

POSITIVE PROGRESS ON DRILLING PROGRAM PERMIT FOR U.S. RARE EARTH PROJECT

HIGHLIGHTS

- Megado progressing activities to permit drilling program for North Fork Rare Earth Project.
- USDA Forest Service confirms documentation for maiden drill program at North Fork Rare Earth Project is complete and public comment period is due to commence.
- Megado to commence drilling as soon as possible once a permit has been received.
- North Fork Rare Earth Project is highly prospective due to high grade rock samples¹ and historical trench results² including:
 - 15.85% TREE (including 2.79% Nd-Pr)
 - 12.81% TREE (including 2.22% Nd-Pr)
- Numerous US Government policy setting supportive of US based critical minerals.
- Remaining 70% of Cyclone Lithium Project to be “ground truthed” in 1H, CY24.

Megado Minerals Limited (ASX: MEG) (**Megado** or the **Company**) is pleased to provide confirmation it is progressing relevant activities to permit a drilling program for its North Fork Rare Earth Project based in Idaho, USA. The USDA Forest Service has confirmed that the documentation³ relating to the proposed drilling program is complete and that the scoping period for public comment will begin mid-December 2023 and end in mid-February 2024.

Megado Minerals CEO & Managing Director, Ben Pearson commented:

“Confirmation that our drill permit is progressing as planned is great news. Our North Fork Rare Earth Project is a major priority. The identification of several new, previously unidentified carbonatite outcrops confirms the project is underexplored and has significant potential. Other rare earth projects have shown that carbonatite REE mineralisation is capable of delivering high grades and high tonnage. North Fork has already provided some of the highest-grade rock chip samples ever recorded in the U.S. If this bares out during drilling, we believe North Fork has potential to be a major U.S. rare earths’ project.”

¹ Refer to ASX release dated [14 March 2023](#)

² Refer to ASX release dated [14 April 2022](#)

³ The proposed drill program is being assessed as a [Categorical Exclusion](#) [36 CFR § 220.6 (e) (8)].

North Fork Rare Earth Project

Overview

The North Fork Rare Earth Project was acquired in June 2022 and is located 40 km north-west of Salmon in the Salmon-Challis National Forest, Lemhi County, Idaho. The project includes 526 unpatented mining lode claims covering approximately 11,120 acres (45 km²) (see Figure 1).

