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Magnetic and Electromagnetic Surveys 1986

TECKRON MINES & ENERGY CORP. EAGLE'S NEST PROPERTY

Scadding and Rathbun Townships Sudbury Mining Division, Ontario

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SUMMARY AND CONCLUSIONS

A control grid has been established over the Teckron Mines & Energy Corp. property at Kukagami Lake, Sudbury Mining Division. The grid has been covered by a Proton Magnetometer survey and a VLF-EM survey.

The Shaw Point area of the claims has been surveyed in detail to provide data that can be used in interpretation of the limits of the limestone wedge and its controlling faults. This structural interpretation will assist defining targets for trenching, sampling, and diamond drilling of structural zones which are indicated by turn-of-the-century trenching and pitting, and by recent sampling, to be gold-bearing.

The VLF-EM survey used the primary magnetic field of navigation station NAA at Cutler, Maine. This station lies to the east-southeast of the property. The coupling between the primary field and northeasterly trending structures is poor. Therefore, structures oriented in this direction and observed locally on surface cannot be traced beneath overburden and water. A second VLF-EM survey using a signal source located south of the property will be necessary to provide definition of these structures which are expected to influence mineralization at Shaw Point and elsewhere on the claims.

Additional detailed magnetic work in the immediate area of the Shaw Point showing will be necessary to outline the limits of the various rock types in sufficient detail to permit

selection of drill targets.

During the general surveys reported herein a total of 39.42 line kilometers of grid were established, 3801 determinations of the total magnetic field were made, and the real and quadrature components of the VLF-EM field were determined at 3593 locations.

In addition, detailed surveying of the Shaw Point area included 897 determinations of the total magnetic field, and determinations of the real and quadrature components of the VLF-EM field at 600 locations.

Additional geophysical surveys in the area of zones of mineralization are recommended to provide the detailed information necessary for location of diamond drill holes and, where possible, trenches.

Further work also includes geological mapping, rock trenching of mineralizad zones, sampling, and assaying.

The recommended work is estimated to cost an additional \$116 450.00.

INTRODUCTION

The Eagle's Nest prospect lies in the northeast corner of Scadding and the southeastern corner of Rathbun townships.

Gold has been found in the northern part of the property associated with faulting in Cobalt Group sediments and Nipissing gabbros. The main prospect lies in claims 721326 and 721327 where a block of Espanola limestone is in fault contact with younger rocks. There are reports of gold in the limestones in addition to the metal observed in quartz-carbonate veins that cut Nipissing intrusives and Huronian sediments adjacent to major and minor faults.

There is evidence of trenching and shallow shaft sinking on the main showing apparently done in the late 1800's. There is no record of more recent physical work on the claims in annual Mines Department reports, other official publications, or in the Assessment Work files of the Sudbury office of the Ministry of Natural Resources.

The prospect lies approximately four miles NNE from the Scadding township McLean-Watt gold property of Northgate Exploration Limited and about the same distance SSE of the Flag Resources Ltd. Matagamasi Lake gold prospect in Rathbun Twp.

Continuation of the program of geological mapping, additional geophysical surveying, trenching, sampling, and diamond drilling is recommended. The cost of completion of the preliminary phases of the program is estimated at \$116 450.00.



LOCATION AND ACCESS

The property is located in the extreme northeast corner of Scadding township and the extreme southeastern corner of Rathbun township, Sudbury Mining Division, Ontario.

Approximate co-ordinates are:

46° 44' 00"N; 80° 35' 00"W:

The property can be reached from Sudbury via Highway 17 East to the Kukagami Lake Road, then approximately twelve miles north through Street and Scadding townships to a local cottage property access road that leads northeast three miles (5.0km) to private cabins on the west shore of Shaw Point of Kukagami Lake, within claim No. 721326 of the group.

In most seasons, travel time by road from the Sudbury airport to the claims is approximately one hour.

Sudbury has daily bus, train and airline connections to other parts of the province and North America.

PROPERTY

The property consists of 19 unpatented mineral claims held in the name of Rodney J. Fielding of Hanmer, Ontario. The the record books in the office of the Mining Recorder in Sudbury show all claims are under extension until March 27th, 1986. All claims will require 60 days work before the due date.

Claim No.	Township	Claim No.	Township	
808329 🗸	Rathbun	721323 🗸	Scadding	
808330 🗸	11	721324/	11	
808331 🗸	"	721325	11	
808332 🗸		721326	**	
808333./	11	721327	**	
808334 🗸	Scadding	734018	11	
808335		734019 🗸	11	
808336	"			
808337	11			
808338	11			
808339				
808340	11			

LIST OF CLAIMS

SURFACE RIGHTS

The claims cover Crown Lands with the exception of approximately five acres designated 'Plan M-970' which include five cottages with frontage on Kukagami Lake. Use of surface rights on Crown Lands is governed by the standard regulations. Use of surface rights to the lands described in Plan M-970 must be negotiated with the private owners.

There is also the standard 400 foot surface rights reservation along the shores of Kukagami Lake. Use of this land

is restricted except with prior permission from the Department of Natural resources.

CLIMATE

The area has a continental climate typical of central Canada. Precipitation totals approximately 34 inches (863mm) per annum, relatively well spread throughout the year. Snow accumulations of 700 to 1300mm are frequently observed in average winters, with first significant falls in late October or early November. Continuous cover can be expected from early December until mid-April in most years.

Summer-time maximum temperatures may exceed 30° Celcius and winter minimums in the range of -40° C are not uncommon in January and February. Mean summer maximums are approximately 23° Celcius and mean summer minimums about 12° C. Winter mean maximums are in the range of -7° C and mean minimums -21° C.

TOPOGRAPHY

Kukagami Lake has an elevation of 278m (912') above sea level. Within Scadding Township the land rises to approximately 325m (1066'). In general, the surface is rolling, with occasional abrupt hillocks of bedrock, especially along lake shores where low cliffs are common. Relief is usually less than 30m (100'). There are some low-lying swampy areas but the greater part of the land area of the Township is relatively dry.

Drainage is west to Wanapitei Lake, Wanapitei River, the French River and Georgian Bay.

LOCAL RESOURCES

Sudbury is a city with a population of approximately one hundred and sixty thousand. There is a long history of mining and smelting with a skilled work force in both mining and related support functions. Men, equipment, supplies, and services are all available locally.

Medical facilities are excellent, with several clinics and hospitals in the city.

Rail, highway, and air transportation are excellent to southern Ontario and points east and west of Sudbury.

The claims are forested with several varieties of pine, spruce, balsam fir, cedar, and assorted deciduous species. Some of the timber is merchantable but there have been no recent lumbering or pulp wood operations.

Industrial power is available within twelve miles of the property and local transmission lines provide domestic electricity to residents. Telephone communications, local and international, are possible from homes and businesses on Kukagami Lake.

HISTORY

Gold was first reported from the Kukagami Lake area in the fall of 1891. (Ontario Bureau of Mines, 1892 p.237) The discovery may have been made during surveying of the Scadding -Rathbun township line. The location given for the initial discovery is not specific enough to confirm that it is the same prospect described subsequently as the 'Eagle's Nest mine' (Ontario Bureau of Mines, 1896, p.56), but the two reports appear to refer to the same occurrence.

Slaght, 1896, op. cit., reports sixteen veins "running northwest and southeast and one lateral vein on the property." The geographic position of the veins is given as "locations WD25 and WD40", both on Shaw Point and included in the present claim group. The work mentioned by Slaght was comprised of stripping, and the sinking of ten test pits which were six to ten feet deep and eight to twenty-five feet long.

There is no other record of work from that time, nor do the assessment files show additional ground surveys or prospecting activity subsequent to the claims reverting back to the Crown for non-payment of taxes in 1920. However, Scadding Township was included in an airborne magnetic and electromagnetic survey done by Kennco Explorations (Canada) Ltd. in 1968. The survey apparently covered the Eagle's Nest property but there is no record of follow-up work within the boundaries of the present claim group.

The trenches from the work done in the late 1800's are still locatable but have been partially filled with rotting vegetation and slumped soil. General prospecting has been done in the claim group in the past two years, but little new excavation completed. One trench has been cleaned out north of the section pitted during 1892-96 and shows occasional 1 to 30mg grains of free gold on the contact of quartz-carbonate veining with chloritic gabbro. Sampling of limestone float boulders from the north part of Shaw Point has indicated gold values, but the source of this material, which must be local, is not currently exposed.

Grab samples taken during examinations done in the past two years have returned assays ranging from nil to over 20 oz. Au/ton.

The property was acquired under option by Teckron Mines & Energy Corp. in late 1985 and a program of geophysical surveying undertaken in January of 1986.

During January 1986 a total of 47.93km of lines was established. The base line was laid out approximately along the common boundary of Rathbun and Scadding townships. Profiles run north and south from the base line. The grid was surveyed geophysically during late January and February 1986. Results of that work are discussed herein.

GENERAL GEOLOGY

Reconnaissance geological mapping in the Sudbury area was done as early as 1853 when Alexander Murray conducted river and lakeshore traverses that included the Wanapitei River and parts of the shoreline of Lake Wanapitei. Bell and Barlow worked in the Sudbury Basin beginning in 1888 and included part of the Wanapitei Lake area in their map published in 1891. Collins worked to the south of Lake Wanapitei in 1912 and reported his results in 1914. It was not until 1921, when Quirke mapped Scadding township as part of his regional study, that a geological compilation covering the Eagle's Nest property was completed. Fairbairn mapped Scadding township as part of his 1938 Ashigami Lake project. Cooke et al., prepared the Falconbridge sheet in 1946 and revised Quirke's 1922 map. Thomson mapped Scadding and Maclennan townships during the 1956 to 1959 field seasons but did not re-map those areas covered by Fairbairn in 1938. Thomson reported his findings and presented a compilation in 1961 (ODM Geological Report No.2 and Map No. 2009). The most recent study of the area is based on field work by Dressler and assistants in 1977 and 1978 described in Ontario Geological Survey Report 213.

The geology of the Wanapitei Lake area is summarized in the following table from Dressler (1982) and applies to the portion of Scadding and Rathbun townships within and adjacent to the property under consideration.



TABLE OF LITHOLOGIC UNITS FOR THE LAKE WANAPITEI AREA.

PHANEROZOIC

CENOZOIC

QUATERNARY

RECENT

Swamp, lake, and stream deposits.

PLEISTOCENE

Glacial and glaciofluvial sand and gravel deposits.

Unconformity

PRECAMBRIAN

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

Olivine diabase.

Intrusive Contact

MIDDLE PRECAMBRIAN

SUDBURY NICKEL IRRUPTIVE Sublayer, norite, transition zone norite, micropegmatite, granitic rock.

Intrusive Contact

WHITEWATER GROUP

ONAPING FORMATION

Tuff, quartzite breccia.

SUDBURY EVENT

Explosive volcanism or meteorite impact; Sudbury-type brecciation.

NIPISSING INTRUSIVE ROCKS

Gabbro, granophyre, granitic dike rock, pegmatite, quartz-plagioclase porphyry.

Intrusive Contact

HURONIAN SUPERGROUP

COBALT GROUP

LORRAIN FORMATION

Arkose, subarkose, subarkosic wacke, quartz wacke, arenites.

GOWGANDA FORMATION

Wacke, arkose, conglomerate.

QUIRKE LAKE GROUP

SERPENT FORMATION

Arkose, arkosic wacke, calcareous arkose, minor conglomerate.

ESPANOLA FORMATION

Calcareous siltstone, limestone, calcareous wacke.

BRUCE FORMATION

Conglomerate, pebbly wacke, minor arkose, wacke.

HOUGH LAKE GROUP

MISSISSAGI FORMATION

Arkose, subarkose, arkosic wacke, subarkosic wacke, conglomerate, and silty wacke.

Unconformity

EARLY PRECAMBRIAN MAFIC INTRUSIVE ROCKS

Diabase, glomeroporphyritic diabase, porphyritic diabase.

Intrusive Contact



FELSIC PLUTONIC ROCKS Granodiorite, diorite, migmatite. Intrusive Contact METAVOLCANICS AND METASEDIMENTS METASEDIMENTS Wacke, arkose, gneisses, ironstone, ferruginous chert. METAVOLCANICS FELSIC METAVOCLANICS MAFIC AND INTERMEDIATE METAVOLCANICS Mafic and intermediate metavolcanics, amphibolite, dacite.

The area has been glaciated during Pleistocene time. Deposits of till, outwash sands and gravels, and clay and silt cover much of the bedrock inland from Kukagami Lake. Overburden is generally less than 1.5m on higher ground but may be considerably thicker in intervening till and glacial outwashfilled swales and swampy areas. The last ice advance was from the north with most striae indicating a direction five to ten degrees east of true north.

Consolidated rocks of the area range in age from Early Precambrian to Late Precambrian. The sedimentary rocks are dominated by Huronian Supergroup clastic and carbonate formations, and igneous rocks by Nipissing gabbro and related phases.

The Huronian rocks mapped on the property include Espanola Formation limestones of the Quirke Lake Group and laminated and unlaminated wacke of the Gowganda Formation of the Cobalt Group. Huronian sediments are cut by gabbros assigned to the Nipissing intrusive suite. A Late Precambrian olivine diabase dike is mapped to the northwest and east of the claims and can be

expected to pass through the property just north of Shaw Island.

Structural features of the property are not well exposed. The wedge of Espanola Formation limestone on the peninsula west of Shaw Island is stratigraphically about 1000 feet above its expected position. (W. Meyer, pers. comm., 1985). This implies major dislocation, either by faulting or transport in the Nipissing gabbro magma. There is fracturing which suggests more major faulting than can be observed in outcrop adjacent to the limestone wedge, and Ontario Geological Survey Map 2451 shows two bounding faults. Currently available mapping does not show the extension of these faults into the claims to the southwest, but there is evidence of fracturing, alteration and weak mineralization in gabbro outcrop in claim S-721323 which may be related to the same structure.

The attitude of the Gowganda wacke units on the property is variable, strikes are generally to the northeast and dips in the vicinity of Shaw Island range from 85 E to 30 N.

The contact relationships between the sedimentary rocks and the intrusive gabbro are not well known. The olivine diabase body which is interpreted to pass through the northeastern part of the property is a well defined, nearly-vertical dike.

MINERALIZATION

Mineralization within the claim group appears to be related to emplacement of quartz-carbonate veins and veinlets in

fractures in and adjacent to fault zones in both sedimentary and igneous rocks of the property.

The mineralized zones all seem to be related to tectonic features. However, there is not sufficient information to permit definition of the precise location, attitude, and strike of the assumed dislocations on the property, although topographic features and subsidary fracturing allow interpretation of fault positions to within 10 to 20 meters.

Gold is present in the native state, usually on the margins of the veins and veinlets that we have inspected. Visible gold appears to be in relatively large grains of one to thirty milligrams and to be randomly distributed in the quartzcarbonate veins and veinlet systems. Assays of samples from the claims indicate that there is also some fine gold that is not likely to be visible in hand specimen, but the limited data that are available suggest the greater part of the metal is present in relatively coarse grains.

The common host rock for gold mineralization in the Wanapitei area is Middle Precambrian Nipissing gabbro and Huronian clastic sedimentary rocks of the Quirke Lake Group and the Cobalt Group.

Gold values are also reported from within the Espanola Formation limestone wedge. Quartz-carbonate veining is present in limestone float near the north end of Shaw Point in the northeast corner of claim S-721326. We did not observe similar

material in bedrock. However, the float most likely has a very local origin, since there are no other known outcrops of Espanola Limestone within five kilometers of the property.

The mineralized zones contain small amounts of sulphides. Pyrite and chalcopyrite are identified in both the Shaw Point area and from within the Nipissing gabbro where chlorite-quartzcarbonate alteration is observed in fracture zones assumed to be related to faults passing through the intrusive. Carbonate addition appears to be usual in all mineralized zones. It is commonly cream to creamy-pink in color and often is intimately mixed with quartz veinlets and impregnations.

Chloritization may be even more pervasive than carbonate addition. Both gabbros and sediments appear strongly chloritized in all locations where precious metal values are reported. In some exposures of quartz-carbonate mineralization, original rock forming minerals have been totally replaced by chlorite so that identification of the host rock becomes difficult at the hand specimen level.

The distribution of gold in the prospects appears to be typical of grain-dominated mineralization. The data at hand do not permit estimation of optimum sample size or provide a firm basis for planning a sampling program. However, our experience with similar mineral distributions suggests that there should be no particular difficulty in developing the data base required for proper interpretation of surface and diamond drill sampling

results. It should be expected that there will tend to be highly variable assay results from small samples, e.g. diamond drill cores, and that neither the extreme highs or lows should be considered as individually meaningful.

PRODUCTION

There has been no recorded production of metals from the property.

RESERVES

There is not sufficient information on which to base an estimate of resource or reserves.

EXPLORATION POTENTIAL

The property warrants exploration for precious metals, particularly in the area of Shaw Point, both on land and beneath the waters of Kukagami Lake.

The indications of gold mineralization in the series of trenches put down on fracture zones at the turn of the century are particularly interesting since they are located adjacent to a block of Espanola Limestone which is stratigraphically about three hundred meters above its expected position. The presence of the block of limestone is taken to suggest that there has been major dislocation in the Shaw Point area and that sort of dislocation would suggest good possibilities for extensive

ground preparation and possibly significant gold mineralization.

Elsewhere on the property there are indications of faultrelated alteration, minor sulphide mineralization, and variable gold values. While the Shaw Point prospect would seem to be the best location for development of a significant mineral deposit, these other areas warrant general investigation during the first phases of exploration of the claims.

GEOPHYSICAL SURVEYS

MAGNETIC SURVEYS

A magnetometer survey was completed on the property during January and February, 1986, using a model G-816/826 proton magnetometer manufactured by Geometrics Inc.

The instrument measures the instantaneous total magnetic field of the earth in gammas (nT) at the position of the sensor. This field will vary with time and is generally corrected to some arbitrary reference intensity. A base station was chosen on each base line and secondary base stations established along the base lines at the origin of all profiles. All readings were corrected for diurnal variation on the basis of data collected at the beginning and end of each circuit. Circuit time was kept to less than one hour and there were no large variations in magnetic intensity at any time during these surveys. Maximum station reading variation due to diurnal fluctuations in the intensity of the earth's magnetic field is estimated at less

than plus or minus five gammas.

Individual corrected magnetic determinations are plotted on the accompanying plans. The average total magnetic field in the area is about 58 300 to 58 600 nT. Maximum intensities recorded locally reached 61 000 nT, but usual amomalous readings are in the 59 000 to 59 600 nT range. Only the last four digits are plotted routinely on the accompanying plans.

ELECTROMAGNETIC SURVEYS

The electromagnetic surveys were done using a model EM-16 very low frequency receiver manufactured by Geonics Limited. This equipment is designed to operate using signals from military navigation stations transmitting in the 12 000 to 29 000 Hz frequency range. These military signals are designed primarily for the purposes of submarine navigation.

The primary signal penetrates ocean water to depths in the order of 100 meters and has been detected in rock at depths of 500 meters or more. The deeply-penetrating primary (magnetic) signal produces secondary currents along structural features that have electrical resistivity contrasting with that of the surrounding rocks. These secondary electrical currents can be detected by the VLF receiver which responds to the magnetic fields associated with them. The instrument provides the means of measuring the inclination of the resultant of the primary and secondary magnetic fields ('Real' component). These dip angle

data are used to interpret the axis of current flow and, by association, the axis of the conductive structure.

The instrument also provides a measure of the time lag between the primary and secondary fields ('Quadrature'), which is expressed in percent.

The dip angle data are of most use in structural interpretations. Profiles of the dip angle data are often used to illustrate graphically the inclination of the resultant field. Dr. D. C. Fraser describes a mathematical filter that gives contourable numbers to indicate the axis of conductive zones and, at the same time, removes some of the very long and very short wave length "noise" that is common to much geophysical survey data.

In the interpretation reviewed herein, conductive axes have been located using graphic and simple difference methods. The difference in dip angle between consecutive readings is determined by inspection. The conductive axis corresponds to the steepest slope or slopes observed. Interpretation can be done along survey lines and from one line to another, such as is necessary when the conductors are sub-parallel to the survey lines. When survey lines do not cut the conductive axes at a large angle, it is useful to visualize the resultant field associated with conductive axes as a surface that approximates a half-cylinder and consider each dip angle reading as a point determination representing a specific 'topographic' location on

that surface.

