

Peninsula Minerals

7 July 2008

Companies Announcement Office
Via Electronic Lodgement

REVISED EXPLORATION TARGET SIZES AT LANCE: 50-76 MILLION POUNDS eU₃O₈

Highlights

- World Industrial Minerals have, after re-interpretation, estimated that the global exploration target size for the Lance projects is 39-60 million short tons at 0.05-0.07% eU₃O₈ for between 50-76 million pounds of U₃O₈¹, including:
 - Estimated exploration target size at the Ross Project of 6.35-9.52 million short tons at 0.05%-0.07% eU₃O₈ for 8-12 million pounds of U₃O₈¹
 - Estimated exploration target size at the Barber Project alone of 2.60-3.90 million short tons at 0.07%-0.09% eU₃O₈ for 4-6 million pounds of U₃O₈¹
 - Estimated exploration target size within and between the other 11 projects of 30.2-46.8 million short tons at 0.05-0.07% eU₃O₈ for 38-58 million lb U₃O₈¹
- Drilling is planned to start in September 2008 to commence the conversion of historic mineralisation to JORC compliant resource status.

Summary

Peninsula Minerals Limited ("**Peninsula**") is pleased to announce that independent consultants Word Industrial Minerals ("**WIM**") have recently completed a thorough re-interpretation of the historic resources at the Lance Project in Wyoming, USA ("**Lance Project**"). This process involved correlation of mineralised sands and construction of mineralisation outlines over the thirteen project areas defined by historic drilling. The mineralised outlines were constructed using realistic cut-off levels for grades and thickness so that an objective estimation of the exploration target size for each Project could be determined. This assessment has allowed prioritisation of Projects in terms of a development schedule for the planned commencement of ISR mining. The Ross Project, due to its high density of existing drilling and previous hosting of the ISR Pilot Plant (now since fully rehabilitated) in the late 1970's, has been identified as the primary production centre. The Barber Project has been identified as the second production centre. Please refer to Figure 1.

Revised Exploration target Sizes

Following a thorough review of the historic drill data comprising over 4,500 drill holes, WIM identified a total of 22 mineralised sands with more than 204 km (127 miles) of roll fronts. Each Project area contains from one to eight vertically stacked mineralised roll fronts giving multiples of resource potential over the 37 km strike length of the Lance Project area. Please refer to Figures 2 and 3 for maximum and average historic drilling results for each project.

Mineralisation outlines were drawn around historic mineralised areas as defined by drilling, based on a cut off grade of 0.02% eU₃O₈ and a grade thickness value of 0.3 %ft (a realistic threshold for Wyoming ISR projects). The exploration target size was then calculated using estimates of the historic mineralised zones which were then extrapolated into undrilled areas. A specific gravity conversion factor of 15.5 cu. ft. per short ton has been used to calculate the tons tabulated in this report. Historic JV operator Nuclear Dynamics had calculated this tonnage factor from large diameter core they collected from drill holes on the Lance Project mineralisation during their work in the 1970's.

Based on the re-interpretation process above, the Ross Project, identified as the first production centre, has a revised Exploration target size of 6.35-9.52 million short tons at 0.05-0.07% eU₃O₈ for 8-12 million pounds of U₃O₈¹.

The Barber Project, located 18km (18.2 miles) south of Ross and seen as a second production centre, has a revised exploration target Size of between 2.60-3.90 million short tons at 0.07-0.09% eU₃O₈ for 4-6 million pounds of U₃O₈¹.

The revised exploration target size within and between the remaining 11 Projects is 30.2-46.8 million short tons at 0.05-0.07% eU₃O₈ for 38-58 million lb U₃O₈¹. This significant potential is largely a result of the vertical stacking of the roll fronts which multiplies the chances of mineralisation per km of strike length. In addition drill density surrounding the Projects is very low and those holes drilled were often at insufficient depth to test the deeper roll front positions. Follow-up drilling on many of the widely spaced holes that did intersect mineralisation was minimal, all of these factors indicating significant upside potential in these areas through further work.

The drilling set to commence in September will be the first phase of an extensive program which is designed to bring both the Ross and Barber Projects to JORC resource status prior to the commencement of a bankable feasibility study in mid 2010. Environmental baseline studies and metallurgical testing have commenced and will be conducted concurrently with the drilling program.

Lance Project Background

The Lance Project is located on the North-East side of the Powder River Basin in Wyoming. The original NuBeth Joint Venture, a joint venture between Nuclear Dynamics Inc, Bethlehem Steel Corporation and later Pacific Power and Hydro ("**NuBeth JV**"), discovered thirteen substantial zones of uranium mineralisation associated with an extensive system of roll fronts through drilling between 1970 and 1979.

