National Instrument 43-101

Technical Report

on the

STARES-CALVERT PROJECT

Adrian, Aldina, Marks and Sackville Townships
Shebandowan Belt
Thunder Bay District, Ontario

for

RJK Explorations Ltd.
and
GLR Resources Inc.

Terence J. Bottrill
Bottrill Geological Services

10th September, 2003
Oakville, Ontario

STARES-CALVERT PROJECT

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4, Al Wende Avenue
Kirkland Lake, Ontario
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NTS 52A/5
89° 55' 35" West 48° 24' 05" North
UTM 283,20 East , 5,364,400 North

Claims

Adrian Township:	TB 1215132, 1239746, 1239790, 1239791, 1239792, 1239793, 1239794, 1241518, 1241519, 1241520
Aldina Township	TB 1215006, 1215007, 1215008, 1215009, 1215056, 1241517
Marks Township	Patent Lot 6 Con 5 S½ , TB 1209574, 1209575, 1239437, 1241587, 1245656, 1209573
Sackville Township	TB 1215053, 1215054, 1215055, 1215058, 1215059, 1215060, 1245650, 1245660, 1247002, 1247002

Terence J. Bottrill
Bottrill Geological Services

10th September 2003
Oakville, Ontario

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Location

The Stares - Calvert property is in the Shebandowan greenstone belt approximately 55 kilometres west of Thunder Bay, Ontario with the centre of the project at UTM Zone 16 NAD 27 at 285,000E, 5367,000N, 89° 55' 35" West longitude, 48° 24' 05" North latitude.

Property and Ownership

The land position represents a contiguous parcel measuring six kilometres east-west by twelve kilometres north-south. The project is held jointly as 50% interests by RJK Explorations Ltd. ("RJK") and GLR Resources Inc. ("GLR"), in 32 contiguous unpatented mining claims (387 units) and 1 patented mining claim covering an aggregate total area of approximately 6,265 hectares in parts of Aldina, Marks, Sackville and Adrian Townships. The initial claims were acquired under an option agreement with the property vendors in 2000. All provisions of the option agreement have been meet by RJK and GLR with the vendors retaining a 3% Net Smelter Royalty which RJK and GLR have the right to repurchase ("buy-back") 2% for a cash consideration of $1,000,000. The vendors also are entitled to an additional 50,000 shares of GLR and RJK upon the property reaching commercial production.

Geology and Mineralization

The Stares-Calvert project of RJK and GLR resulted from the discovery of well mineralized massive sulphide float and its subsequent exploration back to its bedrock source, within the southern part of the Shebandowan greenstone belt. The Shebandowan greenstone belt is part of the western Wawa Subprovince of the Archaean Superior Province of the Precambrian Canadian Shield.

In the project area, the geology consists of mafic volcanic rocks, felsic volcanic rocks - mostly rhyolite - and turbidite graywacke. These units contain horizons of magnetite ironstone, or possibly a single major horizon repeated by folding. A carbonaceous argillite is locally interbedded in rhyolite ash tuffs giving an overall appearance of locally graphitic argillite.

All of these units are tightly folded and locally overturned around isoclinal folds with east-west axes, with later gentle warping around north-south axes. Parts of the volcanic stratigraphy are off-set by faults which were possibly active during the original volcanism.

The supracrustal sequence contains units of gabbro, mostly within the mafic volcanic flow units. These may be syn-volcanic cores of thick flows or syn-volcanic sills of identical composition to the enclosing basalts.

The supracrustal sequence is intruded to the south by a granodiorite to quartz monzonite batholith. To the west it is intruded by a diorite to monzonite batholith.

Most of the stratigraphic units has been assigned to the oldest unit in the Shebandowan belt which was deposited over an interval of three to five million years approximately 2,720 million years ago ("m.y."). Parts of the local sequence were assigned to a younger unit correlated by the Ontario Geological Survey ("OGS") with Temiskaming type rock elsewhere in the Superior Province on the basis of their apparent subaerial setting. These units are structurally coherent with the underlying mafic and felsic volcanic rocks, which also display features characteristic of subaerial settings, as seen elsewhere in the belt, and there is no evidence of the required unconformity between these units which were deposited some 25 m.y. apart. They are considered as part of the same large stratigraphic unit.