The amplitude of the anomaly associated with a conductive zone is a function of the frequency of the primary magnetic field, the conductivity of the structure, and the angle between the primary field and the axis of the conductor (coupling). The frequency is constant throughout the survey. Station NAA, Cutler, Maine, is the signal source used in the general survey. This station is now broadcasting at a frequency of 24 000 Hz. The angle between the primary magnetic field broadcast by station NAA and structural features oriented to the northeast is often in the order of 15 to 20 degrees or less. Therefore, the amplitude of the anomalies related to these faults of interest, determined at any point on the structure, would be, at best, only 25% to 35% of that obtainable if the coupling were 90 degrees.

Because of the low angle of coupling between the primary magnetic field broadcast by station NAA, many of the structures of interest are poorly defined by the VLF-EM survey reported herein. Additional detailed work should use the signal from a station south of the property. If the station schedule is inconvenient or if the signal strength inadequate, use of a portable signal source that could provide a more favourable field orientation is recommended.

INTERPRETATION OF SURVEY RESULTS

MAGNETIC SURVEY

The magnetic data collected during the magnetic surveys carried out over the Shaw Point property of Teckron Mines & Energy Corp. during January and February, 1986, indicate the limits of intrusive and sedimentary bodies, some of which appear to follow fault structures.

Two northwest-trending tabular bodies in the central part of the claim block (S-808338, S-734019, S-734018, S-721326) are indicated by the magnetic data. These have not been mapped in outcrop, but are interpreted to be diabase dykes, and will be verified in the field when snow cover melts.

There are several unexplained high-amplitude, local anomalies in the Shaw Point area, and others of the same nature in the southern part of the property. The latter appear to relate to patches of magnetite in the Nipissing intrusive which underlies much of the southern part of the claim group.

ELECTROMAGNETIC SURVEY

The strongest electromagnetic features detected by the survey lie in the northeast part of the property under the water of Kukagami Lake (S-808331 & S-808332). The cause is not known. The feature appears to have considerable vertical extent and is interpreted to be related to strong shearing with a west-north-

west trend. The geological maps of the southeastern corner of Rathbun township show an olivine diabase dyke that would pass through the area of the anomaly, but in a more northwesterly direction.

Two low amplitude anomalies pass through the central part of the claim group (S-734018, S-734019, S-721326, S-808338). These appear to be related to the south contacts of the tabular magnetic bodies interpreted to be diabase dykes. There appears to be a continuation of the conductive feature related to the more northerly "dyke" to the west from the shore of Kukagami Lake. But, there is no associated magnetic expression beyond the lake shore.

Northeasterly trending structures are not well outlined due to the relatively poor coupling with the primary magnetic field from station NAA. However, there are several features in the southeast corner of the property and one on Shaw Point that are interpreted to be related to faults with this orientation.

Further detailed electromagnetic surveying in the Shaw Point area will require use of the signal from a navigation station located to the south of the property or from a portable signal generator set up either north or south of the claim group.

Other short anomalies, most single-line features, probably relate to near surface steeply dipping bedrock/overburden interfaces.

EXPLORATION PROGRAM

The general geology of the property is relatively well established, but the details that relate to control of mineralization are not sufficiently well known to permit any sort of quantitative evaluation of the mineral resource which may be present.

Therefore, the following exploration program is proposed.

1. Establish a detail grid system in those parts of the property where additional surveying is warranted. The spacing and orientation of these control lines will depend on the survey requirements and local topographic conditions. Spacing as close as 25m with station separations of five to ten meters may be required, particularly near zones of mineralization.

2. Detailed magnetic surveys to cover those parts of the property that have alteration that is known to be associated with gold-bearing zones and in those areas where gold has been observed or has been indicated by assaying. The area of principal interest would be on, and adjacent to, Shaw Point, in parts of claims S-721326, 721327, 808330, and 808331.

3. Detailed electromagnetic surveys in all areas where mineralization is known or expected to occur. The coupling between the primary magnetic field broadcast by navigation stations NAA in Cutler, Maine, and NLK in Jim Creek, Washington,

USA is not ideal for tracing geological structures that are likely to be only modestly conductive. Additional surveying using a navigation station located south of the property, for example, in Maryland or Central America will be required. In the event that there are problems with the scheduling of these stations, or if their signals are not sufficiently strong to give good data, the use of a portable signal generator should be considered. This equipment allows orientation of the primary field to cut the structures being investigated at a high angle and permits their accurate location.

4. Geological mapping along and between the grid lines to better establish the geology of the claims and to provide fine detail in areas where mineralization is observed and where trenching, sampling and diamond drilling is warranted.

5. Diamond drilling of the Shaw Point showing and any other location where mineralization is found in the course of the geological and geophysical investigations.

6. Additional diamond drilling as warranted on the basis of results obtained in the preliminary drilling of showings or other likely targets.

7. Trenching of any areas in which gold mineralization is indicated where overburden will permit efficient and economic exposure of bedrock. In addition, trenching should be

considered in areas where geological and geophysical information suggest that favorable host structures may exist.

8. Sampling of those mineralized zones that can be exposed by The nature of the mineralization that trenching and stripping. we observed during a visit to the property indicates that some sort of bulk sampling will probably be necessary. The size of the sample necessary to give a minimum of five significant grains of metal cannot be determined from data presently available. However, assaying a series of samples of known size, treated with due regard to preparation of sub-samples, will give the necessary information. It is suggested that the mineralized zones be drilled and blasted systematically to yield individual samples of up to 200kg each. These samples should be crushed to approximately 1/4", mixed, sub-sampled in various sizes, pulverized, and assayed. Manipulation of the assay results according to appropriate mathematical procedures will establish reliability of a sample of a given weight and the the reliability of the general data base.

9. Assaying must be done on samples that have received careful preparation, weighing and metal extraction. Included in the assaying procedure must be determination of the quantity of gold that is coarse enough to remain on an 80-mesh screen, several analyses of the fine pulp, and combination of these data to give a reliable estimate of the metal content of the sample and

of the mineralized zone.

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ESTIMATED COSTS

The cost of the recommended work is estimated as follows:

Lines 8km @ \$200.00 (including land and water)	\$1	600.00
Magnetic surveys @1.80/sta (or av. \$225.00/km)	\$1	800.00
VLF-EM (TX-27 mode) @1.80/sta (av. 200.00/km)	\$1	600.00
Geological mapping general detailed	\$5 \$4	000.00
Trenching	\$10	000.00
Preliminary diamond drilling (350m @ \$82.00/m)	\$28	700.00
Additional drilling depending on results obtained in preliminary work. (Allowance) 300m @ \$82.00/m	\$24	600.00
Sampling	\$8	000.00
Assaying	\$4	000.00
Supervision, interpretation of results, et cetera.	\$6	200.00
Consulting and reporting	\$5	500.00
Travel, room & board	\$3	500.00
Vehicle charges	\$2	650.00
Drafting, secretarial, printing, binding, telephone, et cetera.	\$3	800.00
Contingency	\$15	000.00
TOTAL	\$116	450.00

REFERENCES

Dressler, Burkhard O.

1982: Geology of the Wanapitei Lake Area, District of Sudbury; Ontario geological Survey, Report 213, 131p. Accompanied by Maps 2450, 2451, scale 1:31 680 (1 inch to 1/2 mile).

Fairbairn, H.W.

1939: Geology of the Ashigami Lake Area, Ontario Department of Mines, Volume 48, 1939, Accompanied by Map 48m (Ashigami Lake Area)

Martins, J.M., et al

1979: McLean-Watt Gold Property; in Annual Report of the Regional and Resident Geologists, 1979, edited by C.R. Kustra, Ontario Geological Survey, Miscellaneous Paper 91, 143 p.

Pye, E.G., et al, (Editors)

1984: The Geology and Ore Deposits of the Sudbury Structure, Ontario Geological Survey, Special Volume 1, 603 p. Accompanied by Map 2491, at a scale of 1:50 000, Map NL-16/17-AM Sudbury, at a scale of 1:1 000 000, and 3 charts.

Slaght, A.

1

1894: Fourth Report of the Inspector of Mines; Ontario Bureau of Mines, volume 4, 1894. 1896: Fifth Report of the Bureau of Mines; 1895, p.56.

Thompson, J.E.

1961: Maclennan and Scadding Townships; Ontario Department of Mines, Geological Report 2, 34p. Accompanied by Map 2009, scale 1 inch to 1/2 mile.

1986.

CERTIFICATE

James E. Tilsley, of the town of Aurora, Province of I, Ontario, hereby certify:

- I am a Consulting Geologist and reside at 5 Steeplechase 1. Avenue, Aurora, Ontario.
- 2. I am a graduate of Acadia University, 1959, B.A., Geology.
- I am a member of the Association of 3. Professional Engineers of Ontario, The Association of Professional Engineers of Manitoba and designated Consulting Engineer, Ontario Association of Professional Engineers, 1975.
- I have been employed as a geologist since graduation, 4. with consulting groups since 1964 and in private practice since 1980.
- 5. This report is based on study of records relating to the property as available from the assessment files of the Ministry of Natural Resources, province of Ontario, reports of the Geological Survey of Canada, maps and reports published by the Ontario Bureau of Mines, the Ontario Department of Mines, and the Ontario Geological current technical literature, review of Survey, activities on the claims during the past two years, observations made during a visit to the property on September 4th, 1985, and the results of geophysical surveys carried out under my supervision in January and February 1986.
- I have no interest, direct or indirect, in the proper-ties or securities of Teckron Mines & Energy Corp., 6. or any affiliates, nor do I expect to receive any such interest.

18 Th day of March Dated at Aurora, Ontario this CROFESSIONAL

) Ontario

Ministry of Northern Development and Mines

Geophysical-Geological-Geochemical Technical Data Statement

File_

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) PROTON	MAGNETOMETER; VLF-EM	1
Township or Area SCADDING	5 & RATHBUN	MINING CLAIMS TRAVERSED
Claim Holder(s) R.J. FIEL	DING - OPTIONED TO	List numerically
TECKRON	MINES & ENERGY CORP.	
Survey Company JAMES. E	TILSLEY & ASSOC (D.J. GILN	
Author of Report J. E. TIL	SLEY (PEEMS) (prefix) (number) Q 17213.07
Address of Author 5 STEEPLE	CHASE AUG. AURORA ONT.	
Covering Dates of Survey_ JAN	7 '86 - MAR. 18 '86	<u>S. 324</u>
	(linecutting to office)	325
Total Miles of Line Cut		326
SPECIAL PROVISIONS	DAVS	207
CREDITS REQUESTED	Geophysical per claim	
4	-Electromagnetic	5 734018
ENTER 40 days (includes	-Magnetometer	019
survey.	-Radiometric	5 809 329
ENTER 20 days for each	–Other	
additional survey using	Geological	<u>3.30</u>
same grid.	Geochemical	3.3.1
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Res. Geol Quali	fications	227
Previous Surveys		
File No. Type Date	Claim Holder	
		339
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FFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

9	GROUND SURVEYS – If more than one su	arvey, specify data for each type of survey
Ν	lumber of Stations	Number of Readings 4698 MAG; 4195 VLF
S	tation interval 10m & LESS	Line spacing 100m & 25m
P	rofile scale	
C	Contour interval 200 nT	
LECTROMAGNETIC MAGNETIC	Instrument GEOMETRICS Accuracy Scale constant \pm 100 Diurnal correction method Rolling Base Station check-in interval (hours) Base Station location and value Base Station location and value	NC. PROTON MAGNETOMETER SER# 6010 T NG BASE STATION $\langle 1 hn$ BL 0+00 / 1+00E 58275 nT E.M 16 SER # 5394- Mitter \Box Shoot back \Box In line \Box Parallel line A.O KHZ
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VIT	Corrections made	
<u>GRA</u>	Base station value and location	
	Elevation accuracy	C. C
	Instrument	
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ION	Electrode spacing	
-4	Type of electrode	

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SELF POTENTIAL		
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Survey Method		
Corrections made		
RADIOMETRIC		
Instrument		
Values measured		
Energy windows (levels)		
Height of instrument	Background Count	
Size of detector		
Overburden		
	(type, depth — include outcrop map)	
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GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken_____

Total Number of Samples	ANALYTICAL METHODS					
Type of Sample	Values expressed in:	per cent p. p. m. p. p. b.				
Method of Collection	Cu, Pb, Zn, Ni, Co,	Ag, Mo,	As,-(circle)			
Soil Horizon Sampled	Others					
Horizon Development	Field Analysis (tests)			
Sample Depth	Extraction Method					
Terrain	Analytical Method					
Drainage Development	Field Laboratory Analysis		·····			
Estimated Range of Overburden Thickness	No. (tests			
Istimated Range of Overbarden Americas	Extraction Method					
	Analytical Method					
	Reagents Used		· .			
SAMPLE PREPARATION	Commercial Laboratory (_		tests)			
Mesh size of fraction used for analysis	Name of Laboratory	<u>.</u>	••••••••••••••••••••••••••••••••••••••			
,,,.,	Extraction Method		·····			
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TECKRON MINES & ENERGY CORP.

EAGLE'S NEST PROPERTY

Kukagami Lake - Sudbury Mining Division District of Sudbury, Ontario

James E. Tilsley & Associates Ltd. Consulting Geologists and Engineers Aurora, Ontario, Canada L4G 3G8

May 28 40

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41110NE0046 63.4950 RATHBUN

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MAPS

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Humus Geochemistry Gold - ppb	1:2000	in pocket	

SUMMARY AND CONCLUSIONS

The Eagle's Nest property of Teckron Mines & Energy Corp. located in Rathbun and Scadding townships, Sudbury Mining Division, Ontario has been investigated by geophysical, geological, and geochemical surveys. Stripping and trenching has been done in the Shaw Point area and at other locations to the southwest of the main gold occurrences on the claims.

The areas where it was possible to remove overburden and wash the bedrock, e.g. Shaw Point, do not show sufficient concentrations of gold bearing veins to be of current economic interest. However, additional prospecting remains to be done in other locations within the claim group.

While fifteen samples were tested for platinum group metals, additional attention to the possibility of economic concentrations of these metals is warranted. Recent discoveries of platinum group metals in Nipissing gabbros in the Sudbury area demonstrate the potential of this rock unit. Further prospecting, in particular along the gabbro dykes indicated by magnetic data, is recommended.

sediments. Additional stripping was done in the southeastern part of claim S-721326 and 10m³ of material was removed from an altered zone on line 300mE at 215mS.

Eighty-one samples of the veins and altered zones were taken and assayed for gold. Fifteen samples were also assayed for platinum and palladium.

The prospect lies approximately four miles NNE from the Scadding township McLean-Watt gold property of Northgate Exploration Limited and about the same distance SSE of the Flag Resources Ltd. Matagamasi Lake gold prospect in Rathbun Twp.

LOCATION AND ACCESS

The property is located in the extreme northeast corner of Scadding township and the extreme southeastern corner of Rathbun township, Sudbury Mining Division, Ontario.

Approximate co-ordinates are:

46° 44' 00"N; 80° 35' 00"W:

The property can be reached from Sudbury via Highway 17 East to the Kukagami Lake Road, then approximately twelve miles north through Street and Scadding townships to a local cottage property access road that leads northeast three miles (5.0km) to private cabins on the west shore of Shaw Point of Kukagami Lake, within claim No. 721326 of the group.

In most seasons, travel time by road from the Sudbury airport to the claims is approximately one hour.

Sudbury has daily bus, train and airline connections to other parts of the province and North America.

PROPERTY

The property consists of 19 unpatented mineral claims held in the name of Rodney J. Fielding of Hanmer, Ontario. The claims are currently under option to Teckron Mines & Energy Corporation and the work reported herein has been funded by that company and carried out on its behalf.



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Claim No.	Township	Claim No.	Township
808329	Rathbun	721323	Scadding
808330	n	721324	n
808331	۳	721325	77
808332	n	721326	n
808333	n	721327	π
808334	Scadding	734018	π
808335	n	734019	Π
808336	n		
808337	Π .		
808338	n		
808339	n		
808340	π		

LIST OF CLAIMS

SURFACE RIGHTS

The claims cover Crown Lands with the exception of approximately five acres designated 'Plan M-970' which include five cottages with frontage on Kukagami Lake. Use of surface rights on Crown Lands is governed by the standard regulations. Use of surface rights to the lands described in Plan M-970 must be negotiated with the private owners.

There is also the standard 400 foot surface rights

reservation along the shores of Kukagami Lake. Use of this land is restricted except with prior permission from the Department of Natural resources.

CLIMATE

The area has a continental climate typical of central Canada. Precipitation totals approximately 34 inches (863mm) per annum, relatively well spread throughout the year. Snow accumulations of 700 to 1300mm are frequently observed in average winters, with first significant falls in late October or early November. Continuous cover can be expected from early December until mid-April in most years.

Summer-time maximum temperatures may exceed 30° Celcius and winter minimums in the range of -40° C are not uncommon in January and February. Mean summer maximums are approximately 23° Celcius and mean summer minimums about 12° C. Winter mean maximums are in the range of -7° C and mean minimums -21° C.

TOPOGRAPHY

Kukagami Lake has an elevation of 278m (912') above sea level. Within Scadding Township the land rises to approximately 325m (1066'). In general, the surface is rolling, with occasional abrupt hillocks of bedrock, especially along lake shores where low cliffs are common. Relief is usually less than 30m (100'). There are some low-lying swampy areas but the

greater part of the land area of the Township is relatively dry. Drainage is west to Wanapitei Lake, Wanapitei River, the French River and Georgian Bay.

LOCAL RESOURCES

Sudbury is a city with a population of approximately one hundred and sixty thousand. There is a long history of mining and smelting with a skilled work force in both mining and related support functions. Men, equipment, supplies, and services are all available locally.

Medical facilities are excellent, with several clinics and hospitals in the city.

Rail, highway, and air transportation are excellent to southern Ontario and points east and west of Sudbury.

The claims are forested with several varieties of pine, spruce, balsam fir, cedar, and assorted deciduous species. Some of the timber is merchantable but there have been no recent lumbering or pulp wood operations.

Industrial power is available within twelve miles of the property and local transmission lines provide domestic electricity to residents. Telephone communications, local and international, are possible from homes and businesses on Kukagami Lake.

HISTORY

Gold was first reported from the Kukagami Lake area in the fall of 1891. (Ontario Bureau of Mines, 1892 p.237) The discovery may have been made during surveying of the Scadding -Rathbun township line. The location given for the initial discovery is not specific enough to confirm that it is the same prospect described subsequently as the 'Eagle's Nest mine' (Ontario Bureau of Mines, 1896, p.56), but the two reports appear to refer to the same occurrence.

Slaght, 1896, op. cit., reports sixteen veins "running northwest and southeast and one lateral vein on the property." The geographic position of the veins is given as "locations WD25 and WD40", both on Shaw Point and included in the present claim group. The work mentioned by Slaght was comprised of stripping, and the sinking of ten test pits which were six to ten feet deep and eight to twenty-five feet long.

There is no other record of work from that time, nor do the assessment files show additional ground surveys or prospecting activity subsequent to the claims reverting back to the Crown for non-payment of taxes in 1920. However, Scadding Township was included in an airborne magnetic and electromagnetic survey done by Kennco Explorations (Canada) Ltd. in 1968. The survey apparently covered the Eagle's Nest property but there is no record of follow-up work within the boundaries of the present claim group.

The trenches from the work done in the late 1800's were still locatable at the beginning of the project but were partially filled with rotting vegetation and slumped soil. General prospecting had been done in the claim group in the two previous years, but little new excavation was completed prior to the summer of 1986. One trench had been cleaned out north of the section pitted during 1892-96 and showed occasional 1 to 30mg grains of free gold on the contact of quartz-carbonate veining with chloritic gabbro. Sampling of limestone float boulders from the north part of Shaw Point had also indicated gold values but, when the source of this material was exposed by trenching and stripping on Shaw Point, no extensive zone of mineralization in the limestone was located.

Grab samples taken during examinations done in the past two years returned assays ranging from nil to over 20 oz. Au/ton.

The property was acquired under option by Teckron Mines & Energy Corp. in late 1985 and a program of geophysical surveying undertaken at the beginning of 1986. During January 1986 a total of 47.93km of control lines was established. The base line was laid out approximately along the common boundary of Rathbun and Scadding townships. Profiles run north and south from the base line. The grid was surveyed geophysically during late January and February 1986. Results of that work are discussed in an earlier report.

