

Posted by PamplonaTrader April 2016

As the maiden estimate suggests, Arrow is twice the size of its closest competitor and at nearly double the overall grades. Even with an absurd 10% U3O8 cut-off, Arrow would be amongst the largest deposits in the world.

Here, it was obvious to many of us that Arrow was going to obliterate expectations en route to a monster initial resource estimate. We knew Arrow would go on to claim the title of "Largest Undeveloped Uranium Deposit", and by a very wide margin.

Despite all the superlatives early in the discovery of Arrow, it seems some, are once again hard at work trying to discredit NexGen's Arrow. They were completely off the rails before the Maiden Resource Estimate, insisting that it was impossible for NexGen to put out a resource in excess of 200 Mlbs in just 82 holes. Anyone who listened to the naysayers before the maiden estimate were forced to watch from the sidelines as NexGen surged to lifetime highs - capturing the hearts, minds, and pocket books of resources speculators everywhere.

For those of you who gave in to the haters and missed the first run... IT IS NOT TOO LATE! The maiden estimate was just the tip of the iceberg and there is plenty of upside to be had.

I will demonstrate how RPA used conservative assumptions in the maiden estimate, thereby heavily constraining the resource. I will also show how NexGen can rapidly upgrade the inferred A2 High Grade resource to indicated with aggressive infill drilling. The aggressive infill drilling will not only convert inferred resource to indicated, I will also make clear that the A2 High Grade resource will continue to grow!

THE MAIDEN RESOURCE: CONSERVATIVE ASSUMPTIONS

Per the resource estimate, RPA capped grades at 55% and interpolated grades with an inverse distance cubed (ID3) function.

The function can be expressed as:

$$[(25-d)/25]^3$$

Wherein **d** is the distance from the drill center. 25m is the maximum distance from the drill center (50m diameter area of influence).

This means an intercept of **70% U3O8 would be capped at 55% and grades just 10m away would be normalized down to ~12%.**

EXAMPLE 1: UNINTERPOLATED (100m strike):

For illustrative purposes, let's assume 20% U3O8 is continuous over an 100m strike, 5m depth and 5m width:

$$100\text{m strike} * 5\text{m depth} * 5\text{m width} * 3.92 \text{ tonnes/m}^3 * 2204.62 \text{ lbs/tonne} * \\ 20\% \text{ U3O8} = 4.321 \text{ Mlbs}$$

TOTAL OVER 100m STRIKE: 4.321 Mlbs

EXAMPLE 2: INTERPOLATED (100m strike, 2 holes with 50m centers):

For the Maiden NI 43-101 resource, NexGen methodically drilled holes with 50m centers to produce an inferred estimate:

First 5 meters (5m radius, 10m diameter)

5m strike * 5m depth * 5m width * 3.92 tonnes/m³ * 2204.62 lbs/tonne * **20% U3O8** * 2 for both sides = 0.432 Mlbs

Next 5 meters (10m radius, 20m diameter)

5m strike * 5m depth * 5m width * 3.18 tonnes/m³ * 2204.62 lbs/tonne * **10.24% U3O8** * 2 for both sides = 0.179 Mlbs

Next 5 meters (15m radius, 30m diameter)

5m strike * 5m depth * 5m width * 2.73 tonnes/m³ * 2204.62 lbs/tonne * **4.32% U3O8** * 2 for both sides = 0.065 Mlbs

Next 5 meters (20m radius, 40m diameter)

5m strike * 5m depth * 5m width * 2.50 tonnes/m³ * 2204.62 lbs/tonne * **1.28% U3O8** * 2 for both sides = 0.018 Mlbs

Last 5 meters (25m radius, 50m diameter)

5m strike * 5m depth * 5m width * 2.41 tonnes/m³ * 2204.62 lbs/tonne * **0.16% U3O8** * 2 for both sides = 0.002 Mlbs

Per hole with max 50m Area of Influence: 696 klbs

TOTAL FOR TWO HOLES: 1.392 Mlbs

The above example clearly demonstrates that the inferred resource is **not** assuming mineralization is continuous throughout the orebody and as a consequence, the resource is being **heavily** discounted.