As part of this exploration program, the NuBeth JV drilled more than 5,000 exploration and development holes, totalling in excess of 912,000 metres. This historic drilling data was acquired by Peninsula in the second half on 2007 and has defined a little known uranium district, mainly due to this drilling data and other project related data being held by one related entity since its discovery in 1970. Peninsula now holds title over 7 of the 13 mineralised areas defined by the historic drilling, making it the dominant mineral rights holder in this re-discovered uranium district. As previously announced, the Company continues to actively acquire mineral title over the remaining Project Areas as part of its dedicated land acquisition programme.

Conclusion

The completion of this intensive review and reinterpretation of the historical drill data by WIM provides further confirmation of the potential economic viability of an ISR operation at the Lance Project and supports the Company's mission statement of becoming a 1.5m lb per year U₃O₈ producer with production within one year of permitting.

Yours Sincerely



John (Gus) Simpson
Chairman

For further information, please contact our office on (08)9420 9333 during normal business hours.

¹Please note that the potential quantity and grade of the Exploration Targets in this statement are conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

Disequilibrium Explanatory Statement: eU3O8 refers to the equivalent U3O8 grade. This is estimated from gross-gamma down hole measurements corrected for water and drilling mud in each hole. These results are provisional upon the application of calibration correction factors which are determined from geochemical analysis. Geochemical analysis may show higher or lower amounts of actual U3O8, the difference being referred to as disequilibrium. All eU3O8 results above are affected by issues pertaining to possible disequilibrium and uranium mobility which should be taken into account when interpreting those pending confirmatory chemical analyses.

Competent Person

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Jim Gullinger, Principal of independent consultants World Industrial Minerals who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gullinger consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

