ontario Northland Rail Road at the village of Moose River Crossing and 500 metres southeast of the Moose River.

DATE DRILLED: September 4, 1993.

AZIMUTH: Vertical hole.

DIP: 90 degrees.

DEPTH OF HOLE: 39.62 metres (130.0 feet).

CASING: 10.97 metres (36.0 feet) removed from hole.

STATIC WATER LEVEL: 8.60 metres (28.2 feet) 5 minutes after completion of the drilling.
8.40 metres (27.6′ feet) 12 and 15 minutes after completion of the drilling.

PROJECT GEOLOGIST: Robin E. Goad, Consulting Geologist, London, Ontario.

DRILLING CONTRACTOR: Triangle Drilling Company Ltd., Lively, Ontario.

CORE STORAGE: Formosa property of Formosa Environmental Aggregates Ltd., and Ministry of Natural Resources, Petroleum Resources Core Library, London, Ontario.

DEPTH	DESCRIPTION
0.00-10.97M	**CASING**
0.0-36.0′	
0.00-10.97	Glaciolacustrine clays.
0.0-36.0′	
10.97-11.24M	**MOOSE RIVER FORMATION**
36.0-130.0′	
10.97-11.24	MASSIVE CALCITIC DOLOSTONE
36.0-36.9′	Massive, buff coloured fine-grained dolostone.

DEPTH	DESCRIPTION
11.24-15.40M	PRIMARY BEDDED GYPSUM PARTLY ALTERED TO SATINSPAR
36.9-50.5'	Finely laminated, gray-white dolomitic gypsum with 1 to 2cm thick, gray shale interbeds normal to the core axis (CA). The primary bedded gypsum contains 5 to 100%, averaging 40% patches, veinlets and irregular-shaped laminae of snow-white (locally orange-white), fibrous satinspar gypsum and transparent selenite crystals with patchy brown ferroan dolomite. They are interpreted as the result of hydraulic alteration, recrystallization and segregation of the primary bedded dolomitic gypsum into pure gypsum and dolomite. 11.60-12.15M Pervasive alteration to crystalline selenite, fibrous satinspar and dolomite rhombs. 12.35-13.50M Same as above.
15.40-16.92M	GRAY SHALY SELENITE BRECCIA
50.5-55.5'	Sharp contact at 80 degrees to the CA to a matrix supported breccia composed of 30 to 40% augen-shaped crystals of selenite 0.5 to 1cm in size, and angular clasts of bedded primary gypsum rimmed by a fine-grained groundmass of gray calcitic shale and greyish-white fibrous satinspar.
16.92-27.23M	MASSIVE AND NODULAR SATINSPAR GYPSUM
55.5-89.3'	Sharp contact normal to the CA to massive, white fibrous satinspar gypsum with 5% disseminated selenite crystals, cut by 10 to 15%, yellow-brown, conjugate fracture filling ferroan dolomite defining a chicken wire-like, nodular texture. Local intervals up to 75cm contain up to 20% carbonate filled fractures or patches between the satinspar and selenite crystals or, locally as primary carbonate interbeds. Local zones of massive satinspar or, satinspar with selenite occur in thicknesses up to 30cm, but typically 5 to 10cm. 24.95-25.20M 40% primary bedded light gray gypsum interlaminated with and partly altered to satinspar. 25.25-25.50M Breccia composed of angular dolostone clasts 2mm to 2cm (clast supported) in a greyish brown shaly, calcitic gypsum groundmass. 25.50-25.70M Zone of 30%, light gray primary bedded gypsum interlaminated and partly altered to satinspar. 25.70-27.23M Massive snow-white satinspar with disseminated, transparent selenite and only 1 to 2% dolomite.

DEPTH	DESCRIPTION
27.23-28.30M	SHALY SATINSPAR GYPSUM
89.3-92.8'	Sharp, irregular contact at 80 degrees to the CA to 30% gypsum as previously described and 70%, interbedded light brown, calcitic shale grading down section into gray shale.
28.30-34.15M	MASSIVE AND NODULAR SATINSPAR GYPSUM
92.8-112.0'	Sharp contact to massive, fibrous, snow-white satinspar gypsum with disseminated selenite crystal, and 5 to 10% yellow-brown ferroan dolomite defining a nodular texture as previously described.
34.15-36.20M	SHALY NODULAR SATINSPAR GYPSUM
112.0-118.8'	Sharp contact at 50 degrees to the CA to a similar rock to that previously described but also containing 20% light brown to gray calcitic shale interbeds and irregular laminae anastomosing around nodules of satinspar. Contains small local zones of primary, bedded dolomitic gypsum altering to satinspar.
36.20-38.25M	MASSIVE SELENITIC SATINSPAR GYPSUM
118.8-125.5'	Sharp contact at 70 degrees to the CA to massive, orange-white satinspar and transparent selenite cut by 2 to 5%, yellow-brown ferroan dolomite and gray calcitic shale.
38.25-39.62M	SHALY NODULAR SATINSPAR GYPSUM
125.5-130.0'	Sharp contact at 60 degrees to the CA to shaly nodular satinspar gypsum as previously described but containing 20 to 25% light buff brown and gray calcitic shale interbeds and fractures. Contains local zones of primary bedded dolomitic gypsum partly altered in patches and veinlets to snow-white, fibrous satinspar gypsum.

39.62M (130.0') END OF HOLE

SAMPLE INVENTORY LIST

NO SAMPLES COLLECTED FROM THIS HOLE.

APPENDIX 13.2 CERTIFICATES OF ANALYSIS

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

To: FORMOSA ENVIRONMENTAL AGGREGATES LTD.

163 PINE VALLEY DR., UNIT 55
LONDON, ON
N6J 4R2

Project :
Comments: ATTN: R. GOAD CC: [redacted]

Page Number : 1
Total Pages : 1
Certificate Date: 22-DEC-93
Invoice No. : I9325902
P.O. Number :
Account : KQV

CERTIFICATE OF ANALYSIS A9325902

SAMPLE	PREP CODE		Al2O3 %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	+H2O %	SO3 %	-H2O %
DSP-BULK-RK	208	274	0.30	31.34	< 0.01	0.24	0.10	2.12	< 0.01	0.17	< 0.01	1.10	0.01	23.24	58.65	-----	-----	-----
MSP-BULK-RK	208	274	0.34	31.21	< 0.01	0.20	0.14	2.93	< 0.01	0.17	< 0.01	1.18	0.01	24.09	60.30	-----	-----	-----
MSP-EG	208	274	0.07	32.17	0.01	0.08	0.02	0.37	< 0.01	0.18	< 0.01	0.18	< 0.01	21.23	54.34	-----	-----	-----
MSP-POWDER	208	274	0.29	31.55	< 0.01	0.18	0.10	2.23	< 0.01	0.19	< 0.01	0.93	0.01	23.41	58.92	-----	-----	-----
4-20.20-24.00	208	274	0.04	31.97	< 0.01	0.06	0.02	1.14	< 0.01	0.16	< 0.01	0.18	< 0.01	22.29	55.90	20.0	44.62	0.06
4-27.50-32.30	208	274	0.02	33.19	< 0.01	0.04	0.01	0.73	< 0.01	0.15	< 0.01	0.04	< 0.01	22.87	57.09	19.50	43.50	0.03
4-32.30-33.40	208	274	0.01	32.63	< 0.01	0.04	< 0.01	0.67	< 0.01	0.16	< 0.01	0.03	< 0.01	22.06	55.65	20.1	44.90	0.06
5-12.10-15.40	208	274	0.06	32.05	0.01	0.09	0.02	1.26	< 0.01	0.19	< 0.01	0.21	< 0.01	22.36	56.28	-----	-----	-----
5-15.40-17.75	208	274	0.32	31.19	< 0.01	0.19	0.16	1.82	< 0.01	0.20	< 0.01	1.71	0.01	22.54	58.17	-----	-----	-----
5-17.75-20.75	208	274	0.03	32.48	< 0.01	0.04	0.01	0.38	< 0.01	0.16	< 0.01	0.09	< 0.01	21.67	54.90	-----	-----	-----
5-20.75-23.75	208	274	0.03	33.00	< 0.01	0.05	0.01	0.47	< 0.01	0.16	< 0.01	0.11	< 0.01	22.18	56.05	-----	-----	-----
5-23.75-27.75	208	274	0.01	32.98	< 0.01	0.04	< 0.01	0.83	< 0.01	0.16	< 0.01	0.03	< 0.01	22.82	56.92	-----	-----	-----
5-27.75-30.75	208	274	0.18	32.28	< 0.01	0.13	0.09	1.37	< 0.01	0.19	< 0.01	0.67	0.01	22.81	57.76	-----	-----	-----
5-30.75-34.40	208	274	0.03	32.90	0.02	0.08	0.01	0.76	< 0.01	0.21	< 0.01	0.02	< 0.01	22.45	56.51	-----	-----	-----
5-34.40-36.62	208	274	0.26	33.06	< 0.01	0.17	0.13	3.04	< 0.01	0.20	< 0.01	1.05	0.01	25.98	63.93	-----	-----	-----
5-36.62-39.62	208	274	0.45	31.24	0.01	0.24	0.25	1.25	< 0.01	0.20	< 0.01	1.65	0.02	21.98	57.31	-----	-----	-----
8-11.58-13.40	208	274	0.04	32.09	0.01	0.07	0.02	0.60	< 0.01	0.20	< 0.01	0.10	< 0.01	21.59	54.75	-----	-----	-----
8-13.40-14.40	208	274	0.10	31.56	0.01	0.11	0.05	2.73	< 0.01	0.19	< 0.01	0.60	< 0.01	23.97	59.35	-----	-----	-----
8-14.40-16.90	208	274	0.33	31.60	< 0.01	0.19	0.14	1.36	< 0.01	0.19	< 0.01	1.45	0.02	22.24	57.55	-----	-----	-----
8-16.90-18.30	208	274	0.03	32.66	< 0.01	0.04	0.01	0.23	< 0.01	0.17	< 0.01	0.05	< 0.01	21.59	54.82	-----	-----	-----
8-18.30-21.30	208	274	0.09	32.50	< 0.01	0.11	0.03	0.47	< 0.01	0.09	< 0.01	0.29	< 0.01	21.67	55.29	-----	-----	-----
8-21.30-24.30	208	274	0.01	33.33	< 0.01	0.06	0.01	0.75	< 0.01	0.04	< 0.01	0.03	< 0.01	22.97	57.24	-----	-----	-----
8-24.30-26.45	208	274	0.04	32.27	< 0.01	0.07	0.02	1.24	< 0.01	0.04	< 0.01	0.14	< 0.01	22.55	56.41	-----	-----	-----
8-26.45-27.65	208	274	0.47	31.20	< 0.01	0.28	0.22	2.79	< 0.01	0.06	< 0.01	1.78	0.02	23.88	60.73	-----	-----	-----
8-27.65-30.48	208	274	0.06	33.13	< 0.01	0.11	0.02	0.72	< 0.01	0.10	< 0.01	0.15	< 0.01	22.85	57.18	-----	-----	-----
FGDG	208	274	0.09	32.45	< 0.01	0.14	0.02	0.19	< 0.01	0.05	< 0.01	0.32	< 0.01	21.50	54.80	-----	-----	-----

