

N.T.S. 31C/14

**REPORT ON
GROUND GAMMA-RAY SPECTROMETER SURVEY
UNITED REEF PROPERTY
ANGLESEA TOWNSHIP, ONTARIO**

**Written by: Robert J. Dillman
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July 22, 2011**

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GAMMA-RAY SPECTROMETER SURVEY: READINGS scale 1 : 2,500

GAMMA-RAY SPECTROMETER SURVEY: INTREPRETATION scale 1 : 2,500

Summary

This report summarizes the results of a ground gamma ray spectrometry survey on the United Reef Property in Anglesea Township, Ontario. The survey was completed from June 21, 2011 to July 15th, 2011. A total of 26.4 km's were traversed during the survey.

The gamma-ray survey outlined 8 areas on the property where gamma ray radiation is greater than 2.5X background. Maximum instrument readings in the areas of interest range +50 to 73 counts per second (cps). The subtle increase of radiation is possibly related to potassic alteration caused by hydrothermal fluid and alteration. Potassic alteration is commonly associated with lode gold deposits and the areas of interest may represent areas where gold mineralization occurs.

Location, Property Ownership, Access

The United Reef Property is located in the Southern Ontario Mining Division approximately 190 kilometres northeast of Toronto, Ontario, Canada (Figure 1). The property is situated in Anglesea Township in Hastings County.

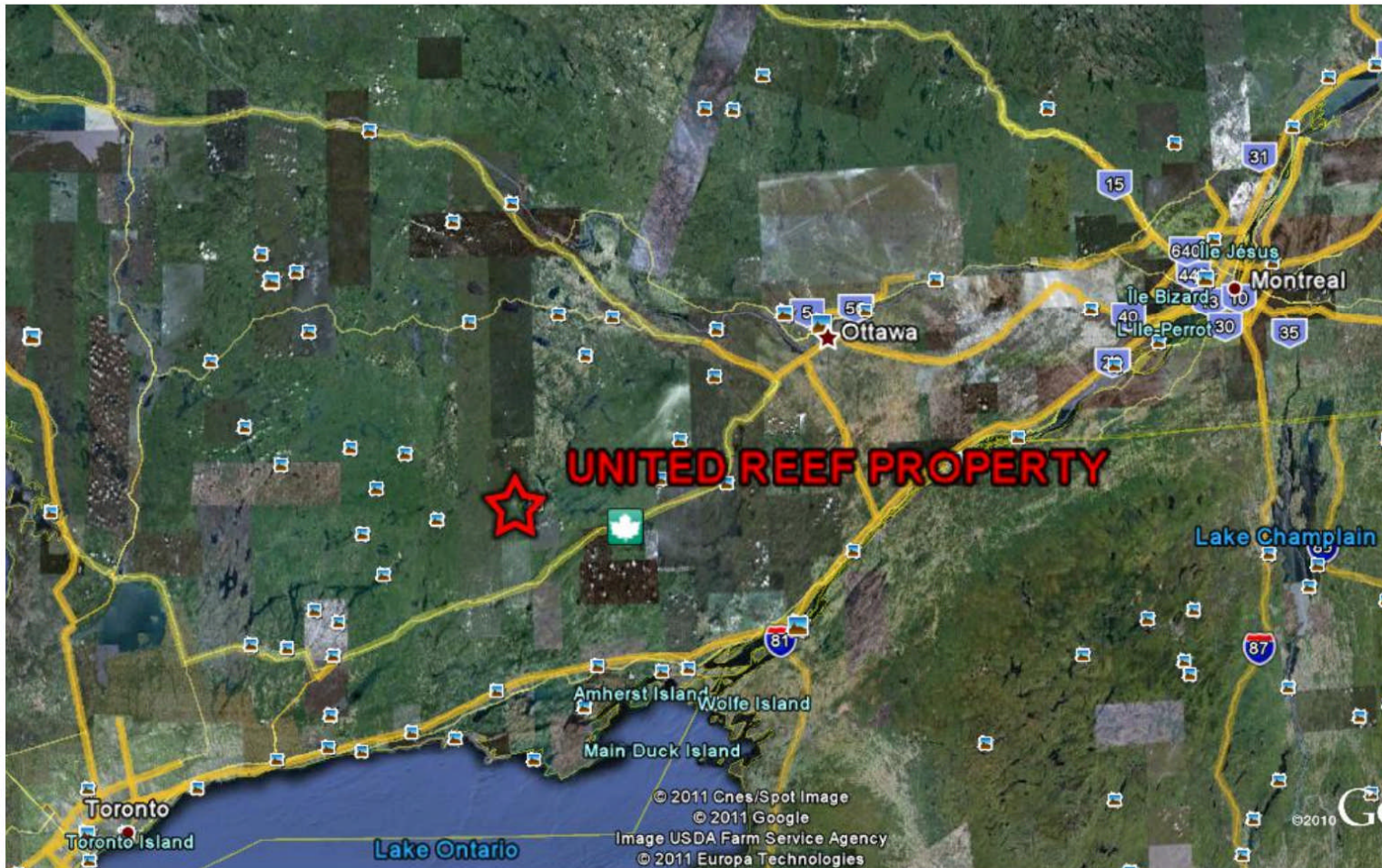
The property consists of two contiguous non-patented mining claims covering a total area of 240 hectares (Figure 2). Table 1. summarizes the logistics of the mining claims. Titles to the mining claims comprising the United Reef Property are held equally by:

