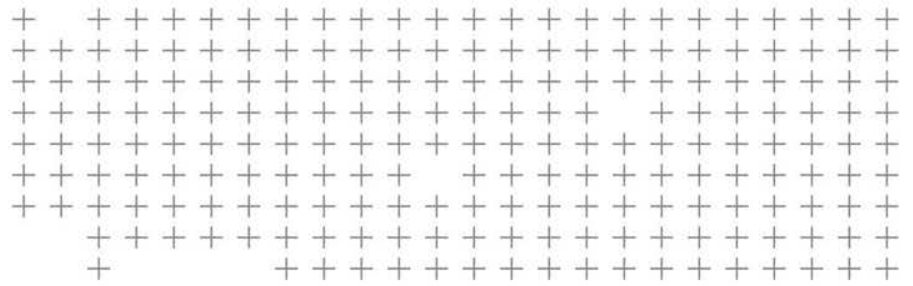


Banita Kassen, Sailegh Aziz, Carolyn Holness

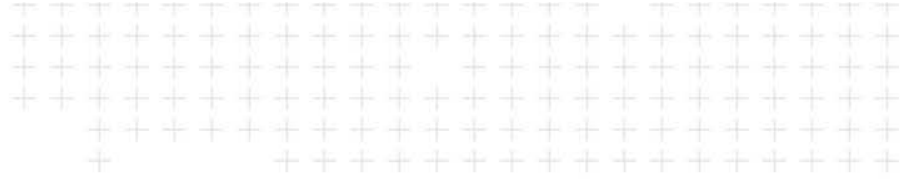
Making the Most of the New Mapping Capabilities



Maps



Creating a Map



- Maps are composed of map services

Creating a Map

- Step 1: Create map services
- Step 2: Register map services in landfolio

Admin Tools > Map Services

All	Service Name	Type	REST Url
<input type="checkbox"/>	Administration	Dynamic	http://52.50.120.51/arcgis/rest/services/AusDemo/AusDemo_Admin/MapServer
<input type="checkbox"/>	Active Licenses	Dynamic	http://52.50.120.51/arcgis/rest/services/AusDemo/AusDemo_ActiveLicenses/MapServer
<input type="checkbox"/>	Applications	Dynamic	http://52.50.120.51/arcgis/rest/services/AusDemo/AusDemo_Applications/MapServer
<input type="checkbox"/>	Inactive Licenses	Dynamic	http://52.50.120.51/arcgis/rest/services/AusDemo/AusDemo_InactiveLicenses/MapServer
<input type="checkbox"/>	Agreements	Dynamic	http://52.50.120.51/arcgis/rest/services/AusDemo/AusDemo_Agreements/MapServer

1

Creating a Map

Admin Tools > Maps > Map

Map: Applications and Active Licenses...
Coordinate System: Web Mercator Auxiliary Sphere
Initial Extent: [Go to](#), [Use current extent](#)

Map Services in Map:

- Active Licenses
- Applications
- Administration
- World Topo Map

Available Map Services:

- AusDemo_Licenses
- Inactive Licenses
- Agreements



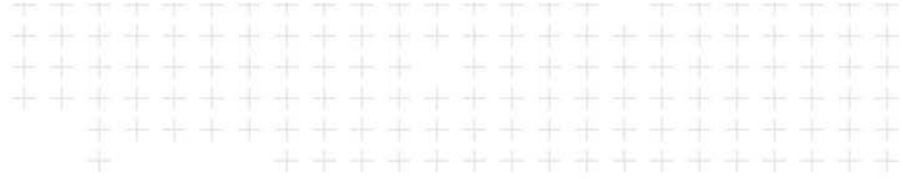
Creating a Map



- Maps are composed of map services
 - Map services can be used in multiple maps
Rather than duplicating layers in multiple map services
 - Map services load separately
i.e. if one map service is slow to load, the other map services are not prevented from loading or displaying



Creating a Map



- Map service transparency and scale
- Map initial extent



CONFIGURATION
Diagnostics

Map:
Applications and Active Licens....
Coordinate System:
Web Mercator Auxiliary Sphere
Initial Extent: [Go to](#), [Use current extent](#)

Map Services in Map:

- Active Licenses
- Applications
- Administration
- Transparency:
- Scale Range:
- World Topo Map

Available Map Services:

- AusDemo_Licenses
- Inactive Licenses
- Agreements

Bookmarks

Search [input field]

Home

Licenses

Environment

Heritage

Tenements

Projects

Combined Reporting

Actions

Approvals

Maps

Reports

Documents

Companies

People

Competitor Monitoring

My Settings

Admin Tools

Help

Maps

- Save current view as: [input field] **OK**
- Bookmarks**
 - Carrapeteena [X]
 - Heritage Area** [X]
 - Jadar [X]
 - Oakover River [X]
 - Oil Pipe [X]
 - Prominent Hill [X]
 - Villa [X]
- Show
- Preferences
- Print...

Legend

Active Licenses

- Heritage
- Environment
- Pipelines
- Tenement
 - Exploration Licence
 - General Purpose Lease
 - Mining Lease
 - Miscellaneous Licence
 - Prospecting Licence

Applications

- Heritage
- Environment
- Tenement
 - Exploration Licence
 - Mining Lease
 - Miscellaneous Licence
 - Prospecting Licence
- Pipelines

Administration

- Aust_TM_MapIndex
- WestAust Mineral Fields
- WestAust Shires
- WestAust Native Title
- WA Environmental Areas
- WestAust Sub-Blocks
- Country & States

13,274,868 m -2,536,597 m



How would you like to select features?

The screenshot displays a GIS application interface. On the left is a dark blue sidebar with a search bar and a menu of categories: Home, Licenses, Environment, Heritage, Tenements, Agreements, Resettlement, Royalty Agreement, Projects, Combined Reporting, Actions, Approvals, **Maps**, Reports, Documents, Companies, People, Competitor Monitoring, My Settings, Admin Tools, and Help. The main area shows a map with various colored polygons (orange, green, purple) and labels such as E 4502498, M 4501105, L 4500152, and M 4600454. A dropdown menu is open over the map, showing three options: 'Select using a point' (with a black dot icon), 'Select using a polyline' (with a dashed line icon), and 'Select using a polygon' (with a purple polygon icon). The 'Select using a polygon' option is currently selected. To the right of the map is a vertical toolbar with buttons for 'Measure' and 'Shape'. At the bottom left, there is a scale bar showing 0, 2, and 4 km.

- Select using a point
- Select using a polyline
- Select using a polygon

Which layers would you like to select from?

The screenshot displays a GIS web application interface. On the left is a navigation menu with the following items: Home, Licenses (Environment, Heritage, Tenements), Agreements (Resettlement, Royalty Agreement), Projects (Combined Reporting), Actions (Approvals), **Maps** (highlighted), Reports (Documents), Companies (People), Competitor Monitoring, My Settings, Admin Tools, and Help. The main map area shows a grid of land parcels in shades of green and orange, with numerous alphanumeric labels such as M 4501105, E 4502498, and L 4600052. A scale bar at the bottom left indicates 0, 2, and 4 km. On the right side, there is a legend panel with a title 'Use the Point, Polyline or Polygon tool for selecting map objects, you can specify the method and layers to use for the selection operation:'. The legend is organized into three sections: Administration, Applications, and Active Licenses. The 'Administration' section includes 'WestAust Mineral Fields' (unchecked), 'WestAust Shires' (unchecked), 'WestAust Native Title' (unchecked), 'WA Environmental Areas' (checked), and 'WestAust Sub-Blocks' (unchecked). The 'Applications' section includes 'Heritage' (checked), 'Environment' (checked), 'Tenement' (checked), 'Pipelines' (checked), and 'Licenses' (checked). The 'Active Licenses' section includes 'Heritage' (checked), 'Environment' (checked), 'Pipelines' (checked), and 'Tenement' (checked). Below the legend, there are icons for selection tools: a point tool, a polyline tool, and a polygon tool.

Administration

- WestAust Mineral Fields
- WestAust Shires
- WestAust Native Title
- WA Environmental Areas
- WestAust Sub-Blocks

Applications

- Heritage
- Environment
- Tenement
- Pipelines
- Licenses

Active Licenses

- Heritage
- Environment
- Pipelines
- Tenement

Would you like to add or remove features?

The screenshot displays a GIS application interface. On the left is a dark blue sidebar with a search bar at the top and a list of menu items: Home, Licenses, Environment, Heritage, Tenements, Agreements, Resettlement, Royalty Agreement, Projects, Combined Reporting, Actions, Approvals, Maps (highlighted in yellow), Reports, Documents, Companies, People, Competitor Monitoring, My Settings, Admin Tools, and Help. The main map area shows a complex set of colored polygons in shades of green, orange, and purple, each labeled with alphanumeric codes such as E 4502498, M 4501105, L 4500152, and M 4600454. A scale bar at the bottom left indicates 0, 2, and 4 km. On the right side, there is a legend and a 'Shape' tool menu. The 'Shape' menu is open, showing four options: 'Select Features' (checked), 'Add features to selection', 'Remove features from selection', and 'Select from current selection'. A tooltip above the menu explains: 'Use the Point, Polyline or Polygon tool for selecting map objects, you can specify the method and layers to use for the selection operation:'. The background of the map area features a light gray grid.

Viewing selected features in the license list

The screenshot displays a GIS application interface. On the left, a map shows various land parcels with different colors (green, yellow, orange, cyan). A purple polygon is drawn over a central parcel, indicating it is selected. The map includes a toolbar with zoom and navigation controls, and a scale bar at the bottom left. On the right, a vertical sidebar contains a legend, search, select, measure, shape, and diagnostics menu. The 'Select' menu is active, showing a list of 21 'Heritage' features. Each feature is listed with its ID and type (HS for Heritage Site). Below this list, a 'Tenement (2)' section is partially visible.

License ID	Type
23937	Registered
23938	Registered
23939	Registered
23940	Registered
23941	Registered
23942	Registered
23943	Registered
23945	Registered
23947	Registered
23948	Registered
23949	Registered
23950	Registered
23951	Registered

Heritage (21)

Tenement (2)

Viewing selected features in the license list

The screenshot shows a GIS application interface. On the left, a map displays various land parcels in different colors (green, yellow, orange, cyan). A purple polygon is drawn over a central parcel, indicating it is selected. The map includes a toolbar with navigation and selection tools, and a scale bar at the bottom left. On the right, a vertical sidebar contains menu items: Legend, Search, Select, Measure, Shape, and Diagnostics. The 'Select' menu is open, showing a context menu for the selected purple polygon. This menu includes options like 'View in License list', 'View in Action list', and 'Remove from selection'. Below the menu, a list of heritage features is displayed, each with a unique ID and a status of 'Registered'.

Use the Point, Polyline or Polygon tool for selecting map objects, you can specify the method and layers to use for the selection operation:

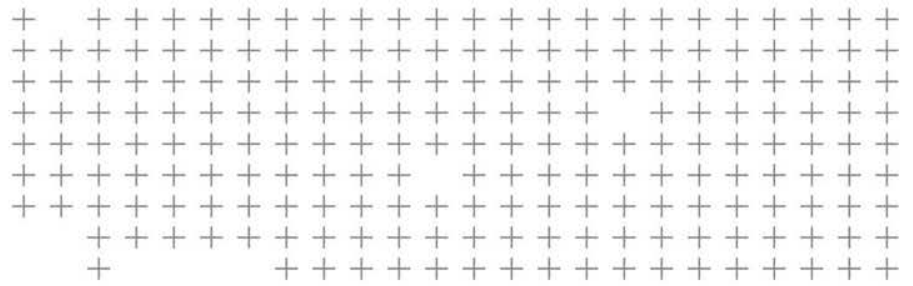
- Legend
- Search
- Select
- Measure
- Shape
- Diagnostics

Heritage (21)

- 23937 HS View in License list
- 23938 HS View in Action list
- 23939 HS View in Action Approval list
- 23940 HS View in Document list
- 23941 HS Remove from selection
- 23942 HS Add to shape
- 23943 HS Remove from shape

23942	HS	Registered
23943	HS	Registered
23945	HS	Registered
23947	HS	Registered
23948	HS	Registered
23949	HS	Registered
23950	HS	Registered
23951	HS	Registered

Tenement (2)



New Editing Functionality

Tips for Manually Adding & Editing Coordinates

- Tab to move to the next field
- Click on the + button to add a new line, copies coordinates from previous line
- Dragging points up and down in the coordinates list
- Creating new points on the map

Tips for Manually Adding and Editing Coordinates

The screenshot displays a software interface with a map on the left and a data panel on the right. The map shows a red polygon with vertices marked by red circles. The polygon is overlaid on a terrain map with various colored blocks and labels such as 'E 4701623', 'E 5201789', 'E 5201788', 'E 5201790', 'E 5202522', 'E 5202521', 'E 5202594', 'CH Test 123', 'E 4702496', '1116m', '1045m', '879m', and 'EL-00045'. A scale bar at the bottom left indicates 0, 3, and 6 km. The data panel on the right contains the following information:

Coordinate System: GCS GDA 1994
Official Area: 80 Sub-Blocks
Calculated Area: 105 sb
Derived Shape:

Parts:
Part 1

Editing Part: Part 1 OK CANCEL

Area: 105 sb DMS

	Latitude			Longitude					
9	23°	15'	00.00"	S	118°	30'	00.00"	E	✘
10	23°	15'	00.00"	S	118°	29'	00.00"	E	✘
11	23°	13'	00.00"	S	118°	29'	00.00"	E	✘
12	23°	13'	00.00"	S	118°	28'	00.00"	E	✘
13	23°	12'	00.00"	S	118°	28'	00.00"	E	✘
14	23°	12'	00.00"	S	118°	27'	00.00"	E	✘
15	23°	11'	00.00"	S	118°	27'	00.00"	E	✘
16	23°	11'	00.00"	S	118°	26'	00.00"	E	✘
17	23°	09'	00.00"	S	118°	26'	00.00"	E	✘
+									

At the bottom right of the data panel, the coordinates 13,206,508 m and -2,653,420 m are displayed.

Tips on manually adding and editing coordinates

The screenshot displays a GIS application interface. The top menu bar includes 'General', 'Parties (1)', 'Conditions', 'Shape', 'Map References (8)', 'Documents', 'Reference Codes', 'Commodities', 'Agreements', 'Groups', 'Related Licenses', 'Actions Open (2)', and 'Actions Closed (1)'. Below the menu, there are sub-menus for 'Roles (4)', 'Discussions', and 'Audit'. The main map area shows a topographic map with a red polygon overlaid. The polygon is labeled 'CH Test 123' and has several vertices marked with red dots. The map also shows other land parcels with labels like 'E 4701623', 'E 5201789', 'E 5201788', 'E 5201790', 'E 5202521', and 'E 5202522'. A scale bar at the bottom left indicates 0, 3, and 6 km. A coordinate table on the right side of the interface provides the DMS coordinates for the vertices of the polygon.

Coordinate System: GCS GDA 1994

Official Area: 80 Sub-Blocks [Copy Calculated Area](#)

Calculated Area: 105 sb

Derived Shape:

Parts: Part 1

Viewing Coordinates of: Part 1

Area: 105 sb DMS

	Latitude	Longitude
1	23° 09' 00.00" S	118° 26' 00.00" E
2	23° 09' 00.00" S	118° 39' 00.00" E
3	23° 18' 00.00" S	118° 39' 00.00" E
4	23° 18' 00.00" S	118° 32' 00.00" E
5	23° 17' 00.00" S	118° 32' 00.00" E
6	23° 17' 00.00" S	118° 31' 00.00" E
7	23° 16' 00.00" S	118° 31' 00.00" E
8	23° 16' 00.00" S	118° 30' 00.00" E
9	23° 15' 00.00" S	118° 30' 00.00" E
10	23° 15' 00.00" S	118° 29' 00.00" E

13,229,516 m -2,674,822 m



Tips on manually adding exclusion areas

Reproject to particular coordinate system

Admin Tools > System Types > License Types > View



License Type Name: **Prospecting Licence**

General Relinquishment Work Commitments Exclusivity Workflows Documents **Coordinate Systems** Reference Points License Code Settings Date Calculations Map References

Field Settings Required Reference Codes Document Types Commodities Status

Other allowed Coordinate Systems

- Allow all Coordinate Systems to be used on this License Type
- Only the following Coordinate Systems can be used on this License Type

There are 6 document types in the list



Name	Allow
GCS_GDA_1994	<input checked="" type="checkbox"/>
GCS_WGS_1984	<input type="checkbox"/>
GDA94_MGA50	<input type="checkbox"/>
ITRF_1996_UTM_Zone_48N	<input type="checkbox"/>
Lambert_Conformal_Conic	<input type="checkbox"/>
Web_Mercator_Auxiliary_Sphere	<input type="checkbox"/>



Reproject to particular coordinate system

License > ADD

Test_PL

License Name:

Prospecting Licence

Status: Application

Western Australia

Application Date:

Grant Date:

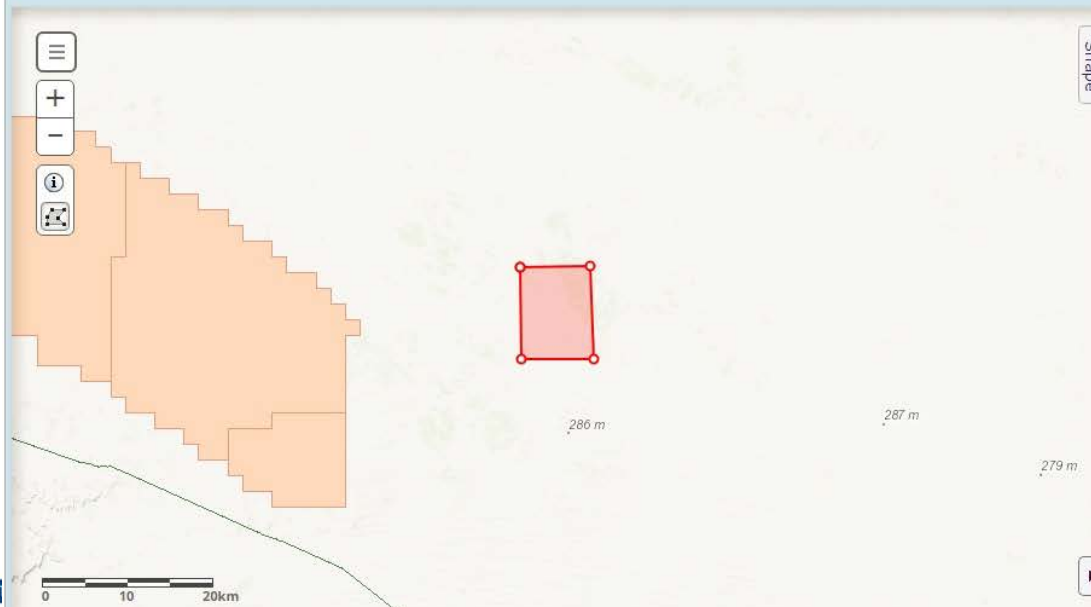
Expiry Date:

< PARTIES

Spatial

CANCEL

MAP REFERENCES >



Shape

Reproject to coordinate system:

- GCS_GDA_1994
- GCS_WGS_1984
- GDA94_MGA50
- ITRF_1996_UTM_Zone_48N
- Lambert_Conformal_Conic
- Web_Mercator_Auxiliary_Sphere

Reproject Coordinates to selected System

Calculated Area

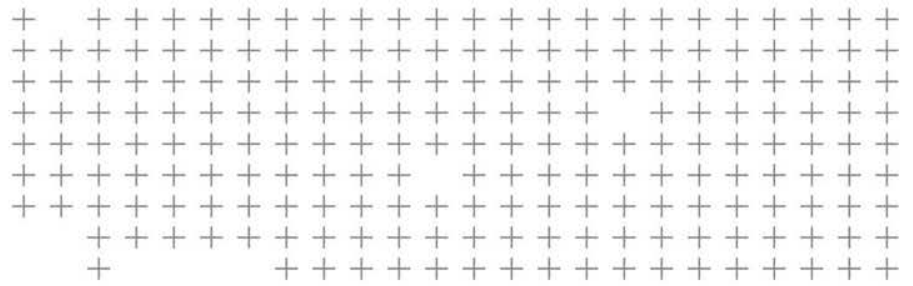
Part 1

Viewing Coordinates of: Part 1

Area: 9,231.51 Ha

	Latitude	Longitude	DMS
1	20° 16' 39.87" S	120° 54' 55.43" E	
2	20° 16' 37.41" S	120° 59' 42.18" E	
3	20° 22' 34.38" S	120° 59' 57.01" E	
4	20° 22' 32.21" S	120° 55' 00.38" E	

