

Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Geographic Information Systems**

A geographic information system (GIS) is a computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface.

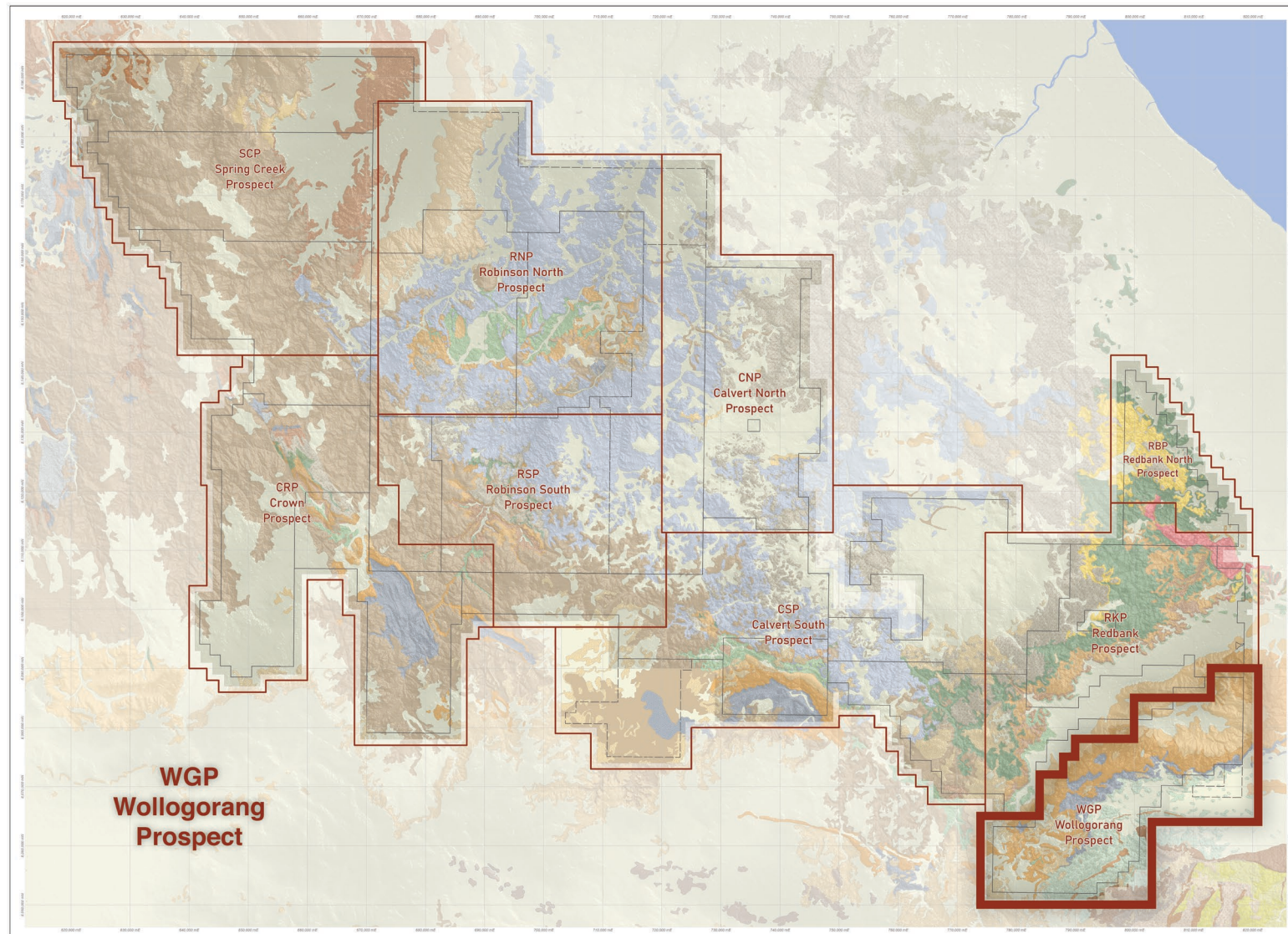
WGP-Wollogorang Prospect  
1,091.00 km<sup>2</sup>

Geological mapping is fundamental to any exploration project. Effective mineral exploration requires an in-depth understanding of the lithological and structural controls of mineralisation.

These insights must be gained through geological mapping at the early stages of the exploration program. Mapping is a cost-effective exploration tool and a project-generative process that delivers tangible benefits to all exploration programs.

A good geological map not only provides focus to an exploration program, it also clearly communicates the economic potential of a project to stake holders. Geologists strive to know the composition and structure of Earth matter and depict information in GIS format. This provides basis for comparisons and facilitates analysis to offer results that can benefit our future.

The Redbank GIS team are currently focused around the area of Digital Mapping. We understand that at the heart of any Geographical Information System (GIS) is the map database. The efficiency of the GIS is therefore related to the accuracy and reliability of the related map data.



Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Contents-GIS Layers & Images**

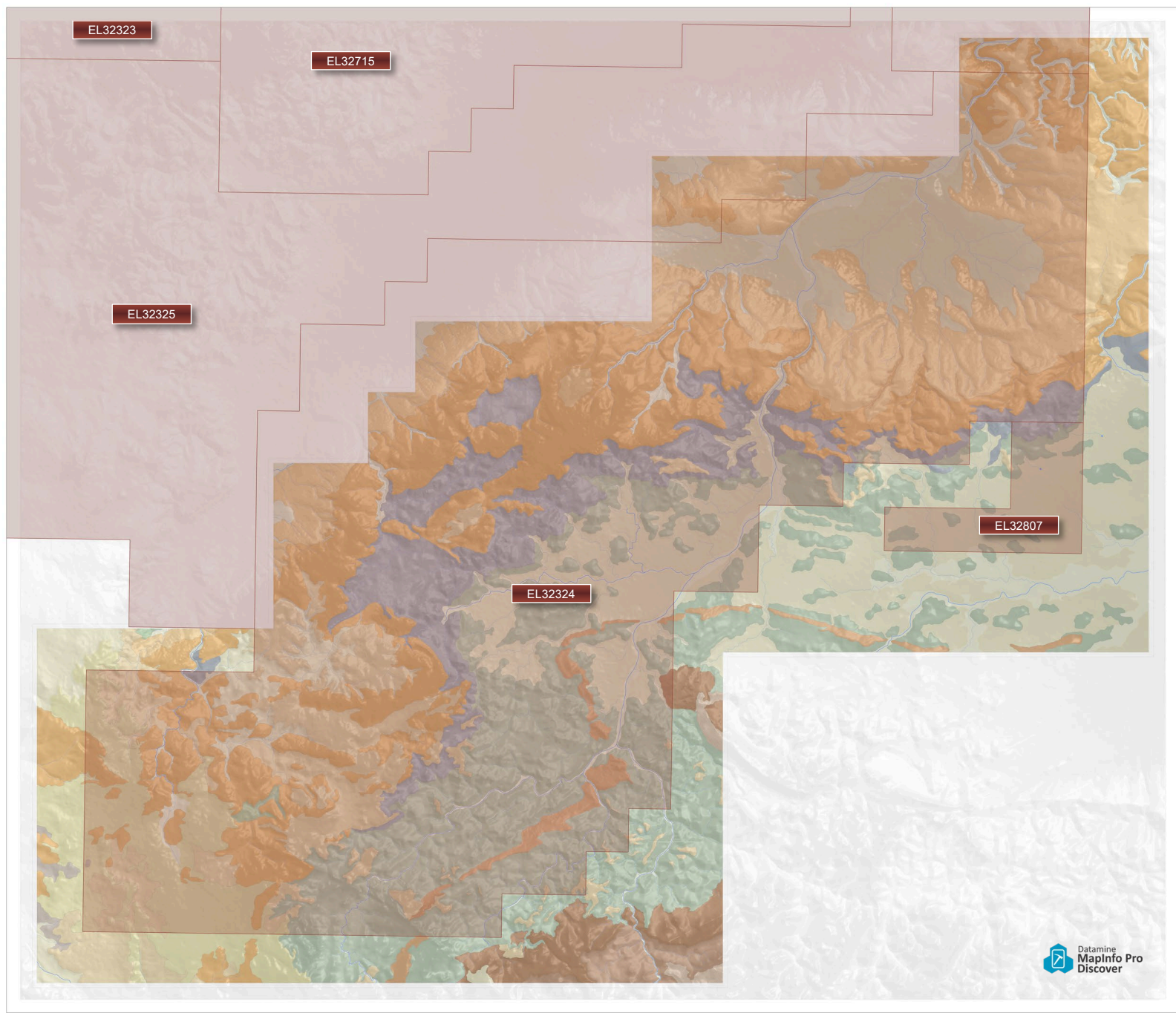
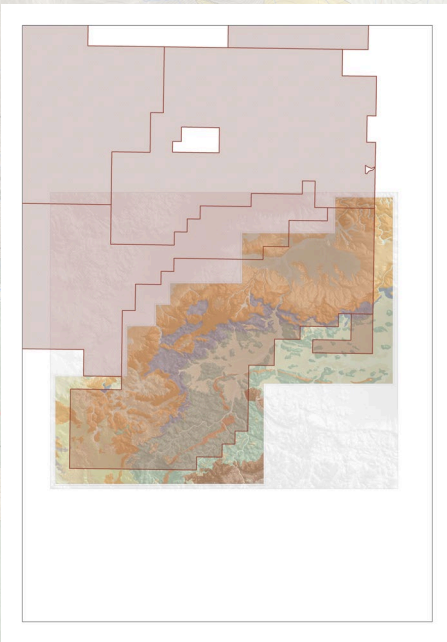