Robert J. Dillman of Mount Brydges, Ontario,

James M. Chard of Cordova Mines, Ontario

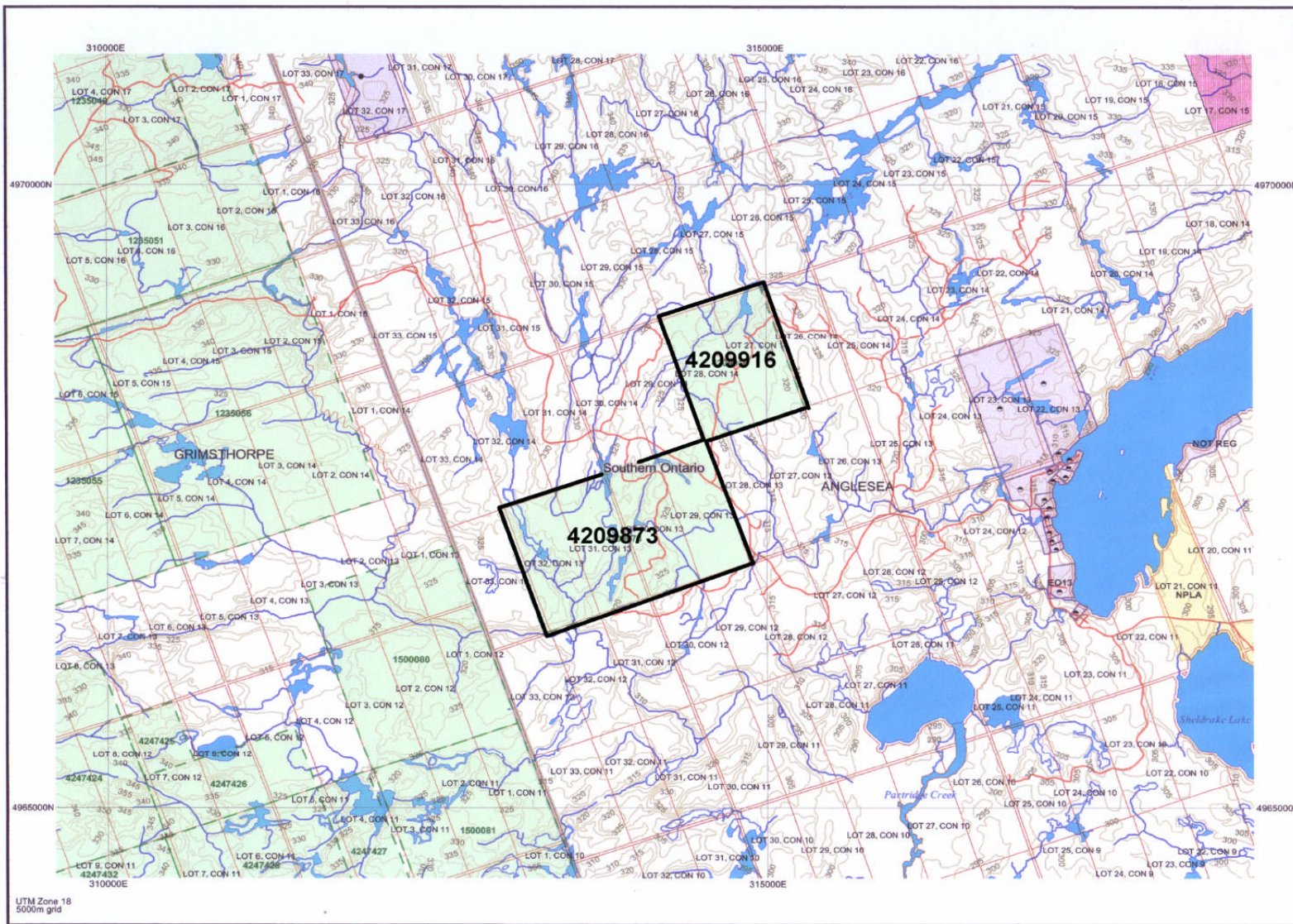
The property is currently under a sales contract to Union Glory Gold Limited of Toronto, Ontario.

The property has good seasonal road access via the Skootamatta Forest Access Road. The Skootamatta Forest Access Road extends from the town of Gilmour on Highway 62 to the town of Northbrook located on Provincial Highway 41. The road crosses the central region of the property.



from: Google Earth

Figure 1.
Property Location Map
United Reef Property
Anglesea Twp., Ontario
Union Glory Gold Limited



**Figure 2. Claim Map
 United Reef Property
 Anglesea Twp., Ontario
 Union Glory Gold Limited**

Table 1.
Claim Logistics
United Reef Property
Anglesea Twp., Ontario

Claim Number	Location	Number of Units	Size Hectares	Assessment Due Date	Amount Due	Assessment Bank
4209916	Lot's 27 & 28, Conc. XIV	4	80 ha	04/ 08/ 2011	\$1,600	\$0
4209873	Lot's 29, 30, 31 & 32, Conc. XIII	<u>8</u> 12 Units	<u>160 ha</u> 240 ha	04/ 08/ 2011	<u>\$3,200</u> \$4,800	\$0

Title:

50% Robert J. Dillman
8901 Reily Drive
Mount Brydges, Ontario
N0L 1W0

50% James M. Chard
3495 Country Road 48
Cordova Mines, Ontario
K0L 1Z0

Land Status and Topography

The United Reef Property is situated on forested Crown Land. The property is uninhabited. There are two Crown leased hunting camps. The camps are accessible by ATV.