CERTIFICATION: Stuart Bickle

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga,
Ontario, Canada L4W 2S3
PHONE: 416-624-2806

FC ISA E PRIME AGC ATES

163 PINE VALLEY DR., UNIT 55
LONDON, ON
N6J 4R2

Project :
Comments: ATN: R. GOAD CC:[redacted]

P... Number :
T... ages :
Certificate Date: 31-DEC-93
Invoice No. : I9410082
P.O. Number :
Account : KQV

*PLEASE NOTE

CERTIFICATE OF ANALYSIS A9410082

SAMPLE	PREP CODE		+H2O %	-H2O %
5-12.10-15.40	244	--	19.50	0.06
5-15.40-17.75	244	--	18.60	0.11
5-17.75-20.75	244	--	19.85	0.07
5-20.75-23.75	244	--	19.35	0.04
5-23.75-27.75	244	--	18.90	0.04
5-27.75-30.75	244	--	18.75	0.05
5-30.75-34.40	244	--	19.15	0.04
5-34.40-36.62	244	--	15.75	0.07
5-36.62-39.62	244	--	18.95	0.06
8-11.58-13.40	244	--	20.00	0.06
8-13.40-14.40	244	--	17.85	0.06
8-14.40-16.90	244	--	18.75	0.06
8-16.90-18.30	244	--	19.70	0.03
8-18.30-21.30	244	--	19.55	0.03
8-21.30-24.30	244	--	18.60	0.03
8-24.30-26.45	244	--	19.95	0.03
8-26.45-27.65	244	--	17.15	0.06
8-27.65-30.48	244	--	18.50	0.03

CERTIFICATION: _____

*ANALYZED AS PER ASTM C471

APPENDIX 13.3 WHITENESS TESTS

Dec. 22,1993

Robin E. Goad
Tel: 519-668-2377
Fax: 519-668-7200

Colour Analysis

Sample#	Colour	Identification #
1	66.9	DSP-BULK-RK
2	65.0	MSP-BULK-RK
3	83.8	MSP-HG
4	67.5	MSP-POWDER
5	87.7	4-20.20-24.00
6	89.3	4-27.50-32.30
7	90.5	4-32.30-33.40
8	88.3	5-12.10-15.40
9	77.3	5-15.40-17.75
10	90.5	5-17.75-20.75
11	89.7	5-20.75-23.75
12	89.9	5-23.75-27.75
13	82.7	5-27.75-30.75
14	89.9	5-30.75-34.40
15	79.2	5-34.40-36.62
16	74.3	5-36.62-39.62
17	89.8	8-11.58-13.40
18	83.5	8-13.40-14.40
19	76.9	8-14.40-16.90
20	87.8	8-16.90-18.30
21	89.0	8-18.30-21.30
22	89.8	8-21.30-24.30
23	88.5	8-24.30-26.45
24	74.3	8-26.45-27.65
25	87.8	8-27.65-30.48
26	57.9	FGDG

020

CROSS SECTION LOOKING NOR

DIAMOND DRILL HOLE MR-93-1

CLAIM : 1193214

SCALE 1:500

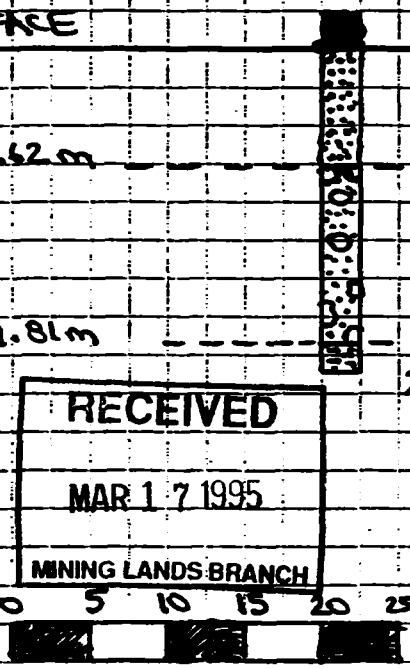
AZIMUTH : N/A (VERTICAL)

DIP : 90°

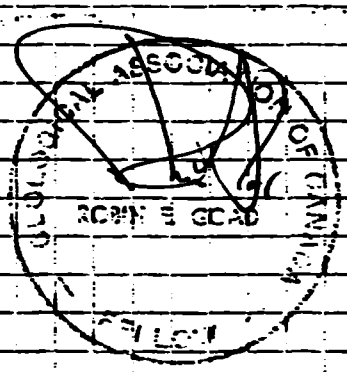
HOLE LOGGED AUGUST 28, 1993

BQ HOLE. (NO CORE)

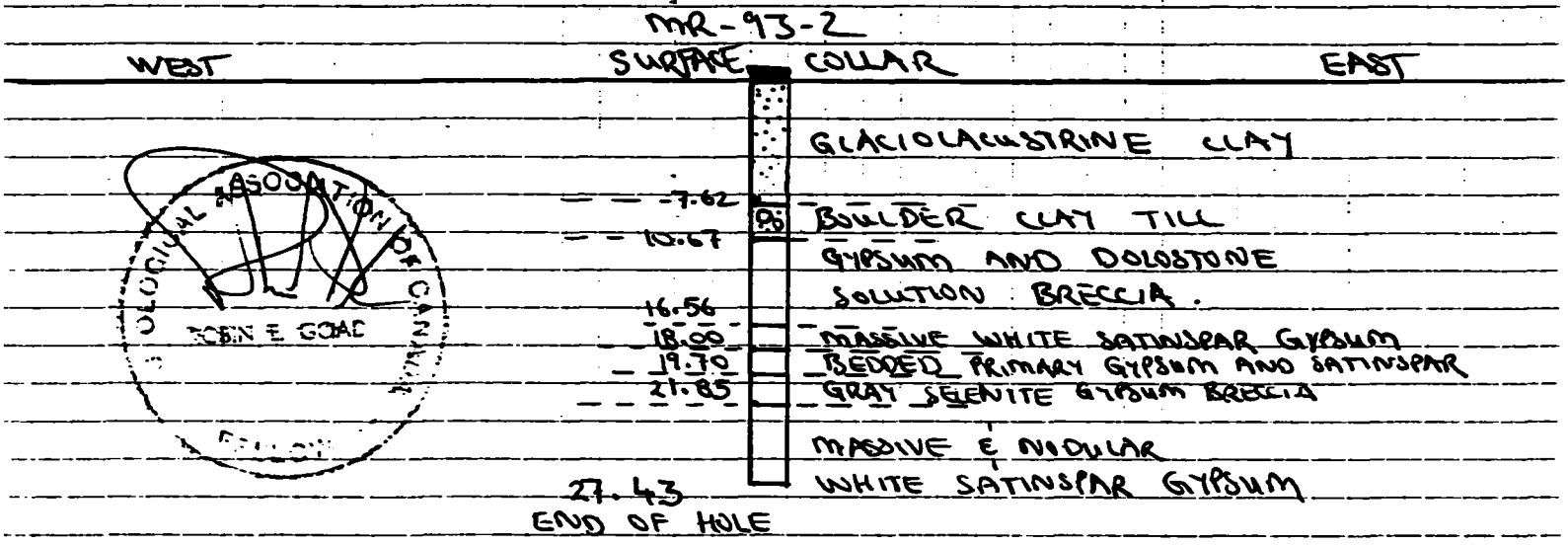
WEST SURFACE EAST.