- 1. WGP-Wollogorang Prospect Regional location**  
WGP-Wollogorang Prospect 1,091.00km<sup>2</sup>
- 2. Contents**  
WGP-Wollogorang Prospect Map Book content.
- 3. Exploration Licences**  
The WGP-Wollogorang Prospect covers several exploration licences, the mapping has included a 2km buffer zone around the WGP-Exploration Licence area
- 4. Geological Map**  
WGP-Wollogorang Prospect digitisation and attribution of Geological layers available in the exploration folder.
- 5. Hydrocarbons Map**  
Hydrocarbon classifications have been completed by John Beeson, these layers are fully attributed and available on our server for further investigations.
- 6. Satellite Imagery**  
The highest quality satellite imagery for the WGP, pix50cm World Imagery tiles have merged and then clipped to the WGP prospect boundary
- 7. Digital Elevation Model (DEM)**  
This DEM is available in the workspace, there has been a contour layer extracted at 5m intervals, this DEM is also available for the "Discover 3D" module within MapInfo. .
- 8. Hydrology Layers**  
Detailed hydrology, Rivers, Creeks and Catchment layers are fully attributed and these layers have been supplied as individual catchment areas, as well as a combined hydrology layer..
- 9. 2021-Soils Samples**  
688 Soil sample points in the WGP, A MapInfo Heatmap Cu-ppm layer has been extracted for the layer.
- 10. 2021-Rock Samples**  
30 Rock sample points in the WGP, A MapInfo Heatmap Cu-ppm layer has been extracted for the layer.
- 11. NTGS-Stream Sediments (Heat Map)**  
150 Stream Sediment sample points in the WGP that have 90+ppm of Cu. , A MapInfo Heatmap layer has been extracted for the 90+ppm layer.
- 12. Drillholes (Historical)**  
There are 34 historical drillholes in the WGP Prospect area
- 13. Geophysics Image (TMIRTP-Tilt)**  
Total magnetic intensity (TMI) -reduced to pole - Tilt filter
- 14. Geophysics Image (TMIRTP)**  
Total magnetic intensity (TMI) -reduced to pole
- 15. Geophysics Image (TMIRTP-1VD)**  
Total magnetic intensity (TMI) -reduced to pole First vertical derivative.
- 16. Geophysics Image (KThUr-Ternary)**  
Ternary radioelement potassium(K)-thorium(Th)-uranium(U) channel data. The image is a red-green-blue (RGB) composite using a histogram-equalised colour-stretch for each of the three channels..
- 17. Areas of Interest**  
Detailed Areas of Interest from John Beeson, Mat Cooper , NTGS and the digitising process (David Hantke).
- 18. Areas of Interest (AEM-ET)**  
Regional Government and Historical Open File Airborne Electromagnetic (AEM) Early Time Channel AEM Composite (ET) Time Domain Surveys Only
- 19. Areas of Interest (AEM-MT)**  
Regional Government and Historical Open File Airborne Electromagnetic (AEM) Middle Time Channel AEM Composite (MT) Time Domain Surveys Only
- 20. Areas of Interest (AEM-LT)**  
Regional Government and Historical Open File Airborne Electromagnetic (AEM) Late Time Channel AEM Composite (LT) Time Domain Surveys Only
- 21. MapInfo Workspace**  
The WGP MapInfo Workspace has been set-up and available in the **RBK-Exploration Folder**, this workspace is our **Exploration Database Master** for the Wollogorang Prospect.

Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect  
Exploration Licences**

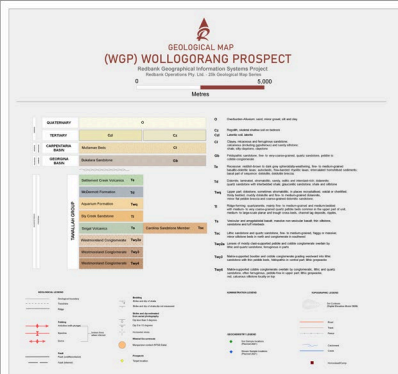
The WGP-Wollogorang Prospect covers several exploration licences, the mapping has included a 2km buffer zone around the WGP-Exploration Licence area

Granted

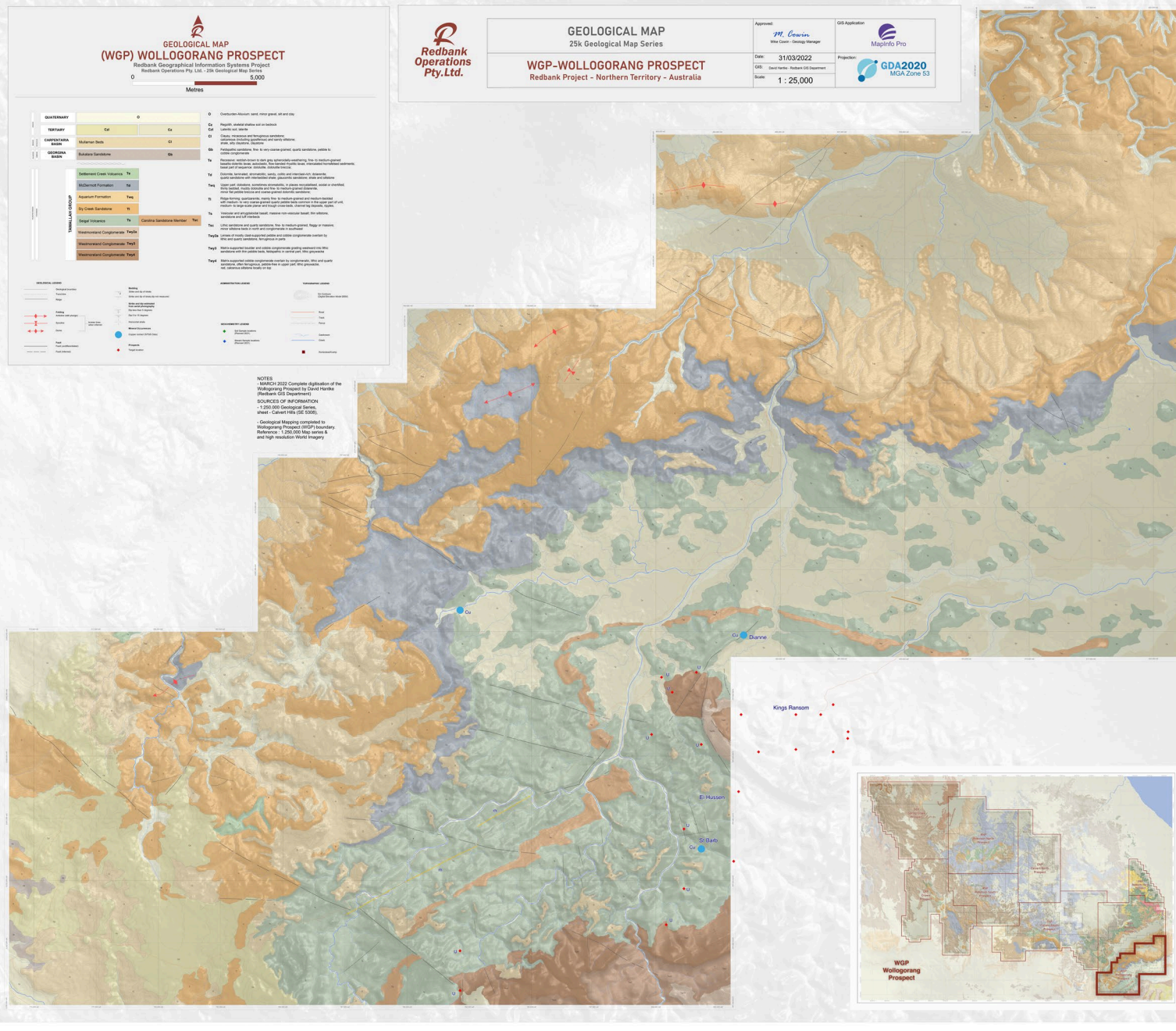


# Redbank Exploration Project NT 25k Geological Map Series WGP-Wollogorang Prospect Geological Map

The WGP-Wollogorang Prospect has now been totally digitised and has been placed on our server. This map has a very high level of detail including Geology, Geo Physics, Satellite Imagery, Hydrology, Topography and DEM.

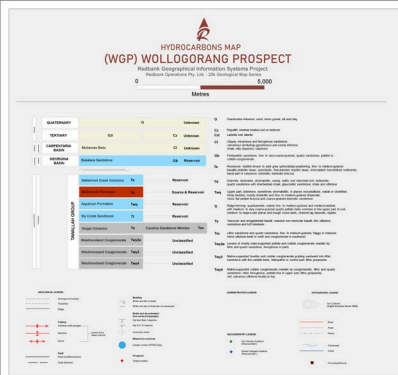


Geological units have been fully attributed in all individual layers, there is also a combined Geology layer with our Redbank codes and hydrocarbon classifications  
Contact boundaries are approximate and will be updated as field data becomes available.

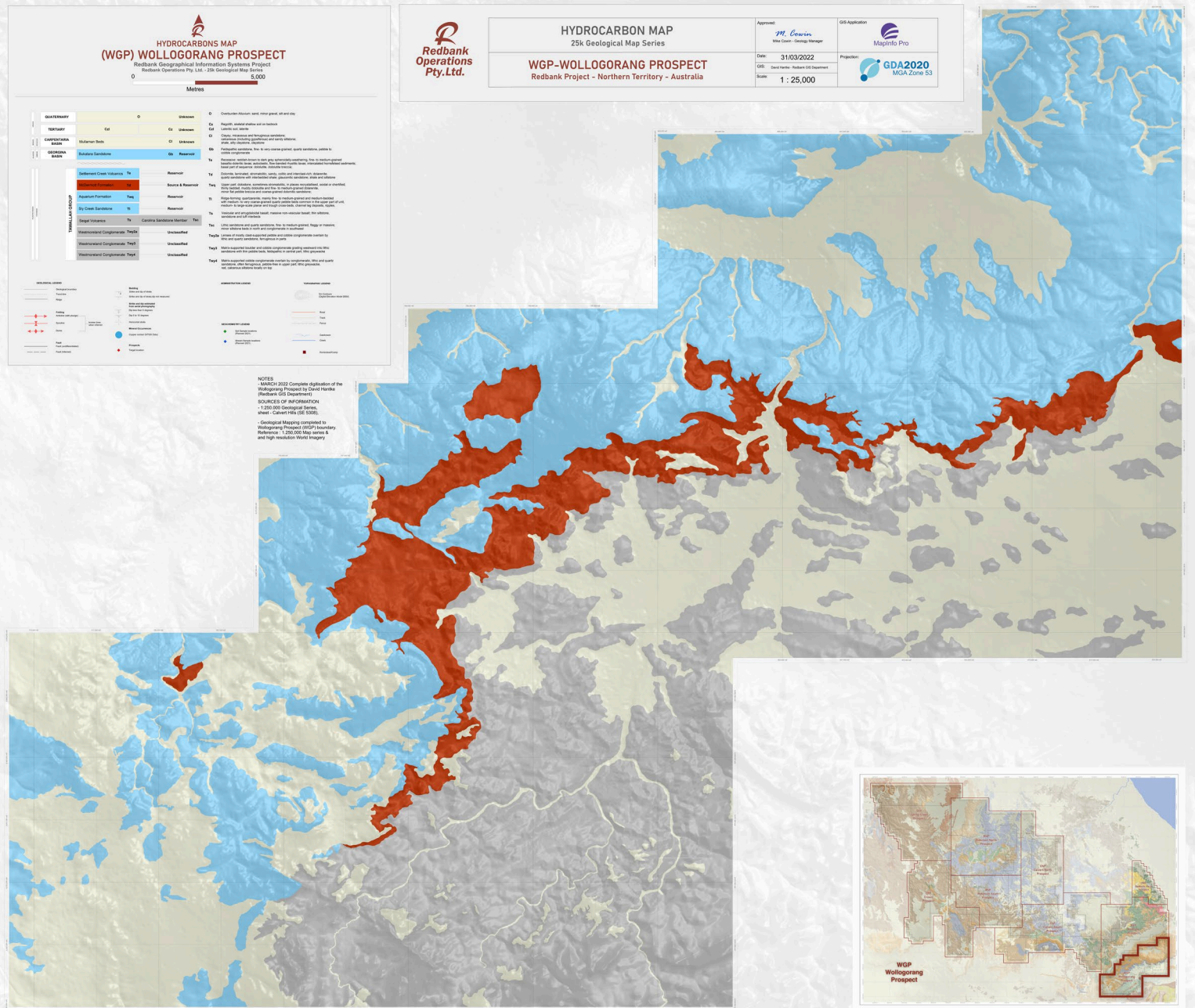


# Redbank Exploration Project NT 25k Geological Map Series WGP-Wollogorang Prospect Hydrocarbons Map

Hydrocarbon classifications have been completed by John Beeson, these layers are fully attributed and available on our server for further investigations.