Most of the area is covered by a single till sheet. Despite the relatively rough physiography for the Canadian Shield, this overburden is extensive, up to 20 metre thick and covers the bedrock throughout much of the project area. It has been cited as an explanation for the comparative lack of prospecting discoveries in the Shebandowan belt as compared with many other similar belts elsewhere in the Shield.

The base- and precious-metal massive sulphide mineralization which has been discovered on the property is within a single continuous almost east-west horizon in a sequence of subaerial rhyolite ignimbrites. It is associated along strike with garnet-chlorite-biotite-pyrite-pyrrhotite which may be a sulphide-silicate facies ironstone. In turn this may be a transitional facies to banded ironstones in the surrounding area which consist of laminated magnetite between layers of mafic silicates which are probably iron-rich as a magnetite-silicate facies. Elsewhere, principally within the mafic volcanic rocks, the ironstones are more typically magnetite-jasper or oxide facies.

The host rhyolite ignimbrites consist of coarse basal tuff breccias and agglomerates overlain by well bedded quartz phyric ash tuffs. The lie over a lowermost unit in the area of massive basalt. The lower part of the quartz phyric rhyolite contains numerous layers and beds of carbonaceous argillite which give the enclosing rocks an overall black colour and appearance of graphite schist. The mineralized horizon lies stratigraphically higher than this interlayered carbonaceous unit.

The host quartz phyric rhyolite is overlain in turn by a quartz-feldspar phyric rhyolite and by a feldspar phyric unit which is possibly mixed with mafic tuffaceous or argillaceous sedimentary components as this unit contains characteristic biotite. There is a continuous sheet of magnetite pyroxenite which separates the second and third rhyolite units, bounded locally by thin basalt flows. The third or uppermost rhyolite locally contains a coarse grained, non-magnetic gabbro, which may mark an earlier fold axis which repeats the stratigraphy to the south.

A major northeast striking fault off-sets the volcanic stratigraphy and may have been active during volcanism. The massive sulphide mineralization is located on the original down-dropped block relative to this fault.

The sulphide mineralization, which is locally very high grade in zinc as well as gold and silver, but generally poor in copper, is probably of the distal transported type, comparable to deposits in similar subaerial volcanic rocks in Proterozoic and Phanerozoic volcanic sequences.

Exploration Concept

The exploration target is for a volcanic-hosted base- and precious-mineral deposit similar to the zones of mineralization which have been located in bedrock and shallow drill holes beneath the original discovery. Interpretation of the local stratigraphy based on the approximately 8,500 metres of drilling in 72 holes has identified possible fault off-sets of the original zone, extending along the original depositional slope away from the prominent northeast striking growth fault to the northwest.

Status of Exploration

The project was initiated following discovery in 1996 of high grade float by local prospectors following active logging roads. The boulder appeared to lie down-ice of a moderate strength airborne electromagnetic anomaly ("AEM") from the 1991 regional OGS survey. This anomaly as well as the enclosing stratigraphy was drilled in 1997 but no source for the boulders was located.

A second group of boulders was found in 2000 approximately one kilometre further south, which were up to 15 tonnes and high grade in zinc and gold, similar to the initial float discovery. Throughout 200, 2001 and 2002 the area was intensively explored using most appropriate techniques suitable for this terrain and target type. Extensive till geochemical coverage extended the float boulder train up-ice to the north to the host stratigraphic unit. Overburden stripping led directly to the discovery of the sub-overburden massive sulphide exposure.

Numerous geophysical techniques have been applied; many of the immediate rocks are magnetic (ironstones, pyroxenite) and others conductive or provide a high chargeability response in the extensive induced polarization surveys across the large cut line grid. Many of these have been tested and shown to be due to various stratigraphic units. The mineralization is primarily semi-massive sphalerite in a matric of granular altered rhyolite and sulphide clasts and is not conducive to most available geophysical techniques, especially in an environment such as this with so many other stratigraphic or formational anomalous electrical and electromagnetic sources.

Traditional B-horizon aqua regia soil geochemistry was ineffective due to the locally thick overburden. The bedrock topography is locally very rugged, which together with the present surface with its local high relied presents very different overburden thickness and character over short distances. An extensive hydromorphic Enzyme Leach soil geochemical survey was completed over much of the grid. An anomaly could be detected corresponding to the originally overburden covered mineralized zone, particularly through multi-element discriminant statistics. Numerous other, locally far higher amplitude, anomalies are due to hydromorphic dispersion in the irregular overburden till, especially discharge and collection in overlying organic rich soils at spring lines along the more recently eroded edges of local ravines which cut both the till and through a prominent ice marginal moraine which forms a line of hills close to the southern boundary of the property and the cut line grid.