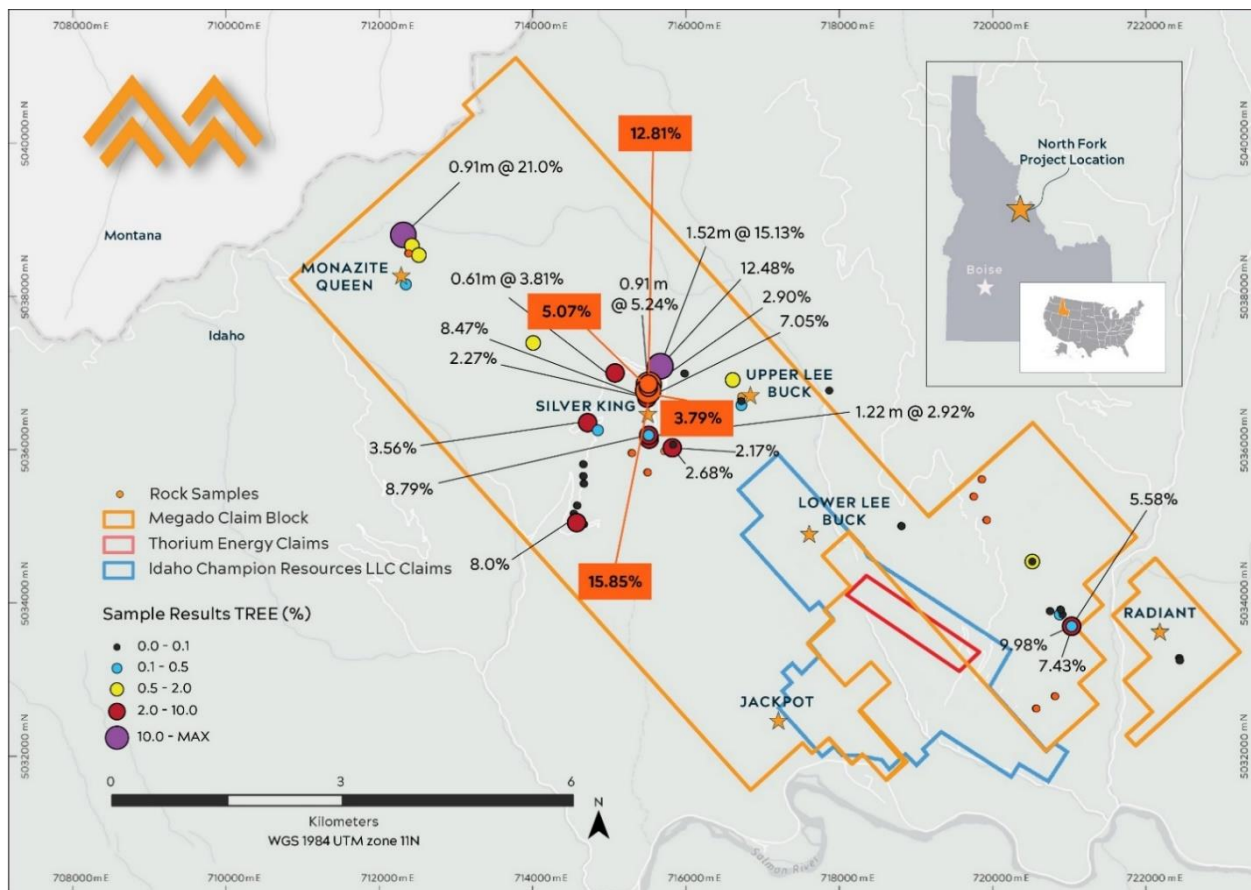


Figure 1: North Fork Project with key REE sample results (historical and Megado sampling).

Geology

The mineralised trend at North Fork is approximately 3 km wide and 30 km long and runs from the Indianola Ranger station on the Salmon River northwest into Montana. The project includes several prospects identifiable via outcropping carbonatite rock. These include Silver King, Monazite Queen, Upper Lee Buck, Jackpot and Radiant. A recent hyperspectral survey by Megado suggests the presence of several new and previously unknown carbonatite outcrops. These will be the focus of future field investigations.

Silver King (**SK**) contains several known occurrences of carbonatite hosted REE mineralisation, the main occurrences being approximately 210 and 170 metres exposed at surface and costean (channel) sampled. Assay results (TREE) for SK are amongst the highest in the U.S. Historical trench results for SK include: **2.0m @ 10.31%** TREE; **2.0m @ 5.80%** TREE; and **1.52m @ 17.70%** TREE. More recent sampling by Megado has shown rock sample results of up to **15.85%** TREE (including **2.79%** Nd-Pr) (see ASX Release [14 March 2023](#)).

Proposed Drill Program

Given the excellent assay results for Silver King, a Plan of Operations to undertake an initial drill program was submitted to the USDA Forest Service in December 2022. Megado has now been advised that a drill permit is on schedule for 1Q 2024.

Megado has applied to permit eight (8) drill pads (see Figure 2, and Appendix A), from which multiple core drillholes can be drilled (during the 12-month permit timeframe). Megado anticipates that it will initially drill ca. 6-8 drillholes for a total of 1,500m, but has the permit flexibility to expand the number of drillholes (effectively unlimited), so long as it utilises the permitted drill pads.

The proposed drill program will initially focus on testing the down dip potential of known REE mineralisation at Silver King. The 8 drill pads provide the flexibility to test along strike (ca. over 1,000m length potential) and down dip of any successful drill intercept. In addition, the program is testing a number of styles of REE carbonatite mineralisation observed at Silver King, namely carbonatite dykes, and carbonatite-related intrusive breccias.