During the summer of 1986 the property was mapped

geologically, stripping and trenching were done in the Shaw Point area, geochemical studies were conducted, and seventy rock samples were collected and analyzed for gold and other metals.

GEOLOGY

GENERAL

Reconnaissance geological mapping in the Sudbury area was done as early as 1853 when Alexander Murray conducted river and lakeshore traverses that included the Wanapitei River and parts of the shoreline of Lake Wanapitei. Bell and Barlow worked in the Sudbury Basin beginning in 1888 and included part of the Wanapitei Lake area in their map published in 1891. Collins worked to the south of Lake Wanapitei in 1912 and reported his results in 1914. It was not until 1921, when Quirke mapped Scadding township as part of his regional study, that a geological compilation covering the Eagle's Nest property was completed. Fairbairn mapped Scadding township as part of his Cooke et al., prepared 1938 Ashigami Lake project. the Falconbridge sheet in 1946 and revised Quirke's 1922 map. Thomson mapped Scadding and Maclennan townships during the 1956 to 1959 field seasons but did not re-map those areas covered by Fairbairn in 1938. Thomson reported his findings and presented a compilation in 1961 (ODM Geological Report No.2 and Map No. The most recent study of the area is based on field 2009). work by Dressler and assistants in 1977 and 1978 described in



LEGEND

PHANEROZOIC

CENOZOIC[®]

QUATERNARY

PLEISTOCENE AND RECENT

Gravel, sand, silt, swamps.

UNCONFORMITY

PRECAMBRIAN^b

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

14a Olivine diabase.

INTRUSIVE CONTACT

MIDDLE PRECAMBRIAN

SUDBURY EVENT

MAFIC INTRUSIVE ROCKS

NIPISSING INTRUSIVE ROCKS

	 11
-	 11

- 11a. Gabbro. 11b. Pegmatitic gabbro. 11c Granophyre.
- 11d Granitic dike rock, pegmatite.
- 11e Quartz-plagioclase porphyry. †
- INTRUSIVE CONTACT

HURONIAN SUPERGROUP

COBALT GROUP

LORRAIN FORMATION

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and set 2	
in the second	

- 10a Grey wacke. Arkose, subarkose, minor subarkose, wacke and quartz wacke, (10b, c, and d). 10b Pink, pinkish grey.
- 10c Grey.
- 100 Greenish grey, grey.† 10e Quartz wacke to subarkosic
- wacke.† 10f Arenites, unsubdivided.†

GOWANDA FORMATION

- 9a Conglomerate
- 9b Arkose. 9C Wacke (not laminated). 9d Laminated wacke. 9e Wacke unsubdivided.†

QUIRKE LAKE GROUP

SERPENT FORMATION

8a Arkose, arkosic wacke, calcareous arkose, minor conglomerate. 8b Dolomite porphyroblastesis.

ESPANOLA FORMATION

7a Calcareous siltstone, limestone, calcareous wacke.

TECKRON MINES & ENERGY CORP.

RATHBUN & SCADDING TOWNSHIPS, SUDBURY DISTRICT, ONT.

GENERAL GEOLOGY

SCALE 11N. to 1/2 MI.



Ontario Geological Survey Report 213.

The geology of the Wanapitei Lake area is summarized in Table 1 (from Dressler, 1982) and applies to the portion of Scadding and Rathbun townships within and adjacent to the property under consideration.

SURFICIAL GEOLOGY

The area was glaciated during Pleistocene time. Deposits of till, outwash sands and gravels, and clay and silt cover much of the bedrock inland from Kukagami Lake. Overburden is generally less than 1.5m on higher ground but may be considerably thicker in intervening till and glacial outwash-filled swales and swampy areas. The last ice advance was from the northeast with most striae in the area reported to indicate a direction five to twenty degrees east of true north. Our observations of features relating to the direction of ice movement within the property boundaries suggests a single ice advance from about 040°. Till cover is seen to be relatively thin in most parts of the claim group, excepting in narrow, low-lying depressions where accumulations of three to five meters have been found during trenching.

BEDROCK GEOLOGY

Consolidated rocks of the area range in age from Early Precambrian to Late Precambrian. The sedimentary rocks are dominated by Huronian Supergroup clastic and carbonate format-

FELSIC PLUTONIC ROCKS Granodiorite, diorite, migmatite. Intrusive Contact METAVOLCANICS AND METASEDIMENTS METASEDIMENTS Wacke, arkose, gneisses, ironstone, ferruginous chert. METAVOLCANICS FELSIC METAVOCLANICS MAFIC AND INTERMEDIATE METAVOLCANICS Mafic and intermediate metavolcanics, amphibolite, dacite.

ions, and igneous rocks by Nipissing gabbro and related phases.

The Huronian rocks mapped on the property include Espanola Formation limestones of the Quirke Lake Group and laminated and unlaminated wacke of the Gowganda Formation of the Cobalt Group. Huronian sediments are cut by gabbros assigned to the Nipissing intrusive suite. A Late Precambrian olivine diabase dike is mapped to the northwest and east of the claims and can be expected to pass through the property just north of Shaw Island.

Structural features of the property are not well exposed. The wedge of Espanola Formation limestone on the peninsula west of Shaw Island is stratigraphically about 1000 feet above Meyer, pers. comm., its expected position. 1985). (W. This implies major dislocation, either by faulting or transport in the Nipissing gabbro magma. There is fracturing which has been interpreted to indicate more major faulting than can be observed in outcrop adjacent to the limestone wedge, and Ontario Geological Survey Map 2451 shows two bounding faults. Our work has not located either of the assumed faults.

Currently available published mapping does not show the

TABLE OF LITHOLOGIC UNITS FOR THE LAKE WANAPITEI AREA.

PHANEROZOIC

CENOZOIC

Quaternary

RECENT

PLEISTOCENE

Swamp, lake, and stream deposits.

Glacial and glaciofluvial sand and gravel deposits.

Unconformity

PRECAMBRIAN

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

Olivine diabase.

Intrusive Contact

MIDDLE PRECAMBRIAN

SUDBURY NICKEL IRRUPTIVE Sublayer, norite, transition zone norite, micropegmatite, granitic rock.

Intrusive Contact

WHITEWATER GROUP ONAPING FORMATION

Tuff, quartzite breccia.

SUDBURY EVENT

Explosive volcanism or meteorite impact; Sudbury-type brecciation.

NIPISSING INTRUSIVE ROCKS

Gabbro, granophyre, granitic dike rock, pegmatite, quartz-plagioclase porphyry.

Intrusive Contact

HURONIAN SUPERGROUP

COBALT GROUP

LORRAIN FORMATION

Arkose, subarkose, subarkosic wacke, quartz wacke, arenites.

GOWGANDA FORMATION

Wacke, arkose, conglomerate.

QUIRKE LAKE GROUP

SERPENT FORMATION

Arkose, arkosic wacke, calcareous arkose, minor conglomerate.

ESPANOLA FORMATION

Calcareous siltstone, limestone, calcareous wacke.

BRUCE FORMATION

Conglomerate, pebbly wacke, minor arkose, wacke.

HOUGH LAKE GROUP

MISSISSAGI FORMATION

Arkose, subarkose, arkosic wacke, subarkosic wacke, conglomerate, and silty wacke.

Unconformity

EARLY PRECAMBRIAN Mafic Intrusive Rocks

Diabase, glomeroporphyritic diabase, porphyritic diabase.

Intrusive Contact

extension of these interpreted faults into the claims to the southwest, however, there is evidence of fracturing, alteration and weak mineralization in gabbro outcrop in claim S-721323 which lies along the assumed strike of the same structure. Mapping on the property did not locate additional evidence for extensive faulting, and we propose that zones of weakness rather than major dislocations exist in this area.

Stripping and trenching along the northwestern contact and across the limestone block shows it to be 'floating' in Nipissing gabbro, and that there is no well-developed faulting. There may be a fault beneath the swale that passes along the southern limit of the exposure of altered gabbro which hosts the auriferous quartz veins of the Shaw Point showing.

The attitude of the Gowganda wacke units on the property is variable, strikes are generally to the northeast and dips in the vicinity of Shaw Island range from 85°E to 30°N. Observations are plotted on the accompanying geological plan.

The contact relationships between the sedimentary rocks and the intrusive gabbro are not well known due to poor exposure and the relatively flat-lying relationships in the southern part of the claim group.

Magnetic data suggest two distinct nearly vertical tabular bodies in claims S-721326, S-721327, S-734018, S-734019, S-808338, and S-808339. These are interpreted to be Nipissing gabbro, based on one exposure on line 600mE at 150mS. The

magnetic anomalies strike at about 310°. The most easterly one corresponds to a depression which crosses the general trend of surface features on the property. The second tabular body lies approximately 100m to the southwest. It is parallel to the first, but does not have topographic expression. Interpreted contacts are shown on the geological plan (in pocket). The Nipissing gabbro in the area of the property is mapped as a relatively flat-lying sheet. The tabular bodies indicated by magnetic data are interpreted to be dykes of the same composition. Both have electromagnetic expression suggesting emplacement was along fault planes. West of the property that there are observed faults with similar orientation, and the dyke like features are interpreted to be emplaced in zones of weakness that are part of that system.

The olivine diabase body which is interpreted to pass through the northeastern part of the property is a well defined, nearly-vertical dike. It has not been observed in outcrop on the claims.

MINERALIZATION

Mineralization within the claim group appears to be related to emplacement of quartz-carbonate veins and veinlets in fractures in and adjacent to fault zones in both sedimentary and igneous rocks of the property.

The mineralized zones all seem to be related to tectonic features. These features appear to be zones of weakness rather

than distinct fault planes. Strong chlorite alteration of the gabbro with introduction of carbonate and minor sulphides is the most obvious indication of precious metal mineralization. Flat-lying quartz-carbonate veins are the chief carriers of visible gold. They are usually less than 10cm thick. Gold is normally found only on the lower margins of the veins, occasionally on the upper contact, and rarely within the quartz or carbonate of the central part of the veins.

Visible gold appears to be in relatively large grains of one to thirty milligrams and to be randomly distributed in the quartz-carbonate veins and veinlet systems. Assays of samples from the claims indicate that there is also some fine gold that is not likely to be visible in hand specimen, but our observations and the assay data that are available suggest the greater part of the metal is present in relatively coarse grains.

The common host rock for gold mineralization in the Wanapitei area is Middle Precambrian Nipissing gabbro and Huronian clastic sedimentary rocks of the Quirke Lake Group and the Cobalt Group.

Gold values are also reported from within the Espanola Formation limestone wedge. Quartz-carbonate veining is present in limestone float near the north end of Shaw Point in the northeast corner of claim S-721326. Stripping and trenching in the Shaw Point area exposed the western margins of the limestone

block but no extensive zone of similar auriferous material was located in bedrock.

The mineralized zones contain small amounts of sulphides. Pyrite and chalcopyrite are identified in both the Shaw Point area and from within the Nipissing gabbro where chlorite-quartzcarbonate alteration is observed in fracture zones assumed to be related to faults passing through the intrusive. Carbonate addition appears to be usual in all mineralized zones. It is commonly cream to creamy-pink in color and often is intimately mixed with quartz veinlets and impregnations.

Chloritization may be even more pervasive than carbonate addition. Both gabbros and sediments appear strongly chloritized in all locations where precious metal values are reported. In some exposures of quartz-carbonate mineralization, original rock forming minerals have been totally replaced by chlorite so that identification of the host rock becomes difficult at the hand specimen level.

The distribution of gold in the prospects appears to be typical of grain-dominated mineralization hosted by quartzcarbonate veins. There may be some gold in the altered host rock of the quartz veins, but our results do not indicate pervasive precious metal mineralization in the altered zones.

Since the gold values in the zones studied are related chiefly to quartz-carbonate veining and not to the general alteration envelope, the number of veins and veinlets becomes

critical to the development of a mineable zone.

The frequency of quartz veins in the Shaw point area is not great enough to produce a mineable concentration of metal, at least in the areas that we were able to expose by trenching and stripping.

GEOCHEMISTRY

The usual soil geochemistry is not particularly effective in areas where distally derived tills and lacustrine sediments cover bedrock, such as is the case on the Teckron Mines & Energy Corp. Eagle's Nest property.

Forest mull (humus) developed from leaves, needles, bark and wood from trees growing on the overburden, will reflect the chemistry of the material penetrated by the roots. If the tree roots can traverse the overburden and reach bedrock, the metal content of the mull will be indicative of the geochemistry of the rock in place.

Those areas of the property where overburden cover is less than about two to three meters, and where the water table is not high in the overburden profile, are favorable for this type of investigation.

The humus material can be analyzed by a variety of methods. Neutron activation of pellets of humic material has proven to be an accurate, cost-effective procedure particularly suited to the sampling medium. The element of most interest on the property

is, of course, gold. Neutron activation analysis techniques are also suitable for the determination of very small quantities of other elements as well. The cost of 'additional' elements, if done at the same time as the gold analyses, are low and may be useful in selection of the most favorable target areas in some Therefore, samples were analysed for the full range of cases. compatible with the neutron activation elements method. are gold, chromium, iron, cobalt, zinc, arsenic, Included selenium, bromine, molybdenum, silver, antimony, barium, tantalum, tungsten, thorium, and uranium. Gold values are reported in parts per billion [1 ppb = 0.001 ppm or 1/1000 of one gram (one milligram) per tonne]. Iron is reported in percent. A11 other elements are reported in parts per million (ppm or grams per tonne).

The metal of prime interest in this area is gold. Discussions are confined to the gold results obtained. Data in respect to gold and to the other elements is given on the assay certificates, copies of which are included in Appendix II.

159 humus samples were collected at 50m intervals along selected profile lines. These samples were analyzed by neutron activation as noted above. Gold values are plotted on the plan of the grid (in pocket). There is one distinctly anomalous value on line 1000mE at 300mS in claim S-734019 (370ppb Au). This is a single point anomaly that compares with a usual gold content of the humus of about 10 to 20ppb. The meaning of this

isolated value cannot be interpreted from the data available. Further sampling in the area immediately adjacent to this location will be necessary.

It is notable that there are not high gold values in the humus samples collected from Shaw Point where the presence of gold is known from sampling of alteration zones and quartzcarbonate veins. Variation in the gold content of the samples taken appears to relate more to overburden conditions than to bedrock geology. The sampling program has covered only a portion of the property. Further sampling will be required to complete the data base and permit full interpretation of the results.

It appears that geochemical results are not likely to indicate clearly the presence of narrow gold-bearing veins. Zones of alteration that carry gold may be detected by geochemical surveying, perhaps by reference to other associated 'indicator' metals. When additional samples are available further manipulation of the data to study possible associations is recommended.

REFERENCES

Dressler, Burkhard O.

1982: Geology of the Wanapitei Lake Area, District of Sudbury; Ontario geological Survey, Report 213, 131p. Accompanied by Maps 2450, 2451, scale 1:31 680 (1 inch to 1/2 mile).

Fairbairn, H.W. 1939: Geology of the Ashigami Lake Area, Ontario Department of Mines, Volume 48, 1939, Accompanied by Map 48m (Ashigami Lake Area)

Martins, J.M., et al

1979: McLean-Watt Gold Property; in Annual Report of the Regional and Resident Geologists, 1979, edited by C.R. Kustra, Ontario Geological Survey, Miscellaneous Paper 91, 143 p.

Pye, E.G., et al, (Editors)

1984: The Geology and Ore Deposits of the Sudbury Structure, Ontario Geological Survey, Special Volume 1, 603 p. Accompanied by Map 2491, at a scale of 1:50 000, Map NL-16/17-AM Sudbury, at a scale of 1:1 000 000, and 3 charts.

Slaght, A.

1894: Fourth Report of the Inspector of Mines; Ontario Bureau of Mines, volume 4, 1894.1896: Fifth Report of the Bureau of Mines; 1895, p.56.

Thompson, J.E.

1961: Maclennan and Scadding Townships; Ontario Department of Mines, Geological Report 2, 34p. Accompanied by Map 2009, scale 1 inch to 1/2 mile.

CERTIFICATE

I, James E. Tilsley, of the town of Aurora, Province of Ontario, hereby certify:

- 1. I am a Consulting Geologist and reside at 5 Steeplechase Avenue, Aurora, Ontario.
- 2. I am a graduate of Acadia University, 1959, B.A., Geology.
- 3. I am a member of the Association of Professional Engineers of Ontario, The Association of Professional Engineers of Manitoba and designated Consulting Engineer, Ontario Association of Professional Engineers, 1975.
- 4. I have been employed as a geologist since graduation, with consulting groups since 1964 and in private practice since 1980.
- 5. This report is based on study of records relating to the property as available from the assessment files of the Ministry of Natural Resources, province of Ontario, reports of the Geological Survey of Canada, maps and reports published by the Ontario Bureau of Mines, the Ontario Department of Mines, and the Ontario Geological Survey, current technical literature, review of activities on the claims during the past two years, observations made during visits to the property in the fall of 1985, and the summer of 1986, and the results of geological, geophysical, and geochemical surveys, trenching, stripping, and sampling, carried out under my supervision during 1986.
- 6. I have no interest, direct or indirect, in the properties or securities of Teckron Mines & Energy Corp., or any affiliates, nor do I expect to receive any such interest.

Dated at Aurora, Ontario this 1987.

28 Th day of PROFESSIONAL

Appendix I

Assay Certificates Rock Samples

.

X-RAY ASSAY LABORATORIES LIMITED

1885 LESLIE STREET, DON MILLS, ONTARIO M3B 3J4

PHONE 415-445-5755 TELEX 06-986947

CERTIFICATE DF ANALYSIS

TD: JAMES E. TILSLEY & ASSOCIATES LTD ATTN: J.E. TILSLEY GP BOX 115 5 STEEPLECHASE AVENUE AURORA, ONTARIO L4G 3G8 CUSTOMER ND. 27 DATE SUBMITTED 23-MAY-86

REPORT 27913

,

REF. FILE 23571-P4

11 ROCKS

WERE ANALYSED AS FOLLOWS:

		METHOD	DETECTION LIMIT
AU	PPB	FADCP	1.000
PD	PPB	FADCP	2.000
ΡΤ	PPB	FADCP	10.000

TOR IES/LIMIT X-RAY ASSAY LABOR D CERTIFIED BY

DATE 03-JUN-86

SAMPLE	AU PPB	PD PPB	PT PP3
1-1	4	<2	10
T-2	1	<2	<10
T-3	3	<2	10
T - 7	<1	<2	<10
T-9	<1	<2	10
T-11	<1	<2	<10
T-12	3	<2	<10
T-13	1	<2	<10
T-14	5	<2	<10
T-15	49	<2	<10
T-15A	5	<2	<10

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TECKON

CERTIFICATE OF ANALYSIS

TD: JAMES E. TILSLEY & ASSOCIATES LTD ATTN: J.E. TILSLEY GP BOX 115 5 STEEPLECHASE AVENUE AURORA, ONTARIO L4G 3G8

CUSTOMER ND. 27

DATE SUBMITTED 17-NOV-86

REPORT 30134

1

REF. FILE 25838-F4

4 ROCK

WERE ANALYSED AS FOLLOWS:

		METHOD	DETECTION LIMIT
AU	PPB	FADCP	1.000
РD	PPB	FADCP	2.000
ΡT	PPB	FADCP	10.000

X-RAY ASSAY LABORATORIES LIMITED CERTIFIED BY

DATE 21-NOV-86

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TECKRON

1 OF

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PAGE

21-NOV-86	REPORT 301	34 REF.	FILE 25838-	F 4
SAMPLE	AU PPB	PD PPB	PT PPB	_
615	>10000	9	<10	-
616	>10000	8	10	
617	1900	2	<10	
618	>10000	3	<10	

- CONCENTRATION TOO HIGH FOR GEDCHEMICAL ANALYSIS

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	Bell - White analytical laboratories Ltd.	
	P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107	
	Certificate of Analysis	
NO. 1159	DATE: August 6, 1986	
SAMPLE(S) OF:	Rock (2) RECEIVED: August 1986	
SAMPLE(S) FROM:	Mr. Daniel Gignac, Precambrian Exploration & Mining Serv	ices
<u></u>	Re: Tecktron Mines Ltd.	

Sample No.	Gold ppb
8417	34
8	2

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

Bell - White ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 1160		DATE:	August 6, 1986
SAMPLE(S) OF:	Rock (16)	RECEIVED:	August 1986
SAMPLE(S) FROM:	Mr. Daniel Gignac, Teckron M	ines Ltd.	