INFILL DRILLING: CONVERTING INFERRED TO INDICATED

Eyeballing the cross-section below, the H2 High Grade domain appears to roughly measure 200m strike x 200m depth.

image: <http://i.imgur.com/3BfD0Ak.png>



It would require 100 holes using 20m centers to infill a $40,000\text{m}^2$. I can then divide the area in half to account for the triangular shape. As a result, only 50 holes are needed to upgrade the triangle-shaped A2 High Grade domain to a fully indicated resource.

Each directional hole branching from the pilot hole cores 500m-600m so 50 holes x 600m = 30,000m of drilling. If 30,000m are drilled each season and 3 of 6 rigs drilling at Rook I are infilling Arrow's A2 High Grade domain, then it would only require 2 seasons (winter and summer 2016) to complete the conversion of the A2 High Grade domain to a fully indicated resource.

In case you were wondering, the above assumptions w/r/t the dimensions of the A2 High Grade domain reconcile to the resource estimate.

200m strike * 200m depth * 6m width * 3.4 tonnes/m³ * 1/2 to account for triangle shape = 410,000 tonnes.

6m width of the A2 High Grade domain per wireframes from the resource estimate.

INFILL DRILLING: INCREASING THE A2 HIGH GRADE RESOURCE

20m infill drilling at Arrow will not only convert the inferred resources to indicated, it will also **INCREASE** the size of the resource in the next estimate.

EXAMPLE 3: INTERPOLATED (100m strike, 5 holes with 20m centers):

So what would happen to the A2 High Grade resource if it were infilled with 20m spacing?

First 5 meters (5m radius, 10m diameter)

5m strike * 5m depth * 5m width * 3.92 tonnes/m³ * 2204.62 lbs/tonne * 20% U3O8 * 2 for both sides = 0.432M lbs

Next 5 meters (10m radius, 20m diameter)

5m strike * 5m depth * 5m width * 3.18 tonnes/m³ * 2204.62 lbs/tonne * 10.24% U3O8 * 2 for both sides = 0.179M lbs