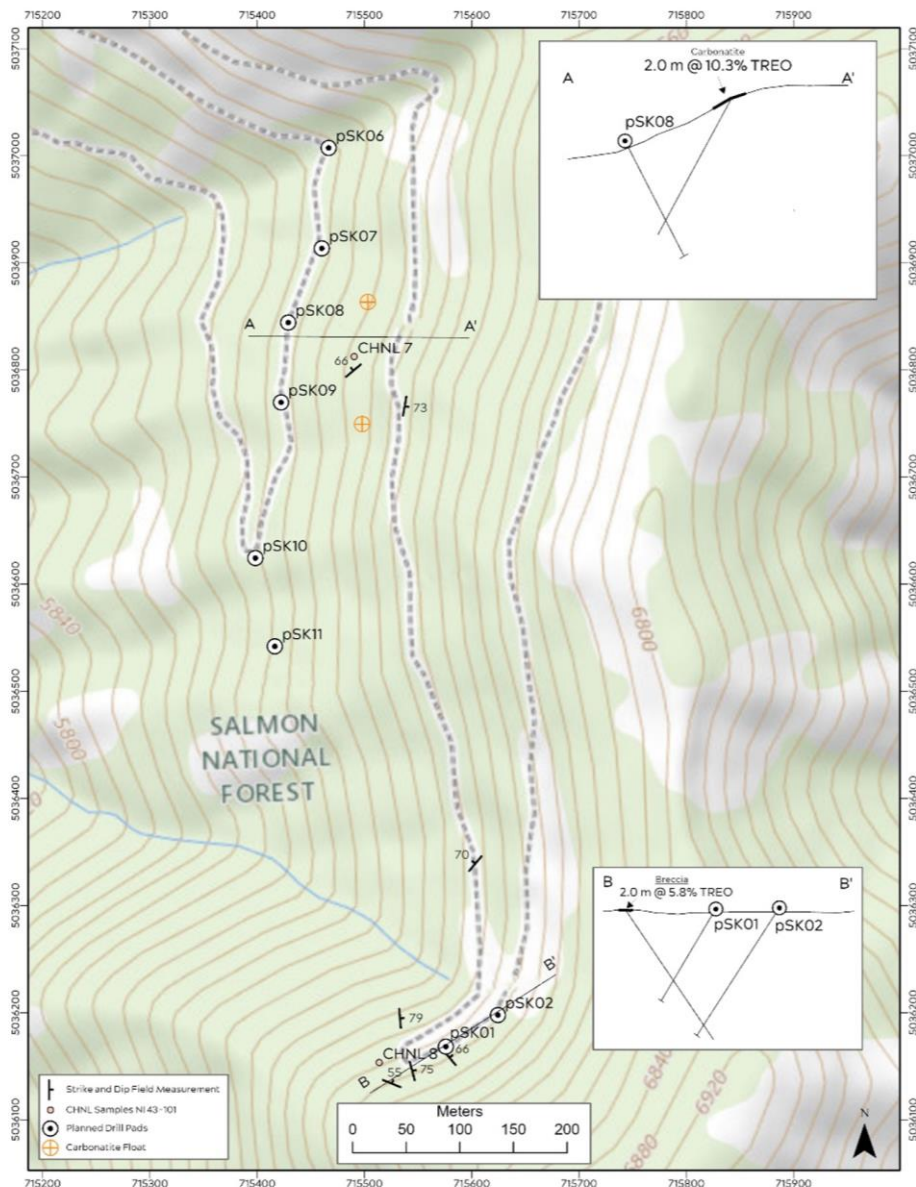


Figure 2: North Fork Rare Earth Project: Map of Planned Drill Pads and Initial Proposed Drill Holes

U.S. Government Policy Settings

There are currently no facilities in the U.S. capable of producing rare earths magnets. In 2022, the Secretary of Commerce determined that U.S. reliance on NdFeB magnet imports threatens national security. The [Mountain Pass mine](#) in California is currently the only U.S. rare earths mine, but it is still reliant on Chinese processors. To address this issue the U.S. Department of Defence (DoD) has provided funding to several companies to strengthen the U.S. domestic rare earths supply chain. These include Lynas USA (ASX: LYC) materials and MP Materials Corp (NYSE: MP) to build U.S. based heavy rare earths (HREE) processing facilities.