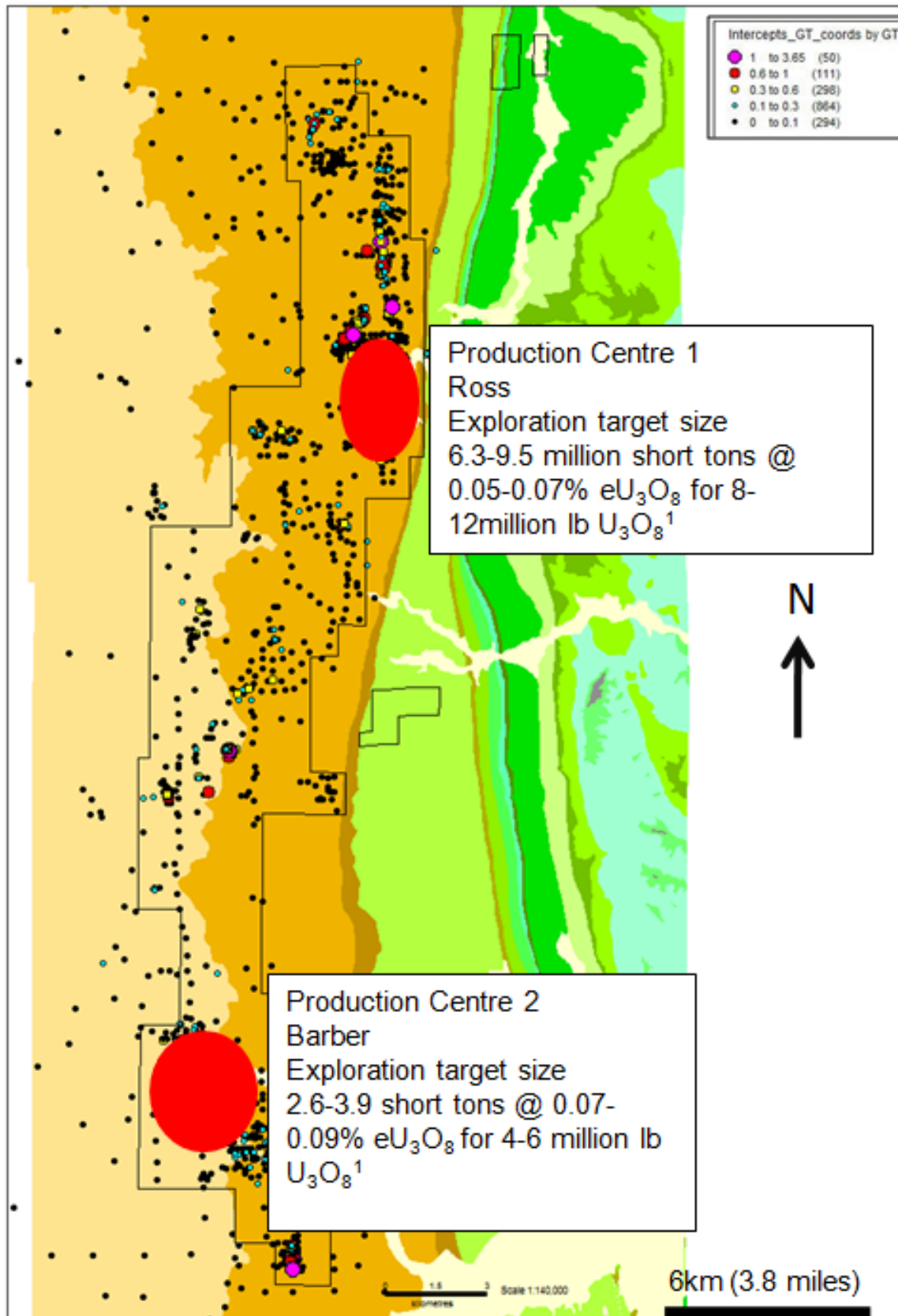


Figure 1 Locations of planned production centres of Ross and Barber projects. Black outline shows land acquired or being acquired.