13,432,112 m -2,349,603 m



Catering for Block-based Licenses



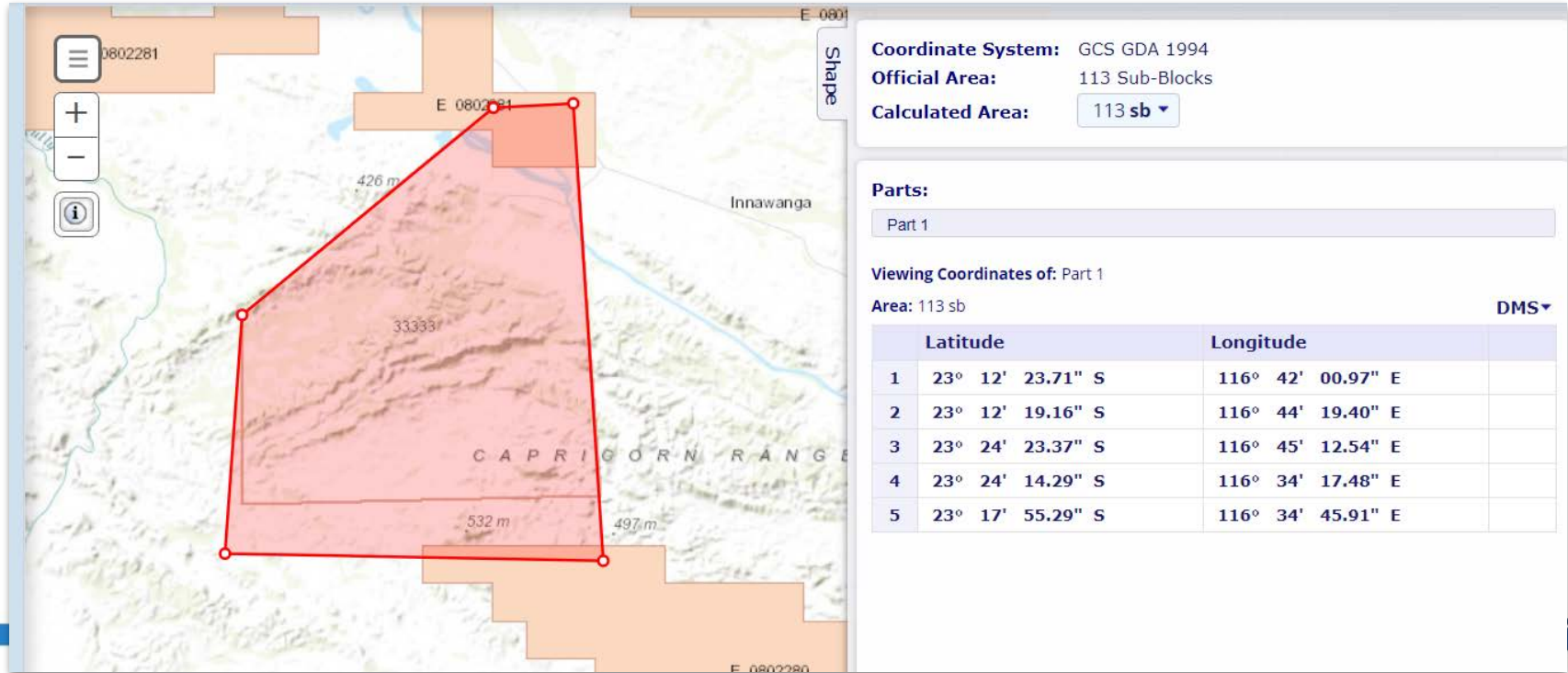
Converting to Blocks



- How to convert a free-form shape to blocks and then simplify the resulting shape to reduce the number of points?
 - License application shapes may be received as free-form polygons and then need to be converted to blocks
 - The conversion often results in many vertices which makes surveying all the points difficult and gives long coordinate lists

Converting to Blocks

- Free-form application shape



The screenshot displays a GIS application interface. On the left, a map shows a red-shaded free-form polygon overlaid on a topographic map of the Caprihorn Range. The map includes elevation contours (e.g., 426 m, 532 m, 497 m) and labels for 'E 0802281' and 'Innawanga'. A sidebar on the left contains navigation controls: a menu icon, zoom in (+) and zoom out (-) buttons, and an information (i) icon. A 'Shape' label is visible on the right side of the map area.

The right-hand panel provides metadata for the selected shape:

- Coordinate System:** GCS GDA 1994
- Official Area:** 113 Sub-Blocks
- Calculated Area:** 113 sb

Below this, the 'Parts' section shows 'Part 1'. The 'Viewing Coordinates of: Part 1' section indicates the area is 113 sb and provides a table of coordinates in DMS format.

	Latitude	Longitude	DMS
1	23° 12' 23.71" S	116° 42' 00.97" E	
2	23° 12' 19.16" S	116° 44' 19.40" E	
3	23° 24' 23.37" S	116° 45' 12.54" E	
4	23° 24' 14.29" S	116° 34' 17.48" E	
5	23° 17' 55.29" S	116° 34' 45.91" E	

Converting to Blocks

- 'Convert to block' tool

The screenshot displays a software interface for converting a polygon to blocks. On the left, a map shows a red polygon overlaid on a terrain map. The polygon is labeled 'CH Demo 123' and has dimensions of 420 m, 532 m, and 497 m. The map includes labels for 'Wooragarra Pool', 'Sully Creek', and 'Innawanga'. The interface includes a legend, a shape tool, and a 'copy current sha' button.

The 'Polygon to Block' tool settings are as follows:

- Coordinate System: GCS GDA 1994
- Official Area: 113
- Sub-Blocks: [Dropdown]
- Calculated Area: 143 sb

The 'Parts' section shows 'Part 1' with a viewing area of 143 sb. The table below lists the coordinates for each part:

	Latitude	Longitude	DMS
1	23° 12' 00.00" S	116° 41' 00.00" E	
2	23° 12' 00.00" S	116° 45' 00.00" E	
3	23° 21' 00.00" S	116° 45' 00.00" E	
4	23° 21' 00.00" S	116° 46' 00.00" E	
5	23° 25' 00.00" S	116° 46' 00.00" E	
6	23° 25' 00.00" S	116° 34' 00.00" E	
7	23° 17' 00.00" S	116° 34' 00.00" E	
8	23° 17' 00.00" S	116° 35' 00.00" E	
9	23° 16' 00.00" S	116° 35' 00.00" E	
10	23° 16' 00.00" S	116° 37' 00.00" E	

Converting to Blocks

- Tools for adding and removing blocks

Draw polygon to select blocks

copy current shape

Legend
Shape

Draw to Add
Draw to Remove

GCS GDA 1994
113 Sub-Blocks [Copy Calculated Area](#)

Calculated Area: 136 sb

Parts: +

Part 1 ✎ ✖

Viewing Coordinates of: Part 1
Area: 143 sb DMS

	Latitude	Longitude	
1	23° 12' 00.00" S	116° 41' 00.00" E	
2	23° 12' 00.00" S	116° 45' 00.00" E	
3	23° 21' 00.00" S	116° 45' 00.00" E	
4	23° 21' 00.00" S	116° 46' 00.00" E	
5	23° 25' 00.00" S	116° 46' 00.00" E	
6	23° 25' 00.00" S	116° 34' 00.00" E	

Double-click to complete

420 m

Wongarra Pfdl

Innawanga

CH Demo 123

CAPRIGORN RANG

0802250
0802281
E 0801630
E 0801640
E 0801644
E 0801648
E 0801652

23°16'00" S
23°20'00" S

116°37'00" E
116°38'00" E
116°39'00" E
116°40'00" E
116°41'00" E
116°42'00" E

gully Crank

Converting to Blocks

- Spatial validations for block-based licenses:
 - Check that the license shape is block-based ie conforms to a grid

Shape Validation

Validation Result Validation Shape Comparison Shape Result Shape Validation Shape Configuration Result Shape Configuration

Validation has been run

RUN VALIDATION

✖ The validation shape is: **Invalid**

Message

- ✔ Shape conforms to grid (Lat: 1 Minutes, Long: 1 Minutes)
- ✖ Shape overlaps 2 licenses
- ✖ Shape overlaps 1 restricted areas

The validation shape overlaps 2 licenses:

	Code	Name	Type	Type Group	Status	Overlap	
✖	E 4702496		EL	Tenements	Application	944.86 Ha	highlight
✖	PL 07	West Angelas Petroleum (Gas)	CP	Pipelines	Active	5.98 Ha	highlight



Converting to Blocks



- Spatial validations for block-based licenses:
 - When checking for overlaps with licenses and other restricted layers, these layers should be block-based to ensure that the resulting shape is also block based
- Example
 - Convert protected area layers to block
 - For any licenses which are not (yet) block-based, create an additional layer where they are converted to blocks

Converting to Blocks

- Example from government Cameroon

The validation shape is: **Invalid**

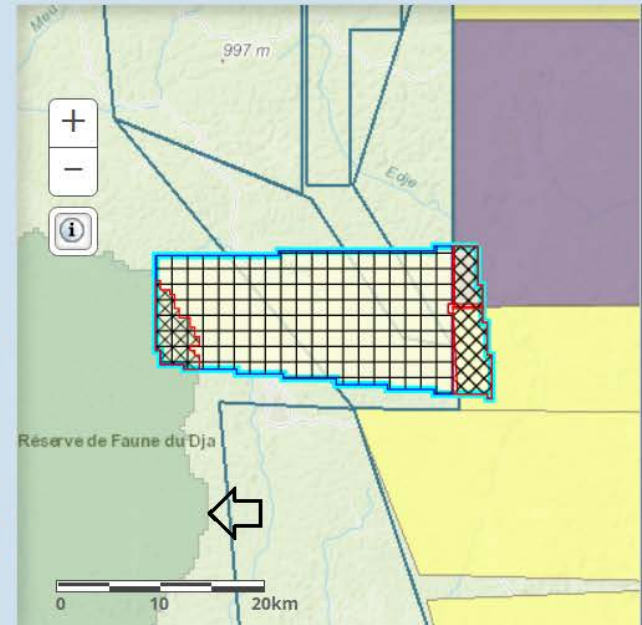
Message	
	Shape conforms to grid (Lat: 15.00 Secondes, Long: 15.00 Secondes)
	Shape is not larger than maximum area (500.0000 Kilomètre carré)
	Shape is not smaller than minimum area (62.0000 Kilomètre carré)
	Shape overlaps 2 licenses
	Shape overlaps 3 restricted areas

The validation shape overlaps **2** licenses:

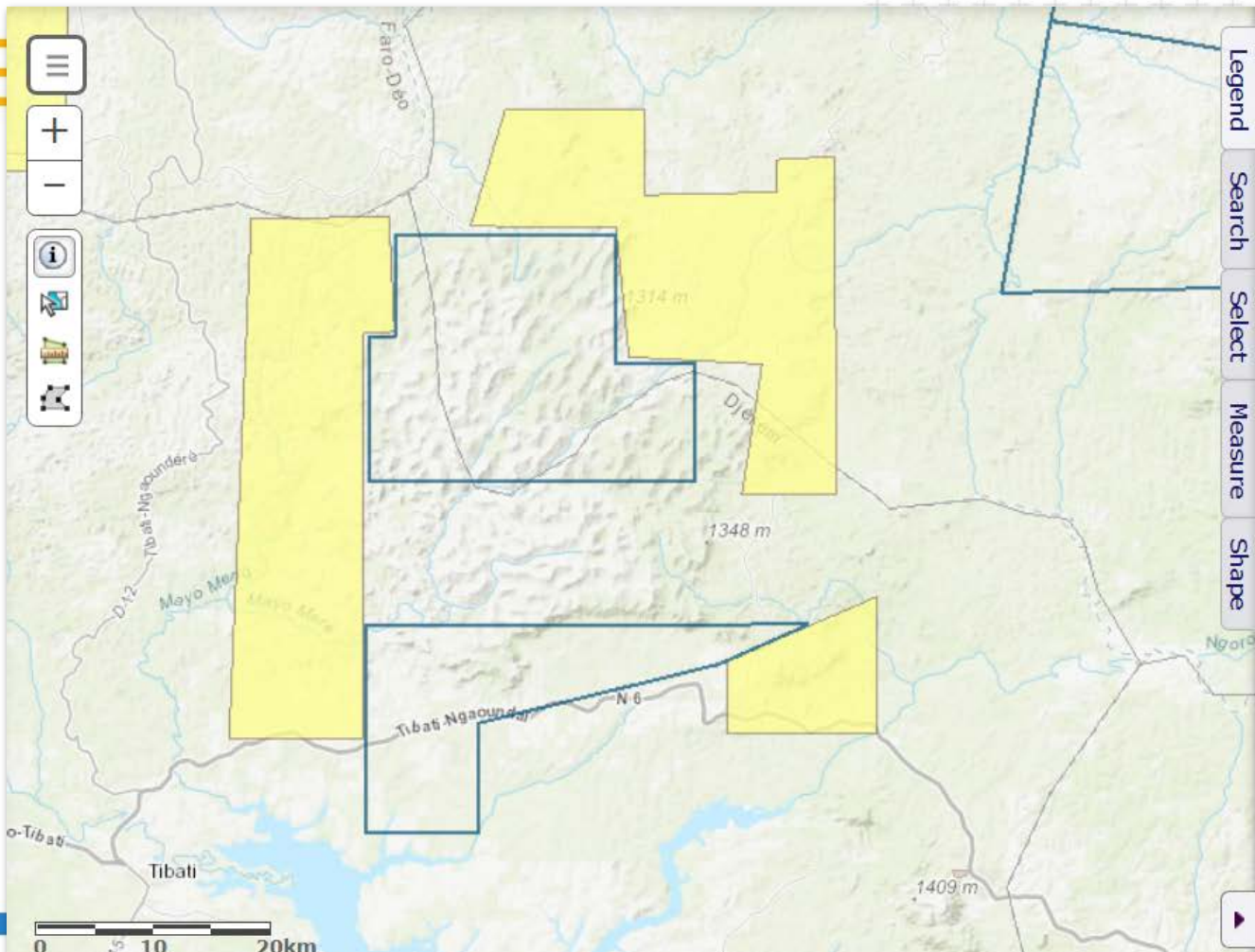
	Code	Name	Type	Type Group	Status	Overlap	
	PEMI 00001	LOMIE	PEMI	Exploitation	Permis Attribué	13.8907 km ²	highlight
	PR 00235	NKAMOUNA I	PR	Recherche	Permis Attribué	26.5502 km ²	highlight

The validation shape overlaps **3** restricted areas:

	Name	External Spatial Dataset	Overlap	
	Réserve de Faune du Dja	Aires_Protégées	23.0405 km ²	highlight
	PR 00235	Grid_Conversion_Buffer_Zone	29.8614 km ²	highlight
	PEMI 00001	Grid_Conversion_Buffer_Zone	14.9299 km ²	highlight



Map Legend

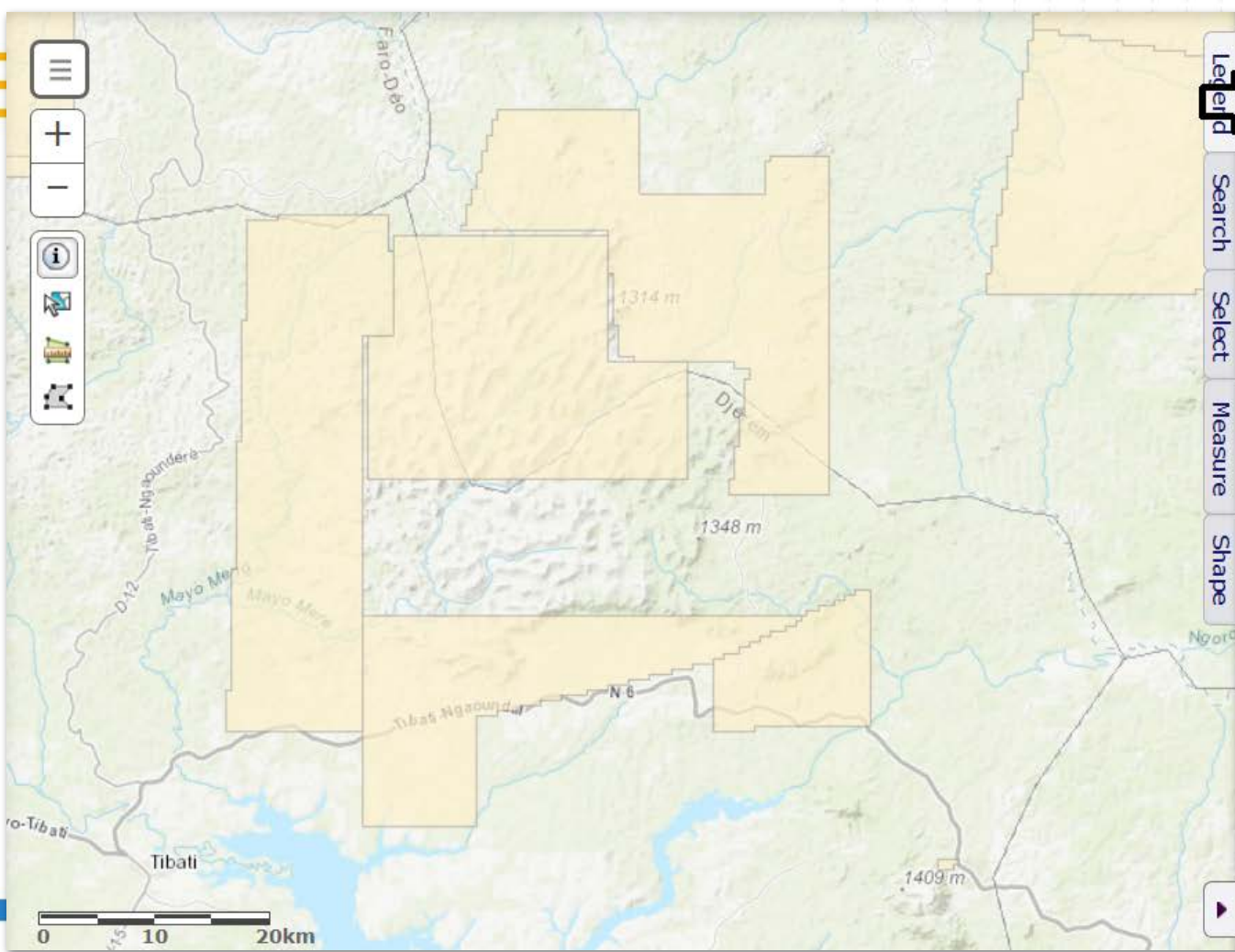


Legend
Search
Select
Measure
Shape

- Zones Tampon**
 - Quadrillage Inversé Permis
 - Zones Tampon Carrières Industrielles
- Permis**
 - Demande Validation Spatiale en attente
 - Demande
 - Permis d'Exploitation des Eaux Minéra...
 - Permis de Reconnaissance
 - Permis de Recherche
 - Permis d'Exploitation de la Mine Indus...
 - Autorisation d'Exploitation Artisanale
 - Permis d'Exploitation de Carrière Indu...
- Administration**
 - Quadrillage Cadastral 15"
 - Aires Protégées
 - Régions
 - Départements
 - Arrondissements
 - Villes
 - Localités

1 473 479 m 751 243 m



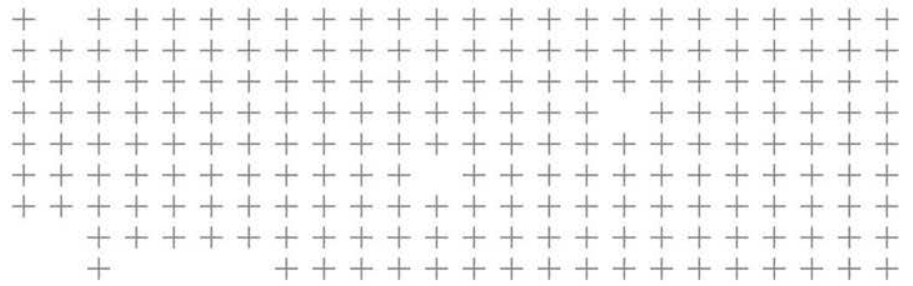


Map navigation controls including a menu icon, zoom in (+) and zoom out (-) buttons, an information (i) icon, a full-screen icon, a compass icon, and a layer selection icon.