The drilling has located the bedrock source for the original float boulders, which are very similar in their overall zinc-gold-silver rich and copper poor geochemistry and characteristic textures of distal transported sulphide ores. Interpretation of all of the stratigraphic and structural information from the completed

drilling has indicated a possible depositional environment for the sulphide debris down the original topographic slope away from a fault uplifted block to the southeast, which was possibly a feeder to proximal vent type mineralization. The host volcanic rocks are of subaerial derivation, but they are interbedded with finely layered carbonaceous sedimentary rocks and laminated ironstones which indicate deposition in an adjacent marine basin. This basin thickened rapidly into a turbidite graywacke indicating that the overall depositional slope may have been steep, possibly in a shelf and rise setting from an adjacent deeper basin.

Conclusions and Recommendations

The Stares-Calvert property hosts base- and precious-metal mineralization, locally high grade in zinc, gold and silver, which was probably deposited in a basin marginal to extruding subaerial rhyolites. Possible extensions of the specific host stratigraphic horizon extend around a major east-west fold axis, closing to the west, for up to 10 kilometres, very little of which has been explored in any detail, but which contains numerous possible targets in combinations of geophysical and Enzyme Leach geochemical signatures.

The initial host unit appears to have been fault off-set on one of a series of dextral compressional northeast striking faults, possibly refolded thrust sheets. This horizon extends for 800 metres along strike to the west where it has only been tested by widely spaced shallow holes, many of which never actually crossed the target stratigraphy as they were targeted on the stratigraphically lower graphitic argillaceous member or the underlying rhyolite-basalt contact, prior to the development of the current detailed stratigraphic picture.

An exploration programme is proposed consisting entirely of diamond drilling and related costs for five core holes to test the concept discussed above of a possible extension to the known mineralized horizon down slope and, in effect, at greater depths along strike to the west. The proposed drilling consists of two holes with lengths of 240 metres and three of 325 metres on lines 50, 100, 150 and 200 metres west of the known zone, with target depths (assuming a 45° dip in the hole and an approximately 80° stratigraphic dip to the north) of 125 and 175 metres below surface in a staggered pattern.

The proposed budget for $120,000, to be divided equally between RJK and GLR, includes contingencies (at 10%) and reporting costs (at 15%).

Future programmes could follow-up along this target horizon further along strike to the west and at greater depths depending upon the results of the recommended first stage drilling. Numerous other targets exist within the folded host rhyolite package, particularly where coarse grained felsic rocks, characteristic of "mill rock" have been located in the field.

STARES-CALVERT PROJECT

Adrian, Aldina, Marks and Sackville Townships
Shebandowan Belt, Thunder Bay District, Ontario

Introduction and Terms of Reference

Bottrill Geological Services, a private consulting company based in Oakville, Ontario, has been requested by RJK Explorations Ltd., ("RJK") and GLR Resources Inc. ("GLR") to prepare a Technical Report as defined in National Instrument 43-101 on their jointly owned Stares-Calvert Project in the Thunder Bay district of Ontario. Terence J. Bottrill is the Vice President Exploration for GLR and Bottrill Geological Services is an independent consultant to RJK. Terence J. Bottrill, the author of this report, is a Professional Engineer in Ontario, and has been practicing in Canadian and international exploration since graduation from University in 1968, for most of the last 20 years as an independent consultant.

This report is being prepared in support of the 2002 Annual Information Forms of RJK and GLR. It is also being made available to RJK and GLR for whatever appropriate purposes they require, such as in the required technical documentation of the project as a part of any financing negotiated in the near future.

This report has been based on a review of:

- the relevant published literature, especially the maps and reports of the Ontario Geological Survey "(OGS"), as listed in the "References" section of this report;
- personal examination of the outcrops and a significant representative part of the diamond drill core; and
- detailed review of the technical data and original reports on the exploration completed on the project by GLR and RJK since 1999.

Terence J. Bottrill, the author of this report, has visited the Stares-Calvert project on several occasions, in March, May and July 2002 In addition, he has worked extensively in the Shebandowan greenstone belt in recent years, some of which has been on the other properties held by GLR and RJK in the region. He has worked extensively in the Canadian Shield and in similar Precambrian terranes around the world over the last 35 years, specifically since 1978 in the exploration for volcanic-hosted base- and precious-metal massive sulphide deposits, as well as for sediment-hosted base metal deposits which are transitional into volcanic-hosted deposits.