Per hole with max 20m Area of Influence: 611 klbs

TOTAL FOR FIVE HOLES: 3.055 Mlbs

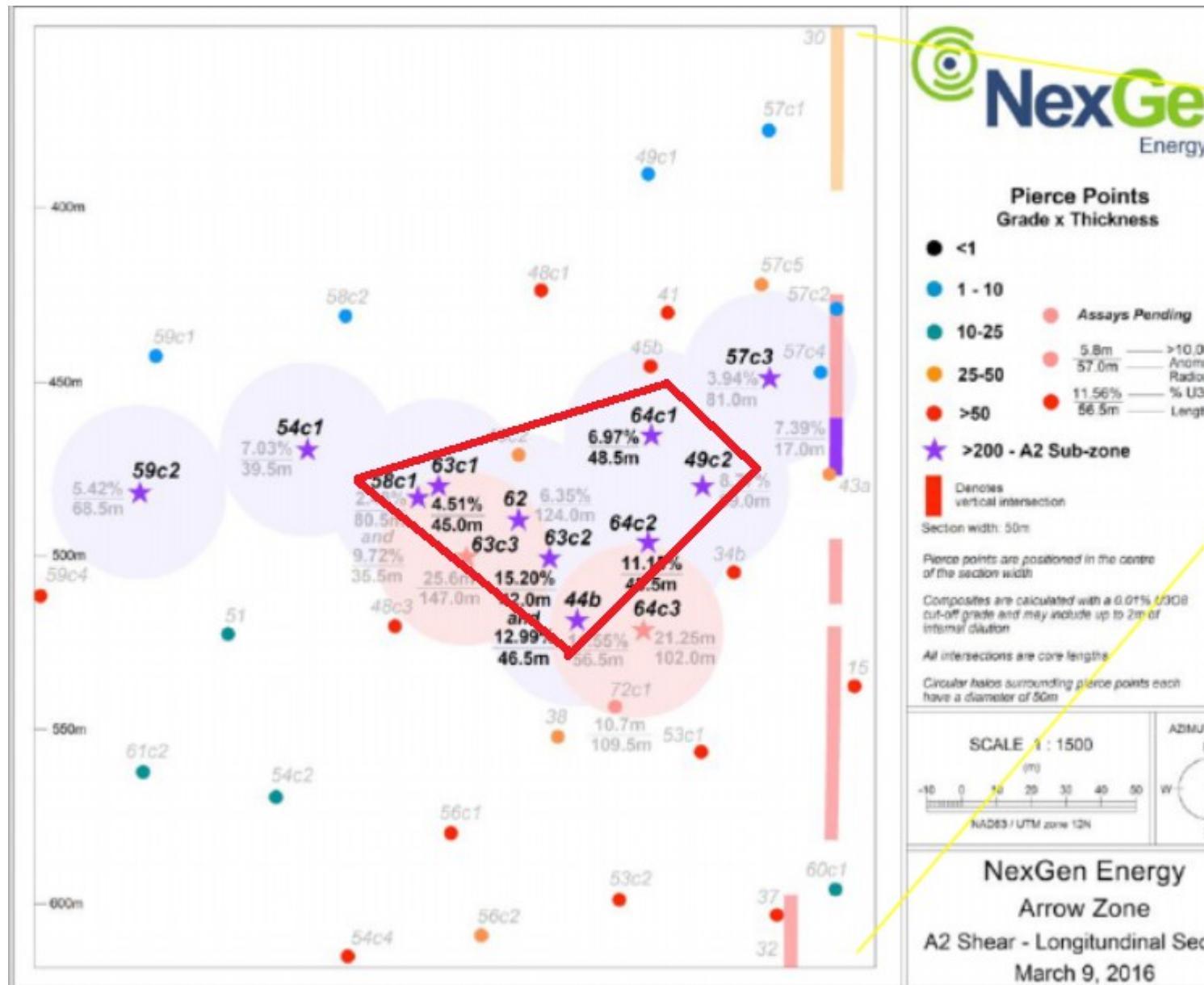
Note how in EXAMPLE 2, the same block yields just **1.392 Mlbs** as a consequence of the ID3 function. As with the examples above, I wouldn't be shocked at all if the A2 High Grade resource more than **doubled** in size with just infill drilling!

INFILL PROGRESS: INCREDIBLE CONTINUITY

How has infilling progressed since the maiden estimate?

Hole 49c2, the most easterly hole, was drilled 41m from hole 44b. Hole 58c1, the most westerly hole, was drilled 51m from hole 44b. Below a cross section view of the pierce points illustrating the methodical infill drilling using ~20m spacing.

image: <http://i.imgur.com/LAaDT4W.png>



Finally, the assay results I present below highlight the incredible continuity of Arrow's A2 High Grade domain (120.5Mlbs inferred @ 13.26% U3O8):

- * Hole 49c2 returned **18m of 20.55%**;
- * Hole 64c1 returned **12.5m of 20.42%**;
- * Hole 64c2 returned **26.5m of 20.13%**;
- * Hole 44b returned **20m of 20.68%**;
- * Hole 63c2 returned discrete intervals of **31m @ 20.09%** and **27m of 19.98%**;

- * Hole 62 returned discrete intervals of **23m @ 20.37%** and **13.50m of 20.59%**;
- * Hole 63c1 returned **8m @ 20.15%**; and
- * Hole 58c1 retunred **11m @ 30.61%**.

Read more at <http://www.stockhouse.com/companies/bullboard/nxgef/nexgen-energy-ltd?postid=24727092#bCPYFKlb0ccWWTlq.99>