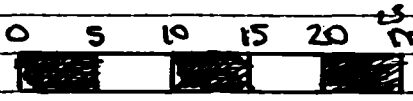
LOCATION = 350m east of west boundary line of claim 1193214 and 600 m south of north boundary line. There is no grid location. The hole is located on a winter road extending 60° from the railroad.



CROSS SECTION OF DIAMOND DRILL HOLE MR-93-2 LOOKING NORTH



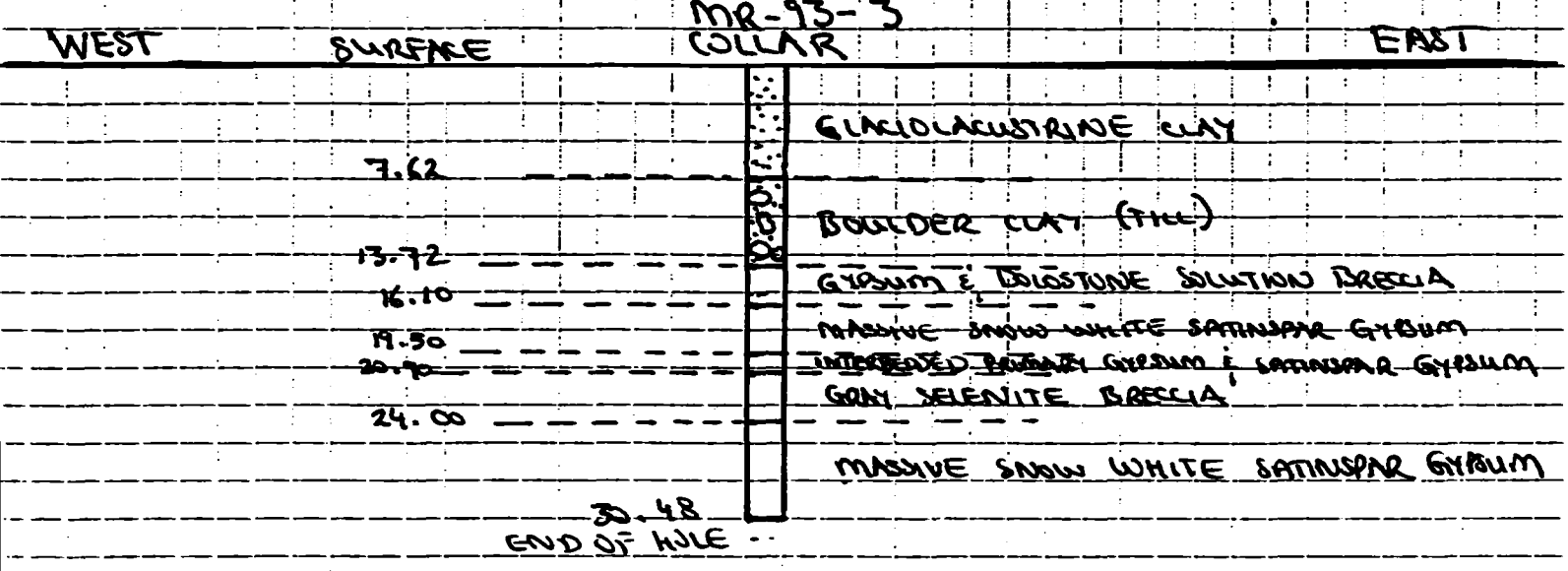
HOLE : COMPLETED AND LOGGED AUGUST 28, 1993
RELOGGED OCTOBER 1993
HOLE : DRILLED WITH BQ CORE.
AZIMUTH : N/A (VERTICAL)
DIP : 90°
CLAIM 1193214



SCALE 1:500

HOLE LOCATION - claim 1193214 740 metres east of west claim boundary and 260 metres south of north claim boundary.

CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-3



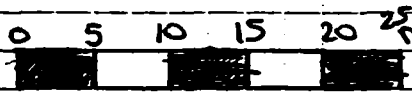
HOLE COMPLETED & LOGGED AUGUST 29, 1993 & THEN RE-LOGGED OCTOBER 1993

HOLE AZIMUTH : N/A - VERTICAL HOLE

HOLE DIP : 90°

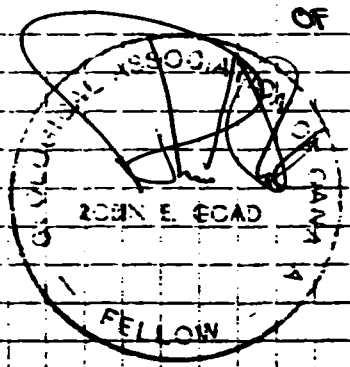
CLAIM : 1193214

CORE SIZE BQ

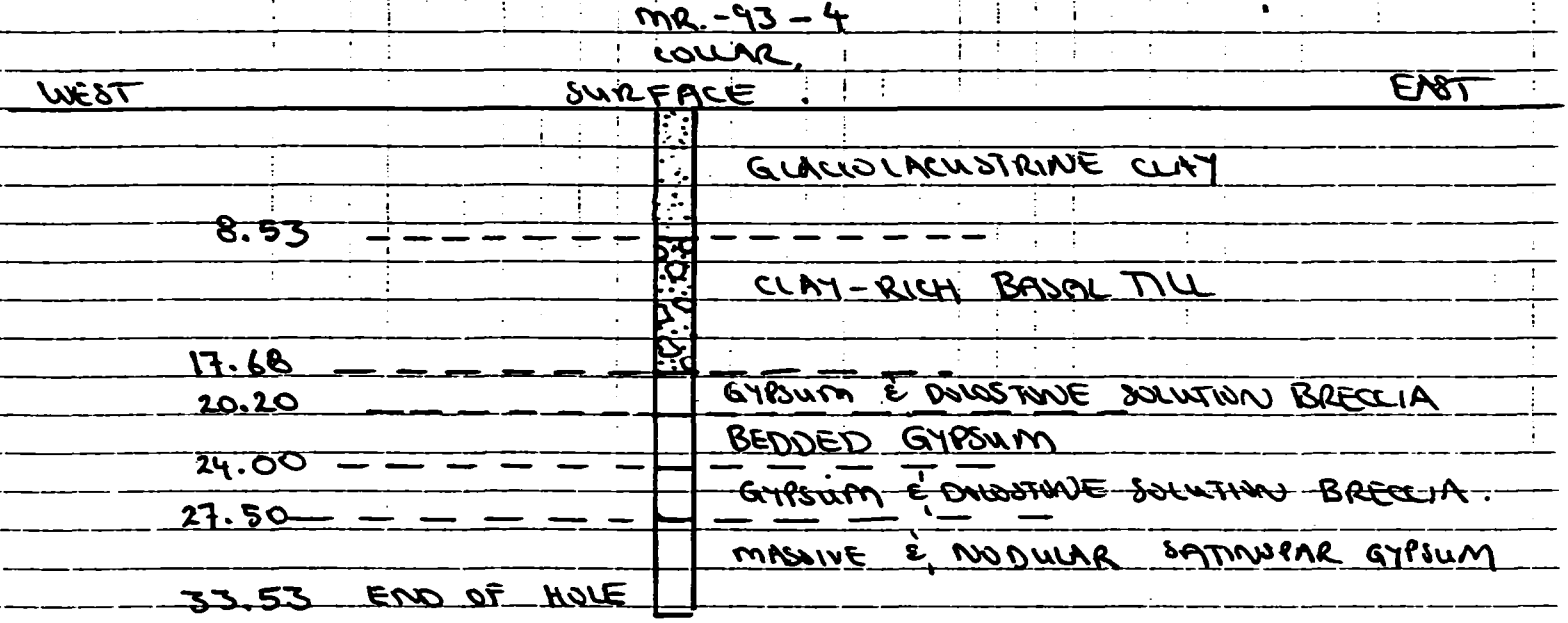


SCALE 1:500

HOLE LOCATION : CLAIM 1193214 1,000 METRES EAST OF WEST BOUNDARY OF CLAIM AND 100 METRES SOUTH OF NORTH BOUNDARY.



CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-4



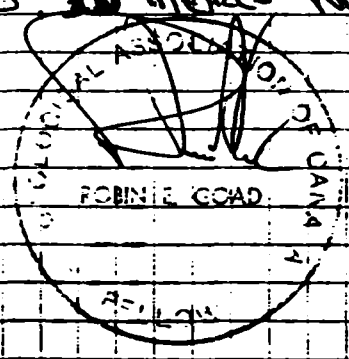
AND LOGGED

HOLE COMPLETED: AUGUST 30 1993 & RELOGGED OCTOBER 1993
HOLE AZIMUTH : N/A - VERTICAL HOLE
HOLE DIP : 90°
CLAIM : 1193215
CORE SIZE : BQ.

