

# **Reef Exploration Program**

Notice of Intent to Drill

May 4, 2011

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#### (1) DESCRIPTION OF PARCELS:



#### (1.a) Overview:

Aquila Resources Inc. has been granted a metallic mineral exploration permit from the Wisconsin Dept. of Natural Resources, and plans to begin drilling in the northeast corner of Marathon County, Wisconsin. The Reef drilling plan proposes seventeen diamond drill holes located in Section 36 of Township 29 North, Range 9 East. Exploration is scheduled to begin mid-May, after the removal of spring road restrictions, and upon the approval of the Wisconsin Dept. of Natural Resources. The exploration program devised by Aquila Resources Inc. is expected to last three months.

#### (1.b) Legal description of parcels:

NWNWS36 T29N R9E: Randy L. Neiter

- a. Parcel Size: 40 acres
- b. Surface Rights: Exploration agreement granting right to explore on property
- c. Mineral Rights: Mining lease granting exclusive right to explore mineral ownership
- d. Boreholes Planned: 11

#### S2NWS36 T29N R9E: Kenneth D. Michels

- a. Parcel Size: 80 acres
- b. Surface Rights: Exploration agreement granting right to explore on property
- c. Mineral Rights: Mining lease granting exclusive right to explore mineral ownership
- d. Boreholes Planned: 4

#### (2) REEF PROPOSED PROJECT AREA:

(1) NWNWS36 T29N R9E



<sup>(2.</sup>a) Project area explanation:

It is the policy of Aquila Resources Inc. to carefully select drill sites and access routes such that surface disturbance is kept to a minimum. Diamond Drill sites will typically have a footprint of approximately 50' x 50' to accommodate the drilling rig, sump, and support equipment, including water truck, back-hoe, bulldozer, and 4WD support vehicles. The construction of such a drill site would require the clearing of underbrush as well as small trees in the immediate vicinity of the drill site.All proposed drill sites are within 0.5 miles of public county roads. Two temporary access routes will be constructed to provide access from Thornapple Creek Rd. to the drill sites. To access the eleven drill sites located on (1) NWNWS36 T29N R9E, a proposed temporary access route will follow the existing driveway in the southwest part of the property, branching off ~500' to the northeast and ~150' to the east. A majority of the route follows fields on the property, keeping surface disturbance to a minimum. To access the six drill sites located on (2) S2NWS36 T29N R9E, a proposed temporary access route will follow the existing driveway in the mortheast. Again, a majority of the route travels through open fields, keeping surface disturbance to a minimum.

(2.b) Approximate drill hole coordinates (NAD83):

Hole ID	Northing	Easting
GBP-27A	4980758	313439
GBP-26A	4980716	313438
GBP-26B	4980699	313452
GBP-25A	4980705	313405
GBP-25B	4980689	313420
GBP-24A	4980645	313420
GBP-23A	4980628	313393
GBP-23B	4980611	313408
GBP-22A	498063	313375
GBP-22B	4980588	313388
GBP-21A	4980630	313312
GBP-18A	4980377	313420
GBP-17A	4980401	313356
GBP-17B	4980368	313386
GBP-16A	4980354	313357
GBP-15A	4980355	313315
GBP-14A	4980348	313280

# (3)DRILLING PLAN:

#### (3.a) Diamond core drilling:

The drilling rig employs a diamond-impregnated drill bit to advance an attached string of hollow drill rods into subsurface rock formations, producing a cylindrical core sample. Diamond core drilling will be utilized to delineate the nature of bedrock at depth. Proposed borehole depths are based on anticipated encounters with a distinct lithological unit, and will range from 200'-800' total depth.NQ-sized drill rods with an outer diameter of 3" will be used throughout the exploration program.All drill holes will be cased from surface to solid bedrock to ensure groundwater aquifers are sealed-off from the borehole to prevent cross-contamination between aquifers, and/or the introduction of any contaminants to the groundwater. In agreement with residents of parcels where Aquila Resources Inc. will be conducting exploration,

drilling will take place 24 hours/day across two 12 hour shifts. Any drilling that takes place within 500' of an inhabited structure will be completed via 12 hour day shifts.

## (3.b) Description of drilling fluids and additives to be used:

The diamond drilling process requires the use of water and inert, bio-degradable polymers to lubricate, cool, and flush drill cuttings from the hole.

## (3.c) Source of water to be used during drilling:

Water for diamond drilling purposes will be obtained locally from the Eau Claire River via pump, and transported to the drill site with clean tankers. Prior to drilling, the water will be treated with chlorine to ensure no contamination of groundwater occurs. Throughout the drilling process water is re-circulated and fully contained on-site in a small sump. Typical sump dimensions are approximately 15'x6'x4' and can hold between 300 and 400 gallons.