Hydrocarbon units have been fully attributed in all individual layers, there is also a combined Geology layer with our Redbank codes and hydrocarbon classifications

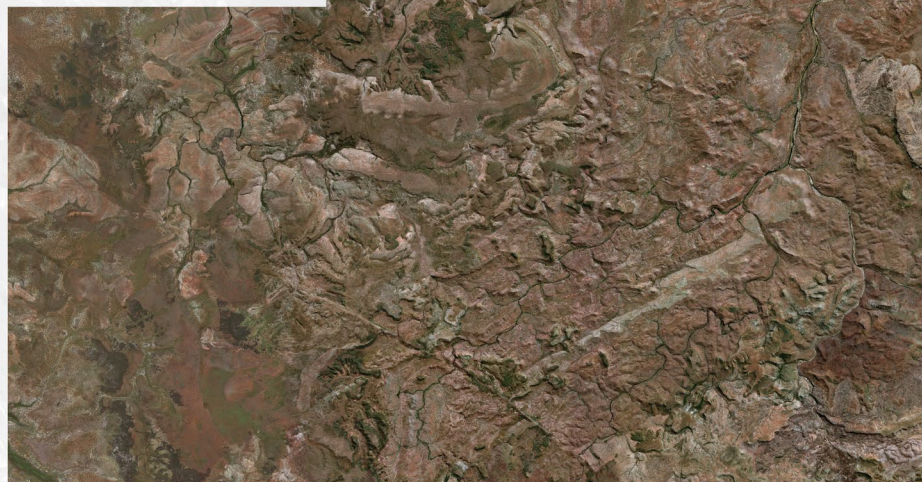


Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect  
Satellite Imagery**

The highest quality satellite imagery has been clipped to WGP boundary and available on our server.

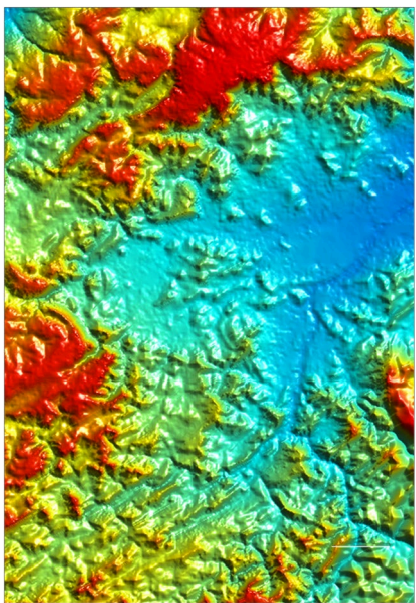


WGP-Imagery has been extracted from the pix50cm World Imagery tiles, these super high resolution imagery tiles have been extracted to the WGP and then merged into one layer, this layer has then been clipped to the WGP prospect boundary and available on our server, this process is supplied in a MapInfo .mrr file, which is super efficient and a processor friendly system for workflow.

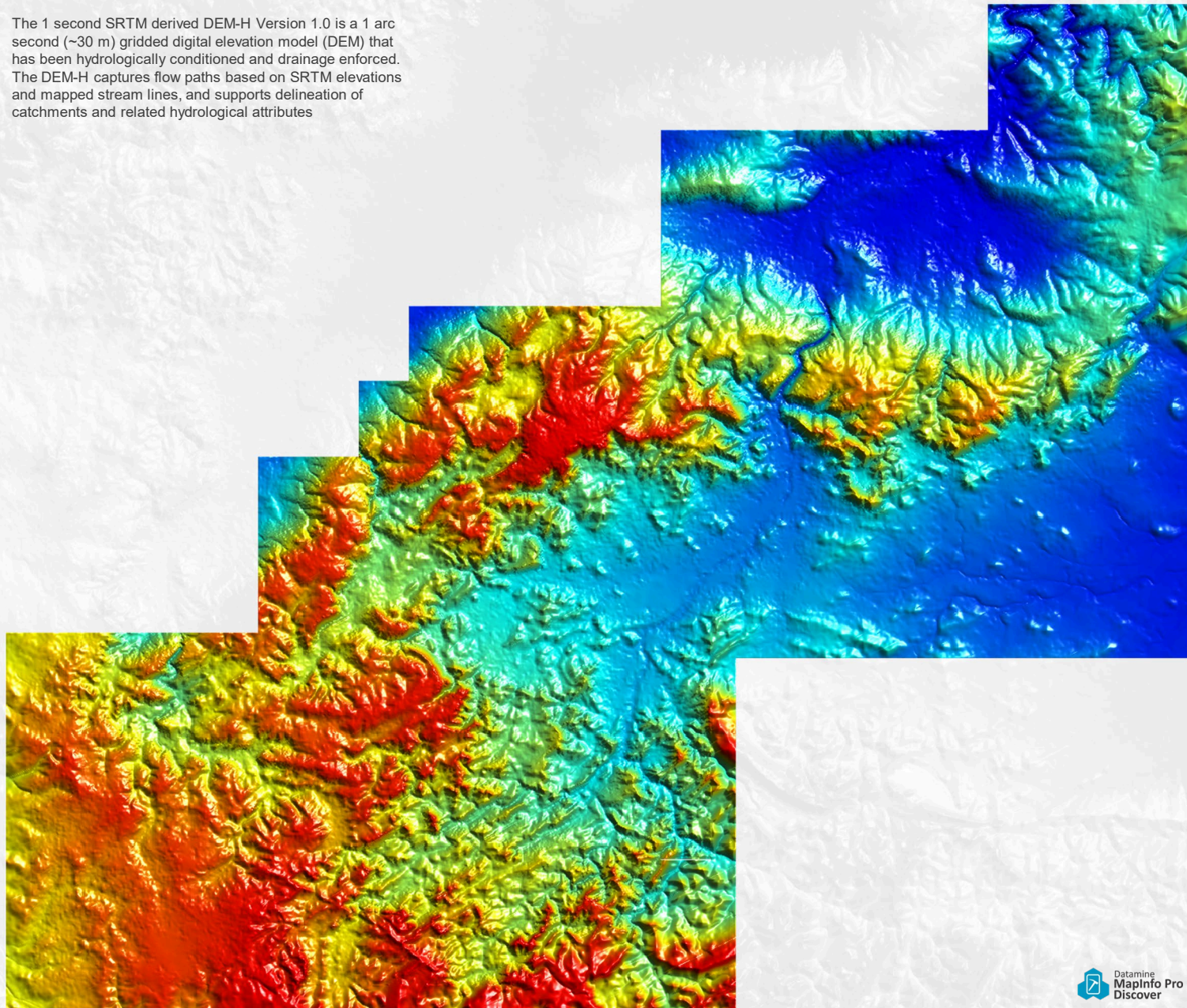


Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Digital Elevation Model**

This DEM is available in the workspace, there has been a contour layer extracted at 5m intervals, this DEM is also available for the "Discover 3D" module within MapInfo.



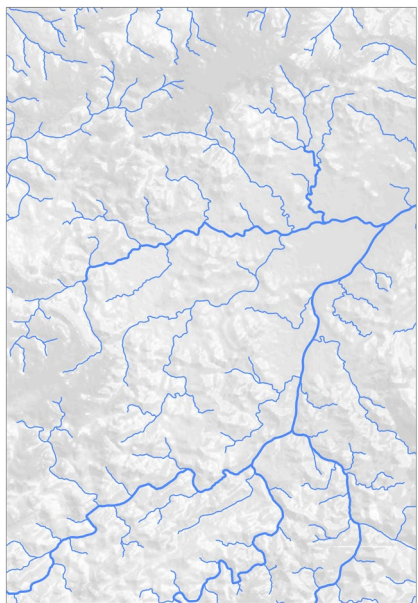
The 1 second SRTM derived DEM-H Version 1.0 is a 1 arc second (~30 m) gridded digital elevation model (DEM) that has been hydrologically conditioned and drainage enforced. The DEM-H captures flow paths based on SRTM elevations and mapped stream lines, and supports delineation of catchments and related hydrological attributes



Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Hydrology**

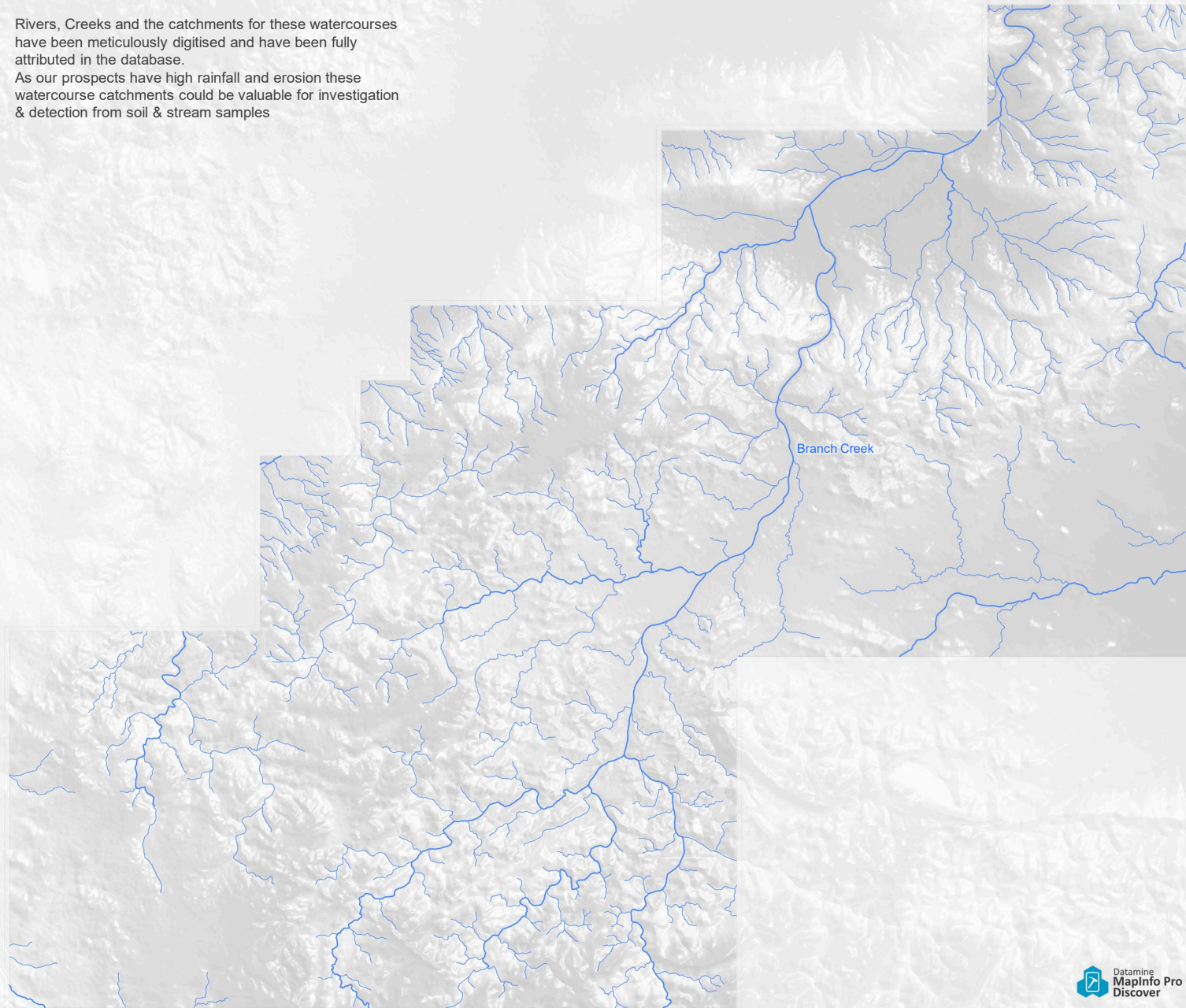
Detailed hydrology layers are available in the workspace.