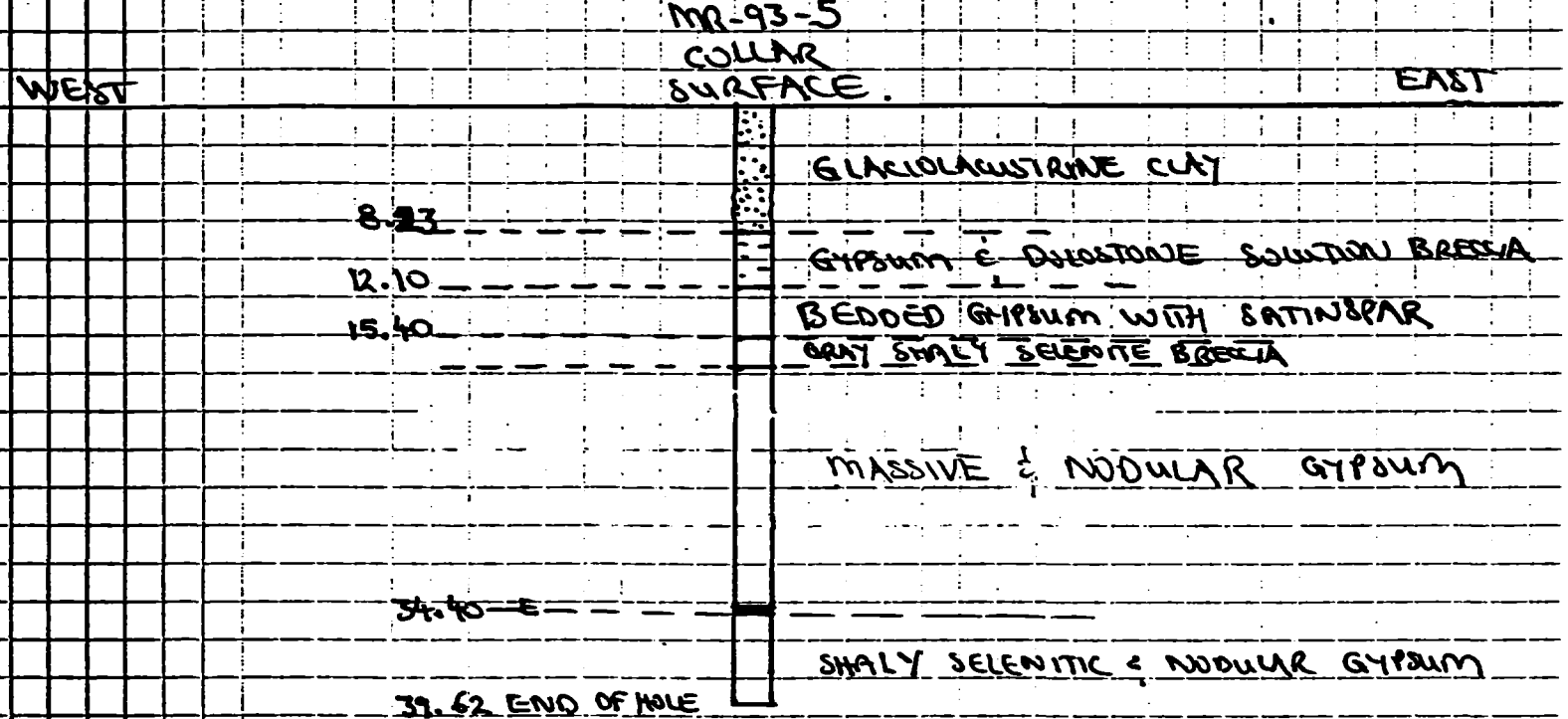
0 5 10 15 20 25 METRES

SCALE 1:500

HOLE LOCATION: CLAIM 1193215 750 METRES EAST OF WEST CLAIM BOUNDARY AND 50 METRES NORTH OF THE SOUTH BOUNDARY

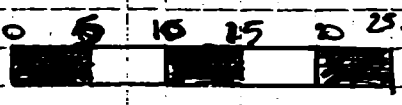


CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-5

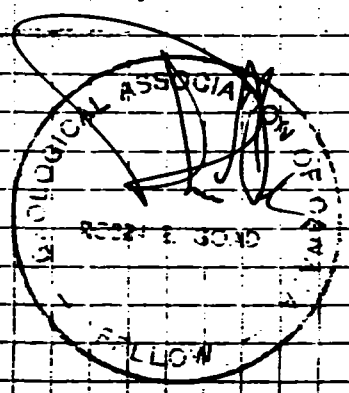


AND LOGGED

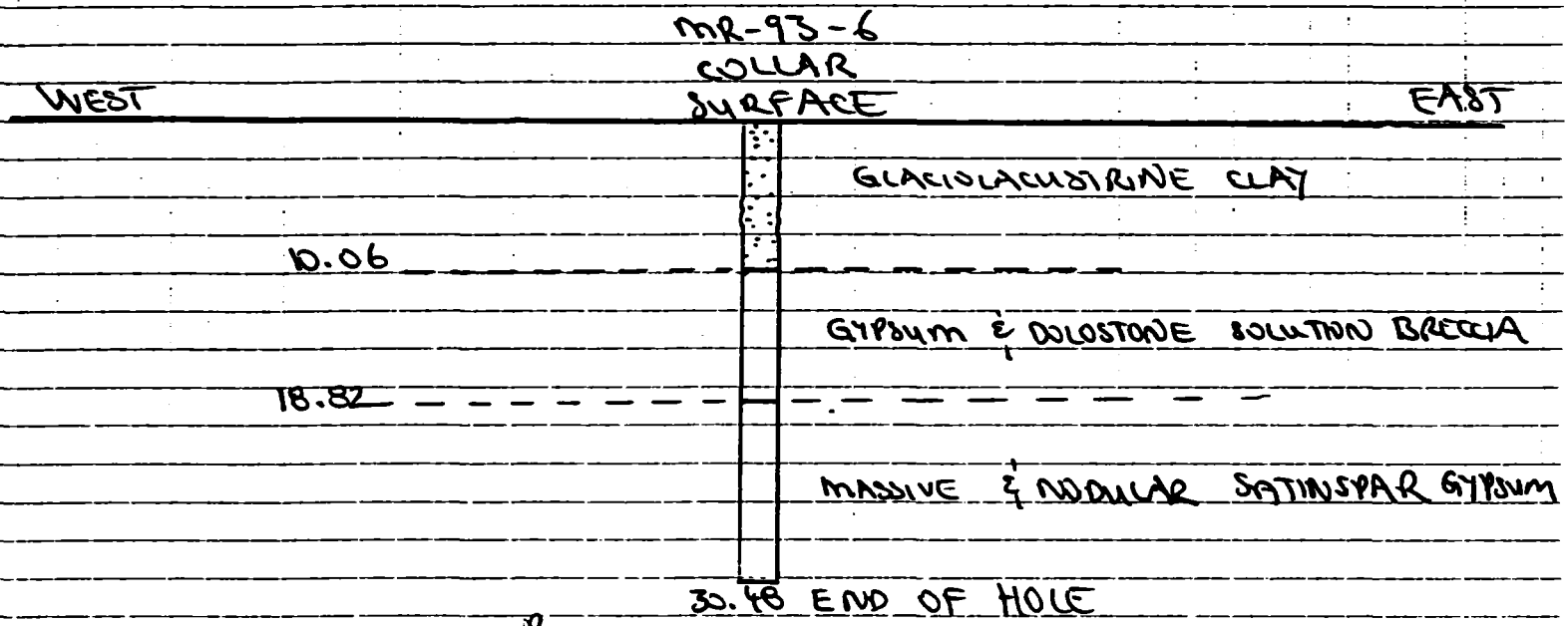
HOLE COMPLETED : AUGUST 31, 1993 & RELOGGED OCTOBER 1993
HOLE AZIMUTH : N/A - VERTICAL HOLE
HOLE DIP : 90°
CLAIM : 1193215
CORE SIZE : BQ
HOLE LOCATION : CLAIM 1193215 200 METRES NORTH OF THE SOUTH BOUNDARY OF THE CLAIM AND 400 METRES WEST OF THE EAST BOUNDARY.