There is no hydro power on the property. The closest hydro lines are located 4.5 km east of the property and provide power to cottages on Skootamatta and Sheldrake Lakes.

The property is at a mean elevation of 305 metres above sea level. The property has gentle topography with gradual hills ranging approximately 25 to 30 metres above the mean elevation.

The property is crossed by several lineaments. The lineaments trend: north, north-northwest and northwest. The lineaments are connected by small streams. The streams flow into Partridge Creek which crosses the southwest corner of the property. Beaver dams along the streams have caused local flooding on the property.

Most of the property is covered by mixed forest composed of spruce, pine, maple and poplar. The area is scheduled for logging later this year.

Regional and Local Geology

The United Reef Property is underlain by Proterozoic geological units belonging to the Grimsthorpe Domain of the Central Metasedimentary Belt of the Grenville Structural Province (Figure 3).

The Grimsthorpe Domain is dominated by mafic metavolcanic and volcanoclastic metasedimentary rocks older than 1270 Ma (Easton 1992). The Grimsthorpe Domain includes:

- younger units of the Grimsthorpe Group, consisting mainly of metasedimentary rocks with metavolcanic-clastes and minor metavolcanic flows of the Tudor Formation, minimum age 1279 +/-13 Ma.
- older massive and pillowed tholeiitic metabasalts, metagabbro and metaperidotite of the Canniff Complex.