Rivers, Creeks and Catchment layers are fully attributed and these layers have been supplied as individual catchment areas, as well as a combined hydrology layer.



Rivers, Creeks and the catchments for these watercourses have been meticulously digitised and have been fully attributed in the database.

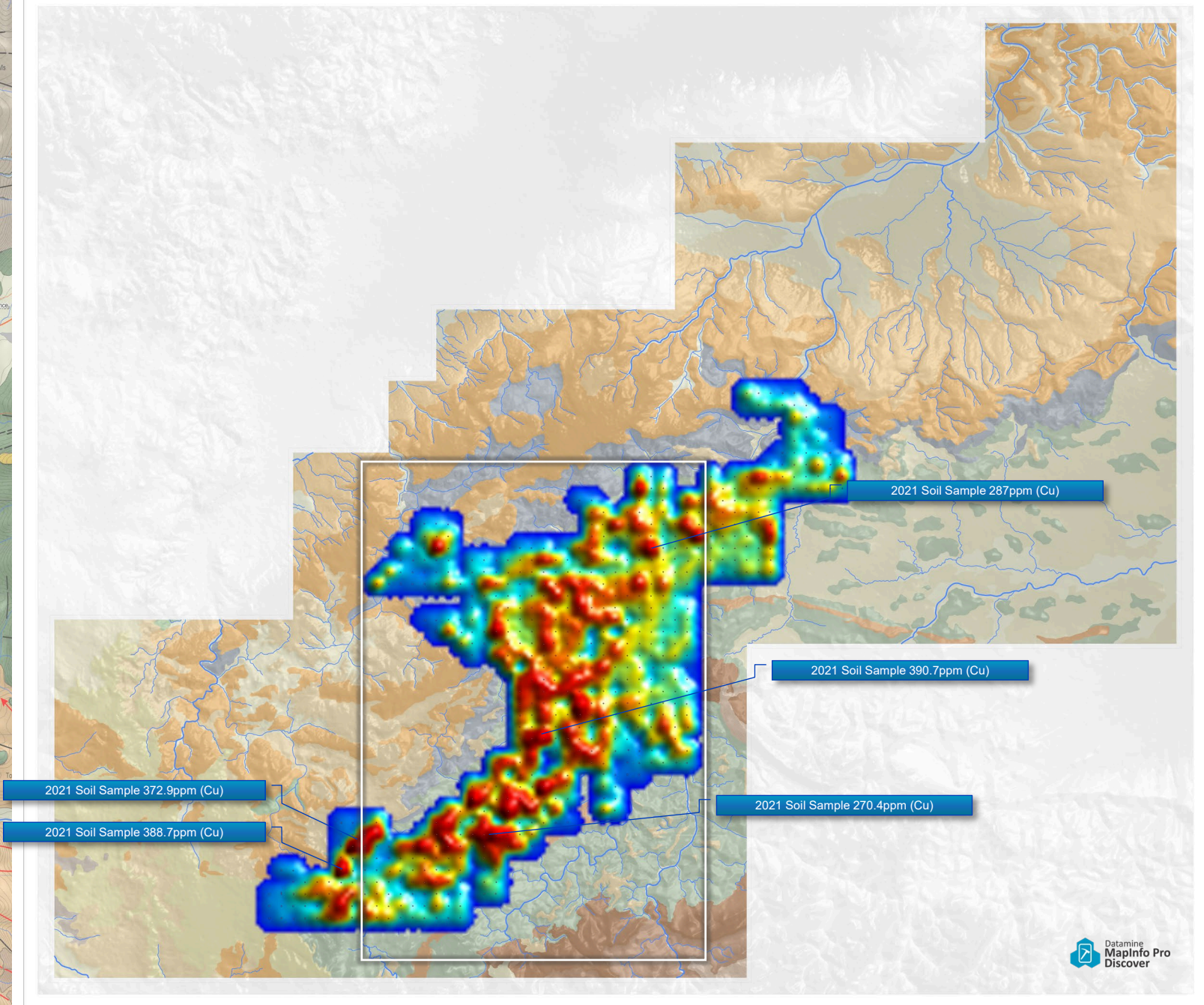
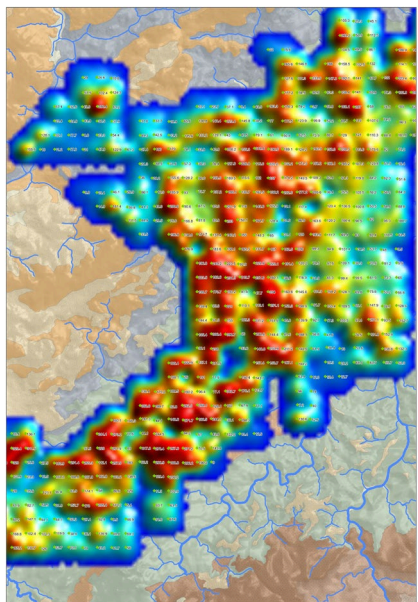
As our prospects have high rainfall and erosion these watercourse catchments could be valuable for investigation & detection from soil & stream samples





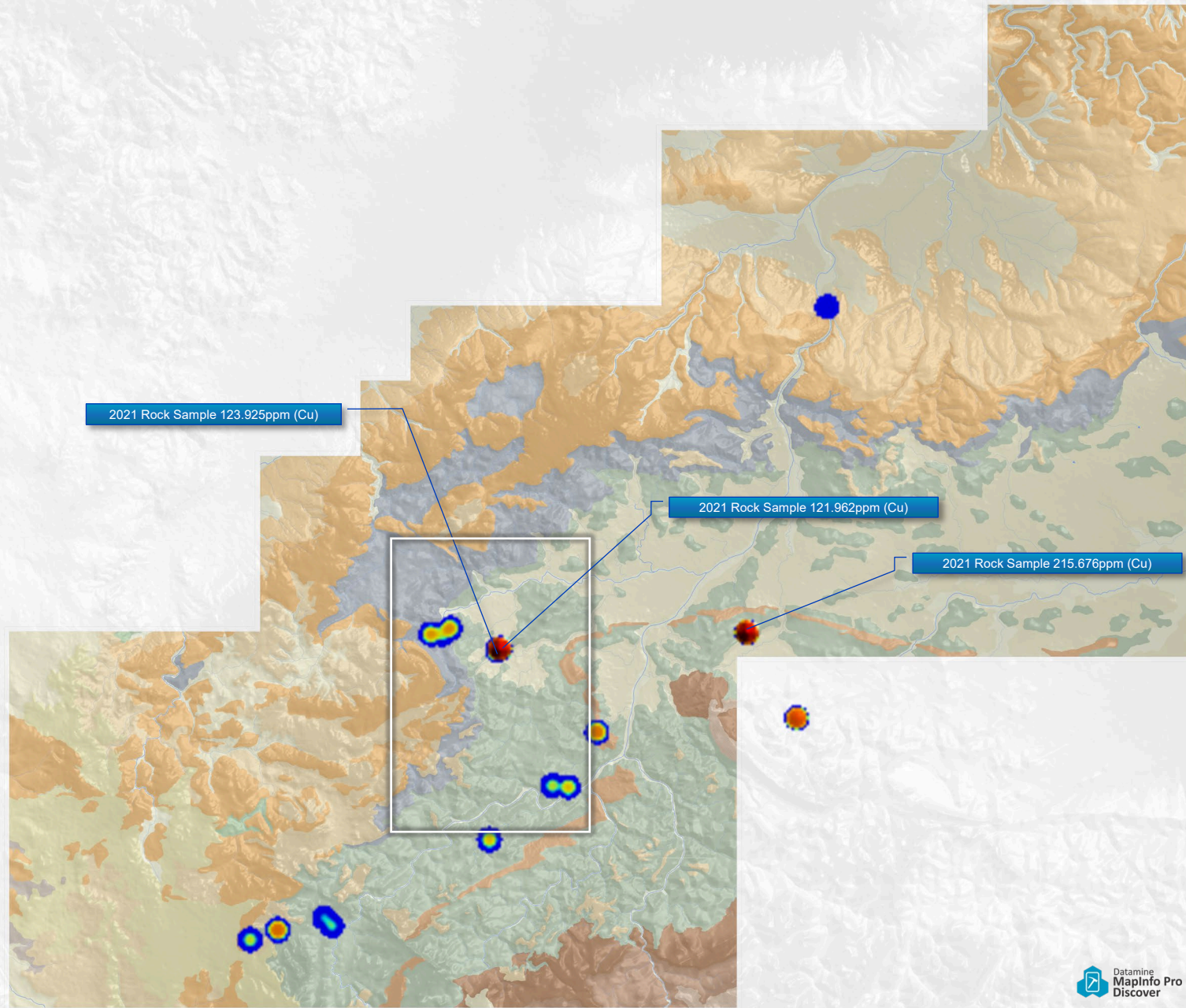
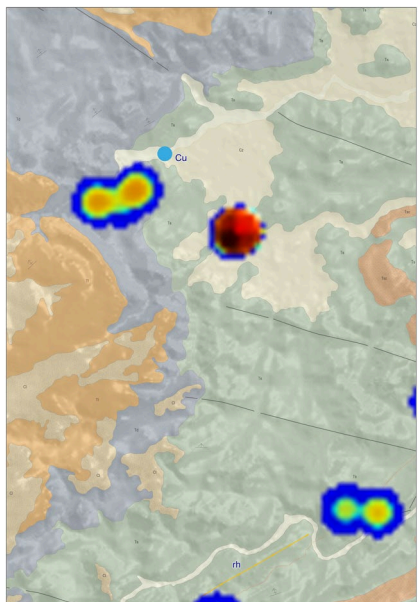
Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**2021-Soil Samples**