Sample No. Gold ppb Oz. Gold 0.033** 0.038** 0.070**

** Checked

IN ACCORDANCE WITH LONG ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS. BELL-WHITE ANALYTICAL LABORATORIES LTD.

Page

				TECKRON	
	Bell - White	ANALYTICAL LABO	RATOR	RIES LTD.	
	P.O. BOX 187,	HAILEYBURY, ONTARIO	TEL:	672-3107	
Certificate of Analysis					
NO. 1216		DATE	Ξ:	August 13, 1986	
SAMPLE(S) OF:	Rock (4)	RECE	EIVED:	August 1986	
SAMPLE(S) FROM:	Mr. Daniel Gign	ac, Teckron Mines Ltd	۱.		

Sample No.	Gold ppb
8419	44
8420	21
1	38
2	18

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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BELL-WHITE ANALYTICAL LABORATORIES LTD.

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Bell-White analytical laboratories LTD.

P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 1483		DATE:	September 21, 1986
SAMPLE(S) OF:	Rock (24)	RECEIVED:	September 1986
SAMPLE(S) FROM:	Mr. Dan Gignac, Teckron Mines Lt	d.	

Samp.No.	Au ppb	Au oz.	Pt ppb	Cu ppm	Ag ppm	<u>Ni ppm</u>
11663/	30	See Sauth				
4	40 - 260					
5	38					
6	10					
ľ	42					
8	5 9					
9 :	12					
11670	40/**					
14						
2	25	0 120**			•	
5	22	0.130				
4' r/	33	0 510**				
D'	4.0	0.510				
0 7 ⁄	40					
/	1/0					
0' 0/	51 51					
11680/	24					
1/000	60	1				
2/	12					
3/	282					
۵ı	271**					
5	206**					
6	19		less than 5	0 86	0.2	78

** Checked

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-GATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

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		Bell - White	ANALYTICAL L	ABORATOR	IES LTD.	
		P.O. BOX 187,	HAILEYBURY, ONTA	RIO TEL:	672-3107	
		Certifi	icate of Analy	sis		
NO.	1941			DATE:	November 20, 19	986
SAN	MPLE(S) OF:	Rock (20)		RECEIVED:	November 1986	
SAN	MPLE(S) FROM:	Mr. Dan Gign	ac, <u>Teckron Mines</u>	Ltd. OK	W	

Sample No.	Gold ppb
8423	32
4	8
5	19
6	4
7	7
8	3
11687	8
8	3
9	27
11690	4
1	1
2	4
3	4
4	73
5	6
6	340**
7	14
8	3
ğ	Ĩ
11700	10

** Checked

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-GATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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BELL-WHITE ANALYTICAL LABORATORIES LTD.



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Appendix II

Assay Certificates Humus Samples

TECKROS EAGLE :

CERTIFICATE OF ANALYSIS

TO: JAMES E. TILSLEY & ASSOCIATES LTD ATTN: J.E. TILSLEY GP BOX 115 5 STEEPLECHASE AVENUE AURORA, ONTARIO L4G 3G8

CUSTOMER ND. 27

DATE SUBMITTED 10-NOV-86

REPORT 30410

REF. FILE 25754-

159 HUMUS

WERE ANALYSED AS FOLLOWS:

	,	METHOD	DETECTION LIMIT
AU	PPB	NA	1.000
CR	PPM	NA	1.000
FE	%	NA	0.050
CD	PPM	NA	1.000
ΖN	PPM	NA	20.000
AS	PPM	NA	1.000
SΕ	PP M	NA	2.000
ΒR	PPM	NA	1.000
MO	PPM	NA	0.500
AG	PPM	NA	2.000
SB	PPM	NA	0.100
ΒA	РРМ	NA	100.000
ΤA	PPM	NA	0.500
W	РРМ	NA	1.000
ΤН	PPM	NA	0.500
U	PPM	NA	0.100

X-RAY ASSAY LABORATORIES LIMITED

DATE 12-DEC-86

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NOTE: DETECTION LIMITS WERE VARIABLE DUE TO THE NATURE OF SAMPLE.

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SAMPLE	AU PP3	CR PPM	FE 🛠	CO PPM
L1E-1N	9	15	0.84	15
L1E-1N-A	18	32	1.64	24
L1E-0+50N	21	53	2.04	16
L1E-0+00	12	13	1.23	18
12E-1+50N	9	23	1.02	17
L2E-0+50N	9	13	1.01	18
L2E-G+00	11	16	1.04	19
L2E-0+50S	11	17	1.09	13
L2E-1+50S	3	18	1.00	13
L2E-2+50S	13	29	1.94	30
L2E-4+00S	20	36	1.81	21
L3E-1+50N	24	36	1.89	31
L3E-1+00N	17	36	2.11	27
L3E-0+50N	19	39	3.62	51
L3E-1+50S	13	17	0.92	15
L3E-2+00S	NH	NH	NH	NH
L3E-2+50S	11	13	1.15	24
L3E-3+00S	13	31	1.85	28
L3E-3+50S	19	33	1.89	26
L3E-4+00S	11	39	1.86	32
L3E-4+50S	20	28	1.75	22
L3E-5+00S	10	32	1.87	27
L4E-2+50N	9	14	0.71	12
L4E-2+00N	NH	NH	NH	NH
L4E-1+50N	9	13	0.74	10
L4E-0+50N	22	34	1.05	22
L4E-0+00	8	22	1.23	10
L4+50E-4+50N	13	17	1.32	17
L4+50E-3+00N	9	16	0.88	14
L5E-5+40N	13	16	1.01	13
L5E-5+00N	10	15	C•94	15
L5E-4+50N	11	13	1.02	17
15E-4+00N	15	23	1.29	17
L5E-3+50N	9	18	1.03	13
L5E-3+00N	8	17	0.99	16
L5E-2+50N	13	13	0.72	10
L5E-2+00N	9	17	1.07	18
L5E-1+50N	10	21	0.96	12
L5E-1+00N	9	27	0.97	13
L5E-0+50N	17	32	1.47	26
L5+25E-5+50N	17	22	1.41	24
L5+25E-4+25N	13	16	1.06	18
L5+50E-6+00N	7	12	0.61	13
L5+50E-5+50N	15	46	2.63	31
L5+50E-5+00N	10	31	1.16	19
L5+50E-4+50N	16	24	1.25	27
L5+50E-4+00N	7	12	0.49	9
L5+50E-3+50N	14	16	1.29	26

NH - NOT HUMUS

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SAMPLE	AU PPB	CR PPM	FE %	CO PPM
L5+50E-3+00N	11	24	1.73	260
L6E-4+00N	12	13	1.00	20
L6E-3+00N	15	24	1.32	30
L6E-2+50N	4	7	0.85	14
L6E-2+00N	6	11	1.07	49
16E-1+50N	14	30	1.82	23
L6E-1+00N	11	27	1.33	23
L6E-0+50N	8	11	0.58	7
L6E-0+00	16	25	1.39	33
L6E-0+505	14	23	1.51	27
16E-1+00S	10	28	1.14	20
L6E-1+50S	11	24	1.22	19
L6E-2+005	16	41	1.51	21
L6E-2+50S	18	39	1.66	27
L6E-3+00S	19	21	1.12	22
16E-3+50S	16	24	1.20	25
L6E-4+00S	18	30	1.48	31
L6E-4+50S	10	18	0.96	19
L6E-5+005	11	34	1.31	17
16E-5+50S	8	12	0.69	11
165-6+005	10	20	1.16	10
L6E-6+50S	9	50	1.36	15
16+50E-3+50N	15	22	1.17	22
L6+50E-3+00N	24	48	2.11	40
L7E-4+00N	18	25	1.45	22
L7E-3+50N	18	25	1.51	25
L7E-3+00N	17	34	1.79	22
L7E-2+50N	14	19	1.36	16
L7E-2+00N	15	20	1.32	21
L7E-1+50N	6	10	0.73	15
L7E-1+00N	15	24	1.65	26
17E-0+50N	10	17	0.85	15
L7E-0+00	13	27	1.51	20
L7E-0+50S	14	21	1.26	16
L7E-1+00S	6	44	1.59	10
17E-1+505	16	22	1.28	21
176-2+005	15	24	1.42	23
175-2+505	13	20	1.13	14
17E-3+005	16	31	1.94	30
17E-3+505	13	21	1.32	33
17E - 4 + 00S	16	34	2.02	33
175-4+505	16	59	2.45	37
176-5+005	16	20	1.20	18
176-5+505	£ ¢	20	0.94	12
17+50F-4+00N	12	24	1.67	22
17+50F-3+50N	16	25	1.48	20
17+505-3+001	3	12	3.77	13
18F-4+00N	13	22	1.44	24

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SAMPLE	AU PPB	CR PPM	FE %	CO PPM
L8E-3+50N	15	22	1.61	25
L8E-3+00N	17	21	1.47	13
L8+50E-4+00N	14	17	1.22	19
L9E-1+503	10	48	1.71	15
L9E-2+00S		65	2.02	21
L9E-2+50S	10	15	0.89	13
L9E-3+00S	20	31	1.86	28
L9E-3+50S	19	32	2.20	32
L9E-4+00S	15	20	1.39	20
L9E-4+50S	27	37	2.42	37
L9E-5+00S	15	23	1.58	22
L9E-5+50S	2	18	1.40	12
L9E-6+00S	14	26	1.75	33
L9E-6+50S	10	41	1.77	15
L9E-7+00S	18	29	1.74	27
L9E-7+50S	15	25	1.51	19
L9E-8+00S	17	29	1.59	23
L10E-0+00	16	20	1.46	24
L10E-0+50S	10	16	1.10	19
L10E-1+00S	17	25	1.52	24
L10E-1+50S	23	29	1.95	30
L10E-2+00S	8	10	0.74	11
L10E-2+50S	17	22	1.50	21
L10E-3+00S	370	40	3.13	25
L10E-3+50S	14	13	1.00	15
L10E-4+00S	12	11	0.79	13
L10E-4+50S	16	21	1.40	21
L10E-5+005	10	22	1.34	17
L10E-5+50S	12	31	1.43	20
L10E-6+00S	10	14	1.06	14
L10E-6+5CS	10	14	0.99	15
L10E-7+00S	10	21	0•94	12
L10E-7+50S	15	33	1.74	20
L11E-1+00N	8	20	1.23	17
L11E-0+50N	. 6	20	0.89	9
L11E-0+00	14	19	1.31	18
L11E-0+50S	8	11	1.35	19
L11E-1+00S	14	25	1.27	22
L11E-1+50S	18	24	1.47	23
L11E-2+00S	9	17	1.02	18
	21	31	2.07	37
	21	26	1.70	27
	16	25	1.71	26
	10	15	1.02	19
	18	28	1.50	21
L115-5+500		24	1.21	15
	11	15	0.92	14
LTIE-0+002	11	20	L+U4	13

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SAMPLE	AU PPB	CR PPM	FE %	CO PPM	
L12E-0+00	11	39	1.69	 16	•
L12E-0+50S	13	30	1.25	17	
L12E-1+00S	6	5,	0.63	20	
L12E-1+50S	8	24	1.32	12	
L12E-2+00S	11	13	1.26	19	
L12E-2+50S	13	17	1.32	17	
L12E-3+00S	14	9	0.43	2	
L12E-3+50S	20	50	1.79	7	
L12E-4+00S	10	34	2.06	14	
ND TAG-A	12	24	1.63	25	
ND TAG-B	8	27	1.65	18	
ND TAG-C	15	19	1.72	24	
ND TAG-D	13	17	1.59	22	
NO TAG-E	15	19	0.93	3	
NO TAG-F	8	14	1.16	15	

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L1E-1N 140 18 2 17 L1E-1N-A 200 44 3 16 L1E-0+50N 70 41 2 17 L1E-0+00 140 25 2 16	7 5 1 5 5 7
L1E+1N-A20044316L1E-0+50N7041211L1E-0+0014025215	5 1 5 5 3 7
L1E-0+50N7041211L1E-0+0014025215	L 5 5 8
L1E-0+00 140 25 2 15	5 5 3 7
	5 3 7
LZE-1+50N 90 25 2 -1	3 7
L2E-0+50N 180 21 2 13	7
L2E-0+00 150 38 2 17	
L2E-0+50S 150 32 2 12	2
L2E-1+50S 110 19 <2	8
L2E-2+50S 20 33 2 1	3
L2E-4+00S 90 40 3 1:	5
L3E-1+50N 370 35 3 1	9
L3E-1+00N 190 31 3 1	1
L3E-0+50N 420 68 3 2	6
L3E-1+50S 110 39 2 14	4
L3E-2+00S NH NH NH NH	H
L3E-2+50S 260 36 2 1	3
L3E-3+00S 120 45 3 1.	2
L3E-3+50S 150 49 4 1	9
L3E-4+00S 240 46 2 1	9
L3E-4+50S 190 52 5 1	5
L3E-5+00S 150 52 4 2	1
L4E-2+50N 100 42 2 1	6
L4E-2+00N NH NH NH NI	Н
L4E-1+50N 90 40 2 - 10	6
130 23 6 2	3
L4E-0+00 90 33 2 1	7
L4+50E-4+50N 90 40 3 1	5
L4+50E-3+00N 100 22 2 1	0
L5E-5+40N 90 21 2 1	ວ
L5E-5+00N 50 22 2	3
L5E-4+50N 90 31 2 10	6
L5E-4+00N 90 39 3 1	5
L5E-3+50N 120 20 2 1	2
L5E-3+00N 150 19 3 1	3
L5E-2+50N 120 27 2 14	4
L5E-2+00N 90 18 2 1	1
L5E-1+50N 140 46 2 1	3
L5E-1+00N 70 26 2 1	3
L5E-0+50N 110 32 6 1	5
L5+25E-5+50N 70 35 2 1	6
L5+25E-4+25N 50 14 2 1	7
L5+50E-6+00N 50° 17 <2 1	6
L5+50E-5+50N 100 43 3 1	0
L5+50E-5+00N 100 24 <2 1	1
L5+50E-4+50N 70 30 2 1	9
L5+50E-4+00N 110 8 2 1	2
L5+50E-3+50N 60 24 2 1	7

NH - NOT HUMUS

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SAMPI	LE ZN PPM	AS PPM	SE PPM	BR PPM	
L 5+50E-3+01	ON 150	83	5	19	•
L6E-4+00N	60	43	3	15	
L6E-3+00N	110	26	3	17	
L6E-2+50N	60	36	<2	17	
L6E-2+00N	50	29	<2	27	
L6E-1+50N	150	56	2	13	
L6E-1+00N	70	35	2	17	
L6E-0+50N	40	12	<2	13	
L6E-0+00	100	. 44	2	15	
L6E-0+50S	100	39	2	20	
L6E-1+00S	60	41	3	13	
L6E-1+50S	70	69	2	14	
L6E-2+00S	80	39	3	14	
L6E-2+50S	70	60	2	13	
L6E-3+00S	70	38	2	16	
16E-3+50S	80	34	2	17	
168-4+005	110	31	2	14	
16E-4+50S	110	26	2	14	
L6E-5+00S	30	23	2	11	
166-5+505	60	51	2	11	
16E-6+00S	70	35	2	13	
L6E-6+50S	100	12	<2	9	
L6+50E-3+5	ON 20	47	3	16	
16+50E-3+0	ON 110	29	2	15	
L7E-4+00N	70	26	3	11	
L7E-3+50N	70	53	5	11	
L7E-3+00N	110	40	2	8	
L7E-2+50N	60	59	3	15	
L7E-2+00N	90	23	2	12	
L7E-1+50N	40	15	<2	-12	
L7E-1+00N	90	24	2	18	
L7E-0+50N	60	37	2	13	
L7E-0+00	50	46	3	11	
L7E-0+50S	50	37	3	15	
L7E-1+00S	70	39	<2	8	
L7E-1+50S	60	40	3	14	
L7E-2+00S	70	39	2	14	
L7E-2+50S	70	53	3	12	
L7E-3+00S	110	30	2	13	
L7E-3+50S	80	48	2	14	
L7E-4+00S	160	34	3	10	
L7E-4+505	150	37	2	9	
L7E-5+00S	60	48	3	15	
L7E-5+50S	50	33	2	12	
L7+50E-4+0	0N 80	32	2	14	
L7+50F-3+5	ON 70	29	3	12	
L7+50E-3+0	ON 50	47	2	11	
L8E-4+00N	100	33	2	16	

SAMPLE	ZN PPM	AS PPH	SE PPM	BR PPM	
L8E-3+50N	100	23	3	14	•
L8E-3+00N	50	33	3	13	
L8+50E-4+00N	70	41	2	15	
L9E-1+50S	90	35	2	8	
L9E-2+00S	100	23	<2	7	
L9E-2+50S	50	50	2	12	
L9E-3+00S	30	34	3	11	
L9E-3+50S	90	60	3	11	
L9E-4+00S	70	46	3	14	
L9E-4+50S	110	51	4	13	
L9E-5+00S	8 O	45	4	18	
19E-5+50S	60	29	2	13	
L9E-6+00S	130	80	3	16	
L9E-6+50S	50	35	2	13	
L9E-7+00S	130	42	2	18	
L9E-7+50S	70	31	4	15	
L9E-8+00S	70	35	3	11	
L1CE-0+00	70	41	3	13	
L10E-0+50S	50	34	3	18	
L10E-1+00S	110	34	3	12	
L10E-1+50S	130	37	3	10	
L1CE-2+00S	60	24	2	13	
L10E-2+50S	50	47	3	13	
L10E-3+00S	80	44	2	10	
L10E-3+50S	40	44	3	10	
L10E-4+00S	40	18	2	13	
L10E-4+50S	70	33	2	13	
L10E-5+00S	70	30	2	9	
L10E-5+50S	100	28	2	9	
L10E-6+00S	110	29	2	15	
L10E-6+50S	50	57	2	13	
L10E-7+00S	40	44	2	9	
L10E-7+50S	90	40	2	10	
L11E-1+00N	80	49	2	12	
L11E-0+50N	40	62	<2	11	
L11E-0+00	70	51	3	14	
L11E-0+50S	50	23	<2	30	
L11E-1+00S	130	22	2	14	
L11E-1+50S	90	28	3	15	
L11E-2+005	120	28	2	8	
L11E-2+50S	100	35	2	11	
L11E-3+00S	90	41	3	16	
L11E-3+50S	110	42	3	12	
L11E-4+00S	70	33	2	11	
L11E-4+50S	03	36	2	10	
L11E-5+00S	60	29	3	23	
L11E-5+50S	70	33	2	14	
1115-6+005	40	28	2	12	

SAMPLE	ZN PPM	AS PPM	SE PPM	BR PPM	
L12E-0+00	90	35	2	9	•
L12E-0+50S	80	34	2	11	
L12E-1+00S	30	12	2	11	
L12E-1+50S	40	30	2	8	
L12E-2+00S	110	24	4	11	
L12E-2+50S	60	35	4	11	
L12E-3+00S	80	22	< 2	10	
L12E-3+50S	140	15	<2	5	
L12E-4+00S	40	50	5	10	
ND TAG-A	70	35	4	15	
NO TAG-B	60	37	4	10	
NO TAG-C	70	45	7	13	
NO TAG-D	70	39	8	26	
ND TAG-E	110	17	<2	13	
NO TAG-F	40	27	3	12	