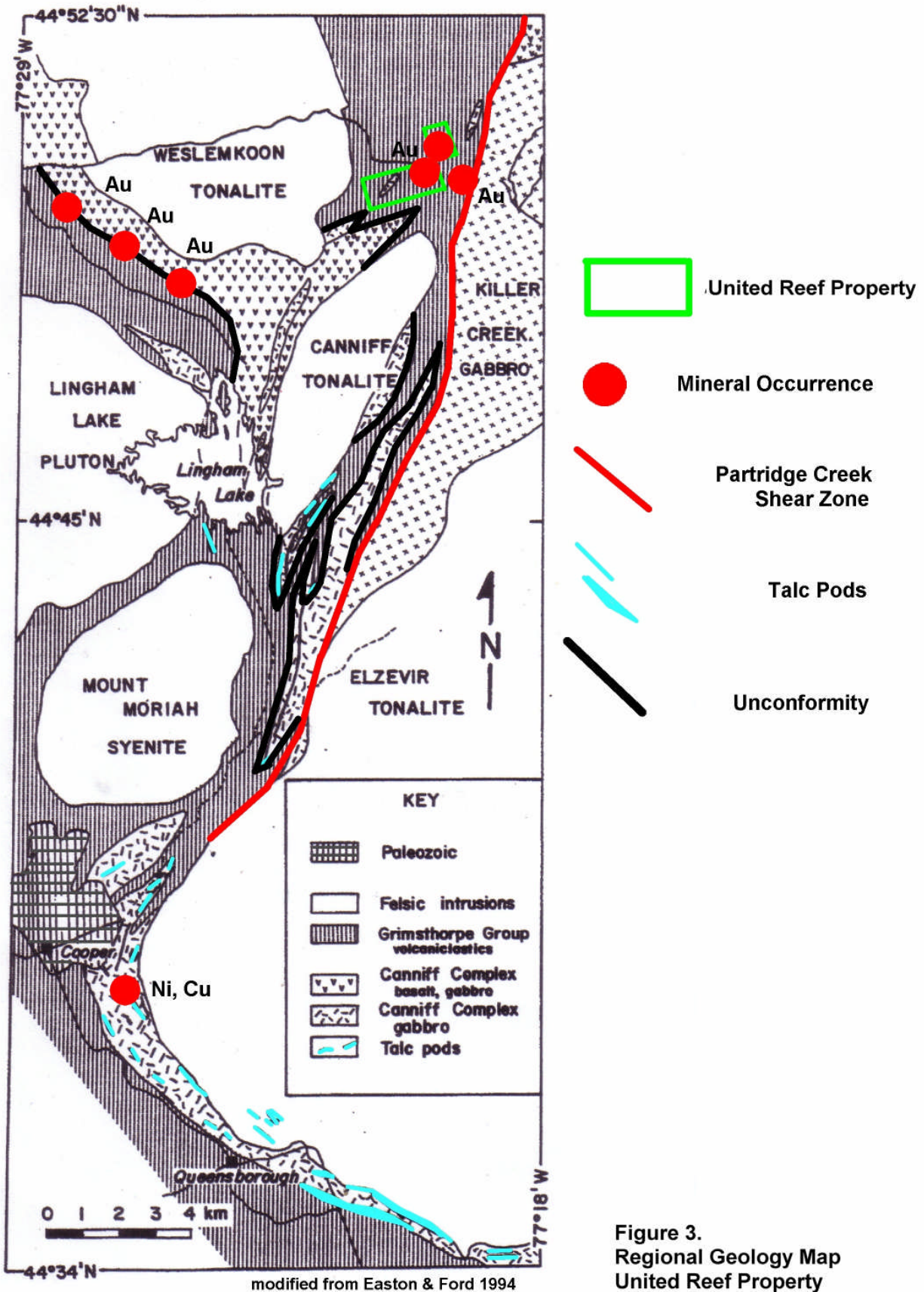


Figure 3.
 Regional Geology Map
 United Reef Property
 Madoc-Grimsthorpe-Anglesea Twp.'s,
 Ontario
 Union Glory Gold Limited

The Grimsthorpe Group and the Canniff Complex are separated by an unconformity. The property is situated close to the unconformity.

The Grimsthorpe Domain has been intruded by felsic aplite dikes and small circular plutons of gabbro. There are several large plutonic bodies in the vicinity to the property. These include: Skootamatta syenite, the Keller Creek Gabbro and the Weslemkoon and Canniff Tonalite intrusions.

The property is located within the Partridge Creek Shear Zone. The fault strikes northeast-southwest and follows the contact between the Grimsthorpe Domain and Keller Creek Gabbro. Easton noted alteration zones associated with shearing on the United Reef Property. The altered rocks are extensively (Fe-Mg) carbonated, silicified and metamorphosed to chlorite, sericite and biotite schists.

Rock units underlying the property belong to the Grimsthorpe Group (Figure 4). Most rock units consist of fine clastic metasedimentary units dominated by biotite-hornblende-quartz-plagioclase gneiss, polymictic conglomerate, rusty schists and small pods of mafic metavolcanics. Rock units generally strike northeast-southwest and dip 50⁰ to 70⁰ southeast.