Heatmap created showing 688 soil sample locations with the highest @ 390.7 Cu-ppm



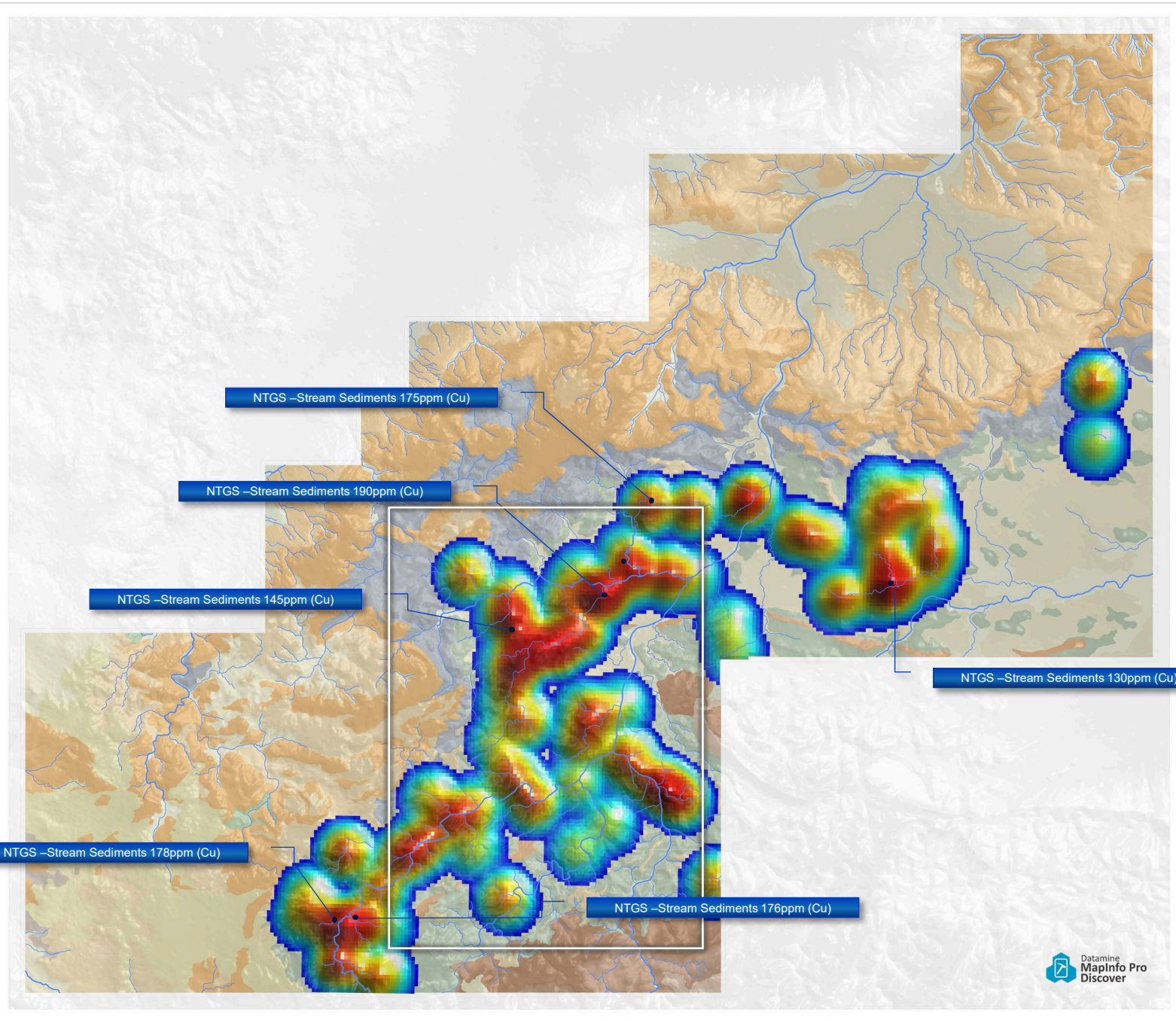
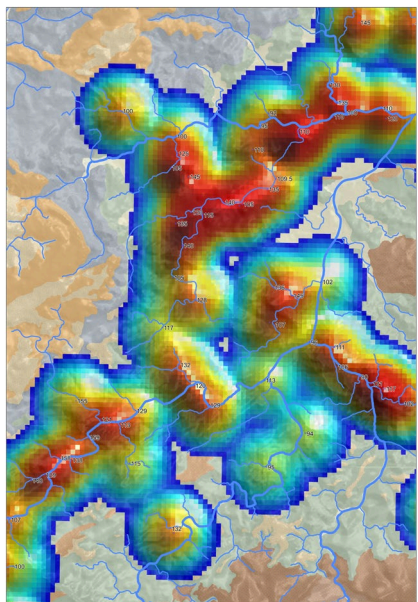
Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**2021-Rock Samples**

Heatmap created showing 30 sample locations



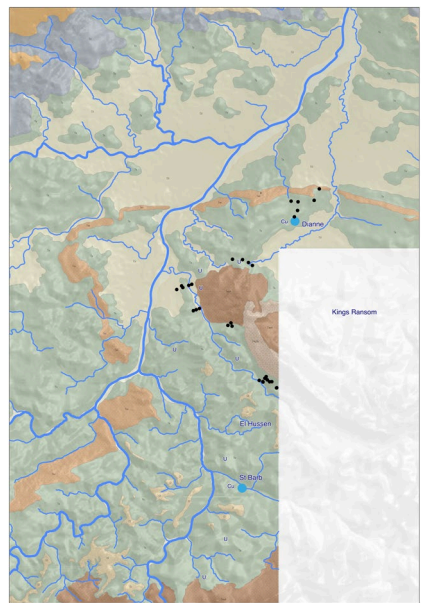
Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**NTGS-Stream Sediments**  
**90+ppm-Cu Heatmap**

There are 150 Stream Sediment sample points  
in the WGP that have 90+ppm of Cu



# Redbank Exploration Project NT 25k Geological Map Series WGP-Wollogorang Prospect Drillholes (Historical)

There are 34 historical drillholes in the WGP Prospect area  
(Please see table contents for details)



Drillhole Identifier	DrillMethod	DrillPurpose	WellType	TrueDepth	Longitude	Latitude	SpudDate	Completed	Status	SourceOrg	Title	MapX10K	MapY10K	Comments	ReportID	Openfile	Hypoged	PublicShare	East_MGA2011	North_MGA2011
150467	UCD807	IC Precious	Mineral	Egal	146.500	137.619	17.426		Unknown	Almece Pty Ltd	EL2458_6463	SE13008	CR196-0230	Yes	No	No	No	801.6112	8.06220355	
150471	UCD807	IC Precious	Mineral	Egal	146.500	137.619	17.426		Unknown	Almece Mining and Exploration	EL2458_6463	SE13008	CR196-0230	Yes	No	No	No	801.6112	8.06220355	
8476681	UCD807	IC Precious	Mineral	Egal	226.000	137.667	17.461		Unknown	Almece Pty Ltd	EL2458_6463	SE13008	CR196-0230	Yes	No	No	No	804.505556	8.06164444	
8578663	UCD808	IC Precious	Mineral	Egal	185.000	137.845	17.673		Unknown	Almece Pty Ltd	EL2458_6463	SE13008	CR196-0230	Yes	No	No	No	804.305488	8.06191589	
8619466	UCD805	IC Precious	Mineral	Egal	96.100	137.644	17.626		Unknown	Almece Pty Ltd	EL2458_6463	SE13008	CR196-0230	Yes	No	No	No	804.443178	8.06154433	
8679153	88W817	Percussion	Mineral	Egal	153.000	137.838	17.524		Unknown	URANAREZ AUSTRALIA PTY LTD.	EL6467_6462	SE13008	CR195-0175	Yes	No	No	No	801.371030	8.0613782	
8679170	88W801	Percussion	Mineral	Egal	6.000	137.624	17.671		Unknown	URANAREZ AUSTRALIA PTY LTD.	EL6467_6462	SE13008	CR197-0172	Yes	No	No	No	798.68101	8.06179117	
8679182	88W803	Percussion	Mineral	Egal	6.000	137.626	17.674		Unknown	URANAREZ AUSTRALIA PTY LTD.	EL6467_6462	SE13008	CR197-0172	Yes	No	No	No	801.466395	8.06159512	
433732	88W804	Diamond Drill	Mineral	Egal	20.000	137.620	17.558		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR193-0011	Yes	No	No	No	800.35221	8.06202154	
433746	88W807	Diamond Drill	Mineral	Egal	48.000	137.624	17.576		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR193-0011	Yes	No	No	No	798.678742	8.06217472	
433744	88W808	Diamond Drill	Mineral	Egal	65.700	137.622	17.5823		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR193-0011	Yes	No	No	No	798.724129	8.06267117	
433748	88W809	Diamond Drill	Mineral	Egal	20.700	137.626	17.5909		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR193-0011	Yes	No	No	No	800.1123	8.06200598	
433756	88W808	Diamond Drill	Mineral	Egal	41.700	137.629	17.5883		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR193-0011	Yes	No	No	No	800.22634	8.06198948	
433760	88W801	Diamond Drill	Mineral	Egal	153.800	137.829	17.5876		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR194-0068	Yes	No	No	No	800.4566	8.06209184	
433764	88W802	Diamond Drill	Mineral	Egal	192.000	137.627	17.5866		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR194-0068	Yes	No	No	No	800.200235	8.06202819	
8486334	EH-5	Diamond Drill	Mineral	Egal	200.000	137.85	17.5276		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.557389	8.05983156	
8486326	EH-1	Diamond Drill	Mineral	Egal	142.000	137.85	17.5271		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.599389	8.05986355	
8486327	EH-10	Diamond Drill	Mineral	Egal	123.000	137.851	17.5286		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.702546	8.05970152	
8486328	EH-11	Diamond Drill	Mineral	Egal	150.000	137.842	17.5286		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.781366	8.05970153	
8486329	EH-12	Diamond Drill	Mineral	Egal	100.000	137.853	17.5283		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.839382	8.05970633	
8486330	EH-13	Diamond Drill	Mineral	Egal	90.000	137.853	17.5284		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.93281	8.05970137	
8486331	EH-2	Diamond Drill	Mineral	Egal	175.800	137.848	17.5282		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.276493	8.05974449	
8486332	EH-3	Diamond Drill	Mineral	Egal	155.600	137.849	17.5287		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.320393	8.05976356	
8486333	EH-4	Diamond Drill	Mineral	Egal	176.000	137.849	17.5286		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.493396	8.05970255	
8486335	EH-6	Diamond Drill	Mineral	Egal	250.000	137.85	17.5283		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.635180	8.05976154	
8486336	EH-7	Diamond Drill	Mineral	Egal	174.800	137.85	17.5288		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.618180	8.05976154	
8486337	EH-8	Diamond Drill	Mineral	Egal	178.600	137.85	17.5288		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.628180	8.05976154	
8486338	EH-9	Diamond Drill	Mineral	Egal	224.000	137.851	17.5286		Unknown	Harts Range Mines	EL10235_6462	SE13008	CR008-0432	Yes	No	No	No	800.262644	8.05976154	
8558720	88TD10-001	Diamond Drill	Mineral	Egal	96.500	137.842	17.4932		Unknown	Harts Range Mines	EL10235_6463	SE13008	CR010-0163	Yes	No	No	No	801.84122	8.06164342	
8558721	88TD10-002	Diamond Drill	Mineral	Egal	85.000	137.844	17.494		Unknown	Harts Range Mines	EL10235_6463	SE13008	CR010-0163	Yes	No	No	No	802.89221	8.06154393	
8558722	88TD10-003	Diamond Drill	Mineral	Egal	75.000	137.839	17.4931		Unknown	Harts Range Mines	EL10235_6463	SE13008	CR010-0163	Yes	No	No	No	801.13139	8.06144833	
8617660	UCD807	IC Precious	Mineral	Egal	146.500	137.645	17.648		Unknown	Almece Pty Ltd	EL2458_6463	SE13008	CR196-0230	Yes	No	No	No	801.518149	8.06149343	
433760	88W803	Diamond Drill	Mineral	Egal	192.000	137.627	17.5866		Unknown	Uniminer (Australia)	EL10235_6462	SE13008	CR194-0068	Yes	No	No	No	801.50183	8.06149343	