Property Description and Location

The Stares - Calvert property is a polymetallic base and precious metal exploration project in the Shebandowan greenstone belt approximately 55 kilometres west of Thunder Bay, Ontario with the centre of the project at UTM Zone 16 NAD 27 at 285,000E, 5367,000N, 89° 55' 35" West longitude, 48° 24' 05" North latitude.

The land position represents a contiguous parcel measuring six kilometres east-west by twelve kilometres north-south.

The project is held jointly as 50% interests by RJK Explorations Ltd. ("RJK") and GLR Resources Inc. ("GLR"), in 32 contiguous unpatented mining claims (387 units) and 1 patented mining claim covering an aggregate total area of approximately 6,265 hectares in parts of Aldina, Marks, Sackville and Adrian Townships.

The initial claims were acquired under an option agreement with the property vendors in 2000. All provisions of the option agreement have been met by RJK and GLR with the vendors retaining a 3% Net Smelter Royalty which RJK and GLR have the right to repurchase ("buy-back") 2% for a cash consideration of $1,000,000. The vendors also are entitled to an additional 50,000 shares of the Company upon the property reaching commercial production.

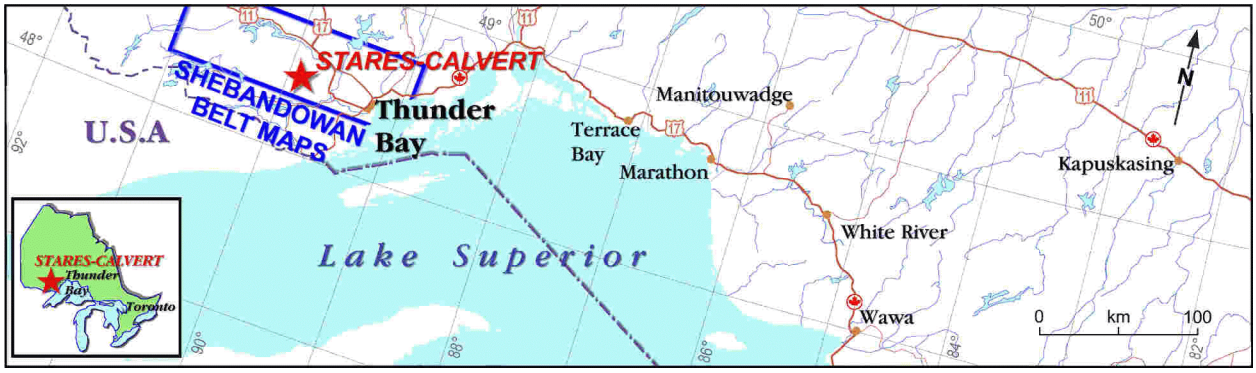

Figure 1 Location of the Stares-Calvert Property in Northwestern Ontario

Accessibility, Climate, Local Resources, Infrastructure and Physiography

Topography, Elevation and Vegetation

The Stares-Calvert project extends from an elevation on hill tops of over 590 metres down to 440 metres to the north in the valley of Serpent Creek. The topography is quite rugged compared to many other parts of the Canadian Shield, partly in response to a glacial terminal moraine close to the southern boundary of the property. Most streams drain to the north, including Serpent Creek, the major stream in the area, which cuts through the southern terminal moraine, and in part is inherited from a higher elevation drainage