## (3.d) Nature and disposal of waste materials generated during drilling:

NQ diamond drilling generates 1.5 to 2.2 cubic feet of waste cuttings per 100' of drilling. This material, consisting of surface sands and gravels, pulverized bedrock, and drill polymers, is collected and contained within the re-circulation sump. The established, environmentally sound process of waste cutting disposal involves containment within the sump and subsequent back-filling upon completion of the diamond drill hole. Throughout the drilling program, any potential surface runoff will be managed through the use of snow berms, silt fencing, and/or straw bales. In addition, all sources of hydrocarbons will have spillcontainment and absorbent materials places beneath them, and upon abandonment, will be removed by the drilling company.

# (4) RECLAMATION PROCEDURE IN ACCORDANCE WITH s.293.13(s)(c) & s.293.01(23):

# (4.a) Proper abandonment of boreholes:

In accordance with NR 130.06(1)(a), completed boreholes will be filled from the bottom of the hole upward to the ground surface with concrete or neat cement grout. For the abandonment of diamond drill holes, the filling procedure will be in compliance with NR 130.06(1)(3)(a). Filling material will be applied through a conductor pipe, except that when practical, a dump bailer will be used. When concrete is placed underwater by a conductor pipe, the bottom end of the conductor pipe shall be submerged in the concrete at all times. If circumstances are encountered where the removal of all or part of a casing from an unconsolidated formation that will not stand open, Aquila Resources Inc. will comply with NR 130.06(1)(3)(b). Upon abandonment of a drill hole, the casing will be removed concurrently with the filling of the drill hole, and the bottom end of the casing shall be kept below the surface of the fill. If, in the event further exploration of a given borehole is anticipated, Aquila Resources Inc. will act in accordance with NR 130.06(1)(4)(b). The casing will be left in place, and the upper terminal of the casing shall be sealed with a watertight, threaded or welded cap.

# (4.b) Restoration of drill site:

In compliance with s.293.01(23) &s.293.13(2)(c), A thorough and effective restoration plan to minimize and rehabilitate surface disturbances will be carried out by Aquila Resources Inc. Upon completion of exploration at a drill site, all materials, structures, and equipment will be immediately removed from the site. Within thirty days of site abandonment, non-merchantable timber and brush disturbed during site construction will be lopped and scattered, and any topsoil displaced during site construction will be redistributed and revegetated in order to stabilize disturbed soils. Aquila Resources Inc. will carry out the same reclamation/restoration techniques on temporary access routes when they are no longer needed.Significant surface subsidence is not likely to be an issue, as the Reef property's geological signature is devoid of the carbonate-rich lithologies that are susceptible to subsidence. No proposed boreholes are located within established wetlands, and in the event that runoff into wetlands becomes an issue, silt fences, snow berms, and/or straw bales will be used to minimize their disturbance.

## (5) RECLAMATION FEE ESTIMATE:

#### (5.a) Abandonment/cementing:

The price quote for the abandonment/cementing of a borehole runs at 3.00/ft, and is carried out by the drilling company immediately after drilling has been completed. The proposed drilling plan includes  $\sim$ 7,000 feet of down hole drilling, with abandonment fees totaling an estimated 21,000.00.

#### (5.b) Site restoration:

The removal of structures and equipment, backfilling of sumps, and the re-distribution of topsoilsare carried out via bulldozer. Bulldozer rental price quotes from past Aquila Resources Inc. exploration programs run at \$150.00/day, with bulldozer operator rates of \$50.00/hr. Based on past reclamation programs carried out by Aquila Resources Inc., five days of bulldozer operation and rental spread out over the course of the proposed exploration program would be sufficient to adequately restore drill sites and access routes to their previous state. Aquila Resources Inc. estimates a total of \$2,750.00 would cover these costs in their entirety.

## (5.c) Revegetation:

Grass seed will be planted at each drill site. With a maximum drilling footprint of 50'x50'per drill site, the total area of the seventeen drill sites that will require seeding totals 4,250 sq. ft. Areas requiring revegetation due to the construction/use of temporary access routes will be minor, as the routes follow fields with flat-lying topography, minimizing topsoil disturbance. Aquila Resources Inc. estimates a total of \$75.00 would cover the price of grass seed required to revegetate all drill sites and access routes.

(5.d) Total estimate:		
Abandonment/cementing fees:		\$21,000.00
Site Restoration fees:		\$2,750.00
Revegetation fees:	+	\$75.00
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Total Reclamation Costs:	\$22,825.00
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