










Landscape Analysis Tool (LAT) User Guide























January 28, 2014

Revision History

Version Date	Author	Description
August 25, 2010	Vendor	First version
August 27, 2010	Vendor	Updates to screenshots
November 23, 2010	Vendor	<ul style="list-style-type: none">• Appendix A - Introduction<ul style="list-style-type: none">◦ Shapefile extensions must be in lowercase• Appendix A - Proposed Activity Size Limitations<ul style="list-style-type: none">◦ Specified the area/length limitations• Appendix A - Table 1<ul style="list-style-type: none">◦ Resized table• Appendix A - Table 2<ul style="list-style-type: none">◦ Updated Disposition/Activity Type Codes
May 30, 2011	Vendor	<ul style="list-style-type: none">• Updated Appendix A to include “Using Multipart Features”• Section 4.4 – “Edit Project Information” lists permissible characters in the “Industry Company Name” and “Industry Contact Name”• Change “Activity Type” to “Purpose Type”
August 30, 2011	Vendor	<ul style="list-style-type: none">• Add in two new MSL Purpose Types in Appendix A – Table 2
February 28 2012	Vendor	<ul style="list-style-type: none">• Add in new road allowance types and LAT News Panel
January 16, 2013	Vendor	<ul style="list-style-type: none">• Correct images and tables
March 25, 2013	Vendor	<ul style="list-style-type: none">• LAT Changes Include - MSL Sump and Table 2 Purpose Types Renamed
November 29, 2013	Vendor	<ul style="list-style-type: none">• Updated screenshots for AER changes• Update Appendix A, Table 1, Table 2
December 9, 2013	Vendor	<ul style="list-style-type: none">• Remove MSL Sump from Table 2

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Acknowledgement:

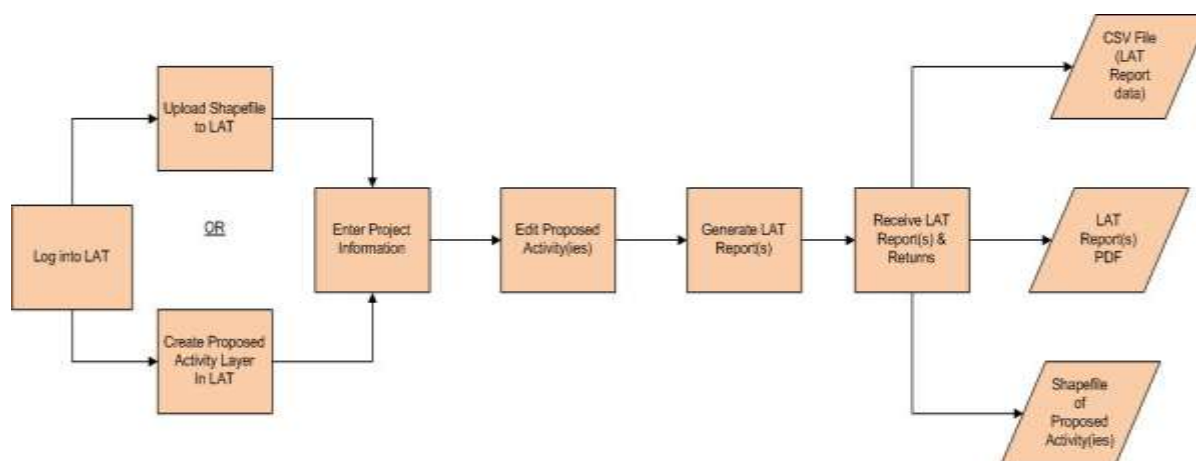
Portions of the LAT were constructed using licensed GeoCortex Essentials technology, developed by Latitude Geographics Group Ltd. Portions of this LAT User Guide made liberal use of the contents of the GeoCortex Essentials On-line Help and Tutorial System for content. We greatly appreciate the ability to use this information and acknowledge their contribution to this document.

1.0 Quick Start: How do I get LAT Reports for Proposed Activities?

The LAT Report Workflow

The workflow for generating LAT Reports is shown in the diagram below and includes the following basic steps:

- Logging into the LAT web site;
- Entering Proposed Activity locations into the LAT using the “Upload Shapefile” tool, or by adding new activities interactively in the LAT;
- Entering Project Information;
- Editing the locations of Proposed Activities (add, move, modify, or delete);
- Generating LAT Report(s);
- Receiving the LAT Report(s) and associated returns by email.



The following sections provide detail on a step by step approach for getting LAT Reports from the LAT.

Step 1 - Enter the LAT login URL in your internet browser.

https://securexnet.env.gov.ab.ca/lat_login.html

You will be directed to the SRD Applications SecureXNET login page for the Landscape Analysis Tool. All existing EDS (Electronic Disposition System) users will automatically be able to access the LAT. If you are an EDS user and are unable to access the LAT, please contact the EDS Help Desk at the following:

EDS central number 780-427-3570 and the following email address, eds.support@gov.ab.ca

If logging in for a new session –

Select the following option:

1 – Please proceed to... [the Landscape Analysis Tool](#)

If you are not logged in to SecureXNET, you will be redirected to log in.