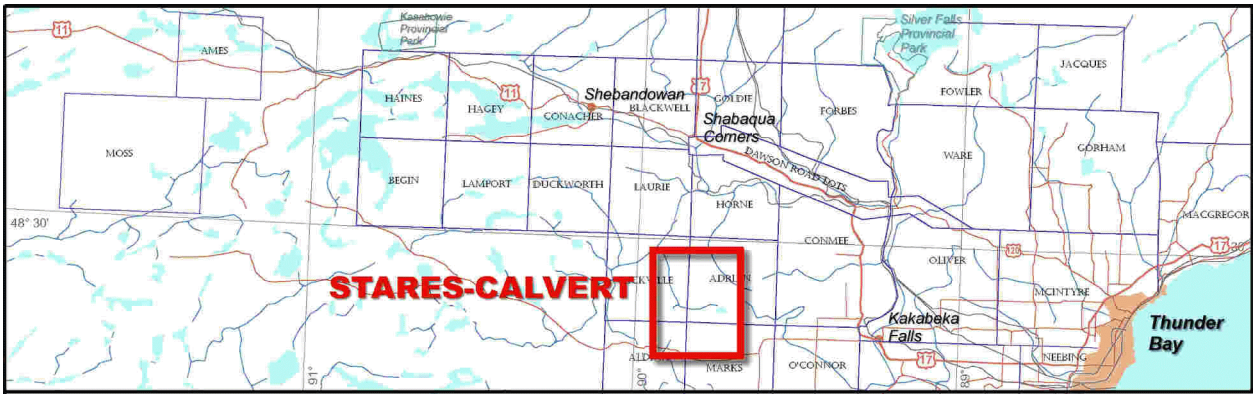

Figure 2 Location of the Stares-Calvert Project West of Thunder Bay

system cutting down through the glacial cover. The relatively steep valley hosting the mineralization of claim TB1215009 is partly a ravine filled with younger alluvial and unconsolidated slope debris from the adjacent hills. The relief is sufficiently steep to affect the availability of suitable drill set-ups relative to the optimal position to test individual targets. The area is covered by typical northern forest, with the exception of the large areas in the south half of the project which have been clear-cut from logging operations extending from the Boreal Forest road.

Means of Access to the Property

The property is accessible by road, lying approximately 55 kilometres west of Thunder Bay and southwest of the small town of Kakabeka Falls with its Provincial Park on the Trans-Canada Highway (Highway 17). A provincial paved road goes south from just west of Kakabeka Falls, from which the Boreal Forest Road extends to the west across a large area as a primary forestry access road. The property is accessible by a series of logging roads extending north and south of the Boreal Forest Road. The main line of the Canadian Pacific and Canadian National railways runs through Kakabeka Falls. Major electrical power lines follow the route of highway 17 and the railways.

Proximity of the Property to a Population Centre

The closest major population centre is Thunder Bay. This city provides most facilities typical of large urban centres, as well as exploration specific facilities including fully accredited assay laboratories, offices of various relevant Ontario government departments, and the facilities at Lakehead University. Kakabeka Falls is primarily a tourist centre with motels, restaurants and a few stores. GLR and RJK maintain a temporary office in the Kakabeka Falls Hotel.

Climate and the Length of the Operating Season

The climate is typical of interior Canada with cold winters and warm humid summers. Other than for periods at freeze-up and break up the entire property is accessible throughout the year by car and truck.

Table 1
Stares-Calvert Property - Claims and Patents

Township	Claim Number	Units	Hectares	Recording Date	Amount Due	Due Date
Adrian	TB1215132	8	129.5	May-06-96	$3,200	May-30-04
Adrian	TB1239746	2	32.4	Sep-29-99	$800	Sep-29-04
Adrian	TB1239790	6	97.1	Sep-29-99	$2,400	Sep-29-04
Adrian	TB1239791	16	259.0	Sep-29-99	$6,400	Sep-29-04
Adrian	TB1239792	4	64.8	Sep-29-99	$1,600	Sep-29-04
Adrian	TB1239793	4	64.8	Sep-29-99	$1,600	Sep-29-04
Adrian	TB1239794	8	129.5	Sep-29-99	$3,200	Sep-29-04
Adrian	TB1241518	14	226.6	Sep-05-00	$5,600	Sep-05-04
Adrian	TB1241519	15	242.8	Sep-05-00	$6,000	Sep-05-04
Adrian	TB1241520	15	242.8	Sep-05-00	$6,000	Sep-05-04
Aldina	TB1215006	16	259.0	May-06-96	$6,400	May-06-04
Aldina	TB1215007	16	259.0	May-06-96	$6,400	May-06-04
Aldina	TB1215008	16	259.0	May-06-96	$6,400	May-06-04
Aldina	TB1215009	16	259.0	May-06-96	$6,400	May-06-06
Aldina	TB1215056	16	259.0	May-06-96	$6,400	May-21-04
Aldina	TB1241517	16	259.0	Aug-22-00	$6,400	Aug-22-04
Marks	Patent Lot 6 Con 5 S½		16.2			
Marks	TB1209573	16	259.0	Jul-31-02	$6,400	Jul-31-04
Marks	TB1209574	16	259.0	Jul-31-02	$6,400	Jul-31-04
Marks	TB1209575	8	129.5	Aug-25-02	$3,200	Aug-25-04
Marks	TB1239437	8	129.5	Sep-30-99	$3,200	Sep-30-04
Marks	TB1241587	8	129.5		$3,200	Sep-05-03
Marks	TB1245656	8	129.5		$3,200	Sep-25-03
Sackville	TB1205324	15	242.8	Sep-13-99	$6,000	Sep-13-04
Sackville	TB1215053	16	259.0	May-06-96	$6,400	May-21-04
Sackville	TB1215054	16	259.0	May-06-96	$6,400	May-21-04
Sackville	TB1215055	16	259.0	May-06-96	$6,400	May-21-04
Sackville	TB1215058	16	259.0	May-06-96	$6,000	May-21-04
Sackville	TB1215059	16	259.0	May-06-96	$6,400	May-21-04
Sackville	TB1215060	16	259.0	May-06-96	$4,800	May-21-04
Sackville	TB1245650	3	48.6	Sep-25-00	$400	Sep-25-04
Sackville	TB1245660	15	242.8	Sep-25-00	$6,000	Sep-25-04
Sackville	TB1247002	10	161.9	Apr-19-00	$4,000	Apr-19-04
Total		**387**	**6264.5**		**$156,826**	
Reserve					**$70,367**	