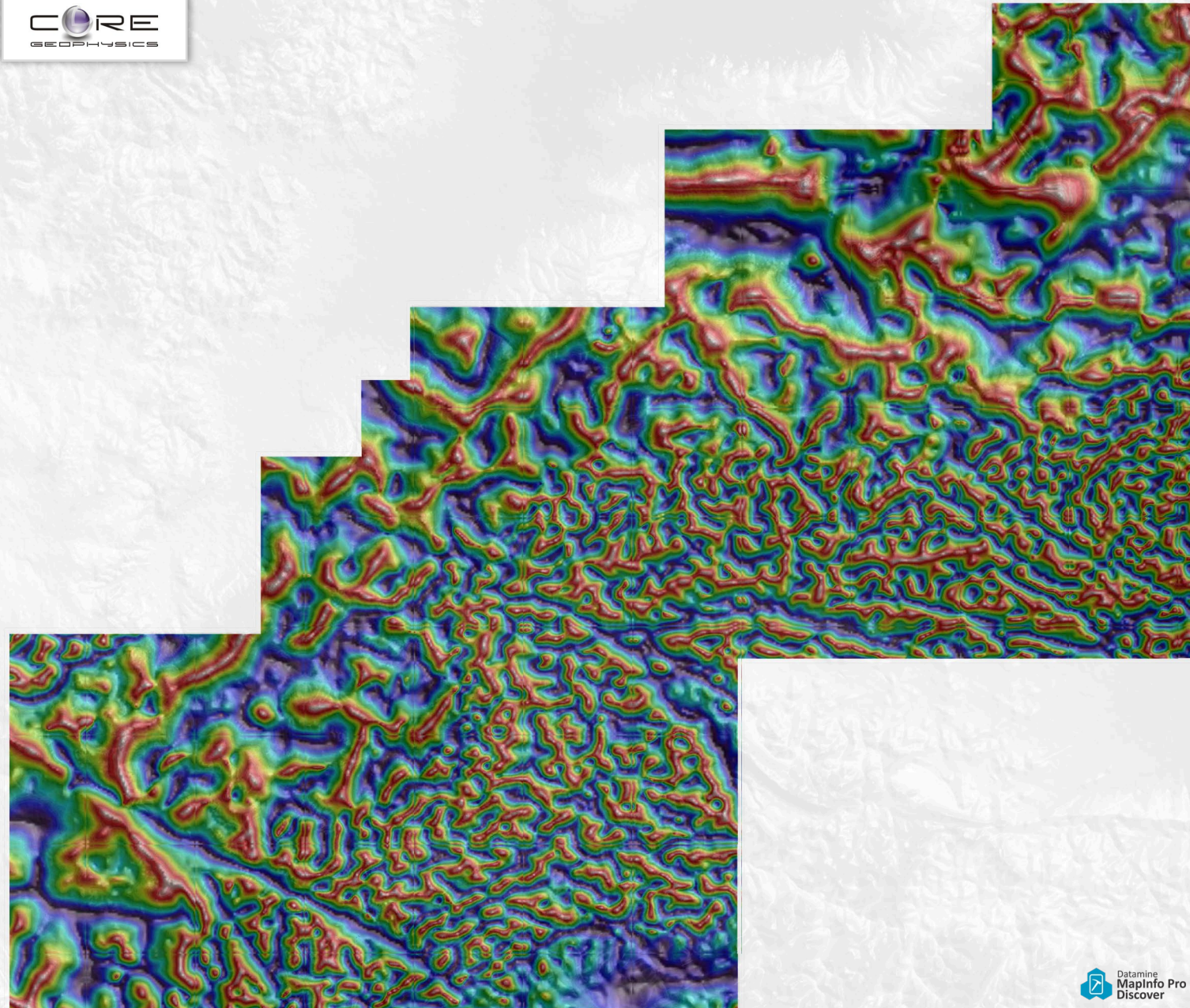
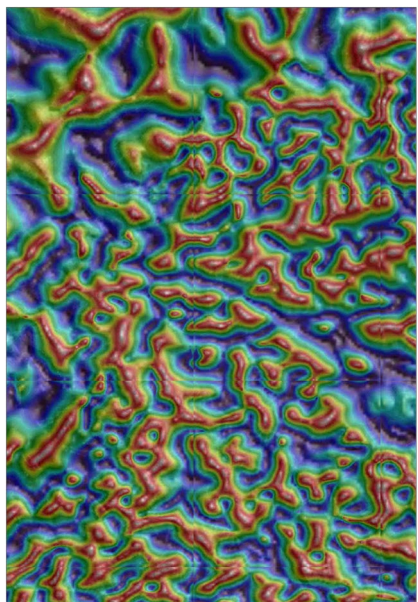
Attribution Table

34 Exploration Drillholes  
1983-2010

Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**

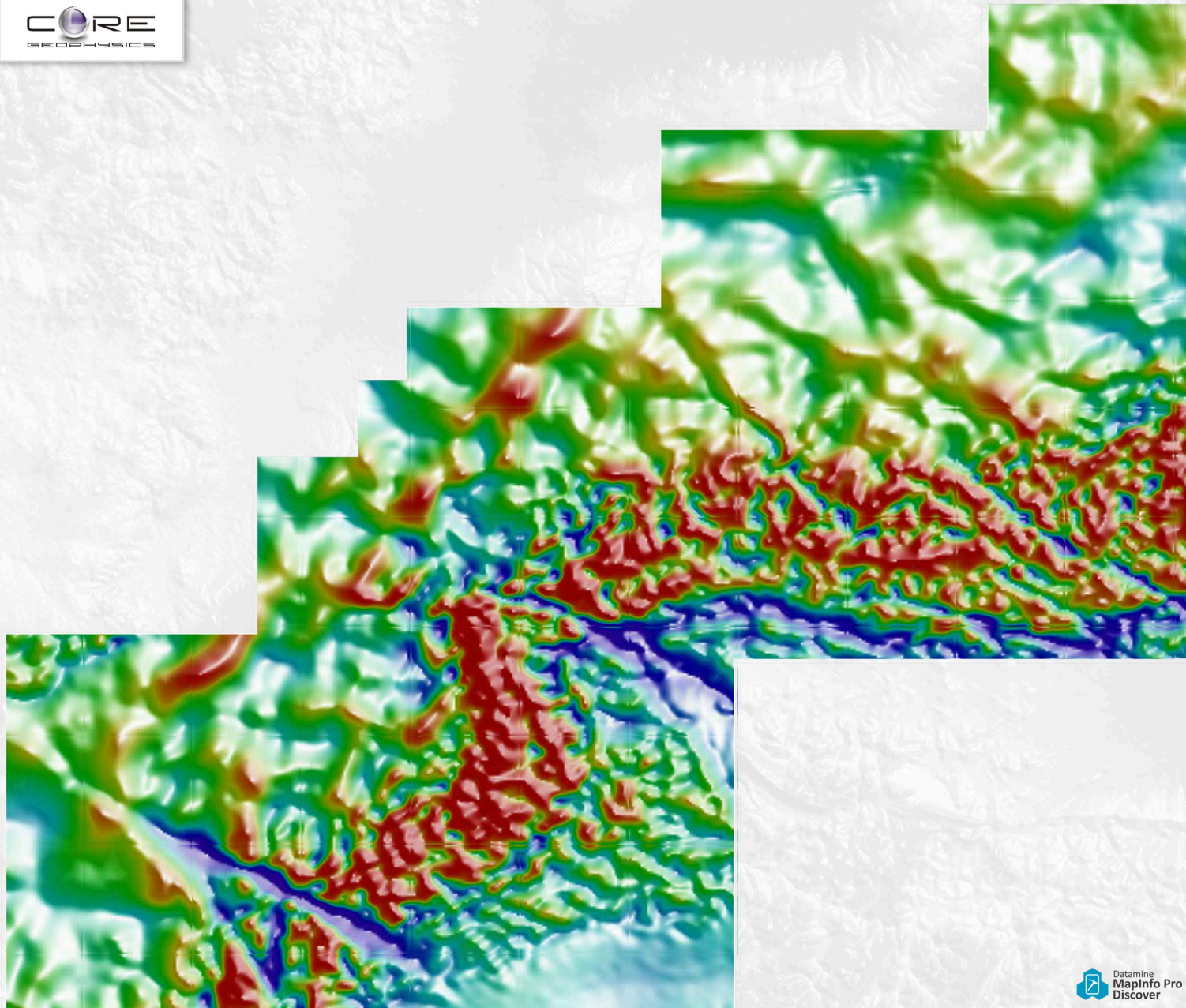
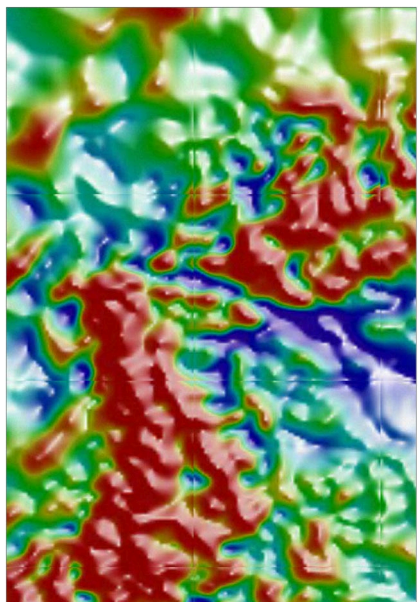
**Geophysics Images**