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SAMPLE	MO PPM	AG PPM	SB PPM	BA PPM
L1E-1N	0.8	<2	0.9	200
L1E-1N-A	0.9	<6	1.9	300
L1E-0+50N	<1.6	<6	1.5	500
L1E-0+00	<0.5	<2	1.0	200
L2E-1+50N	<0.5	<2	1.0	300
L2E-0+50N	0.6	<2	0.9	100
L2E-0+00	0.7	<2	1.0	100
L2E-0+50S	<0.5	<2	1.7	500
L2E-1+50S	<0.5	<2	0.6	100
L2E-2+50S	2.5	<2	1.5	600
L2E-4+00S	1.4	<5	1.6	300
L3E-1+50N	<0.5	<5	2.8	500
L3E-1+00N	<1.3	<5	2.5	300
L3E-0+50N	<1.4	<7	1.3	400
L3E-1+50S	0.9	<2	1.3	400
L3E-2+00S	NH	NH	NH	NH
L3E-2+50S	<0.5	<2	1.2	200
L3E-3+00S	<1.2	<5	1.7	200
L3E-3+50S	1.3	<5	2.0	200
L3E-4+00S	4.0	6	1.9	400
L3E-4+50S	<0.5	<3	1.8	200
L3E-5+00S	<1.3	<5	1.8	200
L4E-2+50N	<0.5	<2	1.0	300
L4E-2+00N	NH	NH	NH	NH
L4E-1+50N	<0.5	<2	1.3	300
L4E-0+50N	<0.5	<4	1.4	200
L4E-0+00	<0.5	5	1.3	400
L4+50E-4+50N	1.0	<2	0.7	100
L4+50E-3+00N	0.5	<2	1.0	100
L5E-5+40N	0.6	<2	1.3	100
L5E-5+00N	1.0	<2	1.3	100
L5E-4+50N	0.5	<2	0.6	100
L5E-4+00N	0.5	<2	0•8	100
L5E-3+50N	<0.5	<2	0.7	200
L5E-3+00N	<0.5	<2	0.8	100
L5E-2+50N	<0.5	<2	1.1	300
L5E-2+00N	1.3	<2	0.9	100
L5E-1+50N	0.7	<2	1.9	300
L5E-1+00N	<0.5	<2	1.3	300
L5E-0+50N	<0.5	<2	2.1	200
L5+25E-5+50N	<0.5	<2	1.2	100
L5+25E-4+25N	<0.5	<2	0.7	<100
L5+50E-6+00N	<0.5	<2	0.6	100
L5+50E-5+50N	<0.5	<2	2•2	400
L5+50E-5+00N	<0.5	<2	1.1	300
L5+50E-4+50N	0.9	<2	1.4	200
L5+50E-4+00N	<0.5	<2	0.5	100
L5+50E-3+50N	0.7	<2	1.1	100

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SAMPLE	MO PPM	AG PPM	SB PPM	BA PPM
L 5+50E-3+00N	0.9	<2	1.5	200
L6E-4+00N	0.6	<2	1.0	100
L6E-3+00N	0.6	<2	1.8	200
L6E-2+50N	<0.5	<2	0.9	100
L6E-2+00N	<0.5	<2	0.7	100
L6E-1+50N	0.7	<2	2.2	200
L6E-1+00N	<0.5	<2	1.9	200
16E-C+50N	<0.5	<2	0.6	<100
L6E-0+00	<0.5	<2	1.8	100
L6E-0+50S	<0.5	<2	1.7	500
L6E-1+00S	<0.5	<2	2.0	200
L6E-1+50S	<0.5	<2	1.3	300
L6E-2+00S	0.5	<2	1.7	100
L6E-2+50S	<0.5	<2	1.9	200
L6E-3+00S	<0.5	<2	1.7	100
L6E-3+50S	<0.5	<2	1.4	400
L6E-4+00S	0.6	<2	1.9	200
L6E-4+50S	0.7	<2	0.9	200
L6E-5+00S	<0.5	<2	1.2	200
L6E-5+50S	<0.5	<2	2.5	100
L6E-6+00S	0.8	<2	1.2	100
L6E-6+50S	<0.5	<2	0.6	300
L6+50E-3+50N	<0.5	<2	1.8	200
L6+50E-3+00N	<0.5	<2	2.4	200
L7E-4+00N	<0.5	<2	1.6	100
L7E-3+50N	<0.5	<2	1.5	100
L7E-3+00N	1.5	<2	1.7	200
L7E-2+50N	1.5	<2	2.0	100
L7E-2+00N	1.2	<2	1.1	100
L7E-1+50N	<0.5	<2	0.9	100
L7E-1+00N	0.5	<2	1.5	200
L7E-0+50N	0.5	<2	1.5	200
L7E-0+00	1.0	<2	1.7	200
L7E-0+50S	1.4	<2	1.4	100
L7E-1+00S	1.5	<2	1.3	200
L7E-1+50S	2.0	<2	1.7	100
L7E-2+00S	1.9	<2	1.7	200
L7E-2+50S	<0.5	<2	1.5	300
L7E-3+00S	1.9	<2	1.9	200
L7E-3+50S	0.6	<2	1.5	100
L7E-4+00S	2.5	<2	1.6	300
L7E-4+50S	1.6	<2	1.7	500
L7E-5+00S	1.1	<2	1.6	100
L7E-5+50S	1.1	<2	1.4	100
L7+50E-4+00N	1.3	<2	2.8	400
L7+5CE-3+50N	1.5	<2	1.6	100
L7+50E-3+00N	1.6	<2	1.3	100
L8E-4+CON	1.3	<2	1.7	200

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SAMPLE	МО РРМ	AG PPM	SB PPM	BA PPM	
L8E-3+50N	0.9	<2	1.8	300	•
L8E-3+00N	2.1	<2	1.7	100	
L8+50E-4+00N	1.2	<2	1.5	100	
L9E-1+50S	0.8	<2	1.9	600	
L9E-2+00S	0.6	<2	1.2	300	
L9E-2+50S	1.2	<2	1.4	200	
L9E-3+00S	2.1	<2	1.5	300	
L9E-3+50S	3.0	<2	1.8	200	
L9E-4+00S	0.9	<2	1.3	200	
L9E-4+50S	1.3	<2	2.3	200	
L9E-5+00S	0.5	<2	1.3	200	
L9E-5+50S	1.5	<2	1.4	200	
L9E-5+00S	1.6	<2	1.6	200	
L9E-6+50S	1.1	2	1.3	200	
L9E-7+00S	1.0	<2	2.0	300	
L9E-7+50S	1.1	<2	1.4	300	
L9E-8+00S	1.8	<2	1.8	100	
L10E-0+00	1.0	<2	1.1	100	
L10E-0+50S	0.9	<2	1.4	100	
L10E-1+00S	1.4	<2	1.6	200	
L10E-1+50S	1.3	<2	1.8	200	
L10E-2+00S	1.3	<2	0.9	100	
L10E-2+50S	2.1	<2	1.5	100	
L10E-3+00S	1.2	<2	1.9	200	
L10E-3+50S	8.0	<2	1.1	100	
L10E-4+00S	<0.5	<2	0.8	100	
L10E-4+50S	1.1	<2	1.5	100	
L10E-5+00S	1.7	<2	1.3	300	
L10E-5+50S	0.7	<2	1.6	200	
L10E-6+00S	0.9	<2	1.4	200	
L10E-6+50S	1.3	<2	1.7	200	
L1CE-7+00S	1.2	<2	1.7	400	
L10E-7+50S	1.1	<2	1.7	200	
L11E-1+00N	1.3	<2	2.1	200	
L11E-0+50N	<0.5	<2	1.1	100	
L11E-0+00	1.4	<2	1.2	100	
L11E-0+50S	0.8	<2	0.8	100	
L11E-1+00S	2.1	<2	1.4	200	
L11E-1+50S	1.8	<2	1.6	100	
L11E-2+00S	<0.5	<2	1.1	200	
L11E-2+50S	1.6	<2	1.8	200	
L11E-3+00S	1.2	<2	2.0	100	
L11E-3+50S	1.1	<2	1.8	200	
L11E-4+00S	1.1	<2	1.3	100	
L11E-4+50S	0.7	<2	2.3	200	
L11E-5+00S	1.6	<2	2•1	100	
L11E-5+50S	0.7	<2	1.2	200	
L11E-6+00S	0.8	<2	1.1	100	

	SAMPLE	HO PPM	AG PPM	S8 PPM	BA PPM	
L12E-0	+00	0.5	<2	1.6	400	
L12E-0	+50\$	0.8	<2	1.4	200	
L12E-1	+005	8.0	<2	0.5	<100	
L12E-1	+505	<0.5	<2	1.0	100	
L12E-2	+005	1.1	<2	1.0	100	
L12E-2	+505	0.7	<2	1.4	100	
L12E-3	+005	0.5	<2	1.0	200	
L12E-3	+505	0.6	<2	0.7	900	
L12E-4	+005	0.6	<2	1.0	100	
NO TAG	- A	<0.5	<2	1.3	200	
NO TAG-	- 3	1.6	<2	1.0	200	
NO TAG-	- C	1.1	<2	1.5	200	
NO TAG-	- D	1.4	<2	1.4	100	
NO TAG-	- E	0.9	<2	1.2	400	
ND TAG	- F	0.9	<2	1.1	100	

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SAMPLE	ΤΑ ΡΡΜ	W PPM	TH PPM	U PPM
L1E-1N	<0.5	<1	0.8	0.2
L1E-1N-A	<1.2	<1	3.1	0.6
L1E-0+50N	<1.5	<1	5.4	1.0
L1E-0+00	<0.5	<1	1.3	0.2
L2E-1+50N	<0.5	<1	1.3	0.3
L2E-0+50N	<0.5	<1	1.1	0.1
L2E-0+00	<0.5	<1	1.0	0.2
L2E-0+50S	<0.5	<1	1.8	<0.2
L2E-1+50S	<0.5	<1	1.2	0.2
L2E-2+50S	<0.5	<2	1.1	0.4
L2E-4+00S	<0.9	<1	3.4	0.7
L3E-1+50N	<1.1	<1	3.5	1.2
L3E-1+00N	<1.0	<1	3.6	0.6
L3E-0+50N	<1.2	<1	2.5	<0.4
L3E-1+50S	<0.5	<1	1.6	0.3
L3E-2+00S	NH	NH	NH	NH
L3E-2+50S	<0.5	<1	1.4	0.3
L3E-3+00S	<0.9	<1	2.6	<0.3
L3E-3+50S	<0.9	<1	2.5	<0.3
L3E-4+00S	<1.3	<1	4.4	1.1
L3E-4+50S	<0.5	1	2.9	0.7
L3E-5+00S	<1.0	<1	3.3	0.9
L4E-2+50N	<0.5	<1	1.3	0.2
L4E-2+00N	NH	NH	NH	NH
L4E-1+50N	<0.5	<1	1.9	0.3
L4E-0+50N	<1.1	2	3.2	1•2
L4E-0+00	<1.1	<1	4.0	1.1
L4+50E-4+50N	<0.5	<1	1.3	0.2
L4+50E-3+00N	<0.5	<1	1.4	0.2
L5E-5+40N	<0.5	<1	1.6	0.3
L5E-5+00N	<0.5	<1	0.7	0•2
L5E-4+50N	<0.5	<1	0.8	0.2
L5E-4+00N	<0.5	<1	1.7	0.3
L5E-3+50N	<0.5	<1	1.6	0.2
L5E-3+00N	<0.5	<1	1.0	0.2
L5E-2+50N	<0.5	<1	1.6	0.3
L5E-2+00N	<0.5	<1	0.5	0.2
L5E-1+50N	<0.5	<1	2.4	0.4
L5E-1+00N	<0.5	<1	2.4	0 • 8
L5E-0+50N	<0.5	<1	1.9	0.7
L5+25E-5+50N	<0.5	<1	0.9	0.4
L5+25E-4+25N	<0.5	1	0.7	0.2
L 5+50E-6+00N	CU+5		<u•5< td=""><td>0.2</td></u•5<>	0.2
L5+50E-5+50N	<0.5	<2	4.0	1.3
	<0.5		1.5	U•4 0 2
	<u•5 <0 ₽</u•5 			0.2
	<u•3< td=""><td><1</td><td><u.5< td=""><td>0.2</td></u.5<></td></u•3<>	<1	<u.5< td=""><td>0.2</td></u.5<>	0.2
L 5 + 5 0 E - 3 + 5 0 N	<0.5	<1	0.7	∂ • 3

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SAMPLE	TA PPM	W PPM	ТН РРМ	U PPM
L5+50E-3+00N	<0.5	<2	1 • 2	0.5
L6E-4+00N	<0.5	<1	0.7	0.3
L6E-3+00N	<0.5	<1	1.1	0.4
L6E-2+50N	<9.5	<1	0.7	0.2
L6E-2+00N	<0.5	<1	0.5	0.7
L6E-1+50N	<0.5	<3	1.5	0.5
L6E-1+00N	<0.5	<1	2.0	0.6
L6E-0+50N	<0.5	<1	0.6	0.3
L6E-0+00	<0.5	<1	1.3	0.4
L6E-0+50S	<0.5	<1	1.2	0.4
L6E-1+00S	<0.5	<1	1.6	0.5
L6E-1+50S	<0.5	2	1.1	0.4
L6E-2+00S	<0.5	<1	1.9	C • 7
L6E-2+50S	<0.5	<1	2.2	0.7
L6E-3+00S	<0.5	<1	1.0	0.5
L6E-3+50S	<0.5	<1	1.1	0.4
L6E-4+00S	<0.5	1	1.5	0.5
L6E-4+50S	<0.5	<1	0.8	0.2
L6E-5+00S	<0.5	<1	1.7	0.5
L62-5+50S	<0.5	<1	1.2	0.4
L6E-6+00S	<0.5	<1	0.9	0.4
L6E-6+50S	<0.5	<2	2•4	0.8
L6+50E-3+50N	<0.5	<1	1.3	0.4
L6+50E-3+00N	<0.5	<2	2.0	0.9
L7E-4+00N	<0.5	<1	1.3	0.5
L7E-3+50N	<0.5	<1	0.9	0.5
L7E-3+00N	<0.5	<1	1.7	0.6
L7E-2+50N	<0.5	<1	1.1	0.5
L7E-2+00N	<0.5	<1	0.7	0.1
L7E-1+50N	<0.5	<1	<0.5	0.2
L7E-1+00N	<0.5	<1	0.9	0.5
L7E-0+50N	<0.5	<1	0.8	0.4
L7E-0+00	<0.5	1	1.1	0.3
L7E-0+50S	<0.5	<1	0.8	0.5
L7E-1+00S	<0.5	<1	.1.9	0.9
L7E+1+50S	<0,5	<1	1.0	0.5
L7E-2+00S	<0.5	<1	1.1	0.5
L7E-2+50S	<0.5	<1	1.1	0.5
L7E-3+00S	<0.5	<1	1.1	0.5
L7E-3+50S	<0.5	<1	1.0	0.4
L7E-4+00S	<0.5	<1	1.4	0.4
L7E-4+50S	<0.5	<1	2.0	0.7
L7E-5+00S	<0.5	<1	0.9	0.5
L7E-5+50S	<0.5	<1	1.4	0.5
L7+50F-4+00N	<0.5	<1	1.6	0.6
L7+50E-3+50N	<0.5	$\overline{\langle 1}$	1.0	0.4
L7+50E-3+00N	<0.5	<1	<0.5	0.3
18F-4+00N	<0.5	<1	1.0	0.4

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SAMPLE	ТА РРМ	W PPM	TH PPM	U PPM
L8E-3+50N	<0.5	<1	1.0	0.4
L8E-3+00N	<0.5	<1	0.7	0.4
L8+50E-4+00N	<0.5	<1	0.7	0.4
L9E-1+50S	<0.5	<1	2.5	0.9
L9E-2+00S	<0.5	<1	2.1	0.6
L9E-2+50S	<0.5	<1	1.1	0.3
L9E-3+00S	<0.5	2	1.2	0.5
L9E-3+50S	<0.5	<1	1.7	0.6
L9E-4+00S	<0.5	<1	0.7	0.4
L9E-4+50S	<0.5	<1	1.4	0.5
L9E-5+00S	<0.5	<1	0.8	0.4
L9E-5+50S	<0.5	<1	1.0	0.3
L9E-6+00S	<0.5	<1	1.0	0.6
L9E-6+50S	<0.5	1	1.5	0.5
L9E-7+00S	<0.5	<1	1.4	0.7
L9E-7+50S	<0.5	<1	0.8	0.5
L9E-8+00S	<0.5	<1	1.2	0.4
110F - 0 + 00	<0.5	<1	0.6	0.2
L10E-0+50S	<0.5	<i l<="" td=""><td>0.7</td><td>0.3</td></i>	0.7	0.3
L10E-1+00S	<0.5	$\langle 1 \rangle$	1.0	0.4
L10E-1+50S	<0.5	<1	1.1	0.4
L10E-2+00S	<0.5	<1	<0.5	0.2
L10E-2+50S	<0.5	<1	1.1	0.3
L10E-3+00S	<0.5	<2	1.6	0.6
L10E-3+50S	<0.5	<1	0.6	0.3
L10E-4+00S	<0.5	<1	0.5	0.2
L10E-4+50S	<0.5	<1	0.9	0.4
L10E-5+00S	<0.5	<1	1.0	0.4
L10E-5+50S	<0.5	<1	1.6	0.6
L10E-6+00S	<0.5	<1	0.7	0.3
L10E-6+50S	<0.5	<1	1.0	C • 2
L10E-7+00S	<0.5	<1	1.5	0.6
L10E-7+50S	<0.5	1	1.7	0.6
L11E-1+00N	<0.5	<1	1.2	0.3
L11E-0+50N	<0.5	1	1.3	0.4
L11E-0+00	(0.5	<1	0.5	0.3
L11E-0+50S	<0.5		0.7	0.5
111E - 1 + 005	(0.5	1	1.1	0.4
1116-1+505	<0.5		1.1	0.4
111E - 2 + 00S	<0.5	<1	0.8	0 3
111E - 2 + 50S	<0.5		1 4	0.3
L11E-3+00S	<0.5 <0.5	1	1 2	
111E - 3 + 50S	(0.5		1.2	0.5
1115-4+005	<pre></pre>			0.3
1116-4+505	\[\lambda \] \[N I 2	U • O 1 7	0.4
11)E-5+005	<0.5	<u>د</u> د 1	1.1	0.5
1115-5+505	<0.5	<u>č</u> 1	0 5	0.2
L11E-6+00S	<0.5	<1	0.9	0.2
		• •	~ • /	~

SAMPLE	TA PPM	W PPM	TH PPM	U PPM	
 L 12E - 0 + 00	<0.5	<1	 1•9	0.7	
L12E-0+50S	<0.5	<1	1.3	0.5	
L12E-1+00S	<0.5	<1	<0.5	<0.1	
L12E-1+50S	<0.5	<1	1.1	0.5	
L12E-2+00S	<0.5	1	0.5	0.2	
L12E-2+50S	<0.5	<1	0.9	0.3	
L12E-3+00S	<0.5	<1	0.9	0.3	
L12E-3+50S	<0.5	<2	3.6	1.2	
L12E-4+00S	<0.5	<1	1.6	0.5	
NO TAG-A	<0.5	<1	1.1	0.4	
NO TAG-B	<0.5	2	1.6	0.4	
ND TAG-C	<0.5	<1	1.1	0•4	
NO TAG-D	<0.5	<1	0.7	0.4	
NO TAG-E	<0.5	<2	2.5	0.7	
ND TAG-F	<0.5	<1	0.7	0.3	

Appendix III Sampling Data

Surface Sampling Data

Sample No.		Location and Description	Au ppb	Assay oz/ton
8401		Rod's drywash -grab- near center of property	18	
8402	-	North face cribbed trench. fine grained pink silicious rock no sulphides. (grab chips)	14	
8403	-	North face cribbed trench. narrow N. dipping quartz vein below pink silicious zone.	8	
8404	-	North face cribbed trench 3 to 4cm wide quartz vein below (3-4cm). 8403 vein. no sulphides.	21	
8405	-	North face cribbed trench shallow N. dipping quartz vein, 1.5m below 8404 - 2-4cm wide.		0.033 0.034
8406	-	2-3cm quartz vein, north end. Western-most trench in gabbro.	41	
8407	-	altered red silicious rock at contact south end western-most trench.	10	
8408	-	Quartz vein, north-dipping on lake shore, 5+60N 5+20E		0.038
8409	-	Shaw Island - L7E, 5+80N narrow quartz vein in sediments, chlorite and weathered carbonate, no sulphides	4	
8410	-	quartz hematite, ankerite vein from zig zag trench, 5+40E, 4+95N		0.07 0.069
8411	-	shallow N. dipping quartz vein in sediments, 5+255, 5+60N	6	