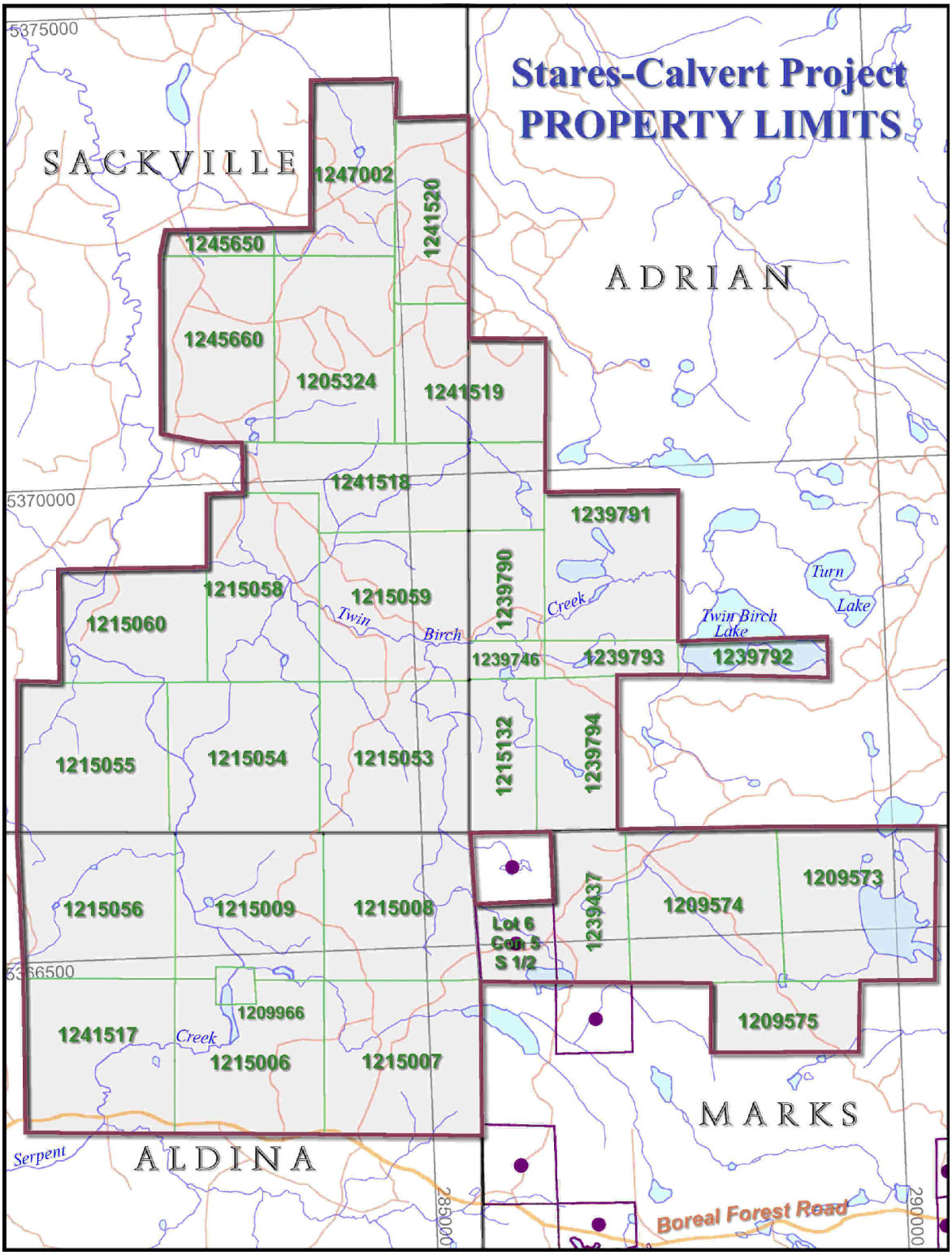

Figure 3 Property Limits and Claims

Local Resources

Other than remaining stands of commercial timber between the previous logging operations there are no economic resources on the property. In the event of a mineral deposit being located on the property all the normally required facilities of power, water and personnel are located within the immediate surrounding area.

History

The Shebandowan Greenstone belt has been explored since the turn of the century for iron ore, base metals and gold. Only minor exploration was ever undertaken in the immediate area of the Stares-Calvert property.

The property was primarily explored in the 1950's for iron ore on the magnetite ironstones. Minor exploration was undertaken to follow-up the 1991 Ontario Geological Survey ("OGS") Airborne magnetic and electromagnetic survey. Very few of the numerous conductors in the area were followed-up on the ground explored or drilled. The OGS released new geological maps for the four townships covered by the property in 1995 (Rogers and Berger, 1995) which showed several areas as underlain by rhyolite breccias and lapilli tuffs, some with alteration and sulphides. This caused a renewed interest in the area, principally by local prospectors and independent geologists working out of Thunder Bay.

Work previously recorded with the Ministry of Northern Development and Mines both on and in the area immediately surrounding the property is as follows:

1956 New Fortune Minerals completed an airborne magnetometer survey over parts of Aldina and Marks townships;

1957 New Fortune Minerals undertook a ground magnetometer survey in Aldina and Marks townships and drilled four holes in exploration for iron ore; either this company or some unknown party sunk exploration pits on exposures of magnetite iron ore (banded ironstone);

1961 Hanna Mining Co. completed a geological survey for iron ore in Marks township;

1991 Ovalbay Geological undertook prospecting and a magnetometer survey in Aldina township;

1993 Ovalbay Geological did further prospecting and a VLF-EM survey in Aldina township;