Derived from NTGS Government Aeromagnetic Surveys  
Total magnetic intensity (TMI) - reduced to pole  
Tilt filter



**Geophysics Images**

Derived from NTGS Government Aeromagnetic Surveys  
Total magnetic intensity (TMI) - reduced to pole



Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**

## Geophysics Images

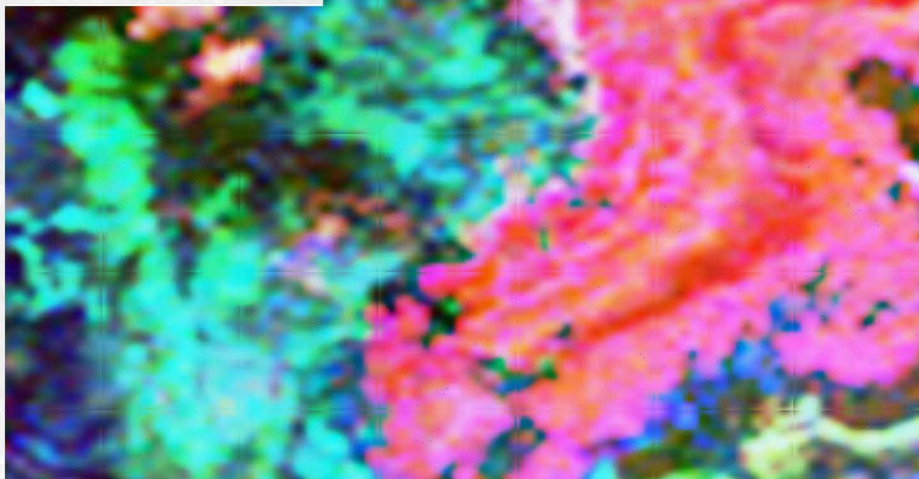
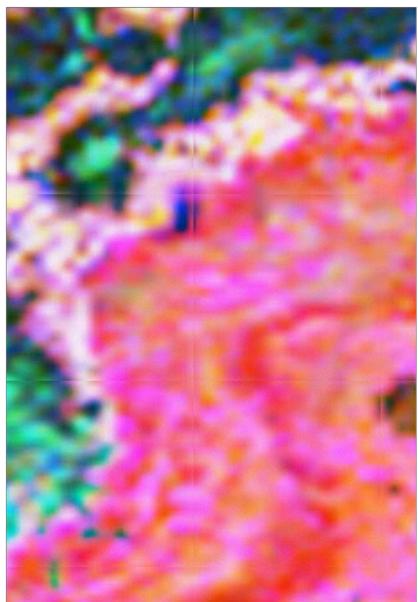
Derived from NTGS Government Aeromagnetic Surveys  
Total magnetic intensity (TMI) - reduced to pole  
First vertical derivative



Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**

**Geophysics Images**

Derived from NTGS Government Aeromagnetic Surveys Ternary radioelement potassium(K)-thorium(Th)-uranium(U) channel data. The image is a red-green-blue (RGB) composite using a histogram-equalised colour-stretch for each of the three channels.





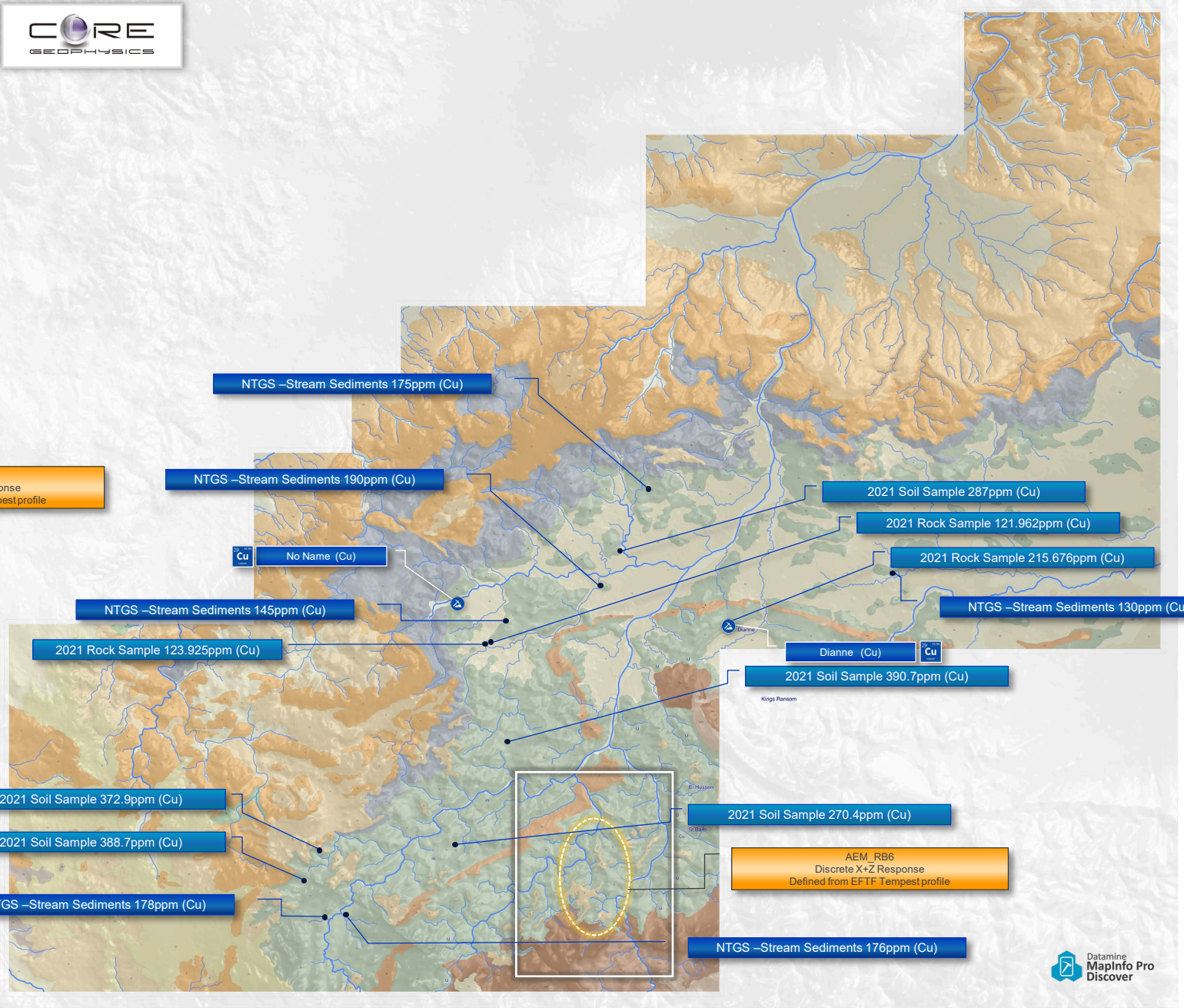
Redbank Exploration Project NT  
 25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Areas of Interest (AOI)**

AOI's available in the workspace include

- Airborne Electromagnetics (Mat Cooper)
- 2021 Soil & Rock Samples
- NTGS Stream Sediments (90+ppm Anomalies)
- NTGS Mineral Occurrences

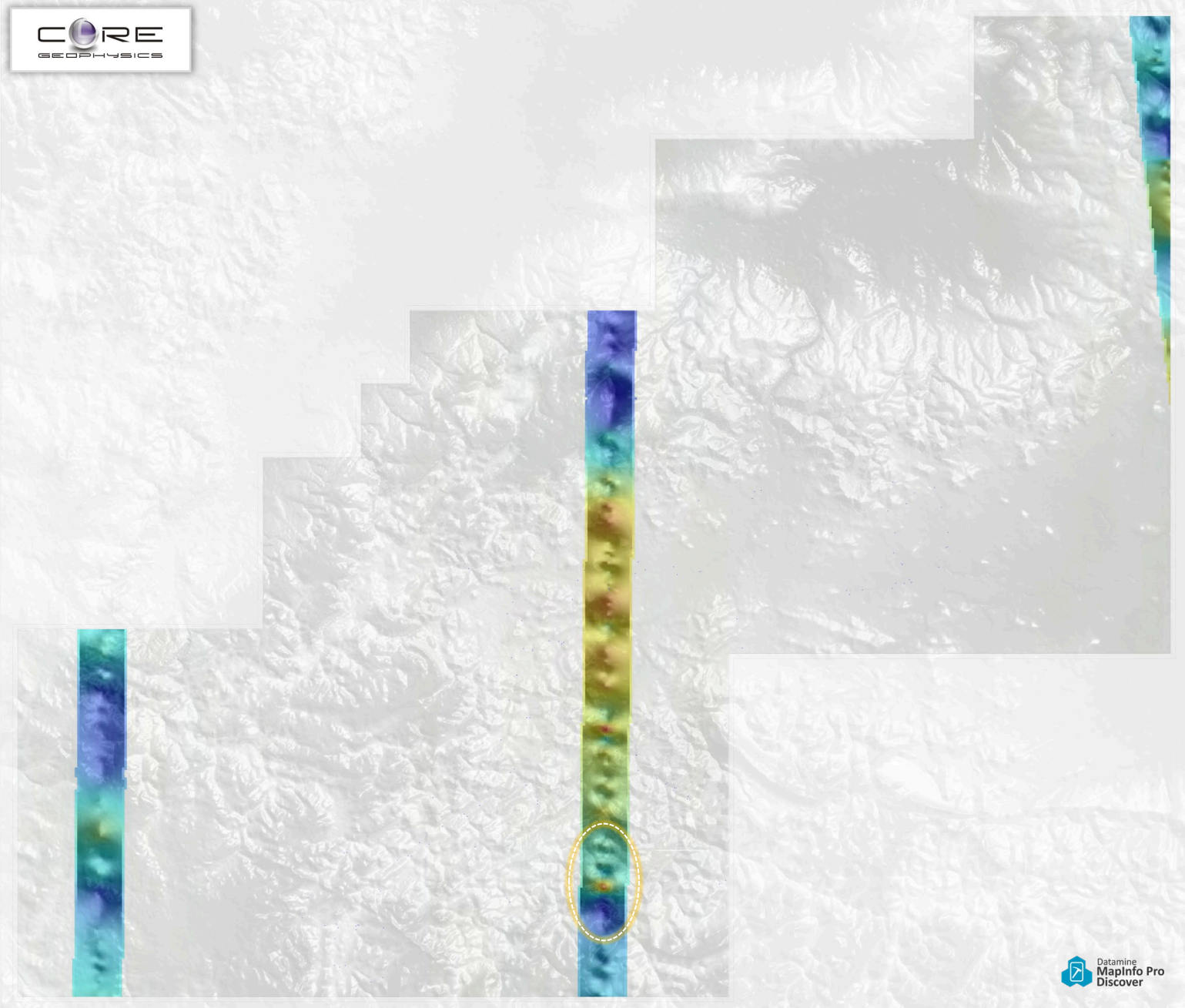
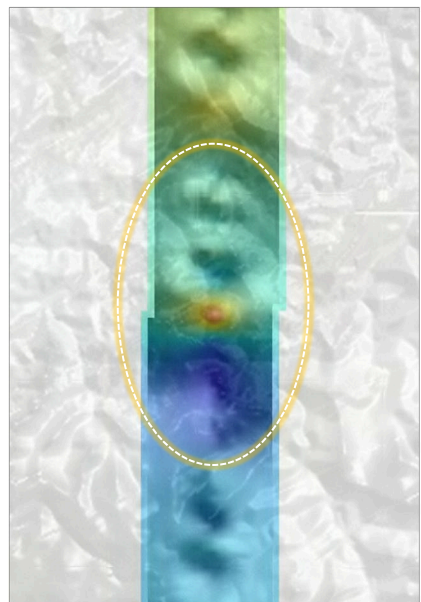