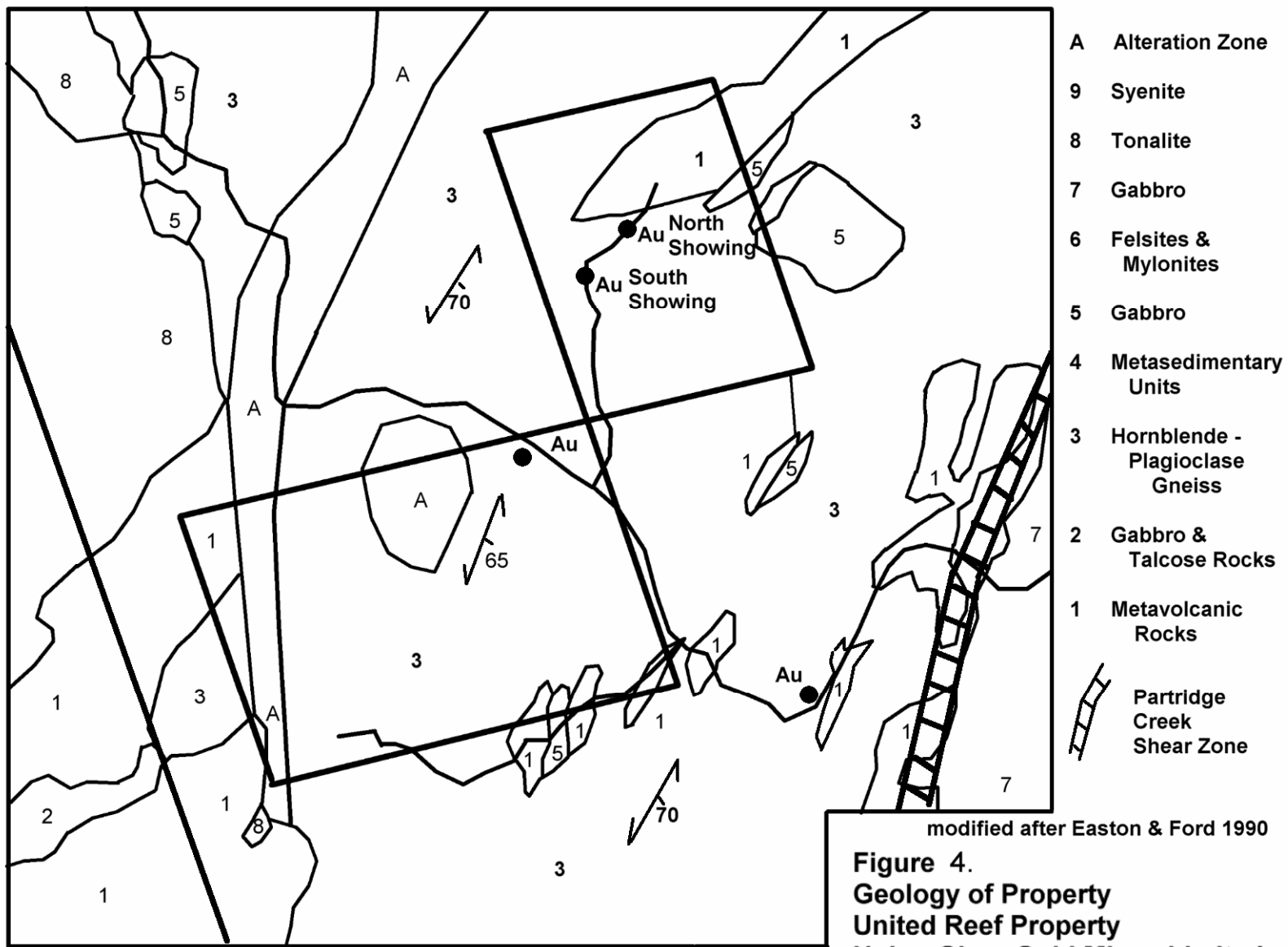
Economic Mineralization

Several narrow quartz veins containing pyrite and gold have been found on the property. The most interesting is the discovery by United Reef Petroleum Limited of a narrow rusty quartz vein assaying 0.19 oz/t gold (North Showing). Further sampling of the vein has yielded assays of 2653 ppb gold over 0.20 m and 4549 ppb gold over 0.15 m.

History of Exploration

The Grimsthorpe-Kennebec area was mapped in detail in 1939 to 1941 by V.B. Meen and W.D. Harding on behalf of the Ontario Department of Mines (Map No. 51d).

In 1987, gold was discovered in Lot 27, concession 14 by geologist, Wayne Johnson on behalf of United Reef Petroleum Limited. He reports finding a narrow, quartz vein assaying 0.19 oz/t gold. A grid was cut. Ground magnetometer and VLF-EM surveys were completed and several trenches were excavated.



modified after Easton & Ford 1990
Figure 4.
Geology of Property
United Reef Property
Union Glory Gold Mines Limited
Anglesea Twp., Ontario

In 1989, H. Dowhaluk completed reconnaissance prospecting and mapping traverses from the Skootamatta Road. He discovered a 4 inch wide flat-lying quartz vein assaying 0.674 oz/t gold in Lot 27, concession 12. He staked 12 claims to cover the showing. In the following year he completed ground magnetometer and VLF-EM surveys and mapped the geology of the claim group.

In 1990, R.M. Easton mapped the geology of the Mazinaw Lake Area for the Ontario Geological Survey (open file 132). The survey included the region surrounding the property. Easton identified the Partridge Creek Shear Zone.

In 1991, Dowhaluk manually excavated nine trenches on his property. No significant results were reported.

In 1999, using an OPAP grant, T. Beesley and J. Laidlaw re-examined the United Reef prospect. Trenches were cleaned and channel sampled using a rock saw. In the North Showing, a narrow quartz vein exposed over 30 metres in length assayed 2653 ppb gold over 0.20 m and 4549 ppb gold over 0.15 m. In the South Showing, an assay of 277 ppb gold was reported from a sample of iron formation.

Survey Dates and Personnel

The ground spectrometer survey over the United Reef Property was completed between June 21, 2011 and July 15, 2011. Fifteen days were devoted towards the survey. The survey was performed by geo-technician James M. Chard of Cordova Mines, Ontario and was assisted by prospector, Ryan Althouse also of Cordova Mines.

Survey Logistics

The ground spectrometry survey was completed on an unmark grid using a GPS and compass to navigation and calculate distances along traverse lines. A total of 26.4 km of lines were traversed during the survey.

Instrument readings were recorded at 25 metre intervals along survey lines spaced 100 metres apart. The GPS coordinates for the survey lines are appended to this report.

The survey was partially hindered by numerous ponds and swamps. There are sections lines where radioactivity could not be measured.

The instrument used for the survey was an Exploranium Gamma Radiation Detector: Model GR-110G. The instrument uses a 4.5 cubic inch Sodium-Iodide detector and measures radiation in Counts Per Second (cps) at a rate of one reading per second. The instrument has an audio alarm which can be set to react to changes in background radiation. The instrument does not differentiate between uranium, thorium or potassium radioactive responses.

During the survey background radiation was determined to range 20 to 30 cps over exposed or thinly covered outcrop. Areas of deep overburden returned responses ranging 10 to 20 cps. Areas considered of interest measured +50 cps or 2.5X background. Highest reading during the survey was 73 cps.

Results from the survey and the interpretation of the results have been plotted at a scale of 1 : 2,500 on maps accompanying this report.

Survey Results

The radiometric survey outlined 8 subtle zones having radiation levels greater than 2.5X background radiation (Figure 5). Table 2 summarizes the survey results.

The radioactivity in the areas of interest measures 50 to 73 cps. In most areas, radioactivity exceeding 50 cps was detected at multiple stations and on adjacent survey lines.

There are 3 dominate trends of the radioactive zones: north, north-northwest and northwest. The radioactive trends mimic the orientations of the major topographic lineaments on the property. The lineaments potentially mark fault zones and the radioactive zones could be caused by hydrothermal alteration associated with the faults.