SCALE = 1:500

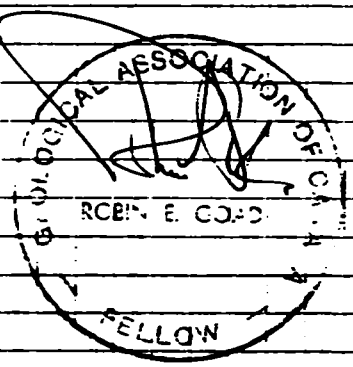


CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-6

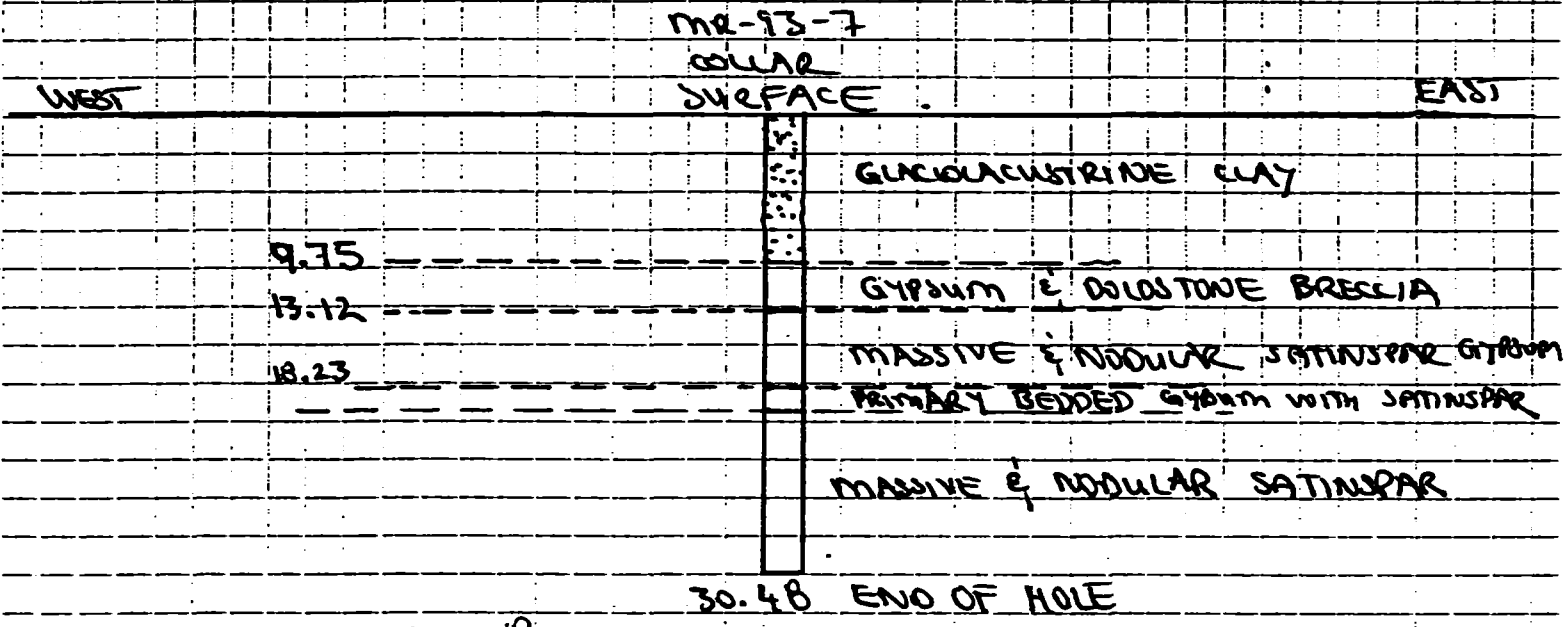


HOLE COMPLETED : SEPTEMBER 1 1993 AND LOGGED & RELOGGED OCTOBER, 1993
HOLE AZIMUTH : N/A - VERTICAL
HOLE DIP : 90°
CLAIM : 1193215
CORE SIZE : BQ
HOLE LOCATION : CLAIM 1193215 200 METRES WEST OF THE EAST BOUNDARY AND 300 METRES NORTH OF THE SOUTH BOUNDARY.

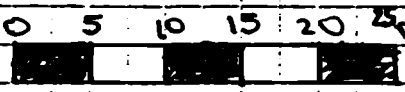
SCALE 1:500



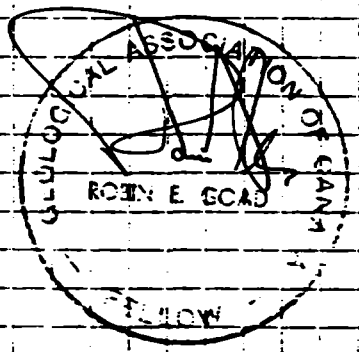
CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-7



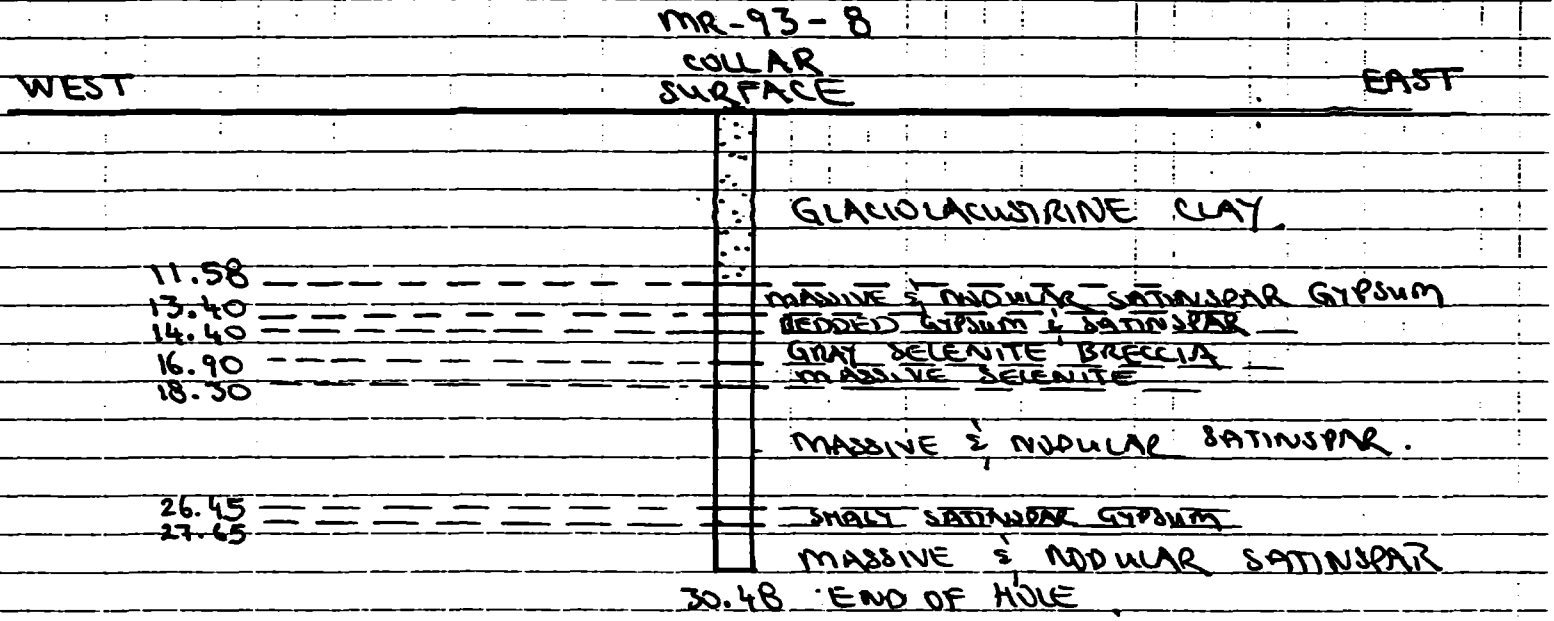
HOLE COMPLETED AND LOGGED: SEPTEMBER 2, 1993 (& LOGGED).
HOLE AZIMUTH: N/A VERTICAL HOLE
HOLE DIP : 90°
CLAIM : 1193215
CORE SIZE : BQ
HOLE LOCATION: CLAIM 1193215 445 METRES NORTH OF THE SOUTH BOUNDARY OF THE CLAIM & 5 METRES WEST OF THE EAST BOUNDARY.