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Surface Sampling Data

page 2

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Sample No.		Location and Description	Au As ppb	oz/ton
8412	-	silicious pink rock at diabase limestone contact (L5+50E, 5+50N)	4	
8413	-	Flat lying pink calcite stringers in limestone, trace pyrite chalcopyrite, (5+75E, 5+60N)	54	
8414	-	Fractured limestone at contact with gabbro, 5+75E - 5+60N	8	
8415	-	Bayshore ankerite zone L3+75E, 2+10N ankerite, chlorite in pegmatitic gabbro, minor quartz vein, trace pyrite, chalcopyrite	269	
8416	~	Bayshore ankerite zone L3+75E, 2+10N 3 converging 2-4cm quartz veins in pink pegmatitic gabbro, ankerite and chlorite clots. no sulphides.	7	
8417	-	130` strike quartz vein form gabbro out crop on road south of Shaw Point	34	
8418	-	Visible gold bearing flat quartz vein, 5+25N 5+25E, - grab	2	
11663	-	Rod CL-4 limestone from Shaw Point area. (see map)	30	
11664	-	Rod CL-1 narrow vertical quartz vein. South of main Shaw Point trench	40	
11665	-	Rod CL-2 Limestone from Shaw Point	38	
11666	-	Rod CL-5 as above	10	

Surface Sampling Data

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Sample No.		Location and Description	Au ppb	Assay oz/tor
11667	-	Rod CL-6 as above	42	· · · · · · · · · · · · · · · · · · ·
11668		Rod CL-7 as above	5	
11669	-	Rod CL-3 as above	12	
11670	-	Rod CL-8 narrow flat dipping quartz vein with chalcopyrite, pyrite in gabbro near limestone	407	
8419	-	Weathered limestone near gabbro contact	44	
8420	-	Weathered and altered limestone near gabbro contact	21	
8421	-	Chalcopyrite, pyrite, malachite bearing quartz vein flat dip in gabbro south of limestone. (same as 11670)	38	
8422	-	Weathered limestone near contact with gabbro.	18	
11671	-	Rod T-10 narrow quartz vein at North end long trench, Shaw Point	11	
11672	-	Rod T-11 altered gabbro at north end trench (as 11671)	25	
11673	-	Rod T-15 narrow quartz vein at south end long trench Shaw Point.		0.130
11674	-	Rod T-12 altered gabbro near limestone xenolith in gabbro in wall of long trench.	33	
11675	-	Rod T-16 flat quartz vein at surface in gabbro. Visible gold		0.513

Surface Sampling Data

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Sample No.		Location and Description	Au Assay ppb oz/ton
11676		Rod CL-9 limestone with pink calcite stringers.	40
11677		Rod T-14 limestone near gabbro contact, north end long trench.	32
11678	-	Rod T-17 narrow visible gold bearing vein, (flat) near 11675	148
11679	-	Rod T-20 sulphide bearing quartz vein, shore of lake, west side Shaw Point	58
11680	-	Rod T-19 narrow flat quartz vein near 11675	8
11681	-	Rod T-21 quartz vein as in 8411	60
11682	-	Rod T-18 quartz vein in altered gabbro near limestone xenolith in long trench, Shaw Point.	12
11683	-	Rod T-23 quartz vein as in 8411 up dip extension of lakeshore flat vein.	282
11684	_	Rod T-22 quartz vein as in 8411	271
11685		Rod T-24 quartz vein on east side Shaw Point in "limestone"?	206
11687	-	Rod BP-1 Beaver Pond showings, quartz carbonate stringers in altered gabbro.	8
11688		Rod BP-2 as above	3

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Surface Sampling Data

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Sample No.		Location and Description	Au Assay ppb oz/ton
11689	-	Rod BP-3 as above, more pink alteration and calcite.	27
11690	-	Rod BP-4 100' south of 11689 similar material	4
11691	-	Rod CS-6 Rusty oxydized rock pink carbonate from dump material in long trench across EM conductor (old cribbed trench)	1
11692	-	granitic rock from center of property, no sulphide. Rod (S-7)	4
11693	-	Rod CS-8 L100mE, 3+50mS, 200' west of line quartz vein in old workings.	4
11694	-	Rod CR-1 Stump showings, fine grained sediment with - 1% sulphides pyrite throughout, no veining.	73
11695	-	Rod CR-2 as 11694 - 20' north	6
11696	-	Rod CR-3 narrow quartz vein with chalcopyrite and malachite - 140' South of bay in gabbro, minor epidote.	340
11697	-	Rod CR-4 6' to 10', from 11696 minor quartz vein and chlorite. no sulphides.	14
11698	-	Rod CR-5 20' - 30' south of 697. original stump showing assay.	3
11699	-	Rod BV-5 quartz vein 250' north of 'bridge' 80' east of trail, old trench.	1

Surface Sampling Data

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Sample No.	Location and Description	Au Assay ppb oz/ton
11670	 Rod BV-6 Pink albite showing, 60' west of line 2E 6+50mS, quartz carbonate. 	10
8423	- Rod BV-7 unknown location quartz gabbro.	32
8424	- Rod BV-8 same as BV-6, from out crop, 100'N. of same.	8
8425	 Rod BV-9 Line 0+00, 5+50mS South Beaver Pond trench, coarse pegmatitic gabbro. 	19
8426	- Rod BV-10 small quartz vein 250' west of main dam. 150' west of base line.	4
8427	 Rod BV-11 Line 5E, 3+75m south rusty rotten veining quartz carbonate vein. 	7
8428	 Rod BV-12 Line 5E, 4+75m south pink alteration, (carbonate) 	3

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TECKRON MINES & ENERGY CORP.

EAGLE'S NEST Property

Scadding and Rathbun Townships Sudbury Mining Division, Ontario

James E. Tilsley & Associates Ltd. Consulting Geologists and Engineers Aurora, Ontario, Canada L4G 3G8

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Appendix II	Assay certificates - samples from Shaw Point showings.

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SUMMARY AND CONCLUSIONS

Teckron Mines & Energy Corp. has entered into an exploration agreement in regard to 19 unpatented mineral claims located in Scadding and Rathbun townships, Sudbury Mining Division, Ontario.

The claims cover the former 'Eagle's Nest' prospect on Shaw Point, Kukagami Lake and several other indications of goldbearing mineralization.

A block of Espanola Formation limestone is exposed on Shaw Point and estimated to be at least 300m stratigraphically above its expected position in this part of the townships. The most recent geological maps of the area show the limestone to be fault-bounded and imply that it has been moved vertically a significant distance. Movement of such magnitude is likely to be accompanied by extensive subsidary fracturing which is the primary ground preparation mechanism observed in the claims.

Trenching and pitting on the point adjacent to the limestone wedge has shown coarse free gold associated with quartzcarbonate veining in strongly chloritized sediments and gabbro. Gold values are also reported from limestone float boulders located near the trenches.

Detailed exploration in the immediate area of the prospect is warranted. In addition, geophysical and geological studies throughout the rest of the property, including the area covered by water, is recommended.

The cost of the work program is estimated to be \$148 150.00

INTRODUCTION

The Eagle's Nest prospect lies in the northeast corner of Scadding and the southeastern corner of Rathbun townships.

Gold has been found in the northern part of the property associated with faulting in Cobalt Group sediments and Nipissing gabbros. The main prospect lies in claims 721326 and 721327 where a block of Espanola limestone is in fault contact with younger rocks. There are reports of gold in the limestones in addition to the metal observed in quartz-carbonate veins that cut Nipissing intrusives and Huronian sediments adjacent to major and minor faults.

There is evidence of trenching and shallow shaft sinking on the main showing apparently done in the late 1800's. There is no record of more recent physical work on the claims in annual Mines Department reports, other official publications, or in the Assessment Work files of the Sudbury office of the Ministry of Natural Resources.

The prospect lies approximately four miles NNE from the Scadding township McLean-Watt gold property of Northgate Exploration Limited and about the same distance SSE of the Flag Resources Ltd. Matagamasi Lake gold prospect in Rathbun Twp.

A program of geological mapping, geophysical surveying, trenching, sampling, and diamond drilling is recommended. The cost of the preliminary phases of the program is estimated at \$148 150.00.

LOCATION AND ACCESS

The property is located in the extreme northeast corner of Scadding township and the extreme southeastern corner of Rathbun township, Sudbury Mining Division, Ontario.

Approximate co-ordinates are:

46 44' 00"N; 80 35' 00"W

The property can be reached from Sudbury via Highway 17 East to the Kukagami Lake Road, then approximately twelve miles north through Street and Scadding townships to a local cottage property access road that leads northeast three miles (5.0km) to private cabins on the west shore of Shaw Point of Kukagami Lake, within claim No. 721326 of the group.

In most seasons, travel time by road from the Sudbury airport to the claims is approximately one hour.

Sudbury has daily bus, train and airline connections to other parts of the province and North America.

PROPERTY

The property consists of 19 unpatented mineral claims held in the name of Rodney J. Fielding of Hanmer, Ontario. The the record books in the office of the Mining Recorder in Sudbury show all claims are under extension until March 27th, 1986. All claims will require 60 days work before the due date.



Claim No.	Township	Claim No.	Township	
808329	Rathbun	721323	Scadding	
808330	11	721324	11	
808331	11	721325	**	
808332	"	721326	**	
808333		721327		
808334	Scadding	734018	11	
808335	11	734019	88	
808336	11			
808337	н			
808338	**			
808339	**			
808340	18			

LIST OF CLAIMS

SURFACE RIGHTS

The claims cover Crown Lands with the exception of approximately five acres designated 'Plan M-970' which include five cottages with frontage on Kukagami Lake. Use of surface rights on Crown Lands is governed by the standard regulations. Use of surface rights to the lands described in Plan M-970 must be negotiated with the private owners.

There is also the standard 400 foot surface rights reservation along the shores of Kukagami Lake. Use of this land

is restricted except with prior permission from the Department of Natural resources.

CLIMATE

The area has a continental climate typical of central Canada. Precipitation totals approximately 34 inches (863mm) per annum, relatively well spread throughout the year. Snow accumulations of 700 to 1300mm are frequently observed in average winters, with first significant falls in late October or early November. Continuous cover can be expected from early December until mid-April in most years.

Summer-time maximum temperatures may exceed 30 degrees Celcius and winter minimums in the range of -40 C are not uncommon in January and February. Mean summer maximums are approximately 23 degrees Celcius and mean summer minimums about 12 degrees C. Winter mean maximums are in the range of -7 C and mean minimums -21 C.

TOPOGRAPHY

Kukagami Lake has an elevation of 278m (912') above sea level. Within Scadding Township the land rises to approximately 325m (1066'). In general, the surface is rolling, with occasional abrupt hillocks of bedrock, especially along lake shores where low cliffs are common. Relief is usually less than 30m (100'). There are some low-lying swampy areas but the
greater part of the land area of the Township is relatively dry.

Drainage is west to Wanapitei Lake, Wanapitei River, the French River and Georgian Bay.

LOCAL RESOURCES

Sudbury is a city with a population of approximately one hundred and sixty thousand. There is a long history of mining and smelting with a skilled work force in both mining and related support functions. Men, equipment, supplies, and services are all available locally.

Medical facilities are excellent, with several clinics and hospitals in the city.

Rail, highway, and air transportation are excellent to southern Ontario and points east and west of Sudbury.

The claims are forested with several varieties of pine, spruce, balsam fir, cedar, and assorted deciduous species. Some of the timber is merchantable but there have been no recent lumbering or pulp wood operations.

Industrial power is available within twelve miles of the property and local transmission lines provide domestic electricity to residents. Telephone communications, local and international, are possible from homes and businesses on Kukagami Lake.

HISTORY

Gold was first reported from the Kukagami Lake area in the fall of 1891. (Ontario Bureau of Mines, 1892 p.237) The discovery may have been made during surveying of the Scadding -Rathbun township line. The location given for the initial discovery is not specific enough to confirm that it is the same prospect described subsequently as the 'Eagle's Nest mine' (Ontario Bureau of Mines, 1896, p.56), but the two reports appear to refer to the same occurrence.

Slaght, 1896, op. cit., reports sixteen veins "running northwest and southeast and one lateral vein on the property." The geographic position of the veins is given as "locations WD25 and WD40", both on Shaw Point and included in the present claim group. The work mentioned by Slaght was comprised of stripping, and the sinking of ten test pits which were six to ten feet deep and eight to twenty-five feet long.

There is no other record of work from that time, nor do the assessment files show additional ground surveys or prospecting activity subsequent to the claims reverting back to the Crown for non-payment of taxes in 1920. However, Scadding Township was included in an airborne magnetic and electromagnetic survey done by Kennco Explorations (Canada) Ltd. in 1968. The survey apparently covered the Eagle's Nest property but there is no record of follow-up work within the boundaries of the present claim group.

The trenches from the work done in the late 1800's are still locatable but have been partially filled with rotting vegetation and slumped soil. General prospecting has been done in the claim group in the past two years, but little new excavation completed. One trench has been cleaned out north of the section pitted during 1892-96 and shows occasional 1 to 30mg grains of free gold on the contact of quartz-carbonate veining with chloritic gabbro. Sampling of limestone float boulders from the north part of Shaw Point has indicated gold values, but the source of this material, which must be local, is not currently exposed.

Grab samples taken during examinations done in the past two years have returned assays ranging from nil to over 20 oz. Au/ton. Photocopies of the assay certificates for these samples are presented in Appendix II.

GENERAL GEOLOGY

Reconnaissance geological mapping in the Sudbury area was done as early as 1853 when Alexander Murray conducted river and lakeshore traverses that included the Wanapitei River and parts of the shoreline of Lake Wanapitei. Bell and Barlow worked in the Sudbury Basin beginning in 1888 and included part of the Wanapitei Lake area in their map published in 1891. Collins worked to the south of Lake Wanapitei in 1912 and reported his results in 1914. It was not until 1921, when

Ouirke mapped Scadding township as part of his regional study, that a geological compilation covering the Eagle's Nest property was completed. Fairbairn mapped Scadding township as part of his 1938 Ashigami Lake project. Cooke et al., prepared the Falconbridge sheet in 1946 and revised Quirke's 1922 map. Thomson mapped Scadding and Maclennan townships during the 1956 to 1959 field seasons but did not re-map those areas covered by Fairbairn in 1938. Thomson reported his findings and presented а compilation in 1961 (ODM Geological Report No.2 and Map No. 2009). The most recent study of the area is based on field work by Dressler and assistants in 1977 and 1978 described in Ontario Geological Survey Report 213.

The geology of the Wanapitei Lake area is summarized in the following table from Dressler (1982) and applies to the portion of Scadding and Rathbun townships within and adjacent to the property under consideration.

TAB	LE OF LITHOLOGIC UNITS FOR THE LAKE WANAPITEI AREA.
PHANEROZOIC	
CENOZOIC	
QUATERNARY	
RECENT	
	Swamp, lake, and stream deposits.
PLEISTO	DENE
	Glacial and glaciofluvial sand and gravel deposits.
	Unconformity

PRECAMBRIAN LATE PRECAMBRIAN MAFIC INTRUSIVE ROCKS Olivine diabase.

Intrusive Contact

MIDDLE PRECAMBRIAN

SUDBURY NICKEL IRRUPTIVE

Sublayer, norite, transition zone norite, micropegmatite, granitic rock.

Intrusive Contact

WHITEWATER GROUP

ONAPING FORMATION

Tuff, quartzite breccia.

SUDBURY EVENT

Explosive volcanism or meteorite impact; Sudbury-type brecciation.

NIPISSING INTRUSIVE ROCKS

Gabbro, granophyre, granitic dike rock, pegmatite, quartz-plagioclase porphyry.

Intrusive Contact

HURONIAN SUPERGROUP

COBALT GROUP

LORRAIN FORMATION

Arkose, subarkose, subarkosic wacke, quartz wacke, arenites.

GOWGANDA FORMATION

Wacke, arkose, conglomerate.

QUIRKE LAKE GROUP

SERPENT FORMATION

Arkose, arkosic wacke, calcareous arkose, minor conglomerate.

ESPANOLA FORMATION

Calcareous siltstone, limestone, calcareous wacke.

BRUCE FORMATION

Conglomerate, pebbly wacke, minor arkose, wacke.

HOUGH LAKE GROUP

MISSISSAGI FORMATION

Arkose, subarkose, arkosic wacke, subarkosic wacke, conglomerate, and silty wacke.

Unconformity

EARLY PRECAMBRIAN MAFIC INTRUSIVE ROCKS

Diabase, glomeroporphyritic diabase, porphyritic diabase.

Intrusive Contact

FELSIC PLUTONIC ROCKS

Granodiorite, diorite, migmatite.

Intrusive Contact

METAVOLCANICS AND METASEDIMENTS

METASEDIMENTS

Wacke, arkose, gneisses, ironstone. ferruginous chert.

METAVOLCANICS

FELSIC METAVOCLANICS

MAFIC AND INTERMEDIATE METAVOLCANICS

Mafic and intermediate metavolcanics, amphibolite, dacite.

The area has been glaciated during Pleistocene time. Deposits of till, outwash sands and gravels, and clay and silt cover much of the bedrock inland from Kukagami Lake. Overburden

is generally less than 1.5m on higher ground but may be considerably thicker in intervening till and glacial outwashfilled swales and swampy areas. The last ice advance was from the north with most striae indicating a direction five to ten degrees east of true north.

Consolidated rocks of the area range in age from Early Precambrian to Late Precambrian. The sedimentary rocks are dominated by Huronian Supergroup clastic and carbonate formations, and igneous rocks by Nipissing gabbro and related phases.

The Huronian rocks mapped on the property include Espanola Formation limestones of the Quirke Lake Group and laminated and unlaminated wacke of the Gowganda Formation of the Cobalt Group. Huronian sediments are cut by gabbros assigned to the Nipissing intrusive suite. A Late Precambrian olivine diabase dike is mapped to the northwest and east of the claims and can be expected to pass through the property just north of Shaw Island.

Structural features of the property are not well exposed. The wedge of Espanola Formation limestone on the peninsula west of Shaw Island is stratigraphically about 1000 feet above its expected position. (W. Meyer, pers. comm., 1985). This implies major dislocation, either by faulting or transport in the Nipissing gabbro magma. There is fracturing which suggests more major faulting than can be observed in outcrop adjacent to the limestone wedge, and Ontario Geological Survey Map 2451



LEGEND

QUATERNARY

PLEISTOCENE AND RECENT

Gravel, sand, silt, swamps.

UNCONFORMITY

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

14a Olivine diabase.

INTRUSIVE CONTACT

SUDBURY EVENT

MAFIC INTRUSIVE ROCKS

Gabbro.

NIPISSING INTRUSIVE ROCKS

	11 a
£ -	116
	110

- Pegmatitic gabbro. Granophyre.
- 11d Granitic dike rock, pegmatite. 11e Quartz-plagioclase porphyry.†
- INTRUSIVE CONTACT

HURONIAN SUPERGROUP

COBALT GROUP

LORRAIN FORMATION

10a Grey wacke. Arkose, subarkose, minor subar-

- kose, wacke and quartz wacke. (10b, c, and d).
- 10b Pink, pinkish grey.
- 10c Grey.
- 10d Greenish grey, grey.†
- 10e Quartz wacke to subarkosic wacke.†
- 10f Arenites, unsubdivided. †

GOWANDA FORMATION

- 9a Conglomerate 9b Arkose.
- 9c Wacke (not laminated).
- 9d Laminated wacke.
- 9e Wacke unsubdivided.†

QUIRKE LAKE GROUP

SERPENT FORMATION

Ba Arkose, arkosic wacke, calcareous

arkose, minor conglomerate. 8b Dolomite porphyroblastesis.

ESPANOLA FORMATION

7a Calcareous siltstone, limestone, calcareous wacke.

TECKRON MINES & ENERGY CORP.

RATHBUN & SCADDING TOWNSHIPS, SUDBURY DISTRICT.ONT. ROFESSION

1985

GENERAL GEOLOG

SCALE 1IN. to 1/2 MI.

shows two bounding faults. Currently available mapping does not show the extension of these faults into the claims to the southwest, but there is evidence of fracturing, alteration and weak mineralization in gabbro outcrop in claim 721323 which may be related to the same structure.

The attitude of the Gowganda wacke units on the property is variable, strikes are generally to the northeast and dips in the vicinity of Shaw Island range from 85 E to 30 N.

The contact relationships between the sedimentary rocks and the intrusive gabbro are not well known. The olivine diabase body which is interpreted to pass through the northeastern part of the property is a well defined, nearly-vertical dike.

MINERALIZATION

Mineralization within the claim group appears to be related to emplacement of quartz-carbonate veins and veinlets in fractures in and adjacent to fault zones in both sedimentary and igneous rocks of the property.