To date, most DoD rare earth funding has focused on downstream processing. However, more recently there is evidence that the government is prepared to fund mining activities. In June 2023, it provided US\$15M to Jervois (ASX: JRV) to accelerate drilling at their Idaho Cobalt Mine; in September it awarded US\$20.6M to Talon Metals (TSE: TLO) to support nickel prospecting in Minnesota and Michigan; and US\$90M to Albermarle (NYSE: ALB) for the Kings Mountain Lithium Mine Restoration.

Earlier this year, a bill was introduced in the U.S. House of Representatives that would provide tax credits to companies that produce rare earth magnets domestically. The bill known as the '[Rare Earth Magnet Manufacturing Production Tax Credit Act of 2023](#)' would provide a US\$20 per kilogram credit for NdFeB magnets made in the U.S., with the credit growing to US\$30 per kilogram for magnets made with rare earths sourced from U.S. mines.

Megado continues to monitor changes in the U.S policy environment as it relates to critical minerals. As Megado progresses its works program it will explore how these changes may potentially benefit the Company and its shareholders.

Cyclone Lithium Project

Overview

The Cyclone Lithium Project was acquired in February 2023. Located in the James Bay Lithium District, Quebec, it includes 302 claims (130 km²). Exploration at Cyclone in 2023 was hampered by wildfires between June and August 2023. This reduced the time available for surface-based exploration and created logistical bottlenecks. As a result, only 30% of the project area was surveyed during Phase I field exploration. Eighteen (18) of 60 planned traverses were completed (see Figure 3). Seventy percent (70%) of Cyclone remains unexplored and highly prospective.

The Phase I field survey was undertaken by Dahrouge Geological Consulting (DGC) between 19-29 August 2023. During the survey, 41 pegmatite occurrences were observed. Sixty-three (63) samples were sent to the laboratory for assay. These were analysed with to determine their geochemical Fertility Ratios and potential for lithium mineralisation. Eight (8) samples were identified as having Fertility Ratios indicative of lithium mineralisation (see [ASX Release 9 October 2023](#)). These samples clustered in 2 groups in the northwest and southeast of the property. Some of the collected rock samples indicated anomalous level of Ta and Rb. These elements are known to be associated with lithium mineralised systems. Importantly, these rock samples were collected from an area where the underlying magnetic geophysical signature appears to continue at depth and along strike.

Geology

The Cyclone Project is within the La Grande Sub province, a subdivision of the Superior Province. Within the Project area are two folded Greenstone belts. These include:

- The northern La Forge Greenstone Belt which consists of paragneisses with minor conglomerates and felsic tuffs.
- The southern Aquilon Greenstone Belt which consist of metabasalts, komatiites, metasediments and calc alkaline felsic rocks.

The Aquilon Belt varies from 2 to 5 km wide and is over 50 km long. Lithologies include tholeiitic metabasalts, ultramafic lavas, iron formation, metasediments and felsic volcanics. Plutonic rock of varying composition along with quartz veins, diabase and pegmatitic dykes crosscut rocks of the volcano sedimentary basin. Lithologies have undergone considerable deformation, faulting, and folding. Almost all of the Cyclone claims are on the Aquilon Greenstone Belt. The geology and structural setting are highly favourable for lithium and nickel (+/-PGE's) mineralisation.

Works Program for 1H, 2024

Megado is committed to completing the remaining Phase I survey work at Cyclone in 2024 (see Figure 3). This includes the remaining 42 traverses. In addition, Megado will explore options to undertake a ground-based geophysics program over winter, to leverage the easier access provided during snow and ice cover. This information could assist in targeting follow-up ground-based field reconnaissance during the 2024 field season.