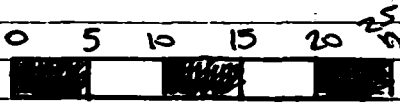
SCALE = 1:500



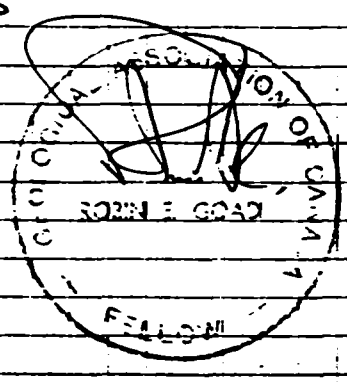
CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-8



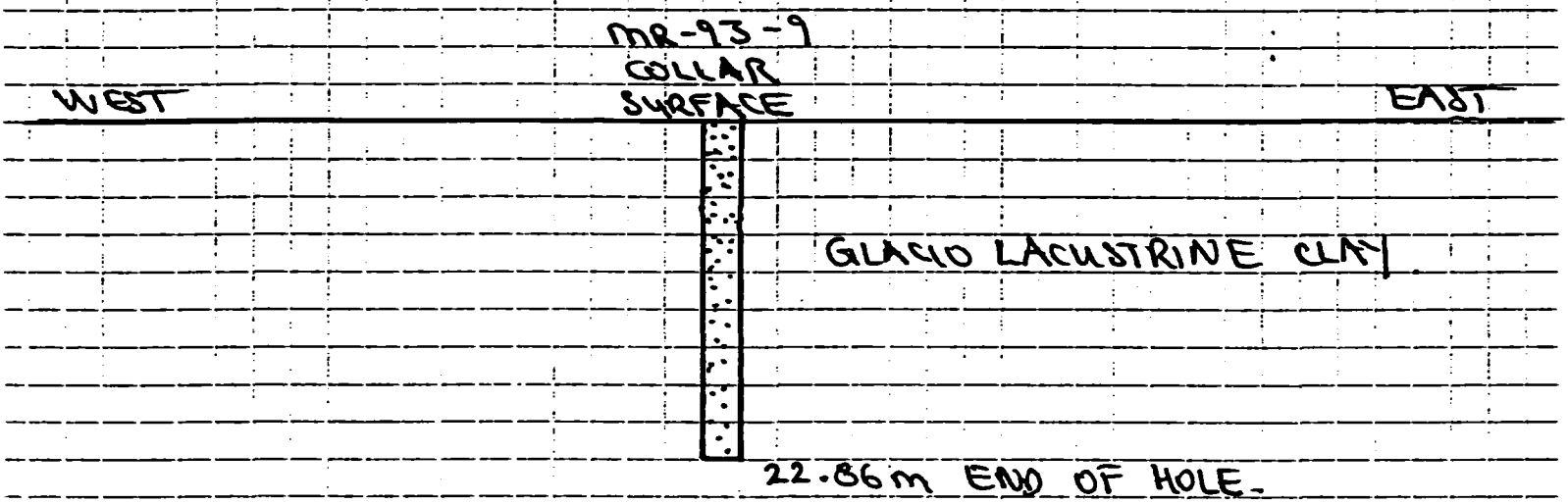
HOLE COMPLETED AND LOGGED: SEPTEMBER 3/1993 & RE-LOGGED IN OCTOBER 1993
HOLE AZIMUTH: N/A - VERTICAL
HOLE DIP : 90°
CLAIM : 1193216
CORE SIZE : BQ
HOLE LOCATION : CLAIM 1193216 200 METRES EAST OF THE EAST CLAIM BOUNDARY AND 700 METRES SOUTH OF THE NORTH CLAIM BOUNDARY.



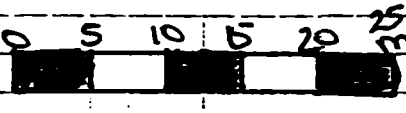
SCALE = 1:500



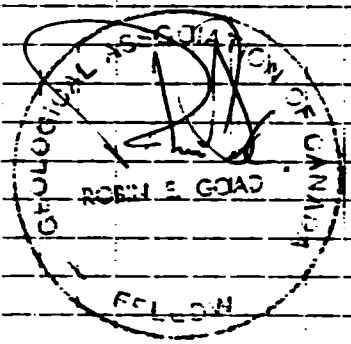
CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR-93-9



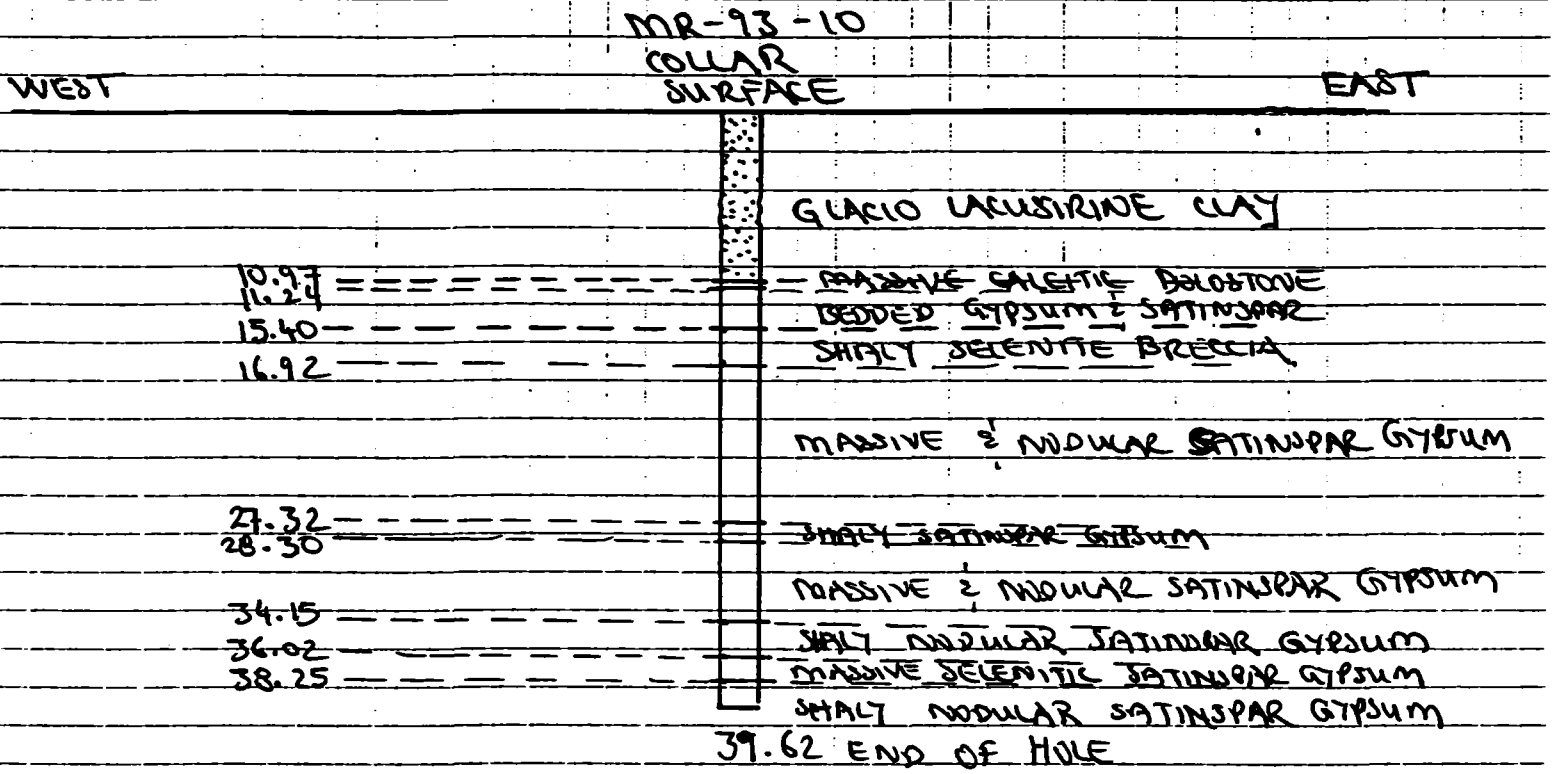
HOLE COMPLETED & LOGGED : SEPTEMBER 3, 1993
HOLE AZIMUTH : N/A - VERTICAL
HOLE DIP : 90°
CLAIM : 1193216
CORE SIZE : BQ
HOLE LOCATION : 600 METRES SOUTH OF NORTH BOUNDARY OF CLAIM 1193216 & 400 METRES EAST OF THE WEST BOUNDARY.



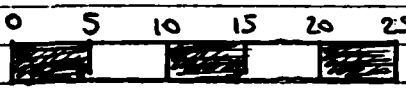
SCALE = 1:500



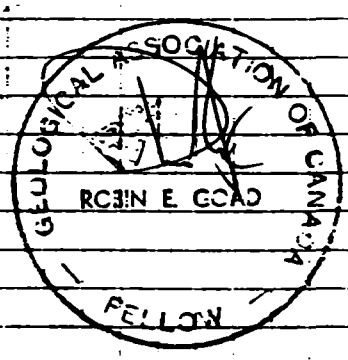
CROSS SECTION LOOKING NORTH OF DIAMOND DRILL HOLE MR 93-10



HOLE COMPLETED & LOGGED SEPTEMBER 3, 1993 & RE-LOGGED OCTOBER 1993
HOLE AZIMUTH : N/A - VERTICAL HOLE
HOLE DIP : 90°
CLAIM : 1193216
CORE SIZE : BQ
HOLE LOCATION : CLAIM 1193216, 800 METRES EAST OF WEST CLAIM BOUNDARY & 450 METRES SOUTH OF NORTH CLAIM BOUNDARY.