The mineralized zones all seem to be related to tectonic features. However, there is not sufficient information to permit definition of the precise location, attitude, and strike assumed dislocations on the of the property, although features subsidary topographic and fracturing allow interpretation of fault positions to within 10 to 20 meters. Gold is present in the native state, usually on the margins

of the veins and veinlets that we have inspected. Visible gold appears to be in relatively large grains of one to thirty milligrams and to be randomly distributed in the quartzcarbonate veins and veinlet systems. Assays of samples from the claims indicate that there is also some fine gold that is not likely to be visible in hand specimen, but the limited data that are available suggest the greater part of the metal is present in relatively coarse grains.

The common host rock for gold mineralization in the Wanapitei area is Middle Precambrian Nipissing gabbro and Huronian clastic sedimentary rocks of the Quirke Lake Group and the Cobalt Group.

Gold values are also reported from within the Espanola Formation limestone wedge. Quartz-carbonate veining is present in limestone float near the north end of Shaw Point in the northeast corner of claim S 721326. We did not observe similar material in bedrock. However, the float most likely has a very local origin, since there are no other known outcrops of Espanola Limestone within five kilometers of the property.

The mineralized zones contain small amounts of sulphides. Pyrite and chalcopyrite are identified in both the Shaw Point area and from within the Nipissing gabbro where chlorite-quartzcarbonate alteration is observed in fracture zones assumed to be related to faults passing through the intrusive. Carbonate addition appears to be usual in all mineralized zones.

It is commonly cream to creamy-pink in color and often is intimately mixed with quartz veinlets and impregnations.

Chloritization may be even more pervasive than carbonate addition. Both gabbros and sediments appear strongly chloritized in all locations where precious metal values are reported. In some exposures of quartz-carbonate mineralization, original rock forming minerals have been totally replaced by chlorite so that identification of the host rock becomes difficult at the hand specimen level.

The distribution of gold in the prospects appears to be typical of grain-dominated mineralization. The data at hand do not permit estimation of optimum sample size or provide a firm basis for planning a sampling program. However, our experience with similar mineral distributions suggests that there should be no particular difficulty in developing the data base required for proper interpretation of surface and diamond drill sampling results. It should be expected that there will tend to be highly variable assay results from small samples, e.g. diamond drill cores, and that neither the extreme highs or lows should be considered as individually meaningful.

PRODUCTION

There has been no recorded production of metals from the property.

RESERVES

There is not sufficient information on which to base an estimate of resource or reserves.

EXPLORATION POTENTIAL

The property warrants exploration for precious metals, particularly in the area of Shaw Point, both on land and beneath the waters of Kukagami Lake.

The indications of gold mineralization in the series of trenches put down on fracture zones at the turn of the century are particularly interesting since they are located adjacent to a block of Espanola Limestone which is stratigraphically about three hundred meters above its expected position. The presence of the block of limestone is taken to suggest that there has been major dislocation in the Shaw Point area and that sort of dislocation would suggest good possibilities for extensive ground preparation and possibly significant gold mineralization.

Elsewhere on the property there are indications of faultrelated alteration, minor sulphide mineralization, and variable gold values. While the Shaw Point prospect would seem to be the best location for development of a significant mineral deposit, these other areas warrant general investigation during the first phases of exploration of the claims.

EXPLORATION PROGRAM

The general geology of the property is relatively well established, but the details that relate to control of mineralization are not sufficiently well known to permit any sort of quantitative evaluation of the mineral resource which may be present.

Therefore, the following exploration program is proposed.

1. Establish a grid system throughout the property with profile lines oriented north-south from base lines located as required to give accurate and convenient control for the profiles which should be cut at 100m intervals with stations at ten meter increments along the lines.

In addition, an allowance for approximately 10 line kilometers of additional line is made in order that mineralized areas and assumed or interpreted extensions of them can be covered in detail for geological mapping and geophysical studies.

2. Magnetic surveys to cover all of the property on the 100m spaced lines and on the detailed grids to be established in those areas that have alteration that is known to be associated with gold-bearing zones and in those areas where gold has been observed or has been indicated by assaying.

3. Electromagnetic surveys covering the entire property plus detailed surveying in all areas where mineralization is known or expected to occur. The coupling between the primary magnetic

field broadcast by navigation stations NAA in Cutler, Maine and NLK in Jim Creek, Washington, USA is not ideal for tracing geological structures that are likely to be only modestly conductive. The use of a portable signal generator is recommended so that the orientation of the primary field can be adjusted to cut the structures being investigated at a high angle and permit their accurate location.

4. Geological mapping along and between the grid lines to better establish the geology of the claims and to provide fine detail in areas where mineralization is observed and where trenching, sampling and diamond drilling is warranted.

5. Diamond drilling of the Shaw Point showing and any other location where mineralization is found in the course of the geological and geophysical investigations.

6. Additional diamond drilling as warranted on the basis of results obtained in the preliminary drilling of showings or other likely targets.

7. Trenching of any areas in which gold mineralization is indicated where overburden will permit efficient and economic exposure of bedrock. In addition, trenching should be considered in areas where geological and geophysical information suggest that favorable host structures may exist.

8. Sampling of those mineralized zones that can be exposed by trenching and stripping. The nature of the mineralization that we observed during a visit to the property indicates that some

sort of bulk sampling will probably be necessary. The size of the sample necessary to give a minimum of five significant grains of metal cannot be determined from data presently available. However, assaying a series of samples of known size, treated with due regard to preparation of sub-samples, will give the necessary information. It is suggested that the mineralized zones be drilled and blasted systematically to yield individual samples of up to 200kg each. These samples should be crushed to approximately 1/4", mixed, sub-sampled in various sizes, pulverized, and assayed. Manipulation of the assay results according to appropriate mathematical procedures will establish the reliability of a sample of a given weight and the reliability of the general data base.

9. Assaying must be done on samples that have received careful preparation, weighing and metal extraction. Included in the assaying procedure must be determination of the quantity of gold that is coarse enough to remain on an 80-mesh screen, several analyses of the fine pulp, and combination of these data to give a reliable estimate of the metal content of the sample and of the mineralized zone.

ESTIMATED COSTS

The cost of the recommended work is estimated as follows:

Lines 34km @ \$200.00 \$6 800.00 (including land and water)

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Lines 10km @ \$200.00 (detailed grids)	\$2	000.00
Magnetic surveys @1.80/sta or (av. \$225.00/km)	\$9	900.00
VLF-EM (TX-27 mode) @1.80/sta (av. 200.00/km)	\$8	000.00
Geological mapping general detailed	\$5 \$4	000.00
Trenching	\$10	000.00
Preliminary diamond drilling (350m @ \$82.00/m)	\$28	700.00
Additional drilling depending on results obtained in preliminary work. (Allowance) 300m @ \$82.00/m	\$24	600.00
Sampling	\$8	000.00
Assaving	\$4	000.00
Supervision, interpretation of results, et cetera.	\$6	200.00
Consulting and reporting	\$5	500.00
Travel, room & board	\$3	500.00
Vehicle charges	\$2	650.00
Drafting, secretarial, printing, binding, telephone, et cetera.	\$3	800.00
Contingency	\$15	000.00

TOTAL

\$148 150.00

REFERENCES

Dressler, Burkhard O. 1982: Geology of the Wanapitei Lake Area, District of Sudbury; Ontario geological Survey, Report 213, 131p. Accompanied by Maps 2450, 2451, scale 1:31 680 (1 inch to 1/2 mile).

Fairbairn, H.W. 1939: Geology of the Ashigami Lake Area, Ontario Department of Mines, Volume 48, 1939, Accompanied by Map 48m (Ashigami Lake Area)

Martins, J.M., et al

1979: McLean-Watt Gold Property; in Annual Report of the Regional and Resident Geologists, 1979, edited by C.R. Kustra, Ontario Geological Survey, Miscellaneous Paper 91, 143 p.

Pye, E.G., et al, (Editors) 1984: The Geology and Ore Deposits of the Sudbury Structure, Ontario Geological Survey, Special Volume 1, 603 p. Accompanied by Map 2491, at a scale of 1:50 000, Map NL-16/17-AM Sudbury, at a scale of 1:1 000 000, and 3 charts.

Slaght, A.

1894: Fourth Report of the Inspector of Mines; Ontario Bureau of Mines, volume 4, 1894.1896: Fifth Report of the Bureau of Mines; 1895, p.56.

Thompson, J.E.

1961: Maclennan and Scadding Townships; Ontario Department of Mines, Geological Report 2, 34p. Accompanied by Map 2009, scale 1 inch to 1/2 mile.

CERTIFICATE

I, James E. Tilsley, of the town of Aurora, Province of Ontario, hereby certify:

- 1. I am a Consulting Geologist and reside at 5 Steeplechase Avenue, Aurora, Ontario.
- 2. I am a graduate of Acadia University, 1959, B.A., Geology.
- 3. I am a member of the Association of Professional Engineers of Ontario, The Association of Professional Engineers of Manitoba and designated Consulting Engineer, Ontario Association of Professional Engineers, 1975.
- 4. I have been employed as a geologist since graduation, with consulting groups since 1964 and in private practice since 1980.
- 5. This report is based on study of records relating to the property as available from the assessment files of the Ministry of Natural Resources, province of Ontario, reports of the Geological Survey of Canada, maps and reports published by the Ontario Bureau of Mines, the Ontario Department of Mines, and the Ontario Geological Survey, current technical literature, review of activities on the claims during the past two years, and recent observations made during a visit to the property on September 4th, 1985.
- 6. I have no interest, direct or indirect, in the properties or securities of Teckron Mines & Energy Corp., or any affiliates, nor do I expect to receive any such interest.

Dated at Aurora, Ontario this day of 1985.

J. E. Tilsley, P.Eng.

Appendix I Details of Claim Status

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DETAILS OF CLAIM STATUS - EAGLE'S NEST PROPERTY Scadding and Rathbun Townships Sudbury Mining Division, Ontario (as of September 4, 1985)

Claim No.	Staking Date & Time	Date Recorded	Due Date	Land/Water	Work Requirements	Township/Map No.	
721323	Sept. 01/83 15:00h	Sept. 30/83	March 27/	'86 L+W (S.R. Excl. Plan M.970)	60 Days	Scadding/M.1092	
721324	Sept. 02/83 16:30h		•	8.	a	•	
721325	Sept. 02/83 10:00h		•		•	•	
721326	Sept. 03/83 13:00h		•	•	•	•	
721327	Sept. 03/83 08:00	ı	•	L+W		•	
734018	0⊂t. 10/83 09:30h	0ct. 11/83		L+W	•		
734019	Oct. 10/83 14:00h	•	•	L+₩	•	ı	
808329	May 28/84 09:00h	June 11/84	•	W	1	Rathbun/M.1061	
808330	May 28/84 11:00h	•		W		•	
808331	May 29/84 13:30h	•		L+W	•	•	
808332	May 29/84 08:00h	•	•	L+W	•	•	
808333	May 28/84 16:30h	8	•	L+W	۲	•	

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DETAILS OF CLAIM STATUS - EAGLE'S NEST PROPERTY Scadding and Rathbun Townships Sudbury Mining Division, Ontario (as of September 4, 1985)

continued...

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Claim No.	Staking Date & Time	Date Recorded	Due Date	Land/Water	Work Requirements	Township/Map No.
808334	June 5/84 08:00h	June 11/84	March 27/86	5 L+W	60 days	Scadding/M.1092 6-3056
808335	June 5/84 11:30h	•	•	L		•
808336	June 5/84 16:00h	•	•	L	1	•
808337	June 8/84 07:00h		•	L		
808338	June 8/84 11:11h	•	•	L		
808339	June 8/84 15:00h	•	•	L+W		•
808340	June 8/84 18:00h		•	L+W		•

Appendix II

Assay Certificates - Samples from Shaw Point Showings

(N.B. - All samples reported must be considered as grab samples since apparent grain size and distribution indicate that determination of average grades will require some sort of bulk sampling and special preparation for analysis).

	P.O. BOX 187, HAILEY	BURY, ONTARIO TEL: 672-3107
	Certificate o	f Analysis Sun 13 1984
. 18014	• •	DATE: June 11, 1984
MPLE(S) OF:	Rock. (13)	RECEIVED: June, 1984
MPLE(S) FROM	Mr. Ken Germundson, Kerr Addison Mines I	imited Project # 0-02-07
	Sample No.	Gold/oz.
•	2	0.526**
•	3	0.004**
	4	6.46 **
,	5	0.060
	6	0.082
	7	0.109**
	8	0.002*
	9	0.002*
	10	0.002*
	11	0.514**
	12	Trace
	13	0.022
	14	Trace
	* Estimate ** Checked	

ACCORDANCE WITH LONG ESTABLISHED NORTH CAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED HWISE GOLD AND SILVER VALUES REPORTED ON THE BHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-FOR LOSSES AND VALUES INHERENT IN THE FIRE ASSAY PROTECTS

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14600

BELL-WHITE ANALYTICAL LABORATORIES LTD.

	10 NIPISSING GABBRO	
	7 ESPANOLA FORMATION.	
	(LIMESTONE, SILTY WACKE)	
	GOWGANDA FORMATION (WACKE, SANDSTONE)	
	QUARTZ VEIN WITH DIP	
	NEW TRENCHING	
	CIT OLD TRENCHING	
	X SAMPLE LOCATION AND NUMBER	
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TECKRON	MINES & ENERGY CORP.	
KUKAGAMI LA	AKE, SUDBURY MINING DIVISION, ONTARIO	
TREN	CHING & GEOLOGY	
	SHAW, POINT	
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JAMES	E.TIL	SLEY 8	ASS	OCIATES	States
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VEIN MATERIAL

v

Ĩ	a) GABBRO
	f) F.G. DIABASE EQUIVALENT
9	b) ARKOSE
	c) CONGLOMERATE
7	a) CALCAREOUS SILT MUDSTONE
	b) COARSE CRYSTALLINE DOLOMITE
6	
<u> </u>	a) PEBBLY WACKE
1. V.	QUARTZ VEIN
a	ANKERITE
с	CALCITE
p	PYRITE

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TECKRON MINES & ENERGY CORP. KUKAGAMI LAKE, SUDBURY MINING DIVISION, ONTARIO										
GEOLOGY SHAW POINT										
JAMES E. TILSLEY & ASSOCIATES LTD.										
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8	452	- 8449		8493	-8690	8787	8802	- 8698	- 8678	8618	8670	- 8663	- 8684		8525
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TECKRON MINES & ENERGY CORP.

EAGLE'S NEST Property

Scadding and Rathbun Townships Sudbury Mining Division, Ontario

James E. Tilsley & Associates Ltd. Consulting Geologists and Engineers Aurora, Ontario, Canada L4G 3G8

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MAPS

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SUMMARY AND CONCLUSIONS

Teckron Mines & Energy Corp. has entered into an exploration agreement in regard to 19 unpatented mineral claims located in Scadding and Rathbun townships, Sudbury Mining Division, Ontario.

The claims cover the former 'Eagle's Nest' prospect on Shaw Point, Kukagami Lake and several other indications of goldbearing mineralization.

A block of Espanola Formation limestone is exposed on Shaw Point and estimated to be at least 300m stratigraphically above its expected position in this part of the townships. The most recent geological maps of the area show the limestone to be fault-bounded and imply that it has been moved vertically a significant distance. Movement of such magnitude is likely to be accompanied by extensive subsidary fracturing which is the primary ground preparation mechanism observed in the claims.

Trenching and pitting on the point adjacent to the limestone wedge has shown coarse free gold associated with quartzcarbonate veining in strongly chloritized sediments and gabbro. Gold values are also reported from limestone float boulders located near the trenches.

Detailed exploration in the immediate area of the prospect is warranted. In addition, geophysical and geological studies throughout the rest of the property, including the area covered by water, is recommended.

The cost of the work program is estimated to be \$148 150.00

INTRODUCTION

The Eagle's Nest prospect lies in the northeast corner of Scadding and the southeastern corner of Rathbun townships.

Gold has been found in the northern part of the property associated with faulting in Cobalt Group sediments and Nipissing gabbros. The main prospect lies in claims 721326 and 721327 where a block of Espanola limestone is in fault contact with younger rocks. There are reports of gold in the limestones in addition to the metal observed in quartz-carbonate veins that cut Nipissing intrusives and Huronian sediments adjacent to major and minor faults.

There is evidence of trenching and shallow shaft sinking on the main showing apparently done in the late 1800's. There is no record of more recent physical work on the claims in annual Mines Department reports, other official publications, or in the Assessment Work files of the Sudbury office of the Ministry of Natural Resources.

The prospect lies approximately four miles NNE from the Scadding township McLean-Watt gold property of Northgate Exploration Limited and about the same distance SSE of the Flag Resources Ltd. Matagamasi Lake gold prospect in Rathbun Twp.

A program of geological mapping, geophysical surveying, trenching, sampling, and diamond drilling is recommended. The cost of the preliminary phases of the program is estimated at \$148 150.00.

LOCATION AND ACCESS

The property is located in the extreme northeast corner of Scadding township and the extreme southeastern corner of Rathbun township, Sudbury Mining Division, Ontario.

Approximate co-ordinates are:

46 44' 00"N; 80 35' 00"W

The property can be reached from Sudbury via Highway 17 East to the Kukagami Lake Road, then approximately twelve miles north through Street and Scadding townships to a local cottage property access road that leads northeast three miles (5.0km) to private cabins on the west shore of Shaw Point of Kukagami Lake, within claim No. 721326 of the group.

In most seasons, travel time by road from the Sudbury airport to the claims is approximately one hour.

Sudbury has daily bus, train and airline connections to other parts of the province and North America.

PROPERTY

The property consists of 19 unpatented mineral claims held in the name of Rodney J. Fielding of Hanmer, Ontario. The the record books in the office of the Mining Recorder in Sudbury show all claims are under extension until March 27th, 1986. All claims will require 60 days work before the due date.

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Claim No.	Township	Claim No.	Township	
808329	Rathbun	721323	Scadding	_
808330	**	721324		
808331	11	721325	11	
808332	**	721326	**	
808333	11	721327	**	
808334	Scadding	734018	**	
808335		734019	**	
808336	11			
808337	**			
808338	11			
808339	11			
808340	**			

LIST OF CLAIMS

SURFACE RIGHTS

The claims cover Crown Lands with the exception of approximately five acres designated 'Plan M-970' which include five cottages with frontage on Kukagami Lake. Use of surface rights on Crown Lands is governed by the standard regulations. Use of surface rights to the lands described in Plan M-970 must be negotiated with the private owners.

There is also the standard 400 foot surface rights reservation along the shores of Kukagami Lake. Use of this land

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is restricted except with prior permission from the Department of Natural resources.

CLIMATE

The area has a continental climate typical of central Canada. Precipitation totals approximately 34 inches (863mm) per annum, relatively well spread throughout the year. Snow accumulations of 700 to 1300mm are frequently observed in average winters, with first significant falls in late October or early November. Continuous cover can be expected from early December until mid-April in most years.

Summer-time maximum temperatures may exceed 30 degrees Celcius and winter minimums in the range of -40 C are not uncommon in January and February. Mean summer maximums are approximately 23 degrees Celcius and mean summer minimums about 12 degrees C. Winter mean maximums are in the range of -7 C and mean minimums -21 C.

TOPOGRAPHY

Kukagami Lake has an elevation of 278m (912') above sea level. Within Scadding Township the land rises to approximately 325m (1066'). In general, the surface is rolling, with occasional abrupt hillocks of bedrock, especially along lake shores where low cliffs are common. Relief is usually less than 30m (100'). There are some low-lying swampy areas but the

greater part of the land area of the Township is relatively dry.

Drainage is west to Wanapitei Lake, Wanapitei River, the French River and Georgian Bay.

LOCAL RESOURCES

Sudbury is a city with a population of approximately one hundred and sixty thousand. There is a long history of mining and smelting with a skilled work force in both mining and related support functions. Men, equipment, supplies, and services are all available locally.

Medical facilities are excellent, with several clinics and hospitals in the city.

Rail, highway, and air transportation are excellent to southern Ontario and points east and west of Sudbury.

The claims are forested with several varieties of pine, spruce, balsam fir, cedar, and assorted deciduous species. Some of the timber is merchantable but there have been no recent lumbering or pulp wood operations.

Industrial power is available within twelve miles of the property and local transmission lines provide domestic electricity to residents. Telephone communications, local and international, are possible from homes and businesses on Kukagami Lake.