AEM\_RB6  
 Discrete X+Z Response  
 Defined from EFTF Tempestprofile



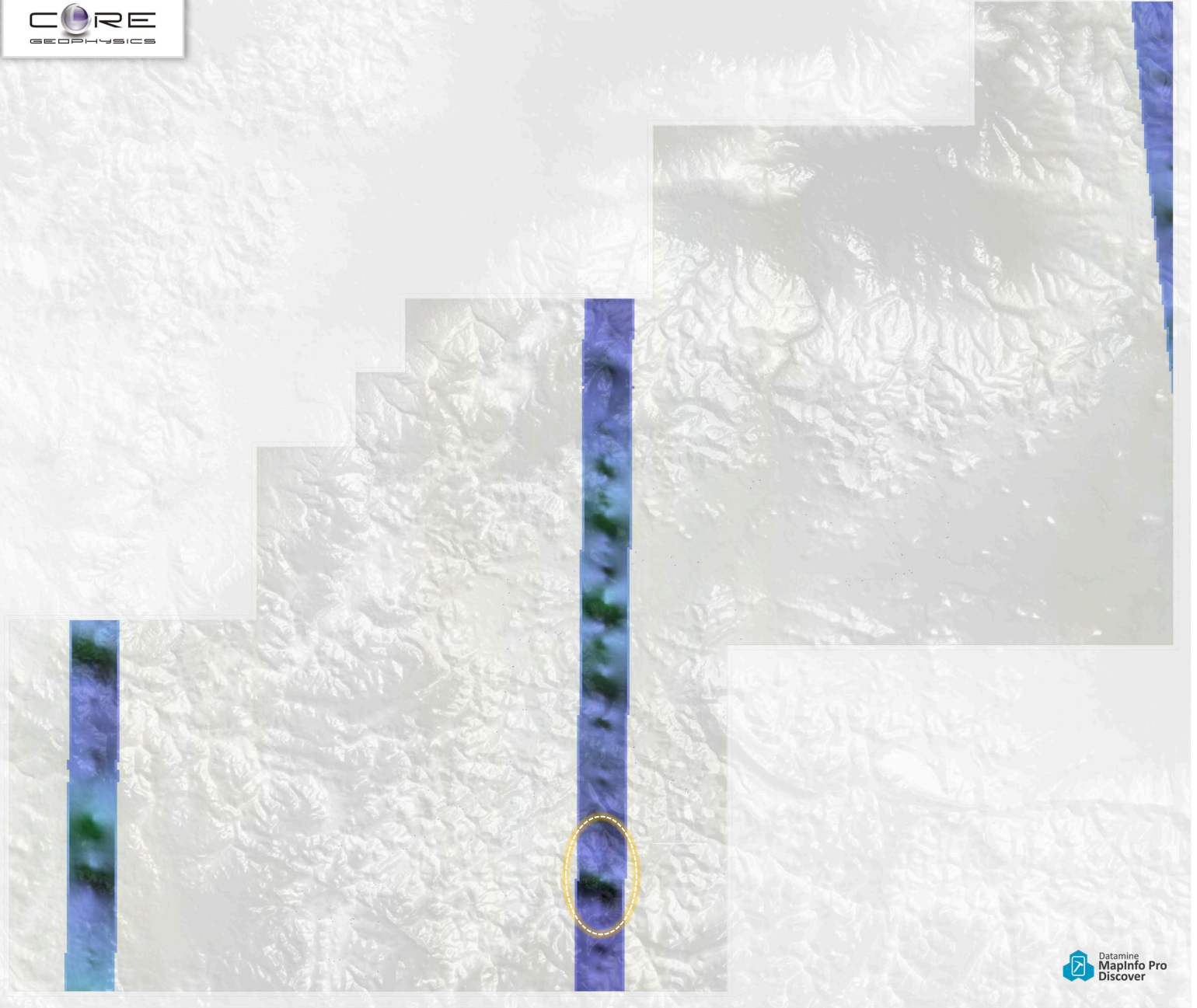
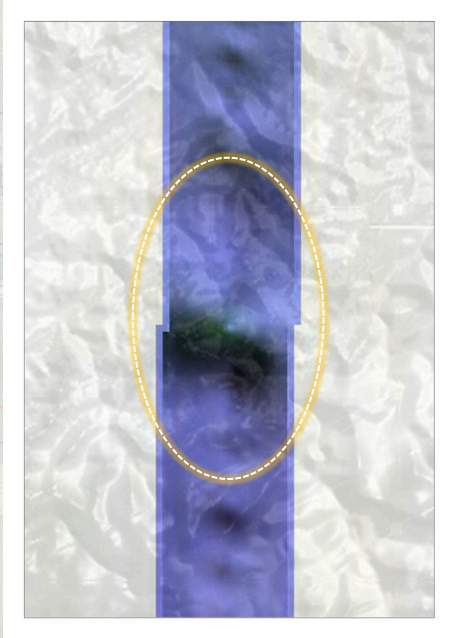
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**WGP-Wollogorang Prospect**  
**Areas of Interest (AOI)**

Regional Government and Historical Open File  
Airborne Electromagnetic (AEM)  
Early Time Channel AEM Composite (ET)  
Time Domain Surveys Only



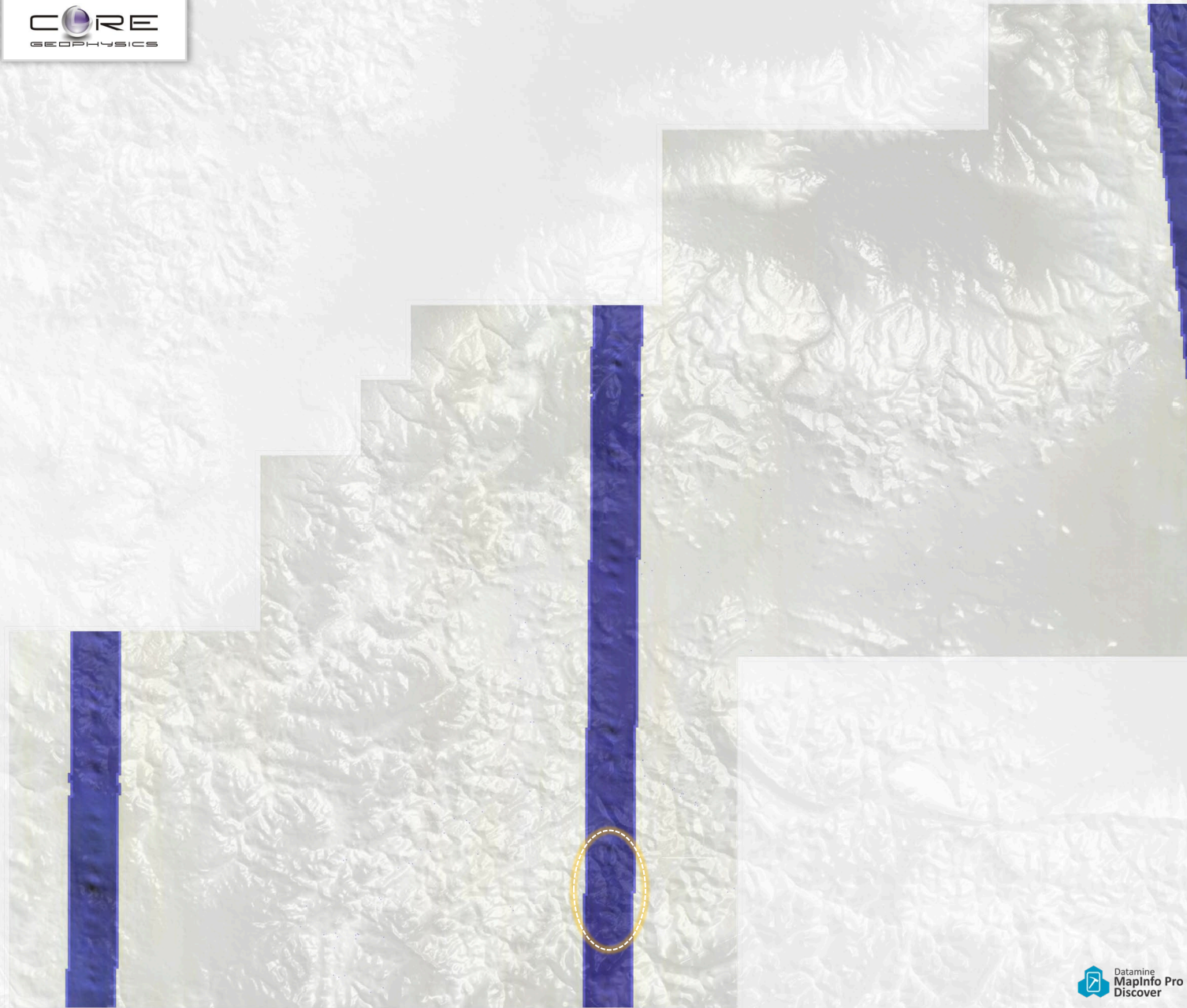
Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Areas of Interest (AOI)**

Regional Government and Historical Open File  
Airborne Electromagnetic (AEM)  
Middle Time Channel AEM Composite (MT)  
Time Domain Surveys Only



Redbank Exploration Project NT  
25k Geological Map Series  
**WGP-Wollogorang Prospect**  
**Areas of Interest (AOI)**

Regional Government and Historical Open File  
Airborne Electromagnetic (AEM)  
Late Time Channel AEM Composite (LT)  
Time Domain Surveys Only



# Redbank Exploration Project NT 25k Geological Map Series WGP-Wollogorang Prospect MapInfo Workspace

The WGP MapInfo Workspace has been set-up and available in the **RBK-Exploration** Folder, this workspace is our base dataset for the WGP