SCALE = 1:500



Ministry of Northern Development and Mines

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9460.00280

2.15868

42I14SE0002 2.15868 CARROLL 900

Personal information collected on this form is obtained under the authority of the Mining Act. Questions should be directed to the Provincial Manager, Mining Lands, Ministry ... Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s): FORTUNE ENVIRONMENTAL MINERALITES LTD.	Client No.: 295664
Address: 163 PINE VALLEY DRIVE, UNIT # 55 LONDON ONTARIO N6J 4R2	Telephone No.: 519 668-2377
Mining Division: PORCUPINE	Township/Area: CARROLL & CANFIELD.
Dates Work Performed: From: AUGUST 22 1993	To: DECEMBER 3/1993

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	
Physical Work, Including Drilling	306.3 METRE (1,005 FEET) DIAMOND DRILLING.
Rehabilitation	
Other Authorized Work	
Assays	MAJOR ELEMENT OXIDES MULTI ELEMENT WHOLE ROCK & WHITENESS
Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ ________

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
ROBIN GOAD CONSULTING GEOLOGIST	55-163 PINE VALLEY DRIVE, LONDON ONTARIO N6J 4R2 *
TRIANGLE DRILLING.	16 HELOISE RD?, LIVELY, ONTARIO P0M 2E0
X-RAY ASSAY? LABS LTD.	5173 TIMBERLEA BLVD. MISSISSAUGA, ONTARIO

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

	Date	Recorded Holder or Agent (Signature)
I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	DEC 20/94	[signature]

ROBIN GOAD, PRESIDENT

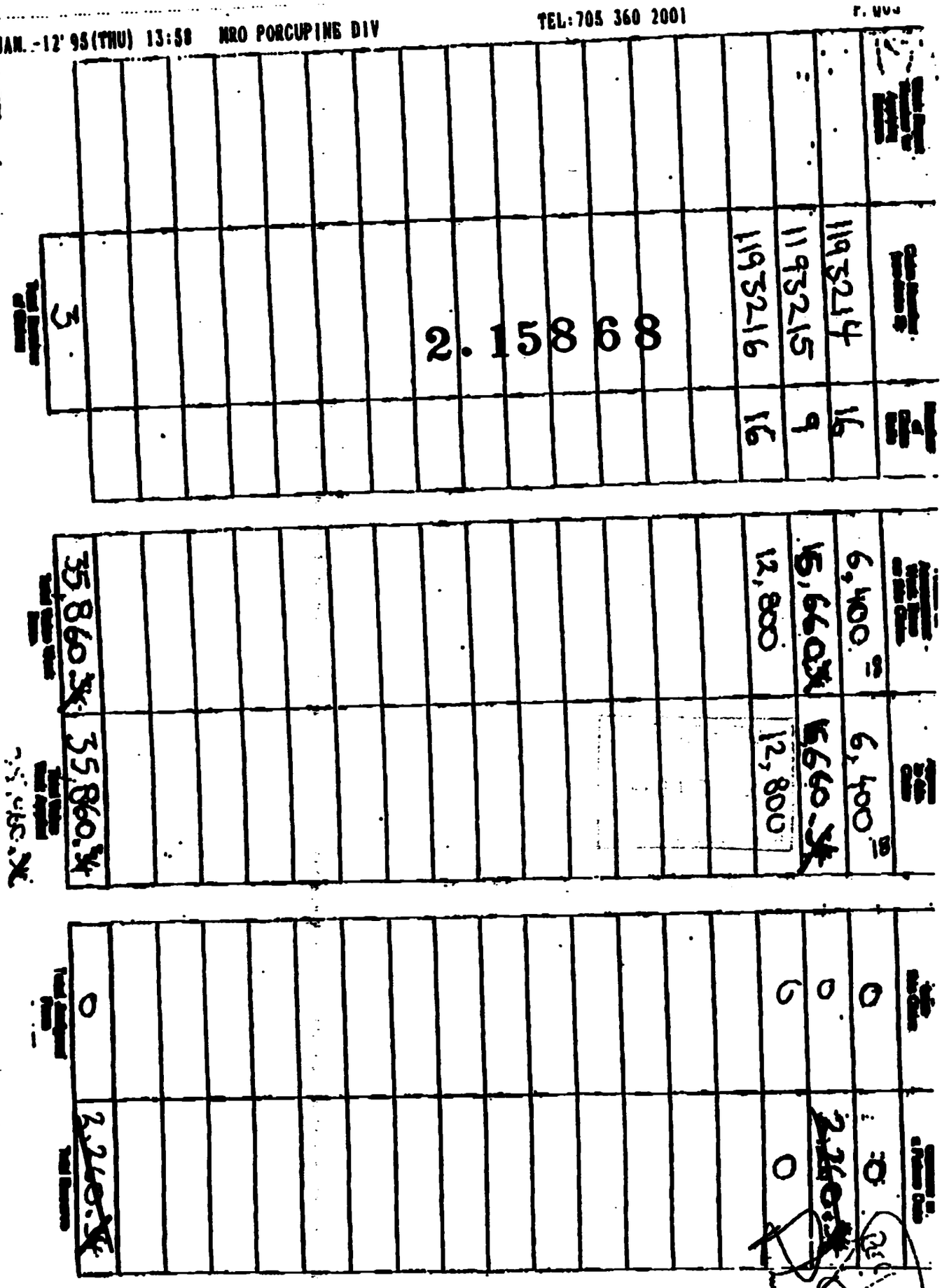
Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: R. ROBIN GOAD	163 PINE VALLEY DRIVE, UNIT # 55 LONDON, ONTARIO N6J 4R2.
Telephone No.: 668-2377	Date: DEC. 20/94	Certified By (Signature): [signature]

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
400.		Gary White signed but not dated	DEC 21 1994
	Deemed Approval Date: MAR 21, 1995	Date Approved	
	Date Notice for Amendments Sent		



Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such reductions, please indicate which claims you wish to protect the allocation of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☒ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandums of agreements, etc., with re to the staking claims.

Note 2: If work has been performed on patented or leased land, please complete the followings

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date 12/JAN/95

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction
W 9460.00280

2.15568

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Frais de l'entrepreneur et de l'expert-conseil	Type DRILLING.	19,959.10	
	GEOLOGICAL.	13,877.40	
	ASSAYS.	969.16	34,805.70
Supplies Used Fournitures utilisées	Type WATER METER	764.47	
	REPORT [illegible] DUNDIAN	255.97	
	MAP REPORT MAPS EX	34.20	
			1,054.64
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		35,860.34

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Indirect Costs Total partiel des coûts indirects		
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		
	Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) / **Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)**		

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.

Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit			Total Assessment Claimed
35,860.34	x 100% / 50	=	35,860.34

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation

2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation		Évaluation totale demandée
	x 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as PRESIDENT (Recorded Holder, Agent, Position in Company) I am authorized to make this certification for DUNDIAN ENVIRONMENTAL AGGREGATES LTD.

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé à faire cette attestation.

Signature	Date
	DECEMBER 20/94

2 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Geoscience Approvals Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

March 23, 1995

Our File: 2.15868
Transaction #: W9460.00280

Telephone: (705) 670-5853
Fax: (705) 670-5863

Mining Recorder
Ministry of Northern Development & Mines
60 Wilson Avenue
1st Floor
Timmins, Ontario
P4N 2S7

Dear Sir:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIM P.1193214 IN CARROLL AND CANFIELD TOWNSHIPS

The deficiencies in the original submission have been rectified.

Assessment work credits have been approved as outlined on the original report of work. The credits have been approved under Section 10, Physical (PDRILL), and Section 17, Assays, Mining Act Regulations.

The approval date is March 20, 1995.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5855.