HISTORY

Gold was first reported from the Kukagami Lake area in the fall of 1891. (Ontario Bureau of Mines, 1892 p.237) The discovery may have been made during surveying of the Scadding -Rathbun township line. The location given for the initial discovery is not specific enough to confirm that it is the same prospect described subsequently as the 'Eagle's Nest mine' (Ontario Bureau of Mines, 1896, p.56), but the two reports appear to refer to the same occurrence.

Slaght, 1896, op. cit., reports sixteen veins "running northwest and southeast and one lateral vein on the property." The geographic position of the veins is given as "locations WD25 and WD40", both on Shaw Point and included in the present claim group. The work mentioned by Slaght was comprised of stripping, and the sinking of ten test pits which were six to ten feet deep and eight to twenty-five feet long.

There is no other record of work from that time, nor do the assessment files show additional ground surveys or prospecting activity subsequent to the claims reverting back to the Crown for non-payment of taxes in 1920. However, Scadding Township was included in an airborne magnetic and electromagnetic survey done by Kennco Explorations (Canada) Ltd. in 1968. The survey apparently covered the Eagle's Nest property but there is no record of follow-up work within the boundaries of the present claim group.

The trenches from the work done in the late 1800's are still locatable but have been partially filled with rotting vegetation and slumped soil. General prospecting has been done in the claim group in the past two years, but little new excavation completed. One trench has been cleaned out north of the section pitted during 1892-96 and shows occasional 1 to 30mg grains of free gold on the contact of quartz-carbonate veining with chloritic gabbro. Sampling of limestone float boulders from the north part of Shaw Point has indicated gold values, but the source of this material, which must be local, is not currently exposed.

Grab samples taken during examinations done in the past two years have returned assays ranging from nil to over 20 oz. Au/ton. Photocopies of the assay certificates for these samples are presented in Appendix II.

GENERAL GEOLOGY

Reconnaissance geological mapping in the Sudbury area was done as early as 1853 when Alexander Murray conducted river and lakeshore traverses that included the Wanapitei River and parts of the shoreline of Lake Wanapitei. Bell and Barlow worked in the Sudbury Basin beginning in 1888 and included part of the Wanapitei Lake area in their map published in 1891. Collins worked to the south of Lake Wanapitei in 1912 and reported his results in 1914. It was not until 1921, when

Quirke mapped Scadding township as part of his regional study, that a geological compilation covering the Eagle's Nest property was completed. Fairbairn mapped Scadding township as part of his 1938 Ashigami Lake project. Cooke et al., prepared the Falconbridge sheet in 1946 and revised Quirke's 1922 map. Thomson mapped Scadding and Maclennan townships during the 1956 to 1959 field seasons but did not re-map those areas covered by Fairbairn in 1938. Thomson reported his findings and presented a compilation in 1961 (ODM Geological Report No.2 and Map No. The most recent study of the area is based on field 2009). work by Dressler and assistants in 1977 and 1978 described in Ontario Geological Survey Report 213.

The geology of the Wanapitei Lake area is summarized in the following table from Dressler (1982) and applies to the portion of Scadding and Rathbun townships within and adjacent to the property under consideration.

TAB	LE OF LITHOLOGIC UNITS FOR THE LAKE WANAPITEI AREA.
PHANEROZOIC	
CENOZOIC	
QUATERNARY	
RECENT	
	Swamp, lake, and stream deposits.
PLEISTO	CENE
	Glacial and glaciofluvial sand and gravel deposits.
	Unconformity
DRECAMBRIAN	

LATE PRECAMBRIAN MAFIC INTRUSIVE ROCKS Olivine diabase.

Intrusive Contact

MIDDLE PRECAMBRIAN

SUDBURY NICKEL IRRUPTIVE

Sublayer, norite, transition zone norite, micropegmatite, granitic rock.

Intrusive Contact

WHITEWATER GROUP

ONAPING FORMATION

Tuff, quartzite breccia.

SUDBURY EVENT

Explosive volcanism or meteorite impact; Sudbury-type brecciation.

NIPISSING INTRUSIVE ROCKS

Gabbro, granophyre, granitic dike rock, pegmatite, quartz-plagioclase porphyry.

Intrusive Contact

HURONIAN SUPERGROUP

COBALT GROUP

LORRAIN FORMATION

Arkose, subarkose, subarkosic wacke, quartz wacke, arenites.

GOWGANDA FORMATION

Wacke, arkose, conglomerate.

QUIRKE LAKE GROUP

SERPENT FORMATION

Arkose, arkosic wacke, calcareous arkose, minor conglomerate.

ESPANOLA FORMATION

Calcareous siltstone, limestone, calcareous wacke.

BRUCE FORMATION

Conglomerate, pebbly wacke, minor arkose, wacke.

HOUGH LAKE GROUP

MISSISSAGI FORMATION

Arkose, subarkose, arkosic wacke, subarkosic wacke, conglomerate, and silty wacke.

Unconformity

EARLY PRECAMBRIAN MAFIC INTRUSIVE ROCKS

Diabase, glomeroporphyritic diabase, porphyritic diabase.

Intrusive Contact

FELSIC PLUTONIC ROCKS

Granodiorite, diorite, migmatite.

Intrusive Contact

METAVOLCANICS AND METASEDIMENTS METASEDIMENTS

Wacke, arkose, gneisses, ironstone. ferruginous chert.

METAVOLCANICS

FELSIC METAVOCLANICS

MAFIC AND INTERMEDIATE METAVOLCANICS

Mafic and intermediate metavolcanics, amphibolite, dacite.

The area has been glaciated during Pleistocene time. Deposits of till, outwash sands and gravels, and clay and silt cover much of the bedrock inland from Kukagami Lake. Overburden

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is generally less than 1.5m on higher ground but may be considerably thicker in intervening till and glacial outwashfilled swales and swampy areas. The last ice advance was from the north with most striae indicating a direction five to ten degrees east of true north.

Consolidated rocks of the area range in age from Early Precambrian to Late Precambrian. The sedimentary rocks are dominated by Huronian Supergroup clastic and carbonate formations, and igneous rocks by Nipissing gabbro and related phases.

The Huronian rocks mapped on the property include Espanola Formation limestones of the Quirke Lake Group and laminated and unlaminated wacke of the Gowganda Formation of the Cobalt Group. Huronian sediments are cut by gabbros assigned to the Nipissing intrusive suite. A Late Precambrian olivine diabase dike is mapped to the northwest and east of the claims and can be expected to pass through the property just north of Shaw Island.

Structural features of the property are not well exposed. The wedge of Espanola Formation limestone on the peninsula west of Shaw Island is stratigraphically about 1000 feet above its expected position. (W. Meyer, pers. comm., 1985). This implies major dislocation, either by faulting or transport in the Nipissing gabbro magma. There is fracturing which suggests more major faulting than can be observed in outcrop adjacent to the limestone wedge, and Ontario Geological Survey Map 2451



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shows two bounding faults. Currently available mapping does not show the extension of these faults into the claims to the southwest, but there is evidence of fracturing, alteration and weak mineralization in gabbro outcrop in claim 721323 which may be related to the same structure.

The attitude of the Gowganda wacke units on the property is variable, strikes are generally to the northeast and dips in the vicinity of Shaw Island range from 85 E to 30 N.

The contact relationships between the sedimentary rocks and the intrusive gabbro are not well known. The olivine diabase body which is interpreted to pass through the northeastern part of the property is a well defined, nearly-vertical dike.

MINERALIZATION

Mineralization within the claim group appears to be related to emplacement of quartz-carbonate veins and veinlets in fractures in and adjacent to fault zones in both sedimentary and igneous rocks of the property.

The mineralized zones all seem to be related to tectonic features. However, there is not sufficient information to permit definition of the precise location, attitude, and strike of the assumed dislocations on the property, although topographic features and subsidary fracturing allow interpretation of fault positions to within 10 to 20 meters.

Gold is present in the native state, usually on the margins

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of the veins and veinlets that we have inspected. Visible gold appears to be in relatively large grains of one to thirty milligrams and to be randomly distributed in the quartzcarbonate veins and veinlet systems. Assays of samples from the claims indicate that there is also some fine gold that is not likely to be visible in hand specimen, but the limited data that are available suggest the greater part of the metal is present in relatively coarse grains.

The common host rock for gold mineralization in the Wanapitei area is Middle Precambrian Nipissing gabbro and Huronian clastic sedimentary rocks of the Quirke Lake Group and the Cobalt Group.

Gold values are also reported from within the Espanola Formation limestone wedge. Quartz-carbonate veining is present in limestone float near the north end of Shaw Point in the northeast corner of claim S 721326. We did not observe similar material in bedrock. However, the float most likely has a very local origin, since there are no other known outcrops of Espanola Limestone within five kilometers of the property.

The mineralized zones contain small amounts of sulphides. Pyrite and chalcopyrite are identified in both the Shaw Point area and from within the Nipissing gabbro where chlorite-quartzcarbonate alteration is observed in fracture zones assumed to be related to faults passing through the intrusive. Carbonate addition appears to be usual in all mineralized zones.

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It is commonly cream to creamy-pink in color and often is intimately mixed with quartz veinlets and impregnations.

Chloritization may be even more pervasive than carbonate addition. Both gabbros and sediments appear strongly chloritized in all locations where precious metal values are reported. In some exposures of quartz-carbonate mineralization, original rock forming minerals have been totally replaced by chlorite so that identification of the host rock becomes difficult at the hand specimen level.

The distribution of gold in the prospects appears to be typical of grain-dominated mineralization. The data at hand do not permit estimation of optimum sample size or provide a firm basis for planning a sampling program. However, our experience with similar mineral distributions suggests that there should be particular difficulty in developing the data base required no for proper interpretation of surface and diamond drill sampling results. It should be expected that there will tend to be highly variable assay results from small samples, e.g. diamond drill cores, and that neither the extreme highs or lows should be considered as individually meaningful.

PRODUCTION

There has been no recorded production of metals from the property.

RESERVES

There is not sufficient information on which to base an estimate of resource or reserves.

EXPLORATION POTENTIAL

The property warrants exploration for precious metals, particularly in the area of Shaw Point, both on land and beneath the waters of Kukagami Lake.

The indications of gold mineralization in the series of trenches put down on fracture zones at the turn of the century are particularly interesting since they are located adjacent to a block of Espanola Limestone which is stratigraphically about three hundred meters above its expected position. The presence of the block of limestone is taken to suggest that there has been major dislocation in the Shaw Point area and that sort of dislocation would suggest good possibilities for extensive ground preparation and possibly significant gold mineralization.

Elsewhere on the property there are indications of faultrelated alteration, minor sulphide mineralization, and variable gold values. While the Shaw Point prospect would seem to be the best location for development of a significant mineral deposit, these other areas warrant general investigation during the first phases of exploration of the claims.

EXPLORATION PROGRAM

The general geology of the property is relatively well established, but the details that relate to control of mineralization are not sufficiently well known to permit any sort of quantitative evaluation of the mineral resource which may be present.

Therefore, the following exploration program is proposed.

1. Establish a grid system throughout the property with profile lines oriented north-south from base lines located as required to give accurate and convenient control for the profiles which should be cut at 100m intervals with stations at ten meter increments along the lines.

In addition, an allowance for approximately 10 line kilometers of additional line is made in order that mineralized areas and assumed or interpreted extensions of them can be covered in detail for geological mapping and geophysical studies.

2. Magnetic surveys to cover all of the property on the 100m spaced lines and on the detailed grids to be established in those areas that have alteration that is known to be associated with gold-bearing zones and in those areas where gold has been observed or has been indicated by assaying.

3. Electromagnetic surveys covering the entire property plus detailed surveying in all areas where mineralization is known or expected to occur. The coupling between the primary magnetic

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field broadcast by navigation stations NAA in Cutler, Maine and NLK in Jim Creek, Washington, USA is not ideal for tracing geological structures that are likely to be only modestly conductive. The use of a portable signal generator is recommended so that the orientation of the primary field can be adjusted to cut the structures being investigated at a high angle and permit their accurate location.

4. Geological mapping along and between the grid lines to better establish the geology of the claims and to provide fine detail in areas where mineralization is observed and where trenching, sampling and diamond drilling is warranted.

5. Diamond drilling of the Shaw Point showing and any other location where mineralization is found in the course of the geological and geophysical investigations.

6. Additional diamond drilling as warranted on the basis of results obtained in the preliminary drilling of showings or other likely targets.

7. Trenching of any areas in which gold mineralization is indicated where overburden will permit efficient and economic exposure of bedrock. In addition, trenching should be considered in areas where geological and geophysical information suggest that favorable host structures may exist.

8. Sampling of those mineralized zones that can be exposed by trenching and stripping. The nature of the mineralization that we observed during a visit to the property indicates that some

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sort of bulk sampling will probably be necessary. The size of the sample necessary to give a minimum of five significant grains of metal cannot be determined from data presently available. However, assaying a series of samples of known size, treated with due regard to preparation of sub-samples, will give the necessary information. It is suggested that the mineralized zones be drilled and blasted systematically to yield individual samples of up to 200kg each. These samples should be crushed to approximately 1/4", mixed, sub-sampled in various sizes, pulverized, and assayed. Manipulation of the assay results according to appropriate mathematical procedures will establish the reliability of a sample of a given weight and the reliability of the general data base.

9. Assaying must be done on samples that have received careful preparation, weighing and metal extraction. Included in the assaying procedure must be determination of the quantity of gold that is coarse enough to remain on an 80-mesh screen, several analyses of the fine pulp, and combination of these data to give a reliable estimate of the metal content of the sample and of the mineralized zone.

ESTIMATED COSTS

The cost of the recommended work is estimated as follows:

Lines 34km @ \$200.00 \$6 800.00 (including land and water)

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Lines 10km @ \$200.00 (detailed grids)	\$2	000.00
Magnetic surveys @1.80/sta or (av. \$225.00/km)	\$9	900.00
VLF-EM (TX-27 mode) @1.80/sta (av. 200.00/km)	\$8	000.00
Geological mapping general detailed	\$5 \$4	000.00 500.00
Trenching	\$10	000.00
Preliminary diamond drilling (350m @ \$82.00/m)	\$28	700.00
Additional drilling depending on results obtained in preliminary work. (Allowance) 300m @ \$82.00/m	\$24	600.00
Sampling	\$8	000.00
Assaying	\$4	000.00
Supervision, interpretation of results, et cetera.	\$6	200.00
Consulting and reporting	\$5	500.00
Travel, room & board	\$3	500.00
Vehicle charges	\$2	650.00
Drafting, secretarial, printing, binding, telephone, et cetera.	\$3	800.00
Contingency	\$15	000.00
TOTAL	\$148	150.00

REFERENCES

Dressler, Burkhard O. 1982: Geology of the Wanapitei Lake Area, District of Sudbury; Ontario geological Survey, Report 213, 131p. Accompanied by Maps 2450, 2451, scale 1:31 680 (1 inch to 1/2 mile).

Fairbairn, H.W. 1939: Geology of the Ashigami Lake Area, Ontario Department of Mines, Volume 48, 1939, Accompanied by Map 48m (Ashigami Lake Area)

Martins, J.M., et al

1979: McLean-Watt Gold Property; in Annual Report of the Regional and Resident Geologists, 1979, edited by C.R. Kustra, Ontario Geological Survey, Miscellaneous Paper 91, 143 p.

Pye, E.G., et al, (Editors) 1984: The Geology and Ore Deposits of the Sudbury Structure, Ontario Geological Survey, Special Volume 1, 603 p. Accompanied by Map 2491, at a scale of 1:50 000, Map NL-16/17-AM Sudbury, at a scale of 1:1 000 000, and 3 charts.

Slaght, A.

1894: Fourth Report of the Inspector of Mines; Ontario Bureau of Mines, volume 4, 1894.1896: Fifth Report of the Bureau of Mines; 1895, p.56.

Thompson, J.E.

1961: Maclennan and Scadding Townships; Ontario Department of Mines, Geological Report 2, 34p. Accompanied by Map 2009, scale 1 inch to 1/2 mile.

CERTIFICATE

I, James E. Tilsley, of the town of Aurora, Province of Ontario, hereby certify:

- 1. I am a Consulting Geologist and reside at 5 Steeplechase Avenue, Aurora, Ontario.
- 2. I am a graduate of Acadia University, 1959, B.A., Geology.
- 3. I am a member of the Association of Professional Engineers of Ontario, The Association of Professional Engineers of Manitoba and designated Consulting Engineer, Ontario Association of Professional Engineers, 1975.
- 4. I have been employed as a geologist since graduation, with consulting groups since 1964 and in private practice since 1980.
- 5. This report is based on study of records relating to the property as available from the assessment files of the Ministry of Natural Resources, province of Ontario, reports of the Geological Survey of Canada, maps and reports published by the Ontario Bureau of Mines, the Ontario Department of Mines, and the Ontario Geological Survey, current technical literature, review of activities on the claims during the past two years, and recent observations made during a visit to the property on September 4th, 1985.
- 6. I have no interest, direct or indirect, in the properties or securities of Teckron Mines & Energy Corp., or any affiliates, nor do I expect to receive any such interest.

Dated at Aurora, Ontario this day of 1985.

J. E. Tilsley, P.Eng.

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Appendix I

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Details of Claim Status

DETAILS OF CLAIM STATUS - EAGLE'S NEST PROPERTY Scadding and Rathbun Townships Sudbury Mining Division, Ontario (as of September 4, 1985)

Claim No.	Staking Date & Time	Date Recorded	Due Date	Land/Water	Work Requirements	Township/Map No.
721323	Sept. 01/83 15:00h	Sept. 30/83	March 27	/86 L+W (S.R. Excl. Plan M.970)	60 Days	Scadding/M.1092
721324	Sept. 02/83 16:30h	•	•	•		•
721325	Sept. 02/83 10:00h	•	•	•	•	•
721326	Sept. 03/83 13:00h	•	1	•	•	•
721327	Sept. 03/83 08:00	•	•	L+W	•	•
734018	0ct. 10/83 07:30h	0ct. 11/83		L+W		
734019	0ct. 10/83 14:00h		•	L+₩	•	
808329	May 28/84 09:00h	June 11/84	•	u		Rathbun/M.1061
B 08330	May 28/84 11 :00 h	•	•	W	×	
808331	May 29/84 13:30h			L+W		•
808332	May 29/84 Ø8:00h	•		L+W		
808333	May 28/84	•	•	L+₩	•	•

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DETAILS OF CLAIM STATUS - EAGLE'S NEST PROPERTY Scadding and Rathbun Townships Sudbury Mining Division, Ontario (as of September 4, 1985)

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Claim No.	Staking Date & Time	Date Recorded	Due Date	Land/Water	Work Requirements	Township/Map No.
808334	June 5/84 Ø8:00h	June 11/84	March 27/8	5 L+W	60 days	Scadding/M.1092 6-3056
808335	June 5/84 11:30h	•	•	L	•	•
808336	June 5/84 16:00h	•	•	L	•	•
808337	June 8/84 07:00h		•	L		•
808338	June 8/84 11:11h	•	•	L		•
808339	June 8/84 15:00h	•	•	L+₩	•	•
808340	June 8/84 18:00h	•	•	L+N	•	•

Appendix II

Assay Certificates - Samples from Shaw Point Showings

(N.B. - All samples reported must be considered as grab samples since apparent grain size and distribution indicate that determination of average grades will require some sort of bulk sampling and special preparation for analysis).

	BELL - WHITE ANALY P.O. BOX 187. HAILEYBU	TICAL LABORATORIES LTD.
	Certificate of	Analysis SUS 13 1984
NO. 18014	•	DATE: June 11, 1984
AMPLE(S) OF:	Rock. (13)	RECEIVED: June, 1984
SAMPLE(S) FROM:	Mr. Ken Germundson, Kerr Addison Mines Li	.mited Project # 0-02-07
	Sample No.	Gold/oz.
	2	0.526**
· ·	. 3	0.004**
•	4	6.46 **
,	5	0.060
	6	0.082
	7	0.109**
	8	0.002*
	9	0.002*
	10	0.002*
•	11	0.514**
	12	Trace
	13	0.022
`	14	Trace
	* Estimate ** Checked	
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BELL-WHITE ANALYTICAL LABORATORIES LTD. _____

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ACCORDANCE WITH LONG ESTABLISHED NORTH CAN CUSTOM UNLESS IT IS SPECIFICALLY STATED ISE GOLD AND SILVER VALUES REPORTED ON TTS HAVE NOT BEEN ADJUSTED TO COMPEN-SES AND GAINS INHERENT IN THE FIRE ASSAY FRODUCED