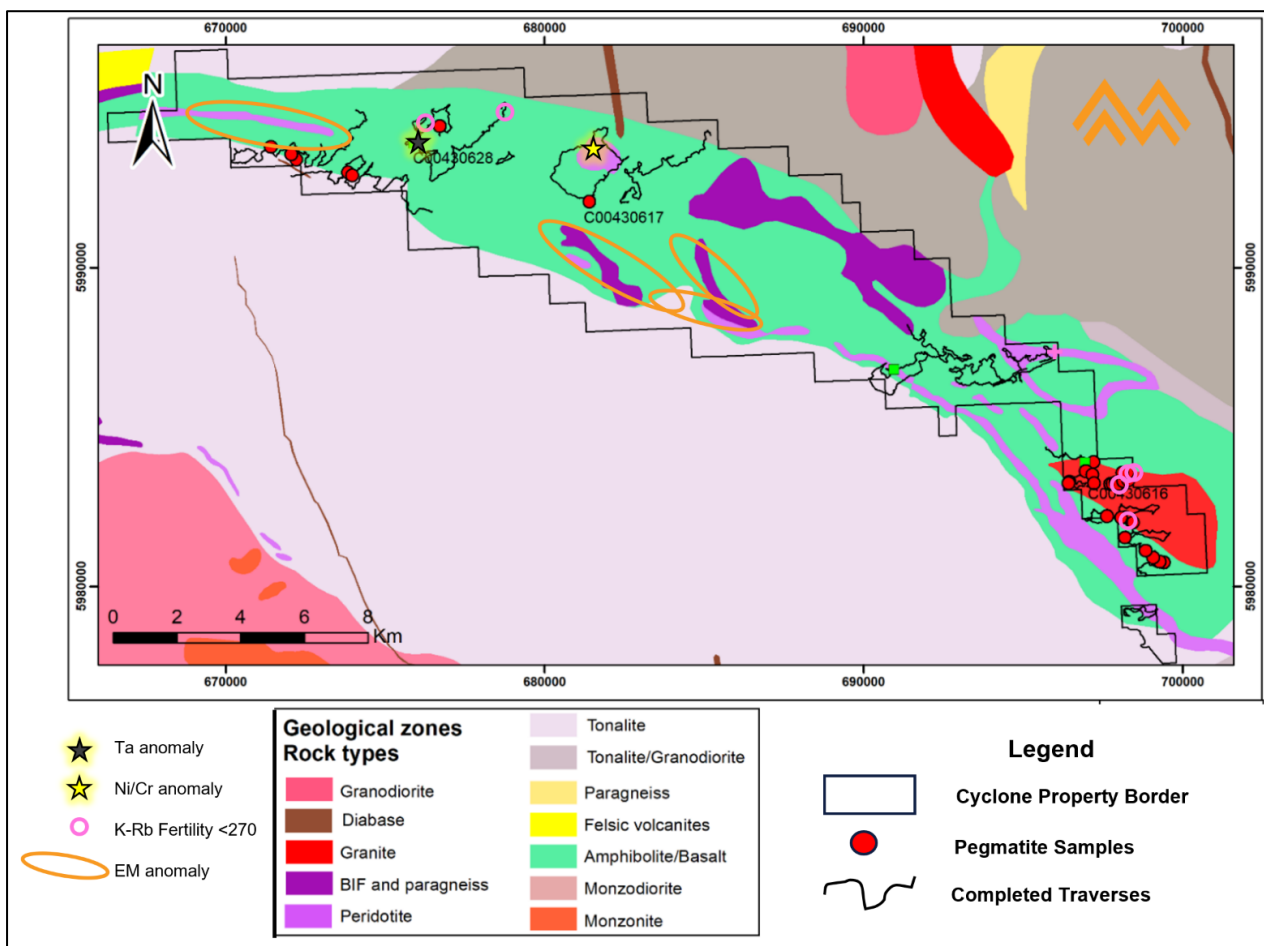


Figure 3: Cyclone Project highlighting the Phase 1 completed traverses (only 18 of 60 planned), several pegmatite samples with significant K-Rb fertility ratios (<270), Ta and Ni/Cr anomalies, and EM geophysics anomaly areas generally coincident with ultramafic rocks (as yet not explored for lithium pegmatites nor nickel sulphide mineralisation).

K Lithium Project

Overview

Acquired in September 2023, the K Lithium Project is in the James Bay Lithium District, Quebec, Canada. The project includes 35 claims (16 km²). A field survey of the project area was undertaken by Dahrouge Geological Consulting (DGC) between 16-20 October 2023. The K Project is characterised by a number of large granite outcrops. During the survey, it was noted that several of these contained coarse-grained pegmatitic dykes. Several had visible occurrences of muscovite and tourmaline. No visible spodumene was observed during the survey.