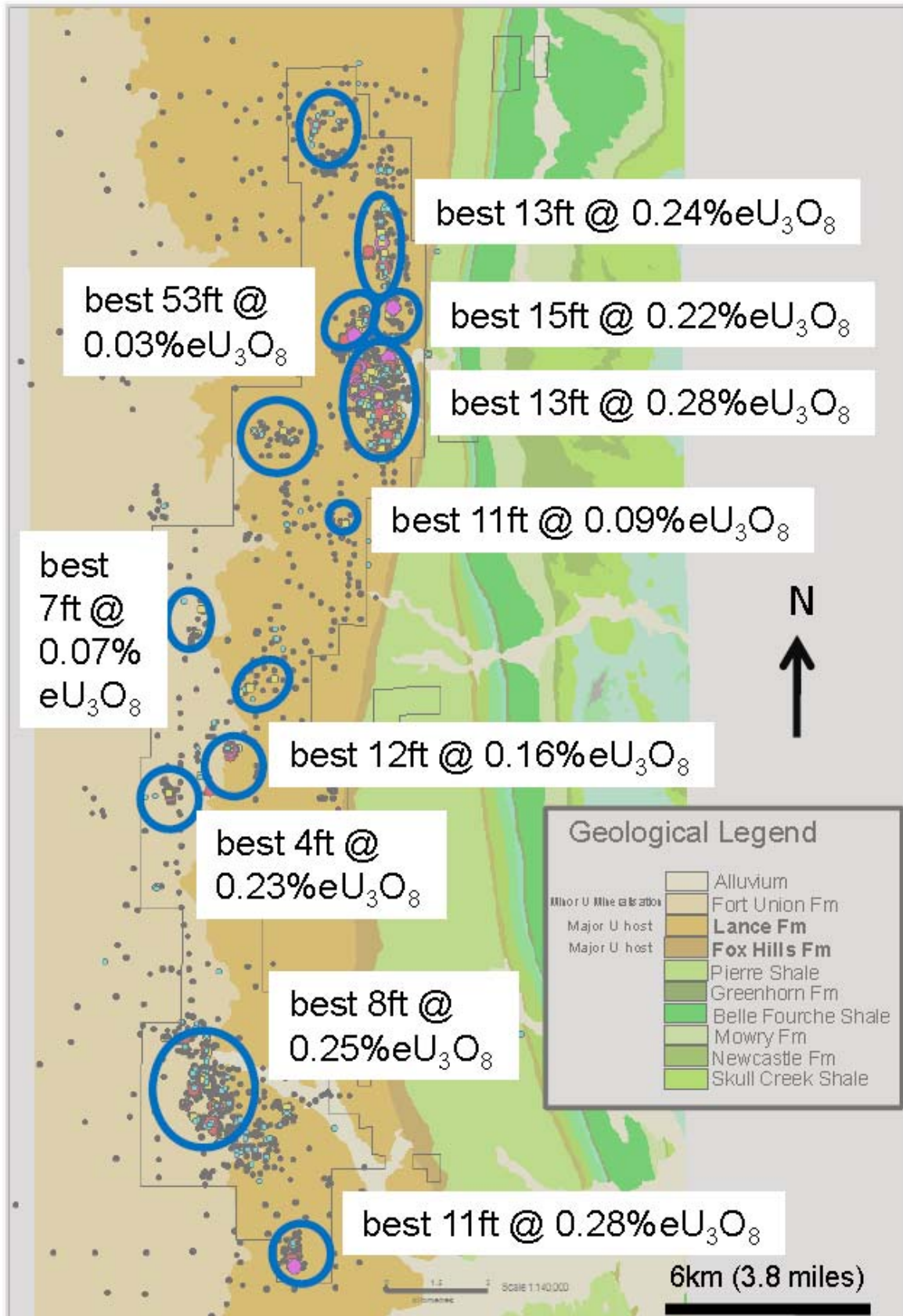


Figure 2 Best historic drill intersections per project

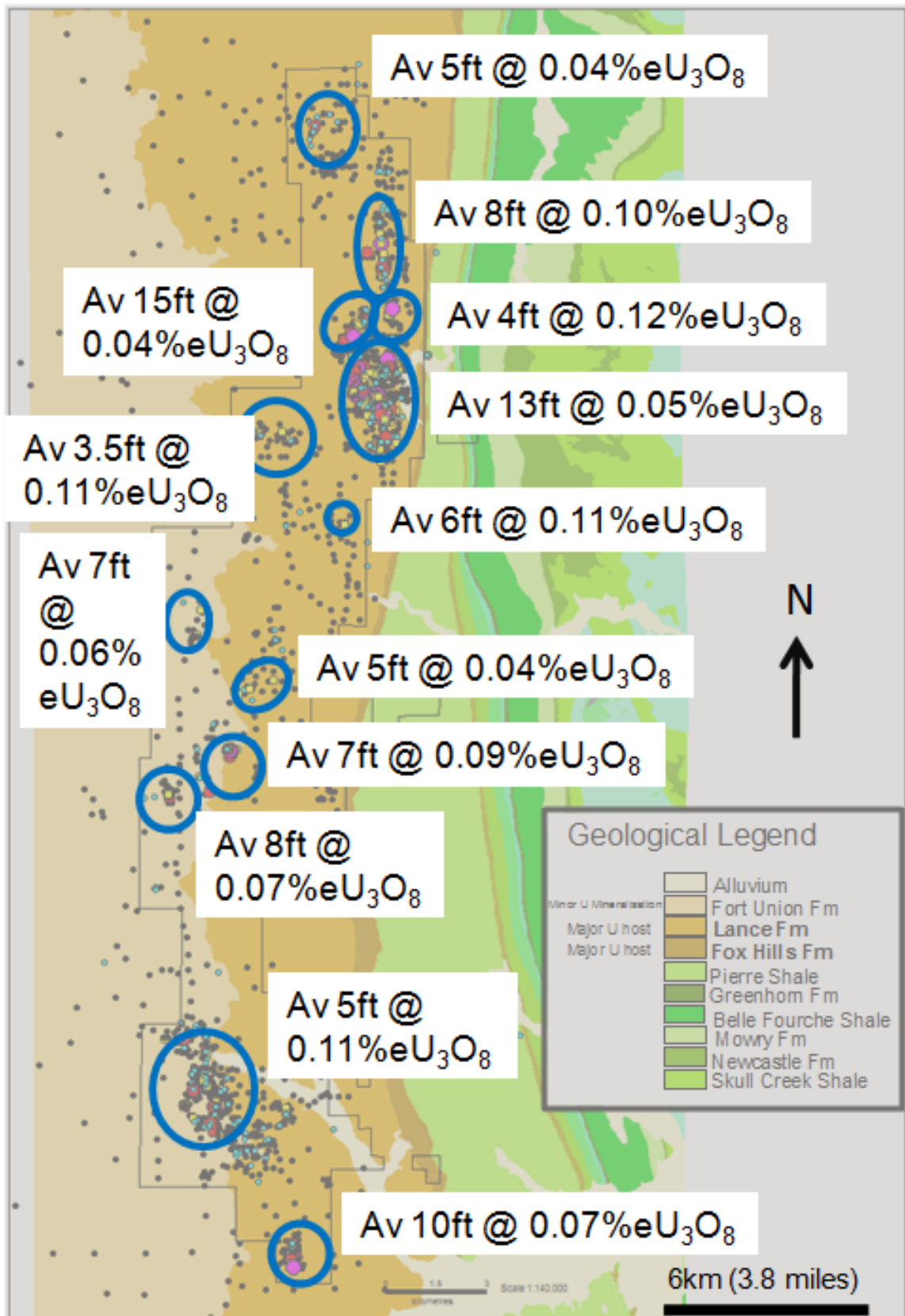


Figure 3 Average historic drill intersections per project