The greatest area of radioactivity occurs in the southwest corner of the property. The region coincides with the intersection of several lineaments. The area also coincides with an alteration zone and is close to the unconformity between the Grimsthorpe Group and the Canniff Complex.

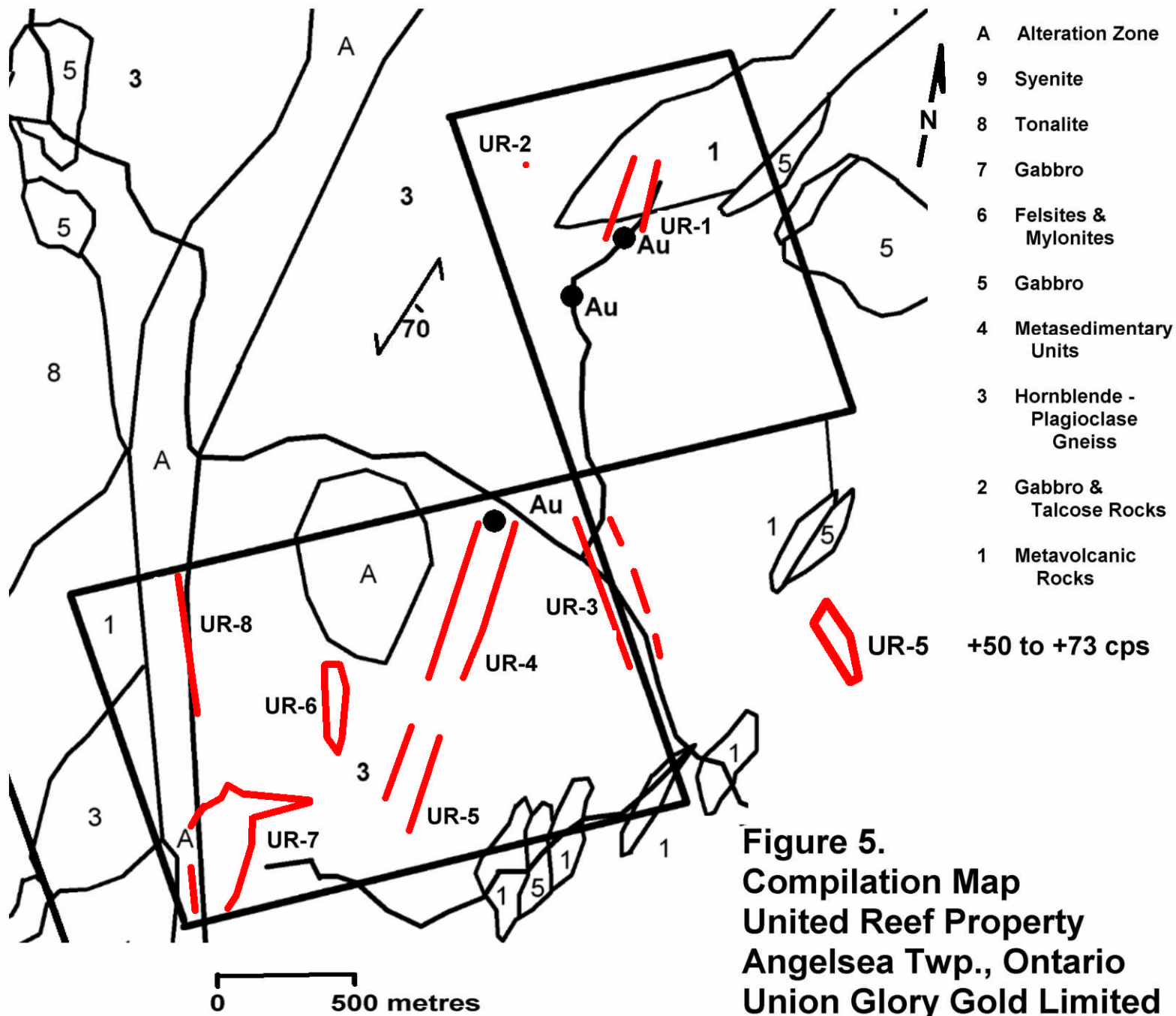


Table 2. +50 cps Anomaly Description, Gamma-Ray Spectrometry Survey, United Reef Property

Anomaly	Grid Location	Trend	Highest Reading	Comment
UR-1	4+00S to 6+50S 6+75E to 4+50E	NW	58 cps	Coincides with North Showing, possibly extends 7+00S, 2+00E South Showing. Anomaly close to unconformity.
UR-2	2+00S, 2+50E	NW?	73 cps	Highest reading during survey. Close to unconformity.
UR-3	11+75S to 14+00S, 0+00 On claim line	NNW	59 cps	Cluster of +50 cps stations along claim line, target possibly east of claim.
UR-4	12+50S to 14+50S 3+50W to 5+00W	N	58 cps	Cluster of +50 cps stations east of north trending lineament. Quartz vein assaying 220 ppb Au at north end of lineament. May extend south to line 17+50S and connect with UR-5 anomaly. 800 metre potential length.
UR-5	17+50S to 18+50S 7+75W to 8+00W	N?	56 cps	Cluster of +50 cps stations situated east of north trending lineament. Possible part of the UR-4 anomaly.
UR-6	13+50S to 16+50S 10+00W to 10+25W	NW	67 cps	2 nd strongest anomaly on property. North-northwest striking cluster of +50 and +60 cps stations following on west side of north-northwest trending lineament.
UR-7	17+50S to 18+50S, 12+25W to 13+00W	N	70 cps	Strongest anomaly on property. Cluster of +50 to 70 cps situated at the intersection of several lineaments and a north trending alteration zone. Close to unconformity between Grimsthorpe Group and Canniff Complex. May extend south to property boundary. Pyrite, quartz veins and Fe-Mg carbonate alteration in area.
UR-8	10+50S to 13+50S 13+75W to 13+50W	NW	59 cps	Northwest trending anomaly coinciding with alteration zone close to unconformity. Pyrite, quartz veins and Fe-Mg carbonate alteration in area.