Fifty-five (55) samples were collected and sent for laboratory assay, results still pending. A decision in relation to the next steps at the K Lithium Project will be made once laboratory assay results have been received and evaluated.

Geology

Locally, rocks are granitic intrusions of the 'Vieux Comptoir Granitic Suite'. This suite comprises 3 subdivisions including 'Suite 3: Spodumene Granite' – the exact host rock (nAvcr3) for lithium mineralisation on a number of known lithium deposits/occurrences in James Bay region.

Next Steps

The primary focus is currently on North Fork and Cyclone Projects. Next steps in relation to K Project will be considered in early CY24 once the assay results have been received.

Other Project Opportunities

Megado continues to evaluate new projects. The primary focus is highly prospective exploration projects targeting the minerals required for the green energy transition and global decarbonisation. Most, but not all are included in the 2023 Critical Minerals List developed by the U.S. Department of Energy⁴. To date, most of the projects evaluated have been in the USA and Canada. Megado will expand this remit to include projects in other jurisdictions.

-ENDS-

Authorised for release by the Board of Megado Minerals Limited.

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⁴ <https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals>

About Megado Minerals

Megado Minerals Ltd (ASX: MEG) (the Company or Megado) is an ASX-listed mining exploration company. The company's assets include the North Fork Rare Earth Project in Idaho, USA and the Cyclone Lithium Project in the James Bay region in Quebec, Canada.

In June 2022, Megado completed the acquisition 100% of the rights, title, and interest in the North Fork Rare Earth Project ('North Fork'), located in the mining-friendly Idaho Cobalt Belt region of Idaho, USA. Subsequently, Megado has acquired new lode claims in the project area. North Fork now consists of 526 (granted and in application), covering approximately 45km² with outcropping, high-grade, rare-earth element (REE) mineralised rock. It contains multiple high-grade, REE mineralised carbonatites that have been observed at surface across numerous prospects over 10km along strike. Previous exploration has returned exceptional grades in channel samples. REE mineralisation displayed at North Fork is high-grade and enriched in critical rare earths (CREO), (typically Y, Nd, Tb, Dy, Eu). Idaho, where North Fork is located, is ranked the best mining policy jurisdiction in the world in 2020 by Fraser Institute.

In February 2023, Megado announced the acquisition of the Cyclone Lithium Project. The Project is in Quebec's James Bay region and centred on the Aquilon Greenstone Belt. The Project encompasses 130km² and includes 304 claims. Located within Category-III lands, the Cyclone Project does not carry any restrictions relating to mining or exploration according to the James Bay Agreement. The Project area is easily accessible year-round via the Trans Taiga Road, which transects the southern part of the Project area.

In September 2023, Megado acquired The K Lithium Project also in Quebec's James Bay region, 10 km east of the (north-south) James Bay Road / Billy-Diamond Highway, ca. 90km south of Raddison, on Lac Kaychikutinaw. The Project covers approximately 16km² (1,598 ha) and includes 35 claims within the La Grande Sub province.

Forward Looking Statements

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward-looking information.

Competent Persons Statement

Information in this "ASX Announcement" relating to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves has been compiled by Dr Chris Bowden who is a Fellow & Chartered Professional of the Australian Institute of Mining and Metallurgy and is Chief Geologist of Megado Minerals Ltd.

He has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012 Edition). Dr Bowden has consented to the release of the announcement.

Appendix A: Proposed Drill Pad Locations as per Plan of Operations

Drill Site #	NAD83E	NAD83N	IMC#	Claim Name	Section	Township	Range
pSK01	715576.9	5036168	ID101839578	NF 500	5	24N	19E
pSK02	715625.5	5036197	ID101839578	NF 500	5	24N	19E
pSK06	715455.0	5036970	ID105765223	NF 242	32	25N	19E
pSK07	715451.0	5036900	ID105765225	NF 244	32	25N	19E
pSK08	715430.0	5036844	ID105765225	NF 244	32	25N	19E
pSK09	715423.3	5036769	ID105765225	NF 244	32	25N	19E
pSK10	715399.3	5036624	ID105765227	NF 246	32	25N	19E
pSK11	715417.5	5036542	ID101839580	NF 502	32	25N	19E