Legend Search Select Measure Shape

- Zones Tampon**
 - Quadrillage Inversé Permis
 - ZONES TAMPON Carrières Industrielles
- Permis**
 - Demande Validation Spatiale en attente
 - Demande
 - Permis d'Exploitation des Eaux Minéra...
 - Permis de Reconnaissance
 - Permis de Recherche
 - Permis d'Exploitation de la Mine Indus...
 - Autorisation d'Exploitation Artisanale
 - Permis d'Exploitation de Carrière Indu...
- Administration**
 - Quadrillage Cadastral 15"
 - Aires Protégées
 - Régions
 - Départements
 - Arrondissements
 - Villes
 - Localités

1 482 346 m 763 626 m



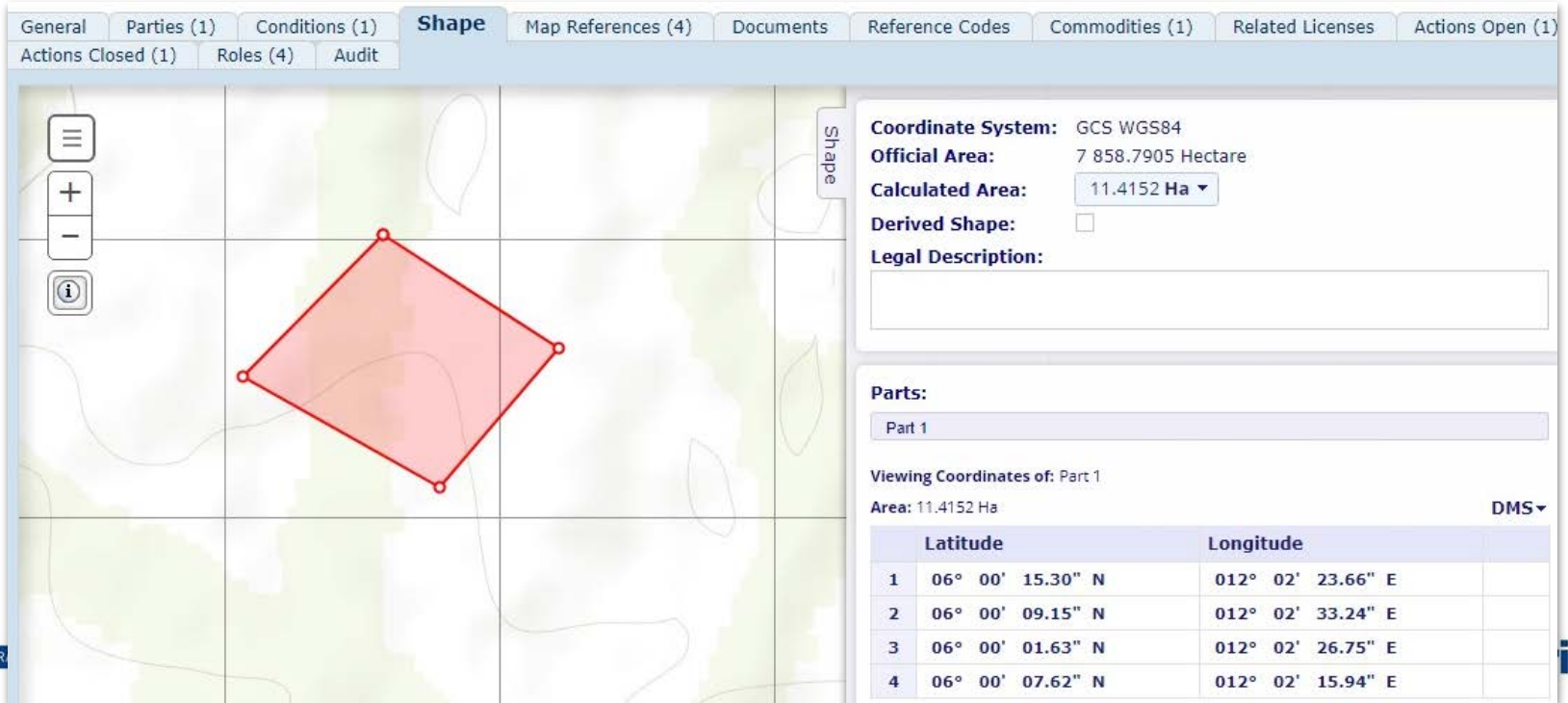
Using Condition Shapes to Create Buffer Areas

Restricted Buffer Area around License

- How can Landfolio be configured to cater for the requirement of having a restricted buffer area around a license shape?
- Example: In Cameroon, required to have a 500m buffer area around some of their quarry licenses

Restricted Buffer Area around License

- Capture a license shape as normal on Shape tab



Coordinate System: GCS WGS84
Official Area: 7 858.7905 Hectare
Calculated Area: 11.4152 Ha
Derived Shape:
Legal Description:

Parts:

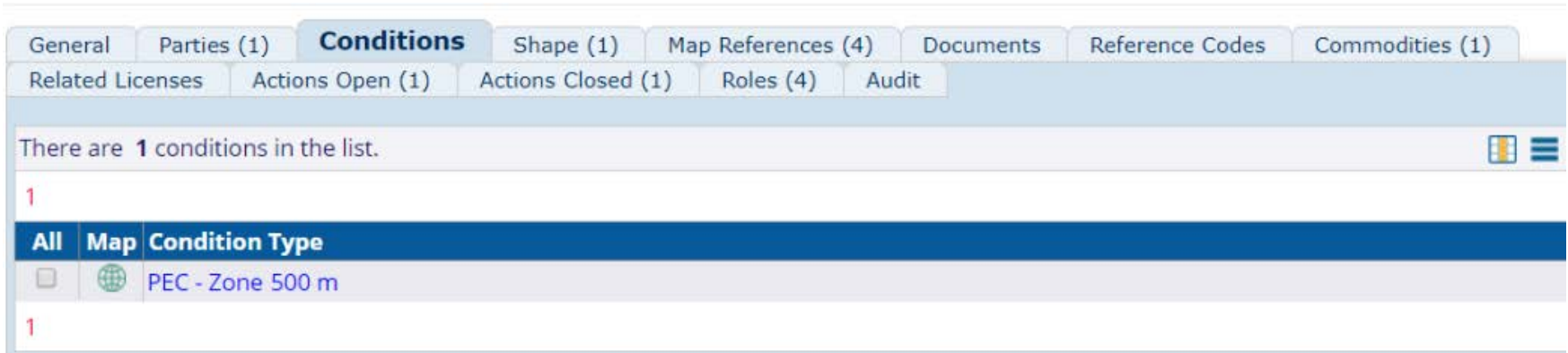
Part 1

Viewing Coordinates of: Part 1
Area: 11.4152 Ha


	Latitude	Longitude	
1	06° 00' 15.30" N	012° 02' 23.66" E	
2	06° 00' 09.15" N	012° 02' 33.24" E	
3	06° 00' 01.63" N	012° 02' 26.75" E	
4	06° 00' 07.62" N	012° 02' 15.94" E	

Restricted Buffer Area around License

- Use the Conditions functionality - add a Condition

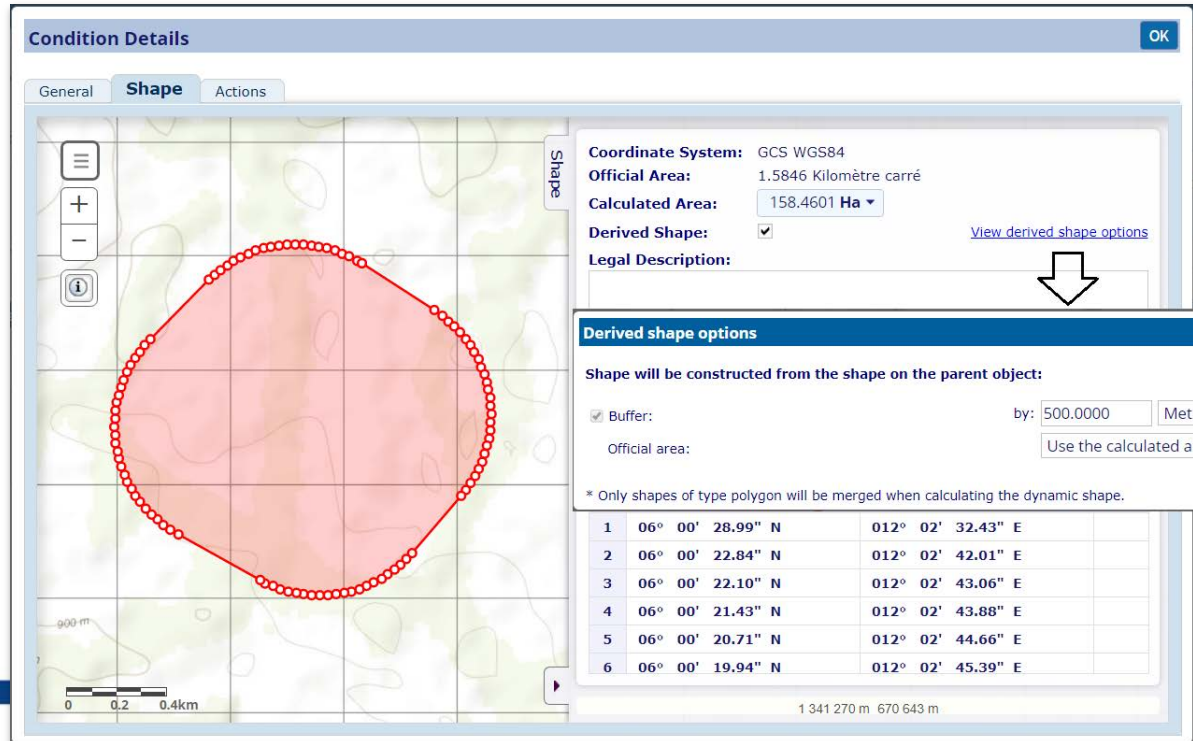


The screenshot shows a software interface with a tabbed menu at the top. The 'Conditions' tab is selected and highlighted. Below the tabs, there is a summary bar indicating '1 condition' and a table listing the condition details.

All	Map	Condition Type
<input type="checkbox"/>		PEC - Zone 500 m

Restricted Buffer Area around License

- Condition to have a 'Derived Shape' based on license shape with 500m buffer



Condition Details OK

General **Shape** Actions

Coordinate System: GCS WGS84
Official Area: 1.5846 Kilomètre carré
Calculated Area: 158.4601 Ha
Derived Shape: [View derived shape options](#)
Legal Description:

Derived shape options

Shape will be constructed from the shape on the parent object:

Buffer: 500.0000 Metr
Official area: Use the calculated ar

* Only shapes of type polygon will be merged when calculating the dynamic shape.

1	06° 00' 28.99" N	012° 02' 32.43" E
2	06° 00' 22.84" N	012° 02' 42.01" E
3	06° 00' 22.10" N	012° 02' 43.06" E
4	06° 00' 21.43" N	012° 02' 43.88" E
5	06° 00' 20.71" N	012° 02' 44.66" E
6	06° 00' 19.94" N	012° 02' 45.39" E

1 341 270 m 670 643 m

Restricted Buffer Area around License

- Add a layer in the map to display the Buffer Area

The screenshot displays a GIS application interface. At the top, there are several tabs: General, Parties (1), Conditions (1), Shape, Map References (4), Documents, Reference Codes, and Commodities (1). Below these are sub-tabs: Actions Open (1), Actions Closed (1), Roles (4), and Audit. The main map area shows a topographic map with a red diamond-shaped license area labeled 'X-D-PEC 0008P-17-1-21'. A large, semi-transparent, cross-hatched buffer area surrounds the license. On the left side of the map, there are navigation controls: a menu icon, a zoom in (+) button, a zoom out (-) button, and an information (i) button. On the right side, there is a legend panel with two sections: 'Legend' and 'Shape'. The 'Legend' section contains a list of layers with checkboxes and color-coded boxes. The 'Shape' section contains a list of layers with checkboxes and color-coded boxes. The 'Zones Tampon' section includes 'Zones Tampon Carrières Industrielles'. The 'Permis' section includes 'Demande Validation Spatiale en attente', 'Demande', 'Permis d'Exploitation des Eaux Minéra...', 'Permis de Reconnaissance', 'Permis de Recherche', 'Permis d'Exploitation de la Mine Indust...', 'Autorisation d'Exploitation Artisanale', and 'Permis d'Exploitation de Carrière Indu...'. The 'Administration' section includes 'Quadrillage Cadastral 15"'. The Trimble logo is visible in the bottom right corner.

General Parties (1) Conditions (1) **Shape** Map References (4) Documents Reference Codes Commodities (1)

Actions Open (1) Actions Closed (1) Roles (4) Audit

Legend

- Zones Tampon**
- Quadrillage Inversé Permis
- Zones Tampon Carrières Industrielles

Shape

- Permis**
- Demande Validation Spatiale en attente
- Demande
- Permis d'Exploitation des Eaux Minéra...
- Permis de Reconnaissance
- Permis de Recherche
- Permis d'Exploitation de la Mine Indust...
- Autorisation d'Exploitation Artisanale
- Permis d'Exploitation de Carrière Indu...

- Administration**
- Quadrillage Cadastral 15"

TRANS

Trimble

Restricted Buffer Area around License

- Create a restricted area layer which includes the buffer shapes on any Application or Active quarry licenses
- Configure Shape Validation actions to check for overlaps with this layer; clip overlaps

Detect restricted area overlaps:

ADD

External Spatial Dataset	Name Field	Clip Overlap	Flag Type
Aires_Protégées	OBJECTID	<input type="checkbox"/>	Warning
Inverted_CountryBorder	OBJECTID	<input checked="" type="checkbox"/>	Restriction
500m PEC Buffer	Code	<input checked="" type="checkbox"/>	Restriction
Grid_Conversion_Buffer_Zone	Code	<input checked="" type="checkbox"/>	Restriction


Restricted Buffer Area around License

- New license application captured in the system

CH test 233

License Name: Submission Date: Status: Demande Validation Spatiale en attente
License Type: Permis d'Exploitation de Carrière Industrielle Grant Date: License Parties:
Expiry Date: Official Area: 19

< CONDITIONS Spatial CANCEL MAP REFERENCES >



The map displays a license area with a red polygon overlay. The license area is labeled 'D-PEC 000RP-17-121'. The map includes a grid, a scale bar (0 to 0.4km), and various map controls.

Shape

Coordinate System: GCS WGS84
Official Area: 19.3731 [Copy Calculated Area](#)
Calculated Area: 19.3731 Ha
Derived Shape:
Legal Description:

Parts:

Part 1

Viewing Coordinates of: Part 1

Area: 19.3731 Ha **DMS**

	Latitude	Longitude
1	06° 00' 18.74" N	012° 02' 53.94" E

1 340 892 m 669 173 m

Restricted Buffer Area around License


- Shape Validation run - overlaps with buffer area detected

Shape Validation




Validation Result Validation Shape Comparison Shape Result Shape Validation Shape Configuration Result Shape Configuration

Validation has been run


RUN VALIDATION

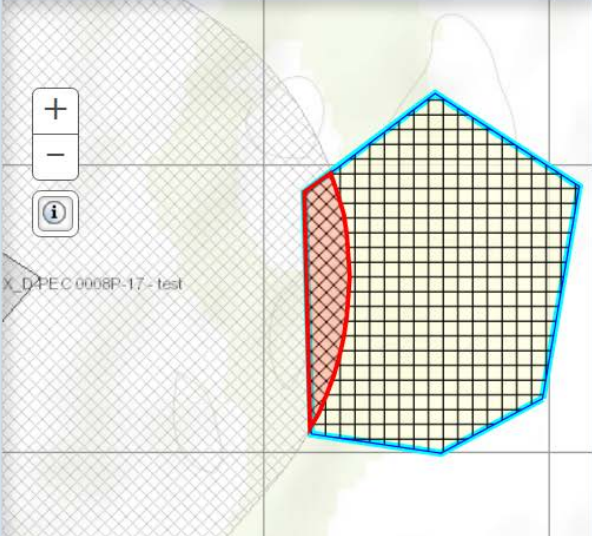
 The validation shape is: **Invalid**

Message


-  Shape is not larger than maximum area (25.0000 Hectare)
-  Shape overlaps 0 licenses
-  Shape overlaps 1 restricted areas

The validation shape overlaps **1** restricted areas:

	Name	External Spatial Dataset	Overlap	
	X_D-PEC 0008P-17 - test	500m PEC Buffer	0.0205 km ²	remove highlight