The UR-1 anomaly has good correlation to the North Showing. During the survey, radiation exceeding 50 cps was detected in the trench and traced northwest to line 5+00S. Similar responses on lines 0+00 to 4+00S suggest the UR-1 anomaly could extend north at least 500 metres. The UR-1 also occurs close to the unconformity between the Grimsthorpe Group and the Canniff Complex.

The UR-2 anomaly represents the highest reading encountered during the survey, 73 cps. The anomaly is a single-station feature on line 2+00S close to the unconformity between the Grimsthorpe Group and the Canniff Complex. The response is considered to low to be caused by uranium or thorium mineralization.

The UR-3 anomaly includes a cluster of +50 cps responses detected over a distance of 450 metres along the east claim line of claim 4209873 between lines 10+50S and 14+50S. The cluster of responses appear to define a target trending north-south possibly situated east of the claim line and outside the claim.

The UR-4 anomaly is situated east of a northeast orientated lineament crossing claim 4209873. The focus of the anomaly is a cluster of +50 cps responses detected over a length of 175 metres on line 14+50S. Subtle radioactivity appears to trend north parallel to the lineament and crosses an area where Easton obtained an assay of 220 ppb gold from a quartz vein. The radioactive trend also appears to continue south along the lineament and merge with the UR-5 anomaly represented by a cluster of +50 cps responses between lines 17+70S and 18+50S.

The UR-6 anomaly is the second strongest anomaly on the property. The radioactive zone includes a cluster of +50 cps and +60 cps sites detected in a 400 metre long trend between lines 12+50S to 16+50S. The anomaly sits west of a north trending lineament crossing the midsection of claim 4209873. Easton notes an alteration zone north of and on strike with the UR-6 anomaly. The alteration zone was not surveyed due to high water levels.

The UR-7 anomaly represents the strongest area of radioactivity on the property. The anomaly is mostly focused on a wide area of responses ranging 50 to 70 cps on line 18+50S but also includes +50 cps responses extending 350 metres in length between lines 16+50S to 20+00S. In addition to high radioactivity, there are three interesting features of this anomaly: 1.) the anomaly occurs close to the unconformity between the Grimsthorpe Group and Canniff Complex, 2.) the anomaly coincides with an alteration zone, 3.) the anomaly occurs at the intersection of several distinct lineaments. During the

survey extensive carbonate alteration was noted and several sulphide bearing quartz veins were discovered in the vicinity of the UR-7 anomaly. Assays for samples from the vein were not available at the time of this report.

The UR-8 anomaly consists of a series of northwest trending +50 cps responses detected over a distance of 300 metres between lines 10+50S and 13+50S. The location of the anomaly appears to coincide with the alteration zone crossing the west side of claim 4209873. In this area, the alteration zone trends parallel to the unconformity between the Grimsthorpe Group and Canniff Complex. The unconformity is marked by a northwest trending lineament.

Discussion of Results

A gamma ray spectrometer was used to delineate areas of subtle radiation potentially caused by potassic alteration associated with hydrothermal alteration and fluids and potential gold mineralization. Alteration of potassium bearing minerals such as K feldspar produces weak gamma ray radiation. Typical of lode gold deposits, potassium alteration results in the production of micaceous, potassic minerals such as biotite in iron-rich rocks, muscovite mica or sericite in felsic rocks and orthoclase in granite and certain types of sedimentary rocks.


The survey was situated close to the unconformity between the Grimsthorpe Group and Canniff Complex. This structure has been shown as an important horizon for gold mineralization in units of the Grimsthorpe Group particularly in the Black River area in Grimsthorpe Twp. and also on the Tudor Property in Tudor Twp. Gamma ray spectrometry surveys completed in the last year on the Black River Properties showed 2-3X background increases of radiation over gold occurrences proximal to the unconformity. On the United Reef Property, anomalous radioactivity of +50 cps or 2.5X background was detected over the North Showing.

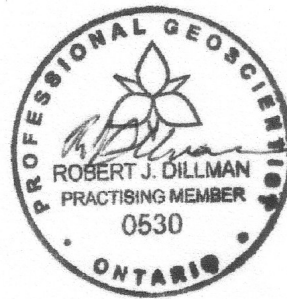
The results of the survey suggest the southwest corner of the property is an area of interest and potentially a high priority target area for further investigation. During this survey several rock samples of sulphide-bearing quartz veins and silicification were collected in the area and are currently awaiting assay. The quartz mineralization and local alteration zones associated with shearing indicates the area has been susceptible to hydrothermal processes and there is good potential for gold emplacement.