1993 Asarco Exploration undertook a magnetometer and VLF-EM survey in Sackville township (unpublished);

1996 Stares Contracting prospecting along newly cut forestry roads discovered sulphide float which assayed 0.6% Cu, 12% Zn, 4.4%Pb, 359 g/t Ag and 5.52g/t Au in Aldina township, which started the first detailed exploration on the present property for other than iron ore;

1996 Cumberland Resources optioned the Stares property and completed a program of line cutting (48.39 km), geological mapping, soil geochemistry (723 samples analysed by AA for Cu, Pb and Zn), magnetometer and VLF-EM surveys.

1997 Cumberland Resources completed a Pulse DEEPEM electromagnetic ("PEM") survey over an airborne electromagnetic ("EM") anomaly up-ice of the mineralized boulder; they drilled six holes on the conductor up-ice of the boulders and a further three holes 3 kilometres to the north on the "Asarco grid" for a total of 1,552 metres of diamond drill core. No mineralization was located and the source of the airborne EM anomaly was a carbonaceous mudstone.

More recent activities by GLR and RJK are described below under exploration.

Geological Setting

Regional Geology

The Stares-Calvert project of RJK and GLR resulted from the discovery of well mineralized massive sulphide float and its subsequent exploration back to its bedrock source, within the southern part of the Shebandowan greenstone belt. The Shebandowan greenstone belt (or Shebandowan belt) is part of the western Wawa Subprovince of the Archaean Superior Province of the Precambrian Canadian Shield (Figure 6). The Shebandowan belt is one of a series of greenstone belts which extend along the north shore of Lake Superior from the western boundary of the Kapuskasing Subprovince, through the Manitouwadge, Hemlo and Schreiber belts, together with the Michipicoten belt further to the south. These are all east of the Proterozoic Lake Nipigon, mid-continent rift cover sequence. To the west of the Proterozoic the Subprovince continues through the Shebandowan belt to the Saganogans belt and into the Soudan and Newton belts of the Vermillion district of Minnesota. It is covered at the west by the Palaeozoic