ORIGINAL SINGED BY

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

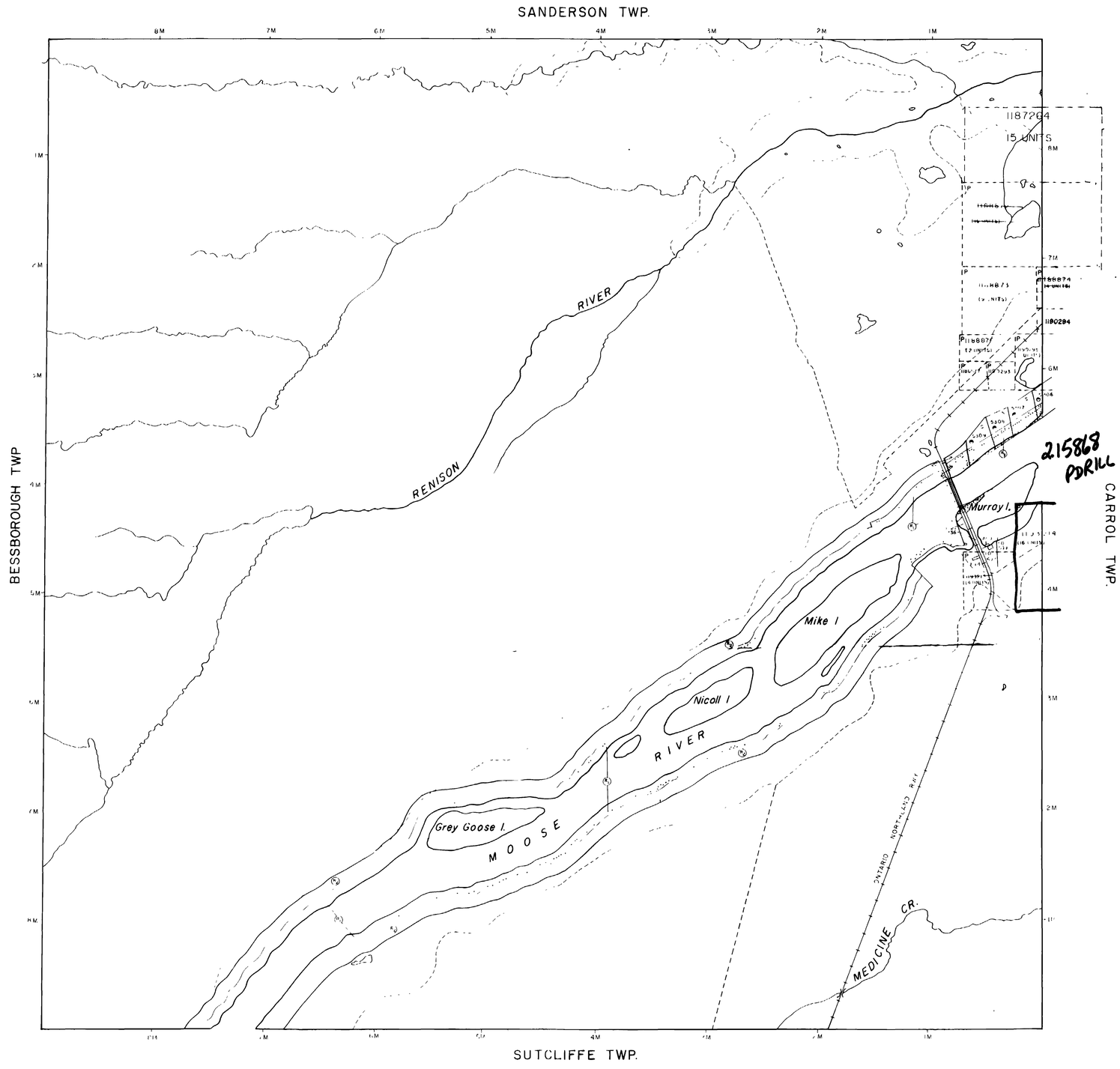
LJ/jl

cc: Resident Geologist
Timmins, Ontario

Assessment Files Library
Sudbury, Ontario

G-1413

REFERENCES



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

LEGEND

- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS BASE LINES, ETC
  - LOTS, MINING CLAIMS, PARCELS ETC
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	◒
" MINING RIGHTS ONLY	◒
LEASE SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	■
" MINING RIGHTS ONLY	■
LICENCE OF OCCUPATION	▼
ORDER IN COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	Ⓒ
SAND & GRAVEL	Ⓢ

AREAS WITHDRAWN FROM DISPOSITION

M R O MINING RIGHTS ONLY
S R O SURFACE RIGHTS ONLY
M + S MINING AND SURFACE RIGHTS

Description	Order No	Date	Disposition	File
(1)	W 62/72	21.10.76	S + M Rights	163199

(2) PROPOSED MISSINAIBI PARK BOBY EXPANSION NOTICE RECEIVED 8 AT JULY, 1991

(3) MINING RIGHTS ONLY WITHDRAWN UNDER SECTION 16 OF THE MINING ACT R S O 1980, ORDER Nº NRW 66/83

MISSINAIBI PROVINCIAL PARK

2.15868

SCALE 1 INCH = 40 CHAINS

0 1000 2000 4000 6000 8000

METRES 0 500 1000 2000

(1 KM) (2 KM)

TOWNSHIP

CANFIELD

M N R ADMINISTRATIVE DISTRICT
MOOSONEE

MINING DIVISION
PORCUPINE

LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario Ministry of Natural Resources

Ministry of Northern Development and Mines

Plan Number G-1413

G-1413

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY
S.R.O. - SURFACE RIGHTS ONLY
M.+S. - MINING AND SURFACE RIGHTS

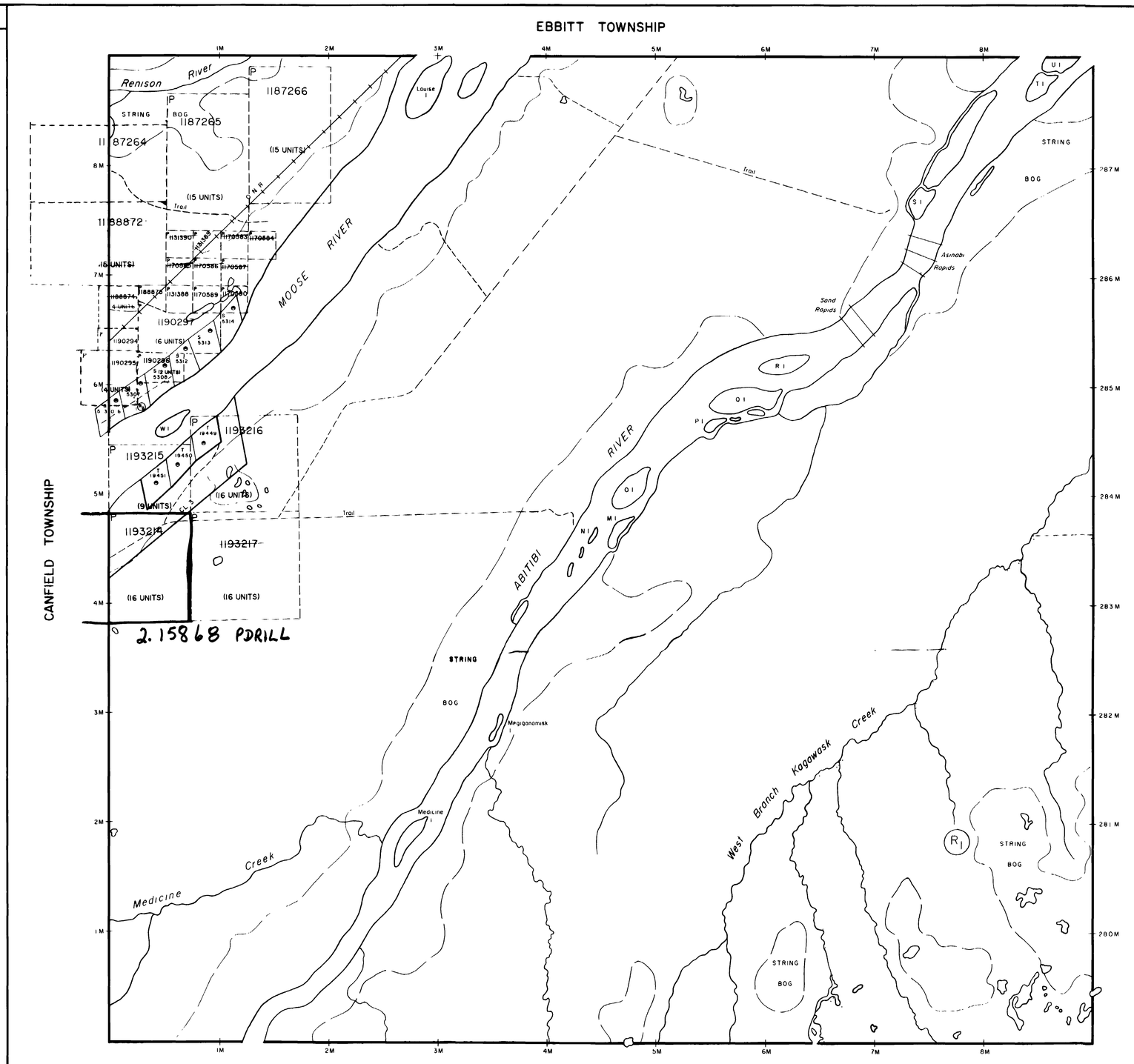
Description	Order No	Date	Disposition	File
SEC 36/80	WP1/91	20/08/91	M+S	
SEC 36/80	NRW 66/83	18/11/83	M R O	171508

NOTES

FLOODING RIGHTS ON MOOSE RIVER TO CONTOUR 100' RESERVED TO H E P C

FLOODING RIGHTS ON ABITIBI RIVER FROM SAND RAPIDS DOWNSTREAM TO ALLAN RAPIDS TO CONTOUR 75', FROM SAND RAPIDS UPSTREAM TO BLACKSMITH RAPIDS TO CONTOUR 126'

SURFACE AND MINING RIGHTS R/W AND EXTRA LAND PATENTED TO O N R FILE 173009



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RESERVATION	®
CANCELLED	®
SAND & GRAVEL	®

PORCUPINE MINING DIVISION

2.15868

SCALE 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 500 1000 2000
1 KM 2 KM

TOWNSHIP
CARROLL

M N R ADMINISTRATIVE DISTRICT
MOOSONEE
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

RECEIVED
FEB 17 1995
MINING LANDS BRANCH

Ontario
Ministry of Natural Resources
Ministry of Northern Development and Mines

Date MAY/93
ACTIVATED MAY 20, 1993 BY D.C.
CHECKED BY B.H.

Number
G-1415

BMD 1415