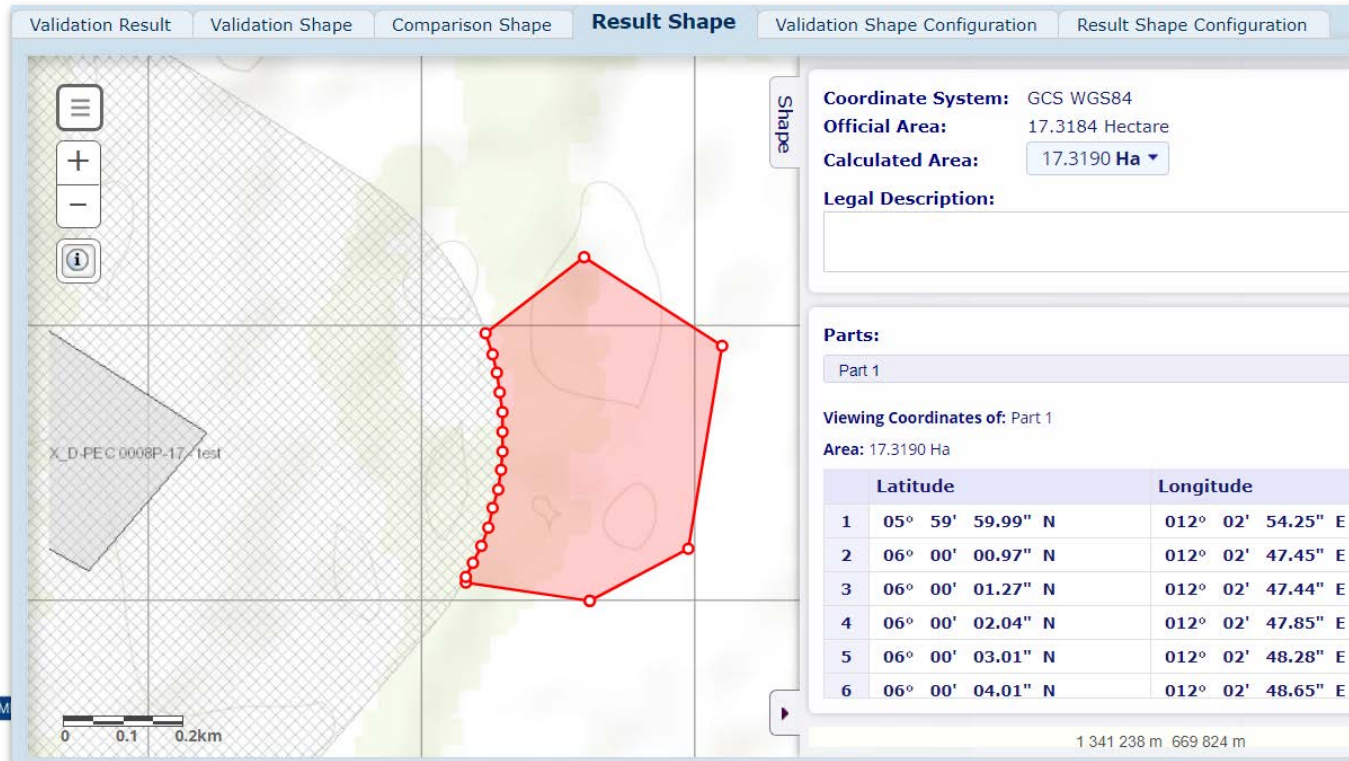


X_D-PEC 0008P-17 - test



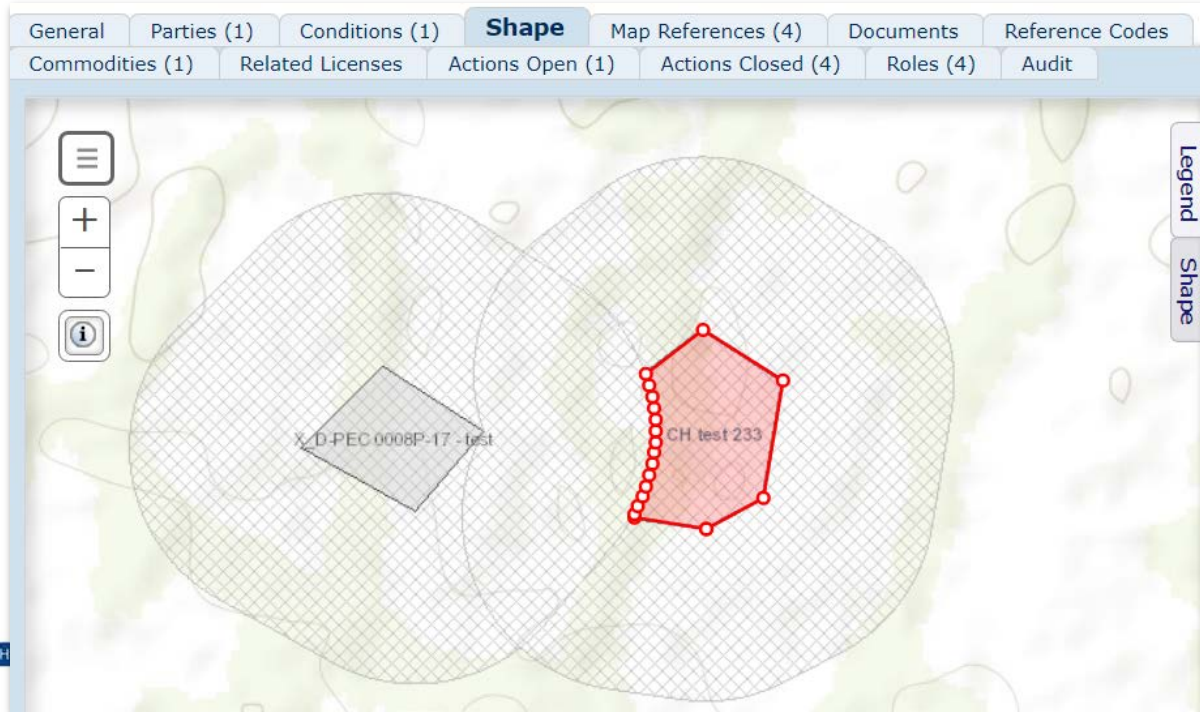
Restricted Buffer Area around License

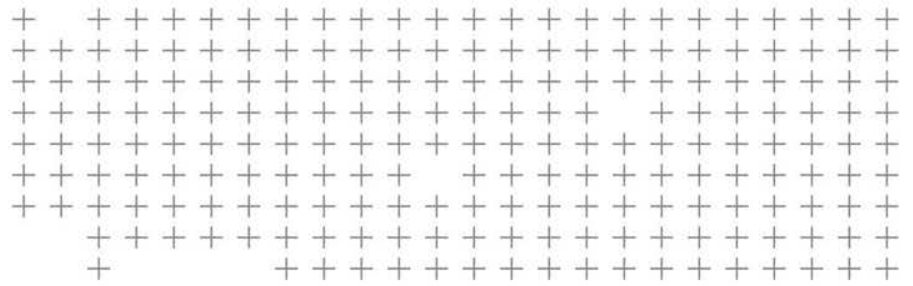
- Overlaps with buffer area clipped out



Problem: Restricted buffer area

- New Application shape updated - the shape is valid shape with no overlaps and now has its own buffer area

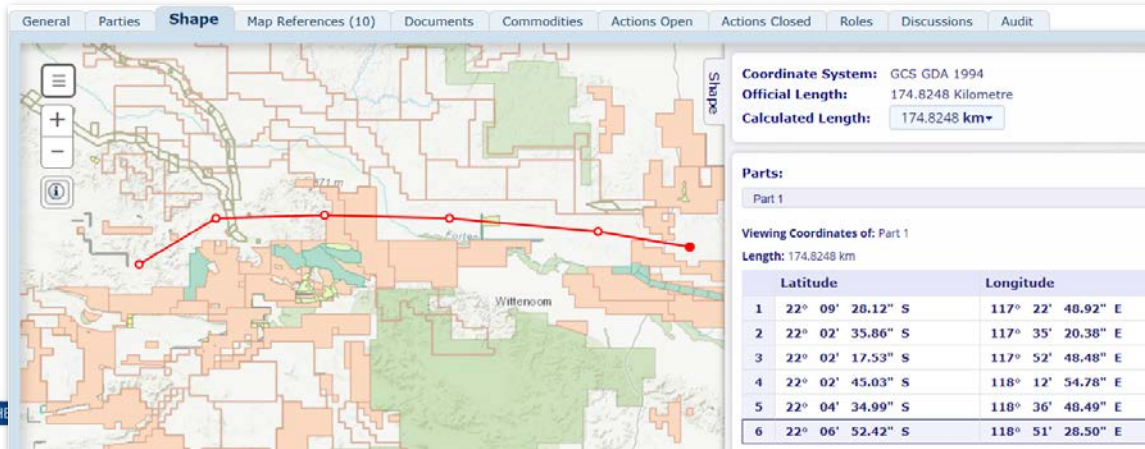




Polylines

Polylines

- New functionality recently developed to support polylines
- Lines captured as the License shape
 - Example: Oil and pipelines
- The line can have multiple points
- System calculates the length of the lines



The screenshot displays a software interface with a map and a data panel. The map shows a red polyline with six vertices. The data panel on the right provides the following information:

Coordinate System: GCS GDA 1994
Official Length: 174.8248 Kilometre
Calculated Length: 174.8248 km

Parts:
Part 1

Viewing Coordinates of: Part 1
Length: 174.8248 km

	Latitude	Longitude
1	22° 09' 28.12" S	117° 22' 48.92" E
2	22° 02' 35.86" S	117° 35' 20.38" E
3	22° 02' 17.53" S	117° 52' 48.48" E
4	22° 02' 45.03" S	118° 12' 54.78" E
5	22° 04' 34.99" S	118° 36' 48.49" E
6	22° 06' 52.42" S	118° 51' 28.50" E



Polylines



- System is able to determine map references for the license based on the location of the line
- System is able to perform spatial validations using line features
 - Run shape validations on ‘line’ licenses
 - Check for number of parts
 - Check for overlaps with licenses and other restricted layers
 - Shape validations run on polygon licenses to check for overlaps with line licenses

Polylines

Shape Validation : Shape Validation

Action [Discussions](#) [Audit](#)

Created By: Demo: Shape Validation > Shape Validation

Due Date:

Shape Validation

Validation Result

[Validation Shape](#) [Comparison Shape](#) [Result Shape](#) [Validation Shape Configuration](#) [Result Shape Configuration](#)

Validation has been run

RUN VALIDATION

The validation shape is: **Invalid**

Message

- Shape conforms to grid (Lat: 1 Minutes, Long: 1 Minutes)
- Shape overlaps 2 licenses
- Shape overlaps 1 restricted areas

The validation shape overlaps **2** licenses:

Code	Name	Type	Type Group	Status	Overlap	
E 4702496		EL	Tenements	Application	944.86 Ha	highlight
PL 97	West Angelas Petroleum (Gas) Pipeline and Stations	GB	Pipelines	Active	5.99 Ha	remove highlight

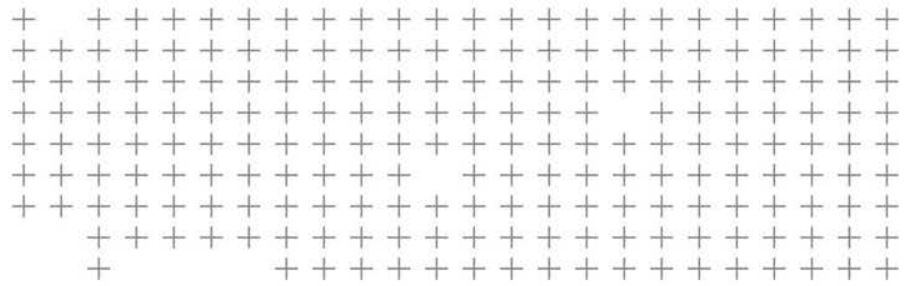
The validation shape overlaps **1** restricted areas:

Name	External Spatial Dataset	Overlap	
Environmentally Sensitive Area	Australia_Protected_Areas	3,882.90 Ha	highlight



Map Legend

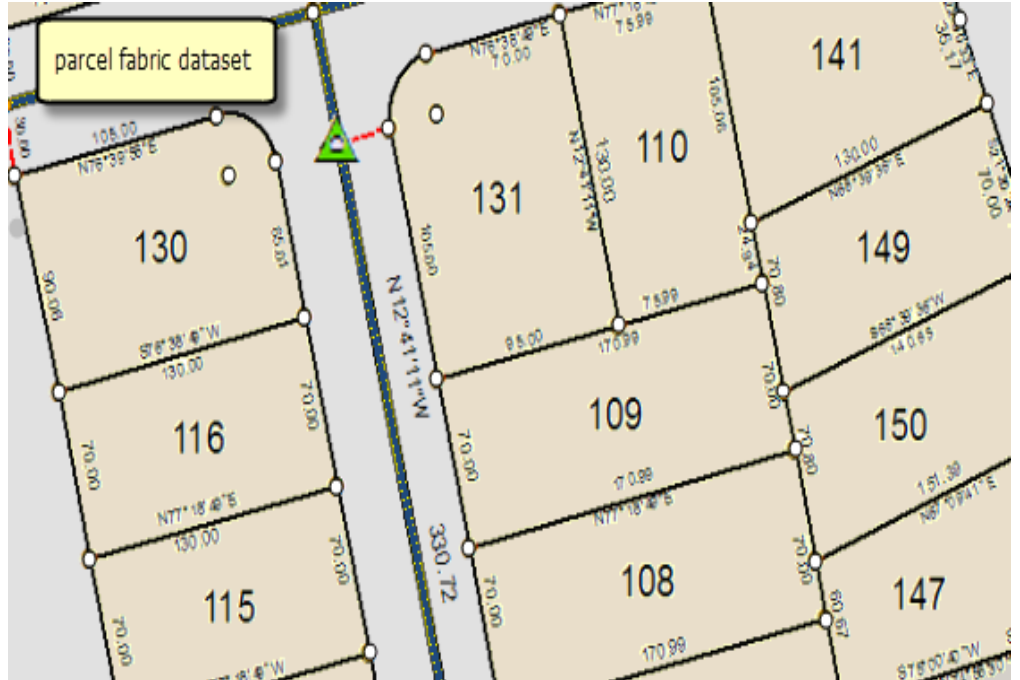
- Validation Shape
- Result Shape
- Overlaps or Problem Areas



Shape Sync Tool

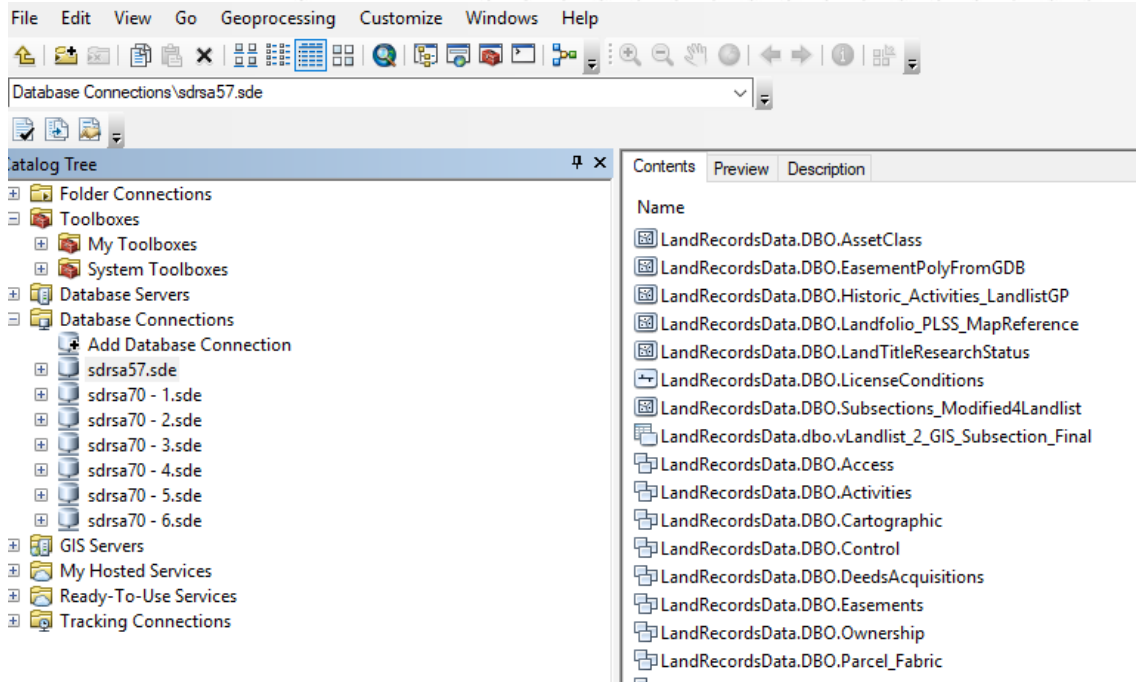
Background

- Data is part of a larger dataset, e.g. parcel fabric
- Advanced editing tools

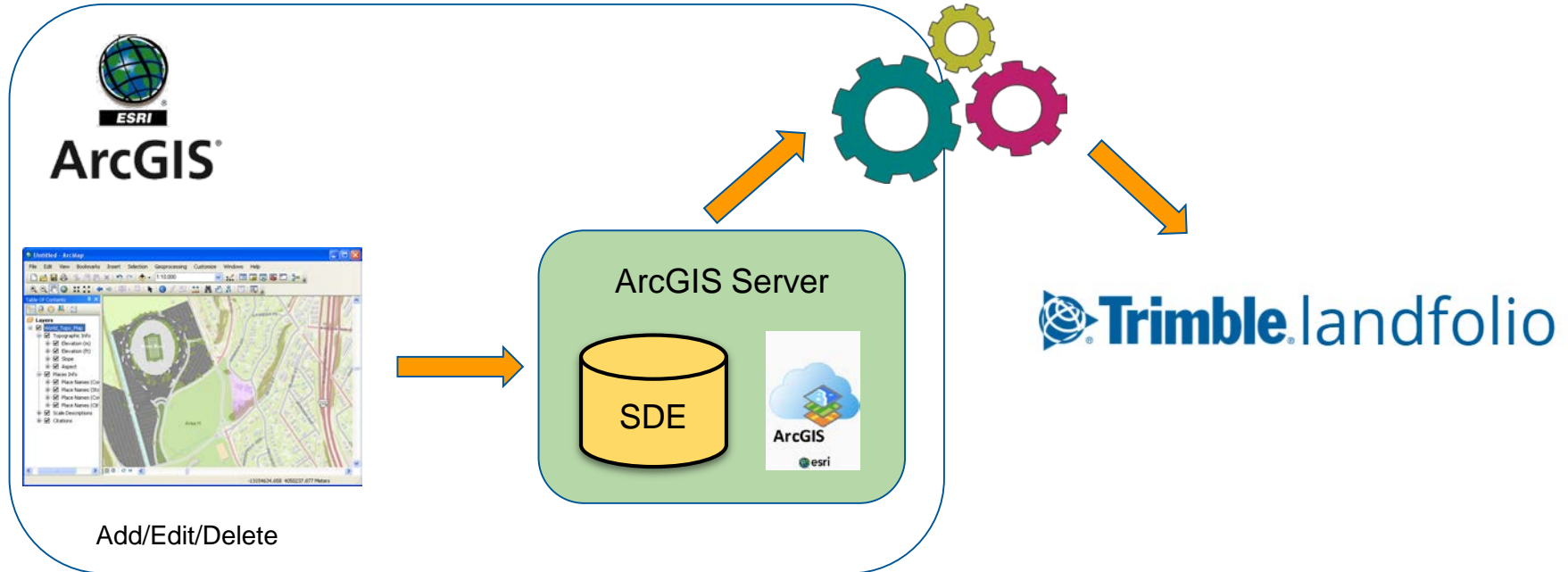


Background continued...

- Datasets to be shared
- Edited outside Landfolio
- Multiple collaborators



Shape Sync Workflow



Advantages...

- Seamless integration
- Single deployment
- Low maintenance
- Audit logging functionality



Outcome

The screenshot shows a GIS application window with a map of land parcels. A pink polygon is highlighted, representing a tenement. The 'Attributes' table for this feature is displayed on the right side of the map.

OBJECTID	Code	SHAPESTArea()	SHAPESTLength()
5	E46_999	0.000005	0.010294

Below the table, the 'OBJECTID' is listed as 5, and the 'Object ID' is noted as 'Null values not allowed'. There are also buttons for 'Create Features', 'Edit Sketch Pro...', and 'Attributes'.

The screenshot shows the 'landfolio' web application interface. The main content area displays details for tenement E46_999. The 'Shape' tab is selected, showing a map of the tenement with its boundary points and a table of coordinates.

E46_999
 License Name: OZ Minerals Prominent Hill Operations Pty Ltd (100%)
 Exploration Licence
 Status: Active
 Western Australia
 Application Date: 04-Apr-2017
 Grant Date: 06-Jun-2017
 Expiry Date: 05-Jun-2020

General Parties (1) Address Conditions (1) **Shape** Map References (6) Documents Commodities Agreements Groups
 Related Licenses Actions Open (9) Actions Closed (7) Roles (6) Discussions Audit

Coordinate System: GCS_GDA_1994
Official Area: 140.41 Hectare
Calculated Area: 5.70 Ha
Derived Shape:

Parts:
 Part 1

Viewing Coordinates of: Part 1
 Area: 5.70 Ha

	Latitude	Longitude
1	22° 22' 14.38" S	119° 43' 59.94" E
2	22° 22' 14.25" S	119° 44' 01.25" E
3	22° 22' 15.51" S	119° 44' 01.48" E
4	22° 22' 16.27" S	119° 44' 02.33" E
5	22° 22' 19.83" S	119° 44' 09.08" E
6	22° 22' 20.49" S	119° 44' 07.97" E
7	22° 22' 22.42" S	119° 44' 08.08" E
8	22° 22' 23.88" S	119° 44' 09.65" E
9	22° 22' 23.30" S	119° 44' 01.81" E

There's more to Shape Sync...