Recommendations

The survey outlined eight areas of interest represented by increasing radiation in excess of 2.5X background levels. It is possible the subtle increases in radiation are caused by zones of potassic alteration and potentially host gold mineralization. As the next phase of the program, prospecting and geological mapping within the areas is recommended to gain a better understanding of the geological environment and determine the cause of the higher radiation and gold potential of the areas. New showings should be excavated by trenching and sampled. Ground magnetometer and VLF-EM surveys are recommended also. These surveys are useful in locating shear zones and conductors for further investigation. The estimated cost for the next phase of exploration including grid construction for survey control is \$75,000. The cost structure for the program is outlined in Table 3.

Respectfully submitted,


Robert James Dillman P.Ge
Arjadee Prospecting



July 22, 2011

Table 3. Budget For Proposed Exploration

Line Cutting/ Grid Work

Line Cutting	29 km @ \$400 / km	11,600	
Food, Hotel, Transportation		<u>3,000</u>	
		\$14,600	\$14,600

Prospecting, Geological Work

Prospecting	2 men x \$350 /day x 14 days	\$9,800	
Food, Hotel, Transportation		3,000	
Maps, Reports		<u>3,500</u>	
		\$16,300	\$16,300

Trenching and Sampling

High-Hoe Excavator	4 days @ \$1200/ day	\$4,800	
Rock Saw, blades and Water Pump	5 days @ \$250 per day	1,250	
Geologist	10 days @ \$400 per day	4,000	
2 Helpers	10 days @ \$400 per day	4,000	
Assays	100 samples @ \$40/ sample	4,000	
Maps and Report		<u>3,500</u>	
		\$21,550	\$21,550

Ground Magnetometer Survey

Survey	29 km @ \$200 / km	\$5,800	
Food, Hotel, Transportation		1,500	
Maps, Reports		<u>3,500</u>	
		\$10,800	\$10,800

Contingency 18.58% **\$11,750**

Total **\$75,000**

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CERIFICATE of AUTHOR

I, **Robert J. Dillman, Professional Geologist**, do certify that:

1. I am the **President** and the holder of a **Certificate of Authorization** for:

**ARJADEE PROSPECTING
8901 Reily Drive
Mount Brydges, Ontario, Canada
N0L1W0**


2. in 1991, I graduated with a **Bachelor of Science Degree** in **Geology** at the **University of Western Ontario**.
3. I am an active member of:
**Association of Professional Geoscientists of Ontario, APGO
Prospectors and Developers Association of Canada, PDAC
Geological Association of Canada, GAC**
4. I have been a **licensed Prospector in Ontario** since 1985.
5. I have worked continuously as a **Professional Geologist** for 19 years.
6. Unless stated otherwise, **I am responsible** for the preparation of all sections of the Assessment Report titled:

**GROUND GAMMA-RAY SPECTROMETER SURVEY
UNITED REEF PROPERTY
ANGLESEA TOWNSHIP, ONTARIO**

dated, July 22, 2011

7. I am not aware of any material fact or material change with respect to the subject matter of the Assessment Report that is not contained in the Assessment Report and its omission to disclose makes the Assessment Report misleading.

Dated this 22nd day of July 2011


Robert James Dillman P.Geo
Arjadee Prospecting



APPENDIX I.
 G.P.S. WAYPOINT DATA
 RADIOMETRIC GAMMA-RAY SPECTROMETER SURVEY
 ANGELSEA TWP, ONTARIO
 UNIOTED REEF PROPERTY

NAD83 UTM/UPS METRIC ZONE 18T

Line Number	Co-ordinates			
	0+00		8+00E	
	E	N	E	N
L0+00	314186	4968939	314947	4969208
L1+00S	314219	4968844	314980	4969114
L2+00S	314252	4968751	315012	4969019
L3+00S	314285	4968656	315046	4968925
L4+00S	314319	4968562	315079	4968831
L5+00S	314352	4968468	315112	4968737
L6+00S	314385	4968374	315144	4968642
L7+00S	314418	4968279	315174	4968547
L8+00S	314450	4968185	315207	4968453
L9+00S	314482	4968089	315240	4968357
L10+50S	314531	4967949	315295	4968216

G.P.S. WAYPOINT DATA

Line Number	Co-ordinates East to West			
	0+00		16+00W	
	E	N	E	N
L10+50S	314531	4967949	312968	4967394
L11+50S	314564	4967854	313001	4967300
L12+50S	314597	4967760	313036	4967204
L13+50S	314632	4967664	313069	4967112
L14+50S	314665	4967573	313103	4967018
L15+50S	314698	4967478	313136	4966924
L16+50S	314732	4967385	313170	4966830
L17+50S	314762	4967290	313203	4966735
L18+50S	314794	4967195	313238	4966641
L19+50S	314825	4967100	313271	4966547
L20+00S	314884	4966945	313320	4966399