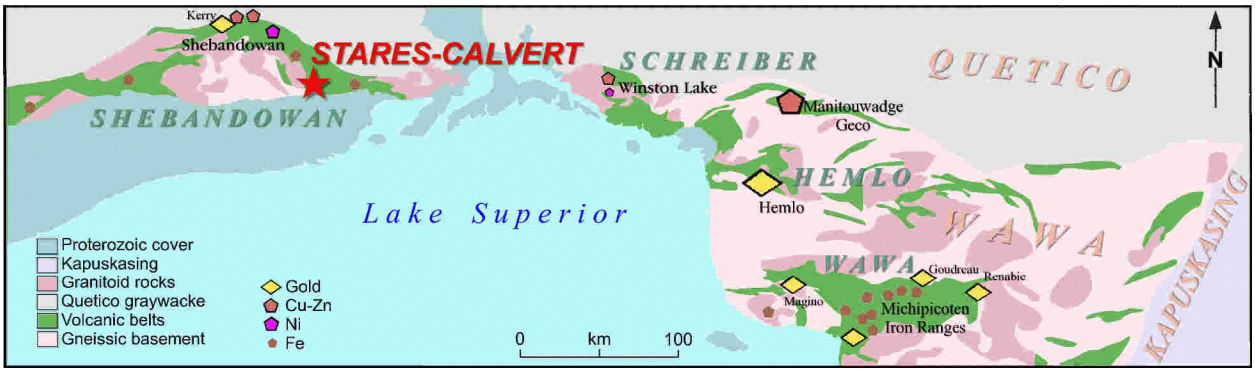

Figure 4 The Geology of the Wawa Subprovince of the Superior Province

sedimentary rocks of the western plains. The Wawa Subprovince has also been described as the western part of the Abitibi belt.

In most respects the Shebandowan belt is similar to the other greenstone belts of the Precambrian shield. It consists predominantly of mafic volcanic rocks, with minor ultramafic and felsic volcanic rocks, sedimentary rocks, both clastic and chemical, as well as various mafic and felsic intrusions. It typically dips steeply to sub-vertical, and is divided into tectonic blocks by numerous faults.

In other respects the Shebandowan belt is somewhat different from many, but probably not all, greenstone belts. The assemblage of rocks which are typically considered as part of a greenstone belt are in this case only one part of a larger orogenic belt with three adjacent lithologically distinct terranes. These were probably all formed more-or-less together and have a strong association in their geochronology, a similarity in their geochemical signatures indicating they were derived from the same part of the lithosphere, and a similar tectonic evolution. Whilst they now have a complex structural relationship consistent with that of an orogenic belt, they may be autochthonous one to another.

The first terrane, to the south, is predominantly granite gneiss which has dates which are older than the adjacent supracrustal rocks.

The second is the greenstone assemblage of volcanic, sedimentary and intrusive rocks. It appears to have been erupted and deposited directly upon, or immediately adjacent to, the basement granite-gneiss terrane. Many of the characteristics of the mafic volcanics, the associated ultramafic volcanics, and the relatively thin but a really extensive inter-flow sedimentary rocks (carbonaceous argillites and magnetite-jasper ironstones) indicate that they were deposited in what was a platformal environment, mostly in relatively shallow water to subaerial settings.

The third geological terrane is the Quetico Sub-province, consisting of graywackes and lesser siltstones and very minor mafic rocks. Further to the north the metamorphic grade gradually increases until the graywackes become migmatites with intrusions of two-mica granites which appear to be derived from melting of the graywacke and migmatite. While the Quetico is typically considered as a distinct Subprovince (Williams, 1991), it appears to be closely involved with the development of both the basement gneiss and the greenstone belt supracrustal rocks. The Quetico terrane turbidite graywackes were probably deposited in a deeper marine basin lying outboard of the original volcanic and basement block which stood topographically high, and are formed from the products of the adjacent greenstone belt, mafic-volcanic rocks as well as the exposed basement granite-gneiss.

Both the basement gneiss and the greenstone are intruded by a variety of granitoid plutons of similar ages. The geochemically very similar older granites and tonalites intrude both the basement granite-gneiss and the volcanic terranes. The younger, post-tectonic granites, granodiorites and quartz-monzonites intrude all three terranes and appear to be partly responsible for "welding" the supracrustal rocks to the basement.