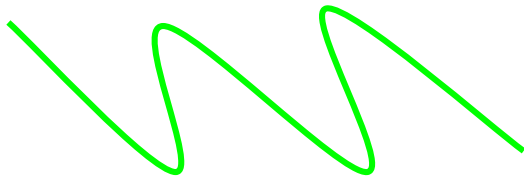
- Line support

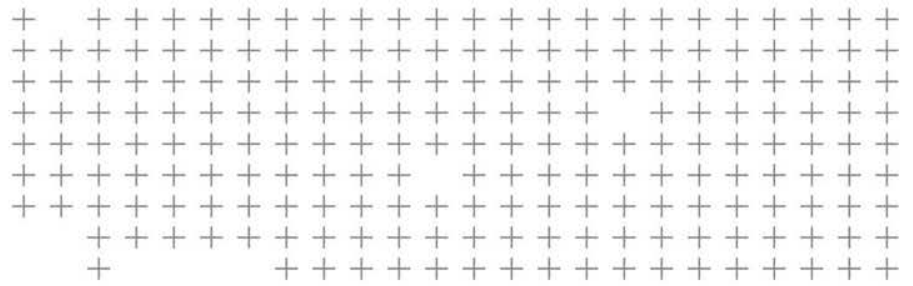


- Point support



- Densification





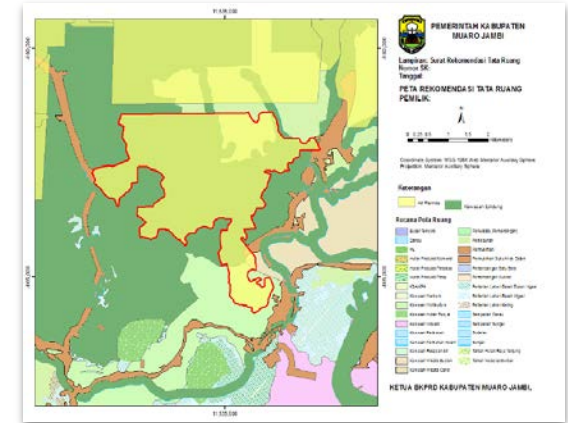
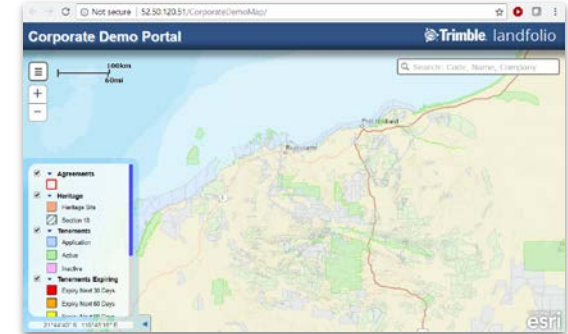
Getting the most out of the Maps

Getting the most out of the Maps

- Show how maps have been used to cater for specific client requirements
- Different tools / features used to enhance maps
- All maps have their contents/layout defined in an mxd file, created in ArcMap
- Utilize all the ArcMap formatting tools to create a nice base map
- Customised configuration to create specific reports etc

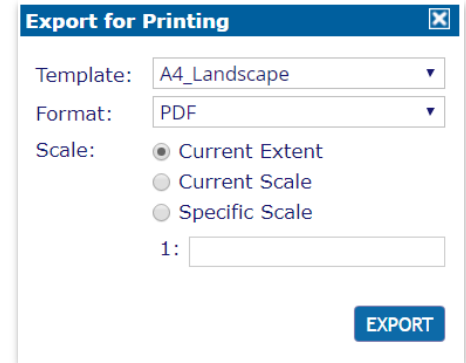
Getting the most out of the Maps

- Where are maps used?
 - Application Maps
 - Landfolio maps
 - View-only map portal
 - Online transaction portal
 - Maps in reports and documents
 - Word template reports
 - SSRS Reports
 - Map Print templates (generated directly from a map)



Map Print Templates

- Generated from the Maps in Landfolio
- Layout is defined in the template
 - Borders, North arrow, scale bar format, title, placement of legend, paper size and orientation
- The extent that map is to be printed at is defined in the Landfolio map, either:
 - Zoom to the required extent
 - Select an option in the printing options dialog to print at a selected scale



Export for Printing [X]

Template: A4_Landscape ▾

Format: PDF ▾

Scale: Current Extent
 Current Scale
 Specific Scale

1:

EXPORT

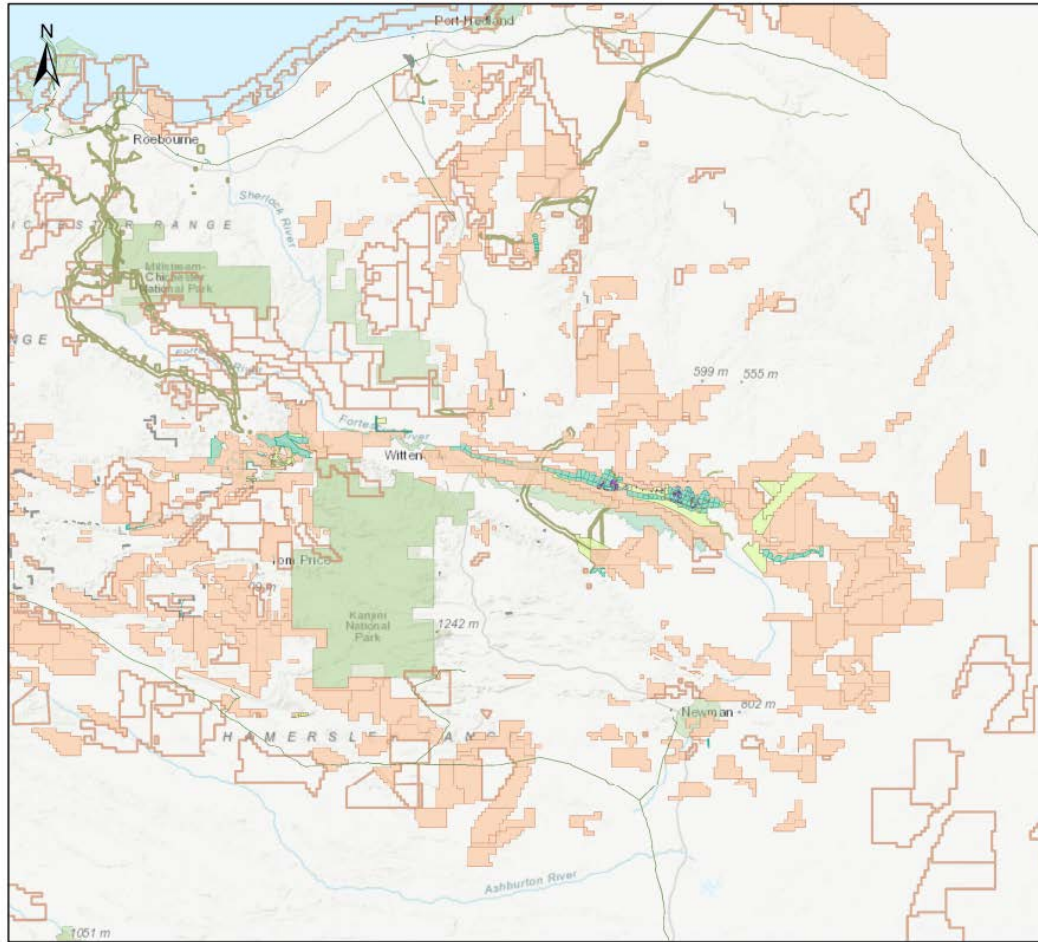


Map Print Templates



- For layers to include in the legend, the print template can be configured to either:
 - Only show layers for which data is visible at the current extent
 - Only show layers that are turned on in the Landfolio map
- > Single map print template can be used for multiple map printing requirements

Applications and Active Licences in Western Australia



LEGEND

Active Licences

- Heritage
- Environment
- Pipelines

Tenement

- Exploration Licence
- General Purpose Lease
- Mining Lease
- Miscellaneous Licence
- Prospecting Licence

Applications

- Heritage
- Environment

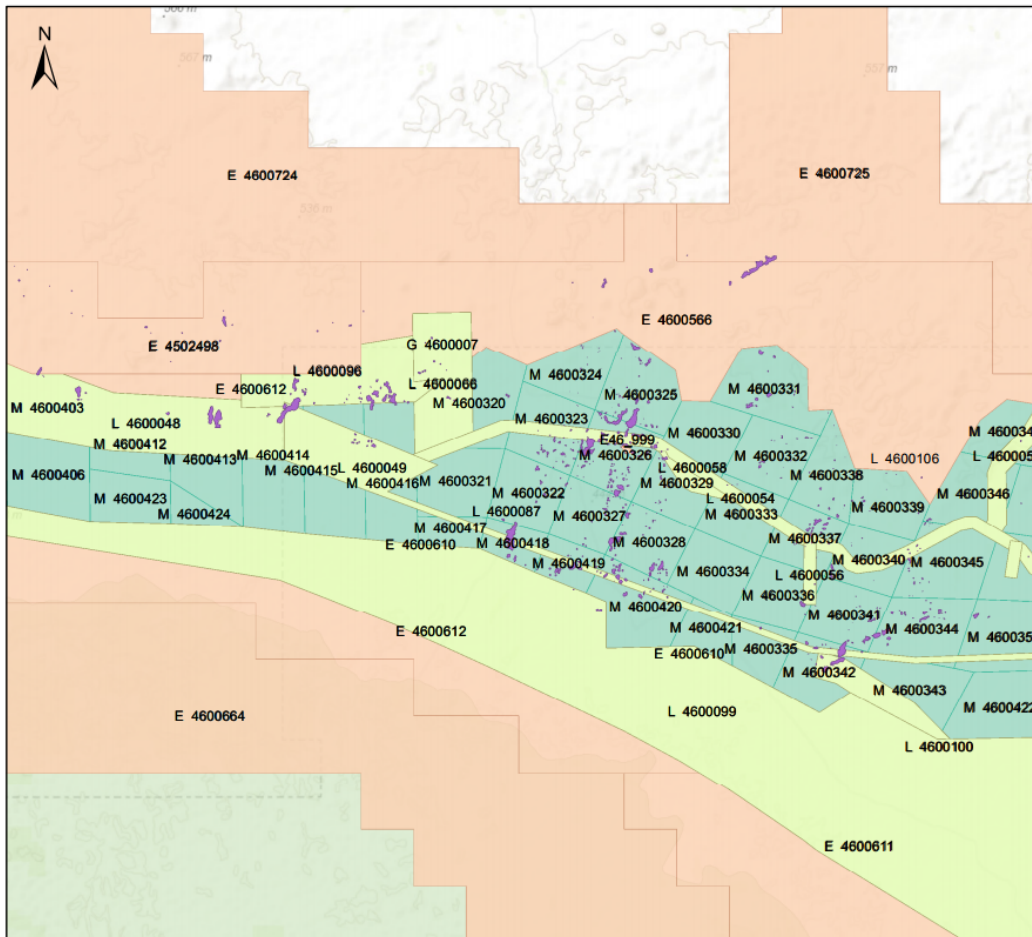
Tenement

- Exploration Licence
- Mining Lease
- Miscellaneous Licence
- Prospecting Licence

Trimble landfolio
Date: 08/02/2018



Applications and Active Licences in Western Australia



LEGEND

Active Licences

- Heritage

Tenement

- Exploration Licence
- General Purpose Lease
- Mining Lease
- Miscellaneous Licence

Applications

Tenement

- Miscellaneous Licence

Trimble landfolio

Date: 08/02/2018



License Reports



- SSRS report designed to highlight the shape of a selected license in a map
- Includes background layers as required
- Can includes a list of coordinates
- Example...



Abidjan le 06/12/2016

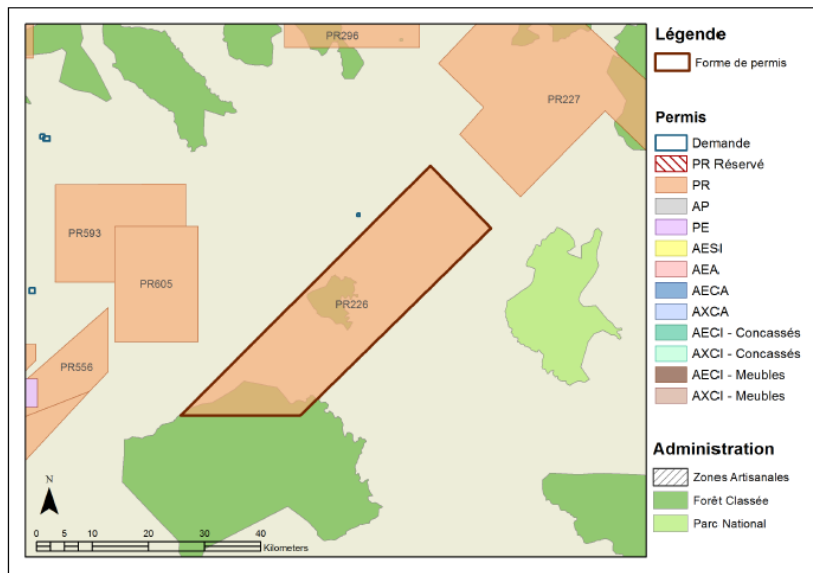
Détenteur de Permis: Tata Steel CI SA
Type de Permis: Permis de Recherches
Numéro de Demande: Checked
Code de Permis: PR226
Substance: Fer

Département: Bangolo, Bloléquin, Duekoue, Guiglo, Kouibly,
Man

Superficie: 811.0000 km²

Statut: Renouvellement en cours

Date de Soumission: 30/07/2009
Date d'Octroi: 27/08/2009
Date de Fin de Validité: 27/08/2016
Date d' Renouvellement: 28/08/2014



Coordonnées géographiques pour PR226:

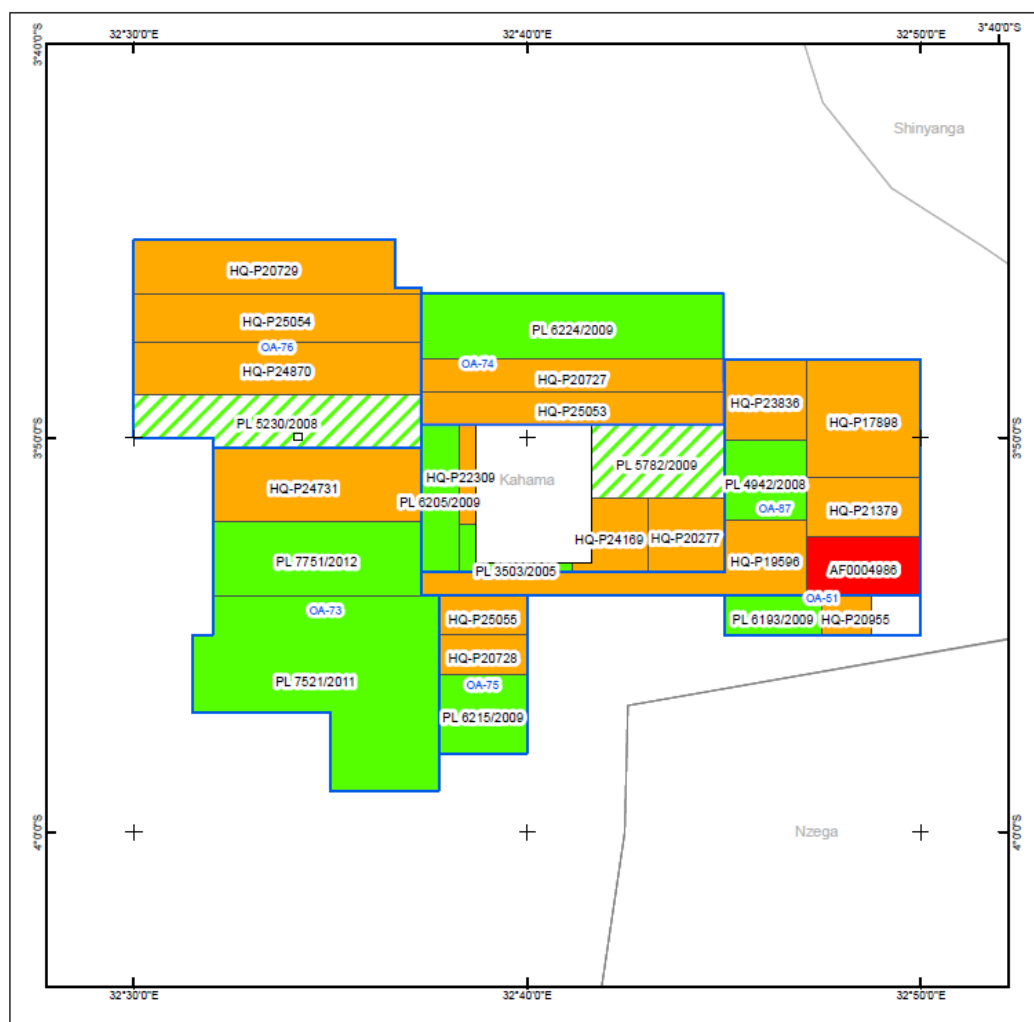
Partie	Points	Latitude	Longitude
Partie 1	1	7° 13' 45.00" N	7° 28' 00.00" O
Partie 1	2	7° 07' 50.00" N	7° 22' 10.00" O
Partie 1	3	6° 50' 00.00" N	7° 40' 30.00" O
Partie 1	4	6° 50' 00.00" N	7° 52' 00.00" O
Partie 1	5	7° 13' 45.00" N	7° 28' 00.00" O



Project Map

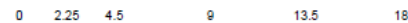


- SSRS report showing all licenses for a particular project
- Example from African Barrick Gold (now Acacia) showing all licenses for their Buzwagi project in Tanzania



Legend

	Active Agreement Boundary	7
	Restricted Period Areas	1 1,474.00 ha
	ML Applications	0
	Active ML-BM	0
	Active ML-MM	0
	Active SML	0
	PL Renewals Pending	2 5,941.00 ha
	PL Applications	16 30,585.60 ha
	Active PL	8 21,264.00 ha



Kilometers

Scale 1:250,000



**AFRICAN
BARRICK
GOLD**

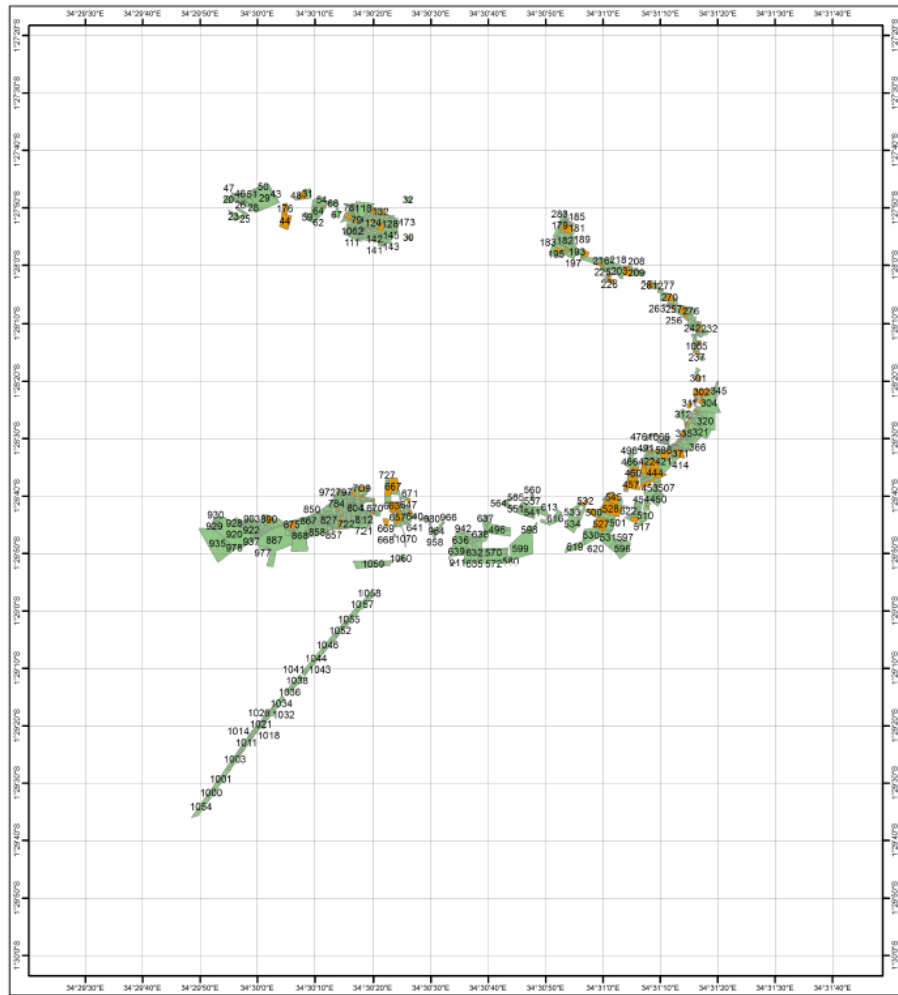
PROJECT NAME: Buzwagi
 JURISDICTION: Tanzania
 PROJECT AREA: 58,664.60 ha
 PROJECTION: Arc 1960
 DATE: 04/Jun/2012











Compensation Map

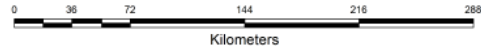


- SSRS Report showing the status of compensation claims for a mining site



Legend

	Surveyed	0
	Access Denied	0
	Assessed	1
	Paid Out	1354 52.80 ha
	Paid Out (Govt Ordered)	0
	Hold Out	142 10.17 ha
	Contested	0
	Legal Action	0



Scale 1:1,519,324

LAND TAKE NAME: Pit Expansion

LAND TAKE AREA: 65.28 ha

JURISDICTION: Tanzania

PROJECTION:

DATE: 23/Jun/2017

Shape Validation Results

- Word template or SSRS reports showing the results of Spatial Validations
- Based on the information recorded on Shape Validation actions
- May include:
 - Lists of validation checks, overlaps, overlapping area
 - Maps showing overlaps, results shape
 - Coordinates and official areas of validation shape and results shape



Shape Validation Results

- Example:
- Kenya Government - results of shape validation in committee summary report



ian test 444 Spatial Mining Company Ltd (100%)

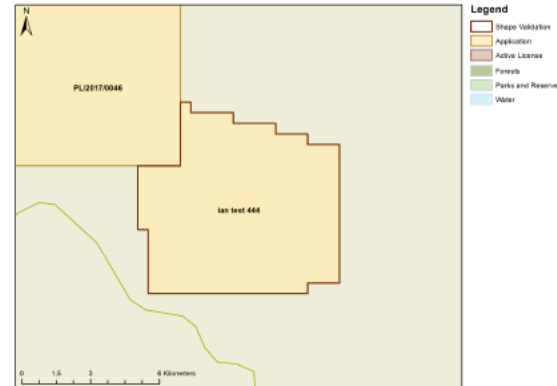
Application Date:	30/11/2017 16:13:33	CR12:	Received and Referenced.
Application Fee Paid:	30/11/2017	Financial Capability:	Accounts in Good standing.
Area Applied:	305.00 Cadastral Blocks	Technical Capability:	Technical Capabilities analysed and approved.
Available Area:	305.00 Cadastral Blocks	Program Supervisor:	Kenyan National Supervisor Approved.
Locality:	Isiolo	Consent:	Consent Received.
Commodities:	Group E: Base and Rare Metals Group	Tax Compliance Certificate:	Received.
Registration:	Received	Valid Prospecting Right:	Referenced.
Work Programme:	Work Programme needs to be more detailed.	Company Directors:	In good standing.
Comment:			
Technical Committee Recommendation:	Recommendation Rejection - Forward to MRB		

The Result Shape shape is: **Valid**

- ✓ Shape conforms to grid (Lat: 15.00 Seconds, Long: 15.00 Seconds)
- ✓ Shape does not have more than maximum number of parts (1 parts)

The Validation Shape shape is: **Valid**

- ✓ Shape conforms to grid (Lat: 15.00 Seconds, Long: 15.00 Seconds)
- ✓ Shape is not larger than maximum area (1500 Cadastral Blocks)
- ✓ Shape is not smaller than minimum area (125 Cadastral Blocks)
- ✓ Shape does not have more than maximum number of parts (1 parts)
- ✓ Shape overlaps 0 licenses
- ✓ Shape overlaps 0 restricted areas
- ✓ Shape validated successfully against map references





Shape Validation Results

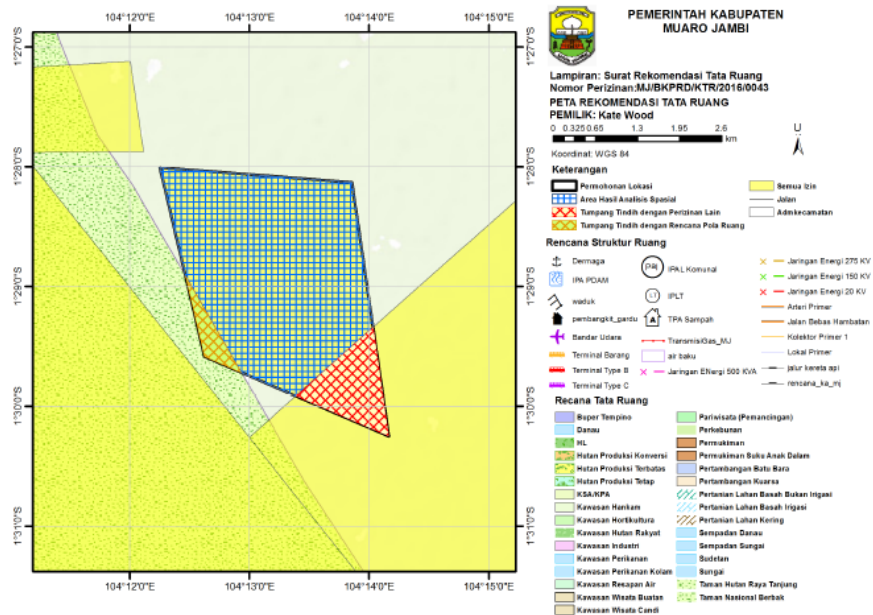
- Example:
- Indonesia Districts: Permit overlap report

Kesesuaian Rencana Tata Ruang

Nomor Perizinan: MJ/BKPRD/KTR/2016/0043
Jenis Perizinan: Kesesuaian Tata Ruang - Perkebunan
Pemilik: Kate Wood
Tanggal Permohonan: 24/08/2016

Area: 9.4838 km²
Provinsi: Jambi
Kabupaten: KAB. MUARO JAMBI
SUBDISTRICT: xxx DESA: yyyy

Hasil Analisis Spasial



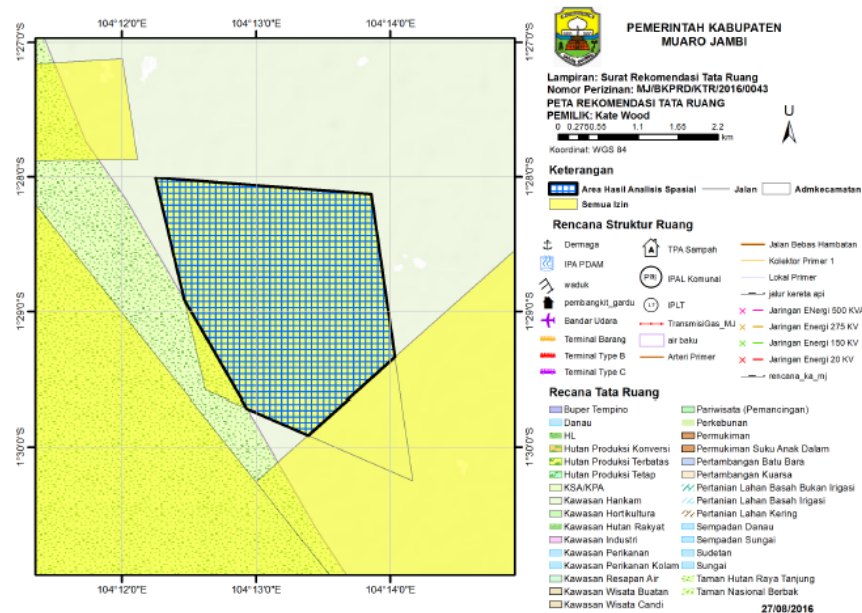
Tumpang Tindih dengan Perizinan Lain:

Nomor	Jenis Perizinan	Status	Tanggal Berakhir	Pemilik	Area Tumpang Tindih
Budi/KTR/01/TES	Kesesuaian Tata Ruang - Perumahan dan Kawasan Permukiman	(Documents Verified & waiting KTR) Dokumen		PT.Budi Oxygen Jaya	9481.1460 Ha

Tumpang Tindih dengan Rencana Pola Ruang:

Kelas Fitur	Kategori	Area Tumpang Tindih	Diizinkan Bersyarat/Dilarang
MJ_SDP_TamanNasionalBerbak	Taman Nasional Berbak	31.4890 Ha	Dilarang

Area Hasil Analisis Spasial



Area yang diizinkan: 8,0338 km²

Koordinat Area Hasil Analisis Spasial:

Bagian	Titik	Bujur	Lintang
1	1	1° 29' 54.80" S	104° 13' 23.19" T
1	2	1° 29' 42.94" S	104° 12' 55.80" T
1	3	1° 28' 54.83" S	104° 12' 27.88" T
1	4	1° 28' 00.35" S	104° 12' 14.98" T
1	5	1° 28' 07.76" S	104° 13' 51.38" T
1	6	1° 29' 20.38" S	104° 14' 01.96" T



Shape Validation Results

- Example:
- Ivory Coast government - Application spatial validation report



Abidjan le 18/12/2016

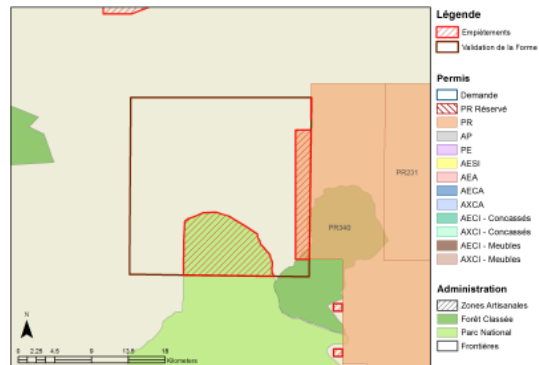
RAPPORT DE VALIDATION DE LA FORME

Société : TEST-AT
 Numéro d'enregistrement de la demande: XPR0016
 Type : Permis de Recherches
 Substance : Or
 Département : Mankono
 Coordonnées géographiques:

Partie	Points	Latitude	Longitude
Partie 1	1	8° 12' 57,19" N	5° 57' 05,73" O
Partie 1	2	8° 12' 57,19" N	5° 51' 17,19" O
Partie 1	3	8° 19' 55,49" N	5° 51' 22,13" O
Partie 1	4	8° 19' 57,94" N	5° 57' 13,15" O
Partie 2	1	8° 12' 00,00" N	5° 59' 00,00" O
Partie 2	2	8° 21' 00,00" N	5° 59' 00,00" O
Partie 2	3	8° 21' 00,00" N	5° 50' 00,00" O
Partie 2	4	8° 12' 00,00" N	5° 50' 00,00" O

Superficie: 136.4334 km²

VALIDATION



Résultats des Validations Spatiales:

Message
La Forme est plus grande que la superficie maximale (400.0000 Kilomètre carré)
La Forme empiète sur 1 permis
La Forme empiète sur 1 zone(s) interdite(s)
La Forme n'est pas Rectiligne

Liste d'Empiètements

Empiètements de Permis:

Code	Type	Statut	Substance	Détenteur de Permis	Superficie de l'Empiètement
PR340	Permis de Recherches	Actif	Or	Lgl Resources Ci Sa	27.8918 km ²

La Forme empiète sur empiètements de zones interdites:

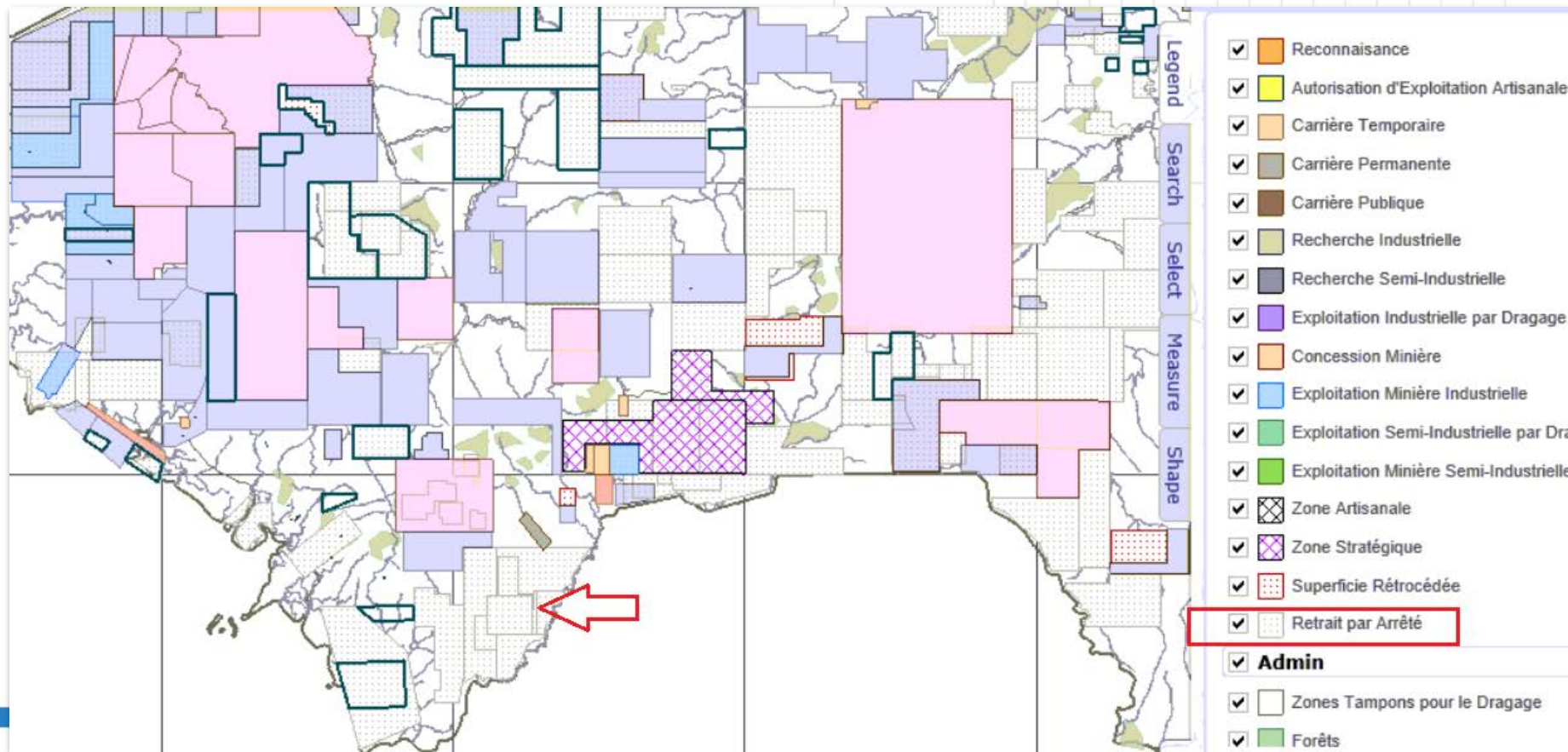
Zones concernées	Nom	Superficie de l'Empiètement	Avertissement / Restriction
Parcs_Nationaux	PN MARAHOUE	67.7065 km ²	Restriction

CONCLUSION : **Rejet de la demande**

Shape Change for Relinquishment

- In many jurisdictions it is a requirement to relinquish part of the license area on renewal
- Area that is relinquished is recorded on a shape change action
- Maps or reports designed to display information about or the areas of relinquishment
- Example: Guinea government
 - When a license is renewed or converted to an operation license, required to relinquish 50% of area
 - Layer included in the map

Shape Change for Relinquishment



Shape Change for Relinquishment

- Example: Ivory Coast government
 - When a license is renewed there may be a relinquishment
 - Percentage of area relinquished determines how much the license holder needs to pay
 - > 25% no fee
 - < 25% fee based on % area relinquished
 - Report showing current shape and area, renewal shape and area plus **Percentage Area Relinquished**

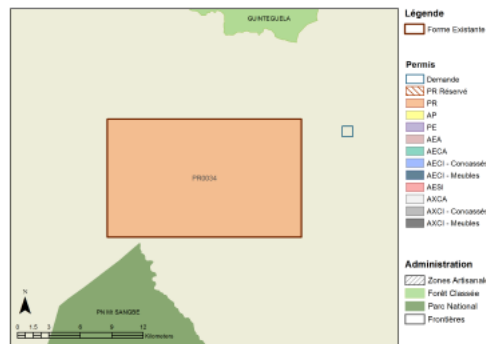


Abidjan le 23/11/2016

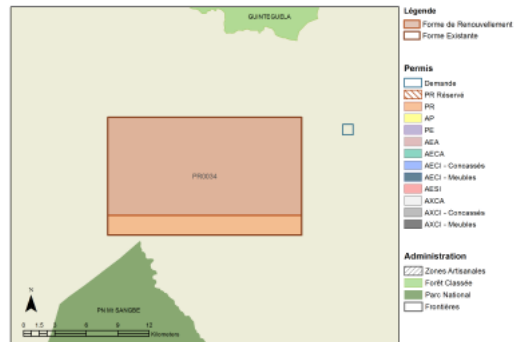
Code du Permis: PR0034
Parties du Permis: Test Carolyn Mining Ltd
Date d'Octroi: 23/11/2016
Date d'Expiration: 22/11/2020

Départements: Touba
Superficie initiale: 203.1253 km²
Superficie du renouvellement: 169.2677 km²
Pourcentage de la réduction: 16.67%

Forme Existante



Forme de Renouvellement





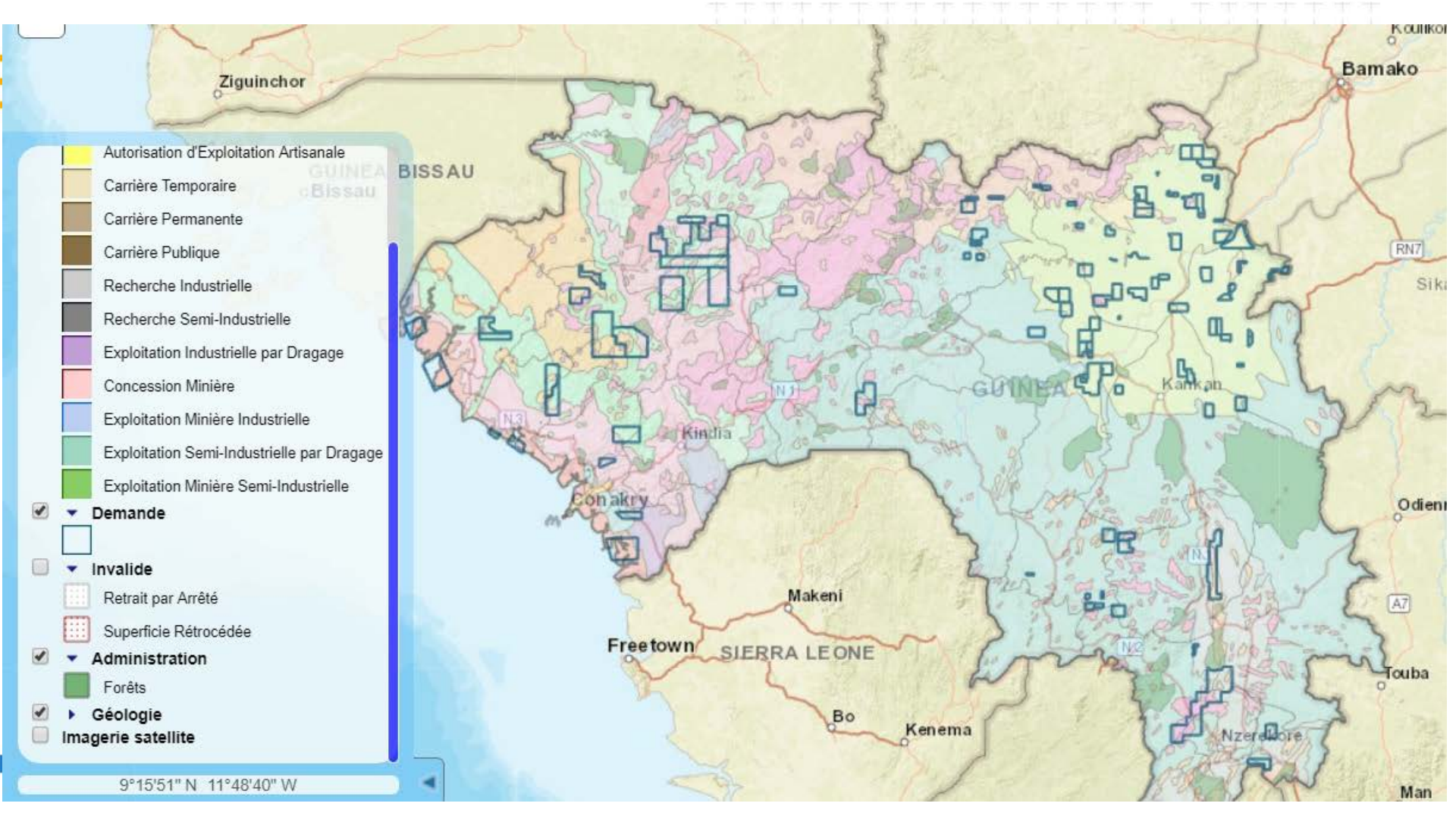
Background Layers



- Various background layers can be added to a map to enhance the visual appeal and usefulness of a map

Examples of background layers in Map portals:

- Geological layer
 - Guinean Government
 - Tanzanian Government
 - Ugandan Government



Ziguinchor

Bamako

BISSAU

GUINEA
Bissau

GUINEA

Kankan

Kindia

Conakry

Makeni

Free town

SIERRA LEONE

Bo

Kenema

Nzerendo

Touba

Man

- Autorisation d'Exploitation Artisanale
- Carrière Temporaire
- Carrière Permanente
- Carrière Publique
- Recherche Industrielle
- Recherche Semi-Industrielle
- Exploitation Industrielle par Dragage
- Concession Minière
- Exploitation Minière Industrielle
- Exploitation Semi-Industrielle par Dragage
- Exploitation Minière Semi-Industrielle

▼ Demande

-

▼ Invalide

- Retrait par Arrêté
- Superficie Rétrocédée

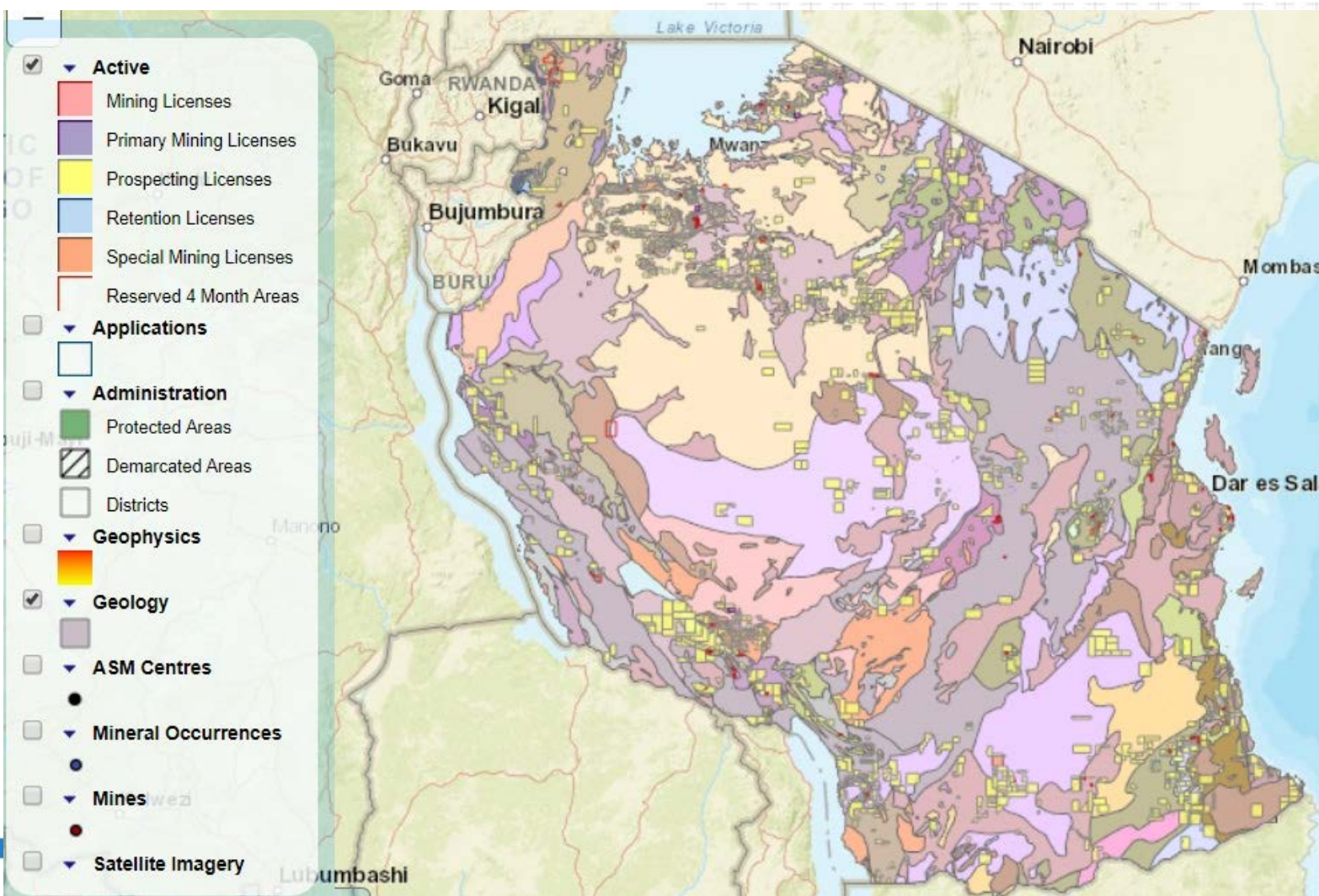
▼ Administration

- Forêts

▶ Géologie

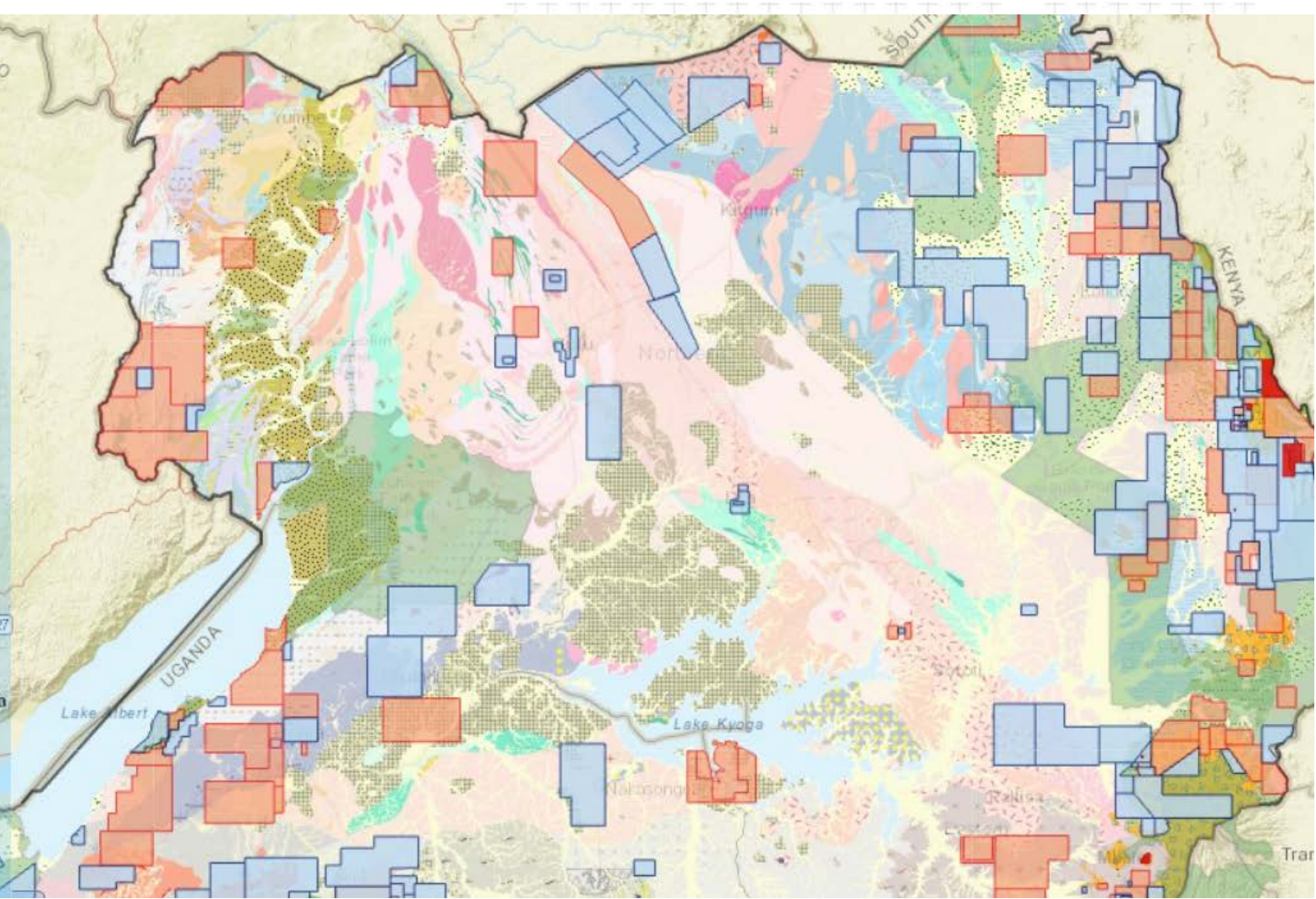
- Imagerie satellite

9°15'51" N 11°48'40" W





- Active**
 - Mining Leases
 - Location Licences
 - Exploration Licences
 - Retention Licences
- Applications**
 -
- Administration**
 - Protected Areas
- Geology**
 -
- Mineral Occurrences**
 - Rare Earth Elements
 - Lithium
 - Asbestos
 - Clay
 - Diatomite
 - Feldspar
 - Granite Gneiss
 - Graphite



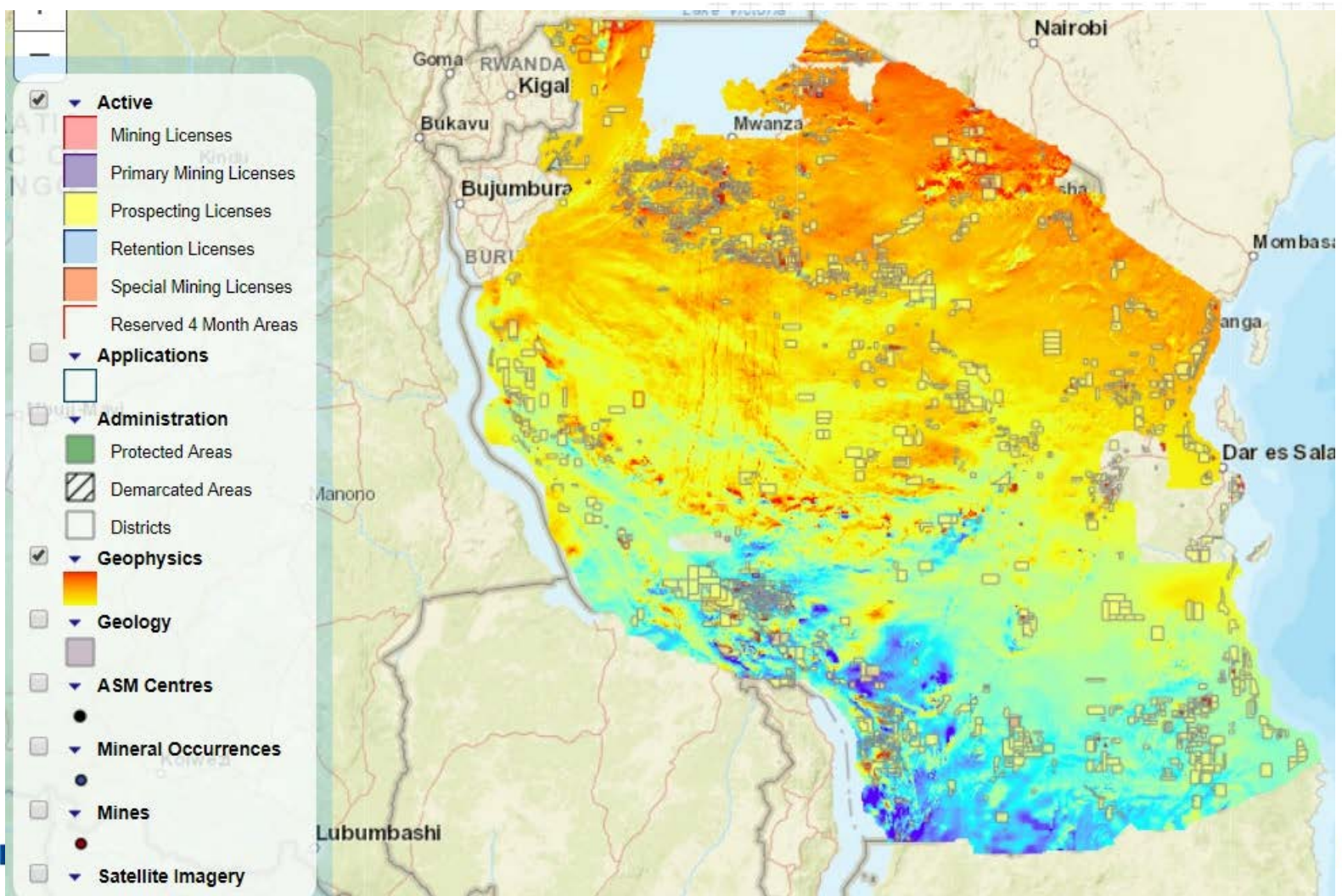


Background Layers



Example of background layer in Map portals:

- Geophysical layer - Tanzanian Government





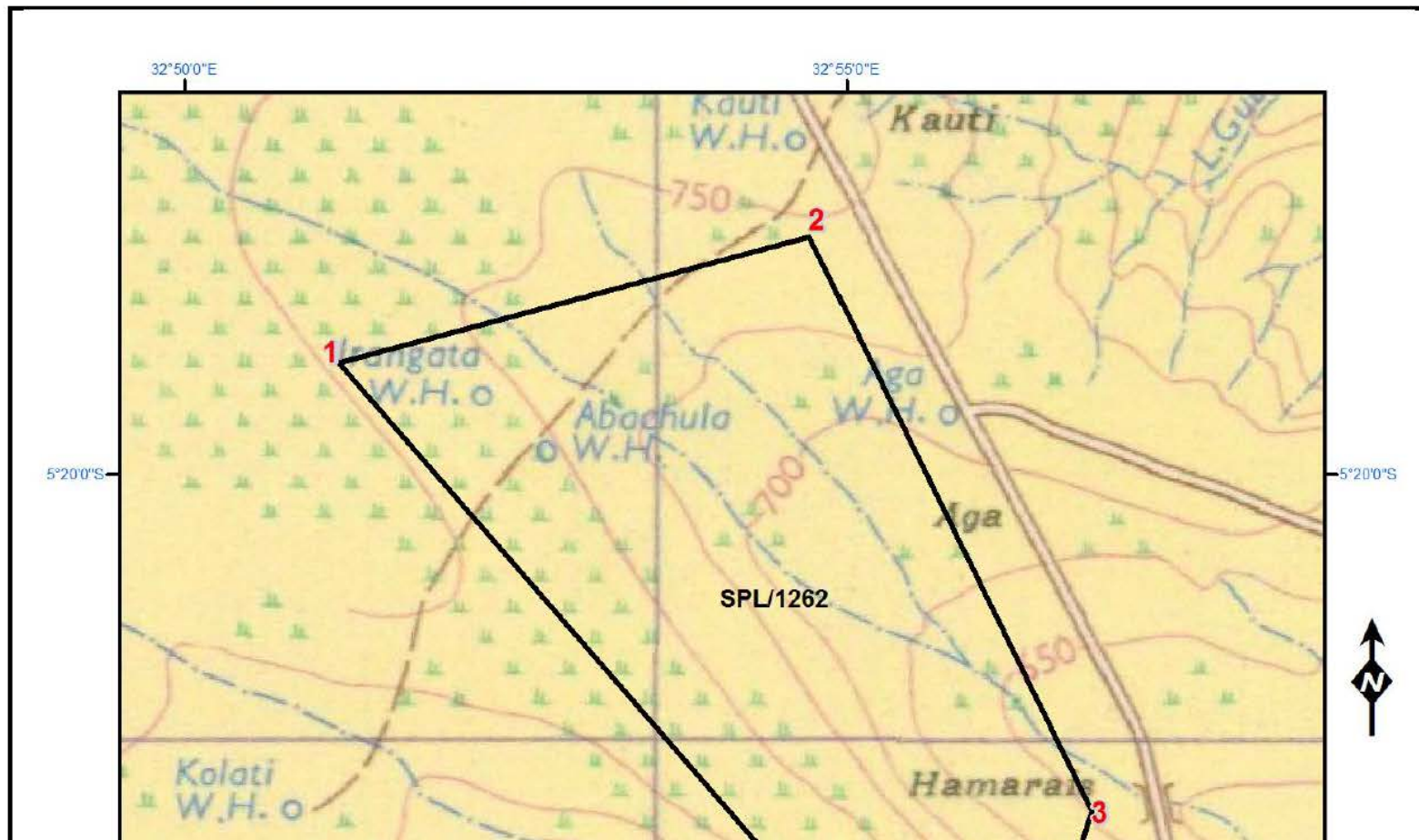
Background Layers



Example of background layers used in map reports/documents:

- Topographic map - used by Ugandan government in granting document

Special Prospecting License No. SPL/1262





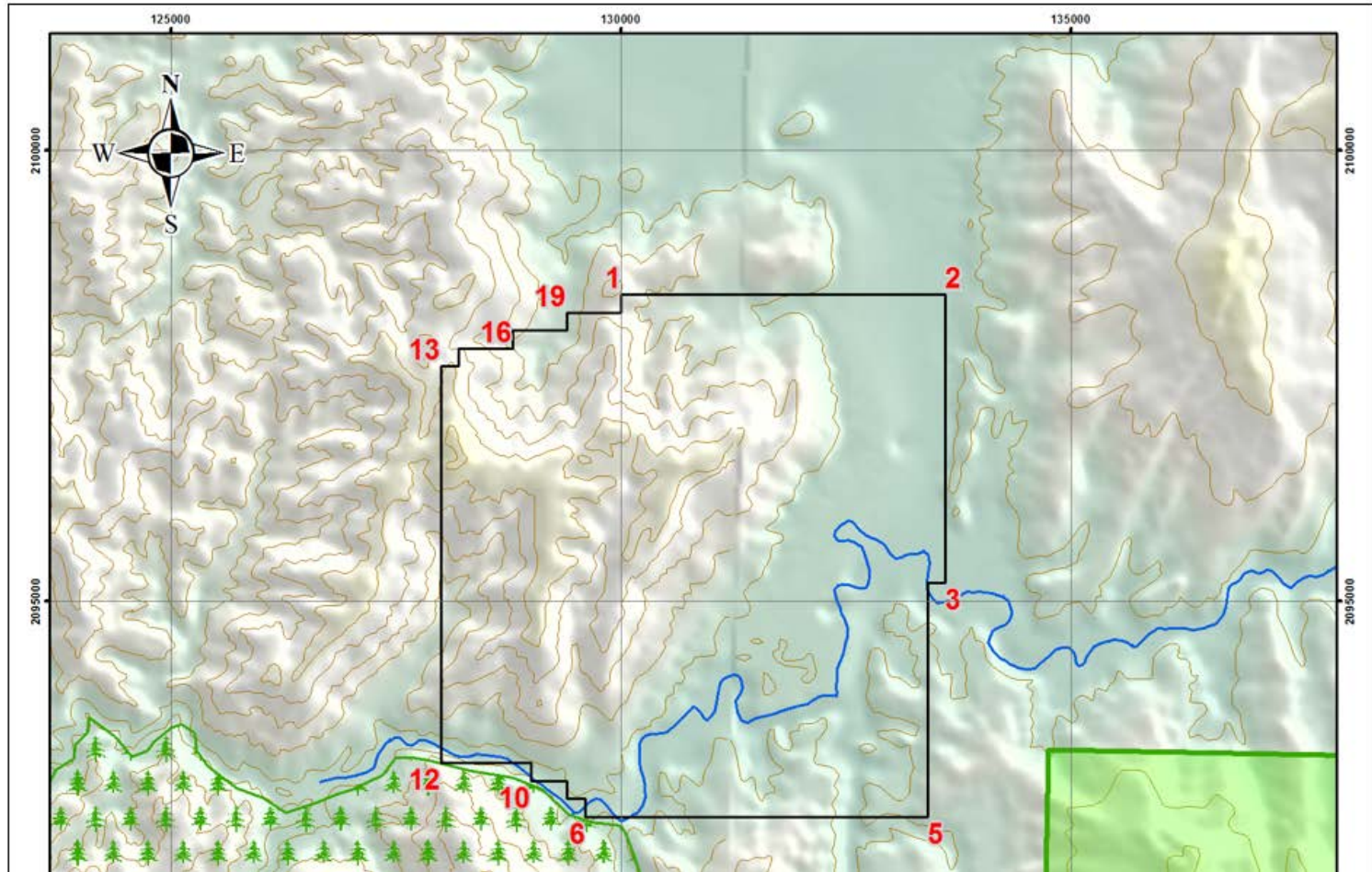
Background Layers



Example of background layers used in map reports/documents:

- Digital Elevation Model showing relief of surface - used by Laos government

ແຜນວາດຂອບເຂດເນື້ອທີ່ອະນຸຍາດສໍາປະທານເພື່ອການຊອກຄົ້ນ, ສໍາຫຼວດ ຂອງ ການທົດສອບທາງກວ້າງຂອງພື້ນຊຸດດິນບໍ່ແຮ່ (Spatial Mining Test Co., Ltd)





Background Layers



Example of background layers used in map reports/documents:

- Spatial Development Plans - used by some of the Indonesian District government offices



**PEMERINTAH KABUPATEN
MUARO JAMBI**

Lampiran: Surat Rekomendasi Tata Ruang
Nomor Perizinan: BKPRD/KTR/KJW
Tanggal:

PETA REKOMENDASI TATA RUANG
PEMILIK: Kate Wood

0 0.075 0.15 0.3 0.45 0.6
Kilometers



Koordinat: WGS 84

Keterangan

— Jalan □ Admkecamatan

Rencana Struktur Ruang

- Dermaga
- IPA PDAM
- waduk
- pembangkit_gardu
- Bandar Udara
- Terminal Barang
- Terminal Type B
- Terminal Type C
- TransmisiGae_MJ
- air baku
- TPA Sampah
- Jaringan Energi 500 KVA
- Jaringan Energi 275 KV
- Jaringan Energi 150 KV
- Jaringan Energi 20 KV
- Arteri Primer
- Jalan Bebas Hambatan
- Kolektor Primer 1
- Lokal Primer
- jalur kereta api
- rencana_ka_mj

Rencana Tata Ruang

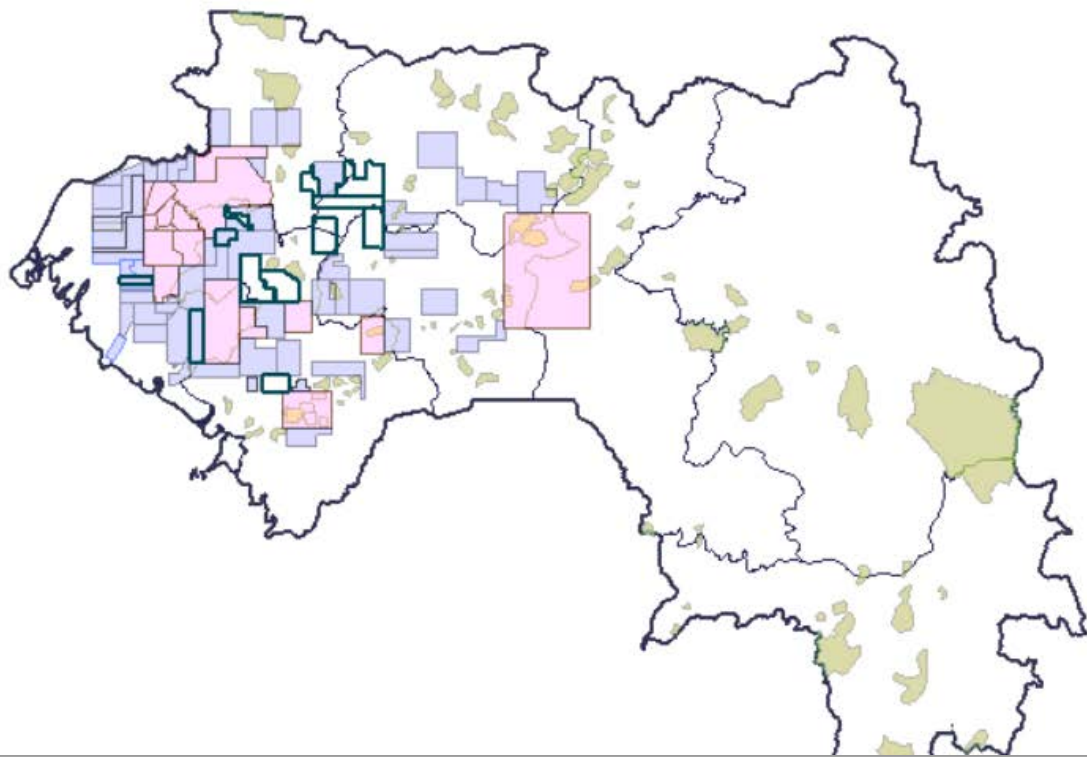
- Buper Tempino
- Danau
- HL
- Hutan Produksi Konversi
- Hutan Produksi Terbatas
- Hutan Produksi Tetap
- KSA/KPA
- Kawasan Hankam
- Kawasan Hortikultura
- Kawasan Hutan Rakyat
- Kawasan Industri
- Kawasan Perikanan
- Kawasan Perikanan Kolam
- Kawasan Resapan Air
- Kawasan Wisata Buatan
- Kawasan Wisata Candi
- Pariwisata (Pemancingan)
- Perkebunan
- Permukiman
- Permukiman Suku Anak Dalam
- Pertambangan Batu Bara
- Pertambangan Kuarsa
- Pertanian Lahan Basah Bukan Irigasi
- Pertanian Lahan Basah Irigasi
- Pertanian Lahan Kering
- Sempadan Danau
- Sempadan Sungai
- Sudetan
- Sungai
- Taman Hutan Raya Tanjung
- Taman Nasional Berbak



Commodity Focused Maps

- Maps designed to only show licenses which are associated with specific commodities
- Example: Guinea Government
 - Separate Map Services and Map Print templates to show different commodities eg Bauxite, Gold etc

Commodity Maps



Legend

Search

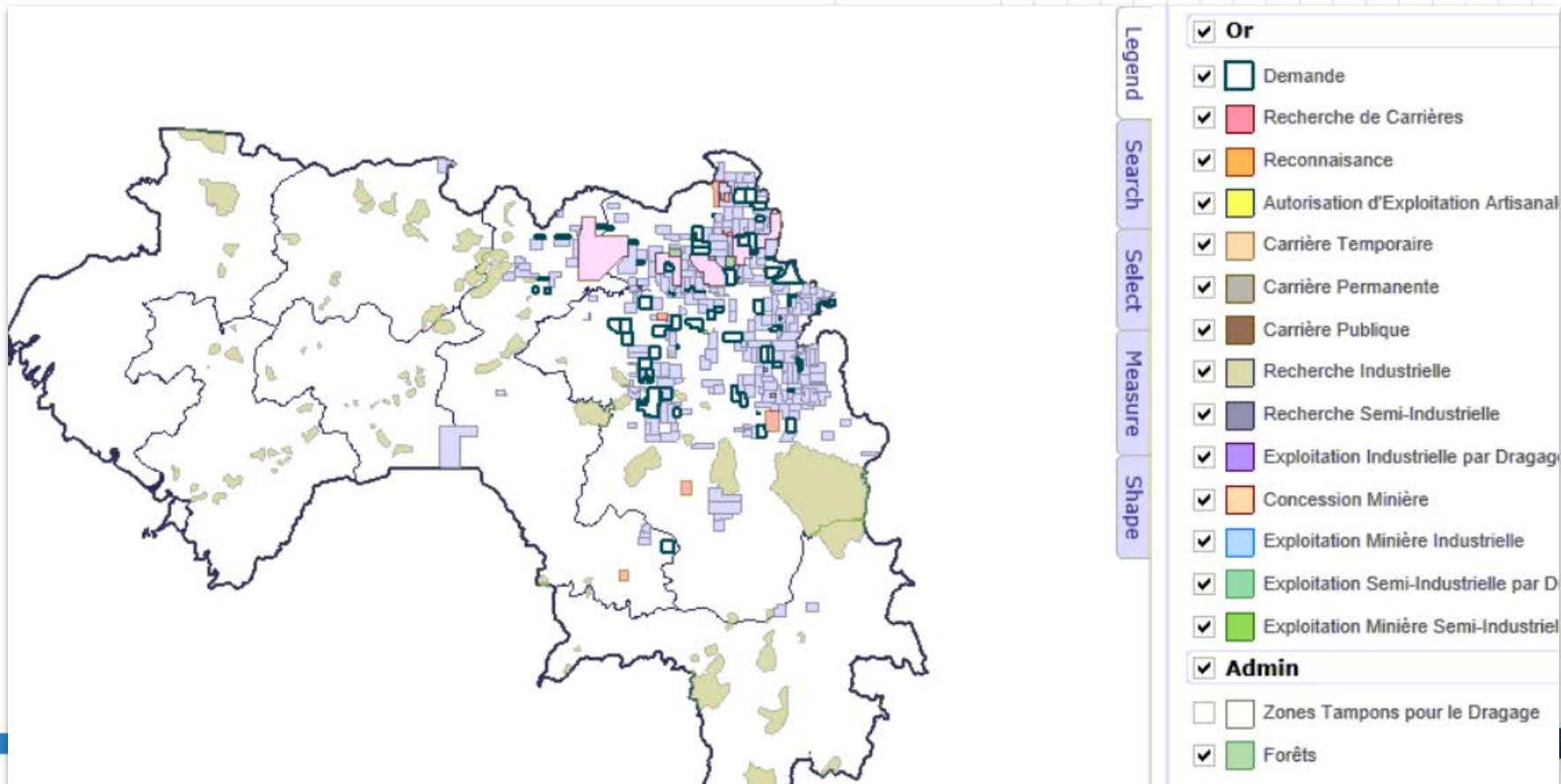
Select

Measure

Shape

- Bauxite**
-  Demande
-  Recherche de Carrières
-  Reconnaissance
-  Autorisation d'Exploitation Artisan
-  Carrière Temporaire
-  Carrière Permanente
-  Carrière Publique
-  Recherche Industrielle
-  Recherche Semi-Industrielle
-  Exploitation Industrielle par Drag.
-  Concession Minière
-  Exploitation Minière Industrielle
-  Exploitation Semi-Industrielle par
-  Exploitation Minière Semi-Industr
-  Forêts
-  Hydrographie
-  Région

Commodity Maps



République de Guinée

Permis Bauxite

Légende

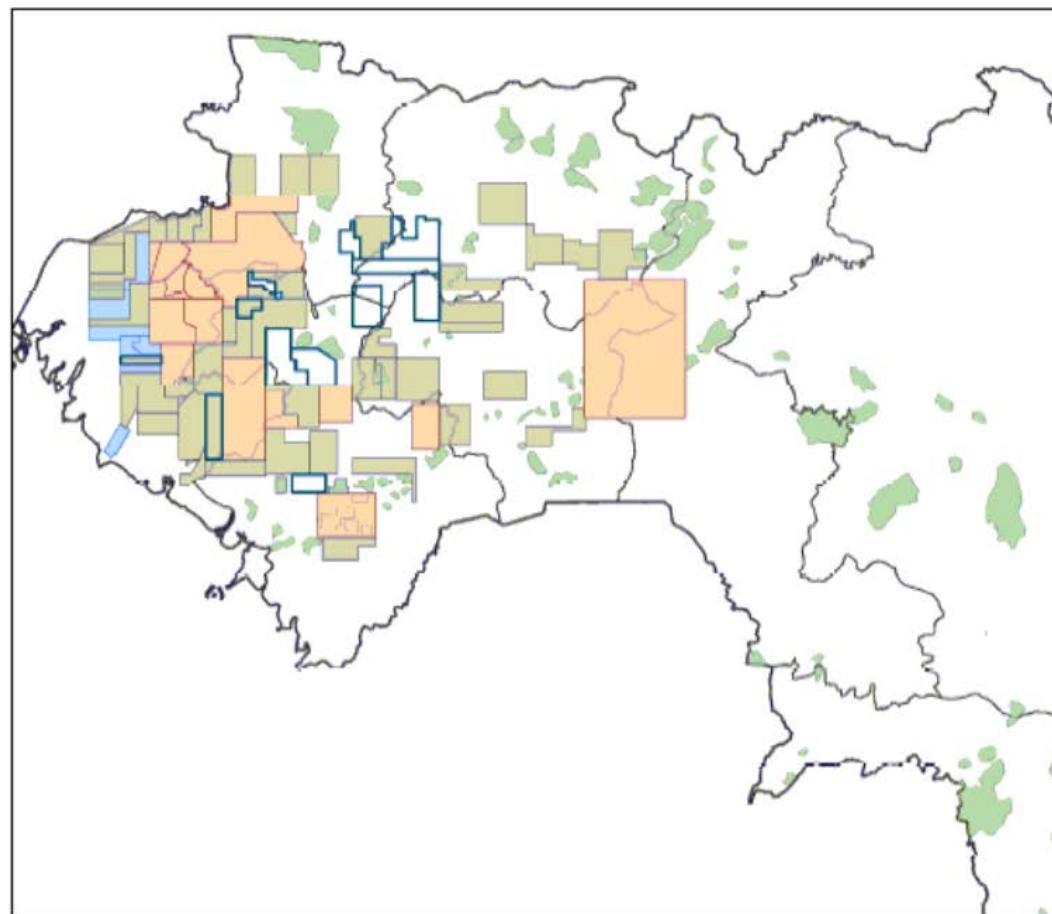
-  Demande
-  Recherche Industrielle
-  Concession Minière
-  Exploitation Minière Industrielle
-  Forêts

Système de Coordonnées
GCS Dabola 1981

Datum
Dabola 1981



0 40 80 160 Kilomètres





Links on the Map Portal



- Links to:
 - Show a **list of Documents** uploaded against the license in the Landfolio back office system
 - Option to open and view the documents
 - Provides an easy way for the public to access documents that should be available in the public domain



Links on the Map Portal

- Links to:
 - Generate a Report for the selected license
 - Provides an easy way for the public to download details of the license or agreement into report format

Demo...

1600292

Multiple Results

Agreements: CA-DIM-09

Confidentiality Agreement

Active

Dimension Mining Pty Ltd, Exploration Resources Ltd

Commodities:

Start Date: 22/02/2008

End Date: 21/02/2018

Area: 2327753 Hectare

[View Full Report](#)

[View Full list of Documents](#)

Tenements: E 1600292

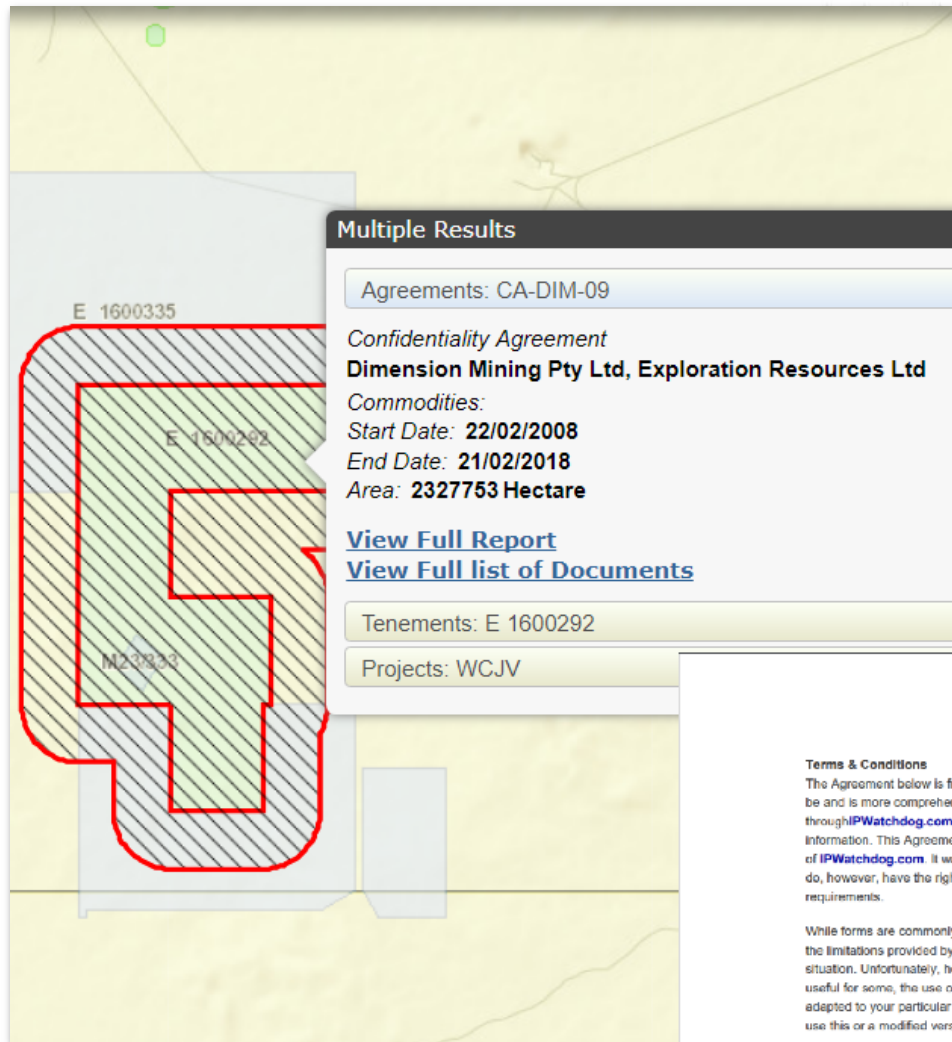
Projects: WCJV

Tenements (1)

E 1600292

Active

*OZ Minerals Carrapateena Pty Ltd (50%),
Exploration Resources Ltd (50%)
Exploration Licence*



Documents for CA-DIM-09

CA-DIM-09.pdf
[View Document](#)

Terms & Conditions

The Agreement below is free and provided for your use as you see fit and at your discretion. It is intended to be and is more comprehensive than either of the Simple Confidentiality Agreements available for free through [IPWatchdog.com](#), and is intended to be used when both parties wish to disclose confidential information. This Agreement was created by [Gene Quinn](#), a patent attorney and founder of [IPWatchdog.com](#). It was created for a particular situation and may not be appropriate for all users. You do, however, have the right to copy this Agreement and modify it as necessary to meet your needs and requirements.

While forms are commonly used and available elsewhere around the Internet it is important to understand the limitations provided by forms. A form, by its very nature, is previously written, usually to address a typical situation. Unfortunately, however, in law there are few typical situations. While this form will be useful for some, the use of a form cannot and does not supplant the need for competent legal advice adapted to your particular situation. IPWatchdog, Inc. and Gene Quinn personally accept no liability if you do use this or a modified version of this Agreement.

Agreement Summary Report

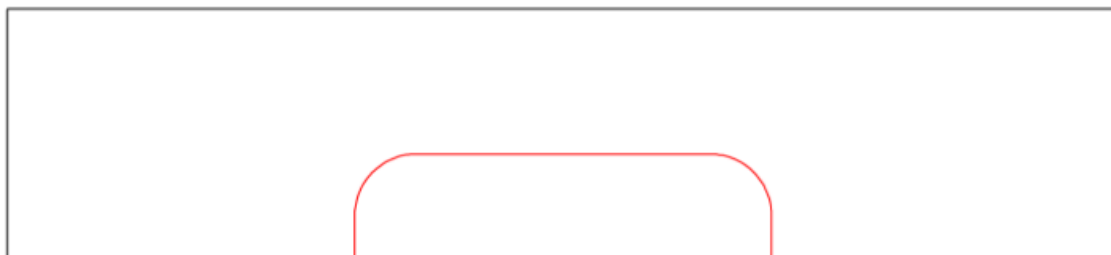
Corporate Demo



Generated on 08/Feb/2018

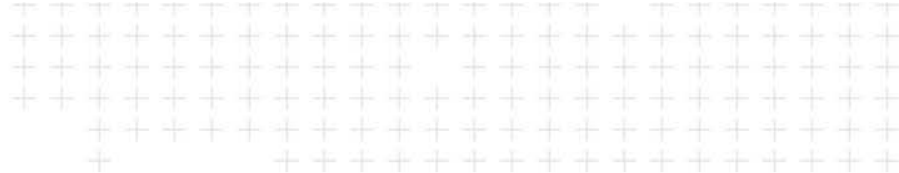
Owner:
Agreement Type: Confidentiality Agreement
Region: Australia
Code: CA-DIM-09
Commodity:
State:
Area: 2,327,753.00 Ha

Status: Active
Signed Date: 22/Feb/2008
Start Date: 22/Feb/2008
End Date: 21/Feb/2018





The End



Thank-you!