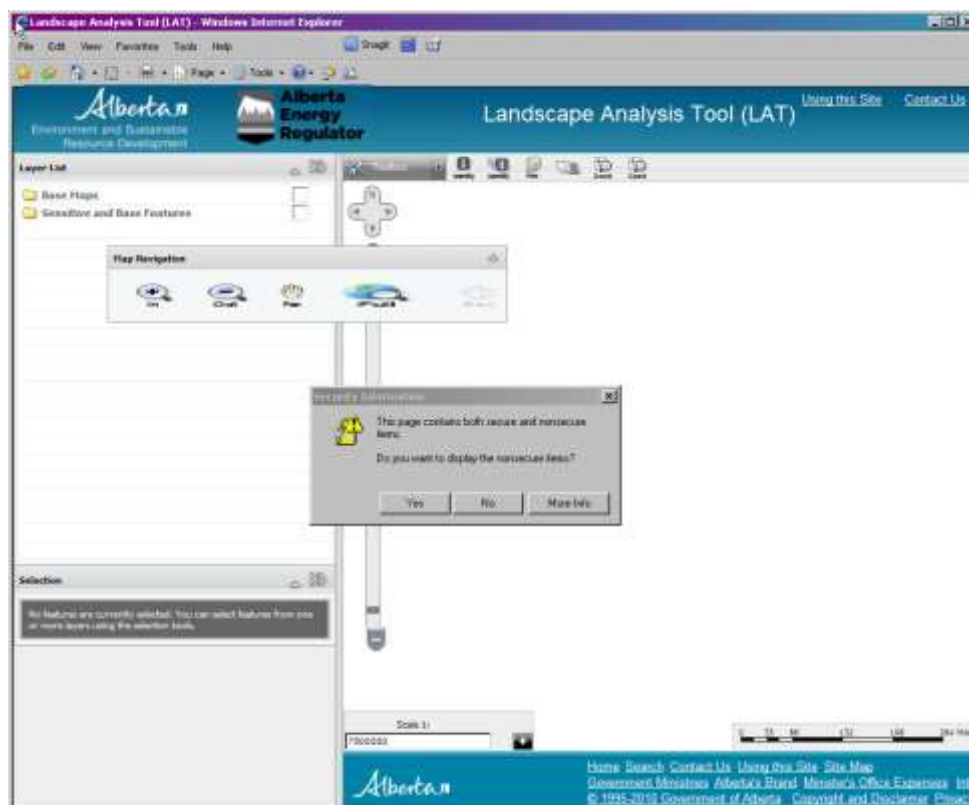


Step 2 - Login into SecureXNET and launch the LAT Tool User Interface.

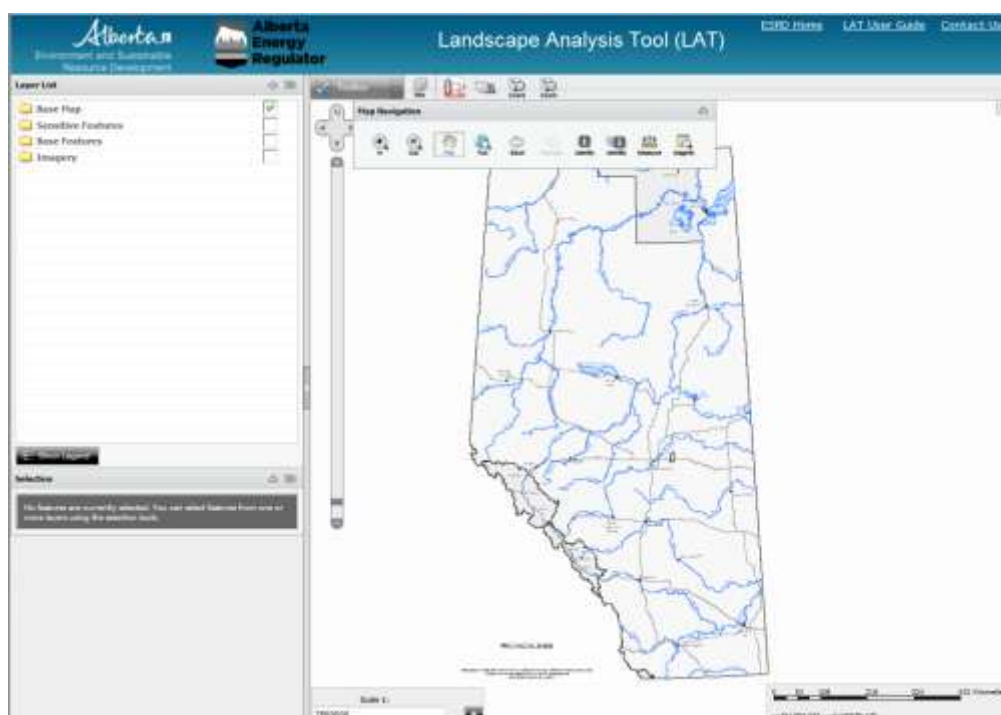
Enter in your **GOA user id**, **Password** and **Account Type**. If successful, you will be directed to the LAT user interface. If you are unable to login, please contact your system or network administrator.



On some IE browsers, when the LAT Tool is loading, you will be prompted by your browser whether to display unsecure items. Please select “Yes”.



This will launch the LAT Tool within your browser and will display the provincial base map.



Step 3 - Entering Proposed Activities into the LAT:

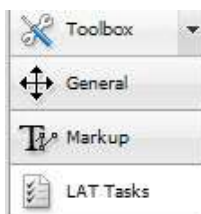
There are **two methods** to enter Proposed Activity data into LAT. Data can be entered in by:

- Uploading a shapefile containing proposed activities;
- Adding proposed activities in the LAT using the editor tool.

Step 3A - How to upload a shapefile:

*****Note:** The LAT requires all shapefiles to be uploaded to conform with the specifications contained within **Appendix A – LAT Shapefile Specification for Proposed Activities**. Please refer to this specification to ensure that your shapefile will be processed. Failure to comply with this specification will result in incomplete and invalid LAT Reports.

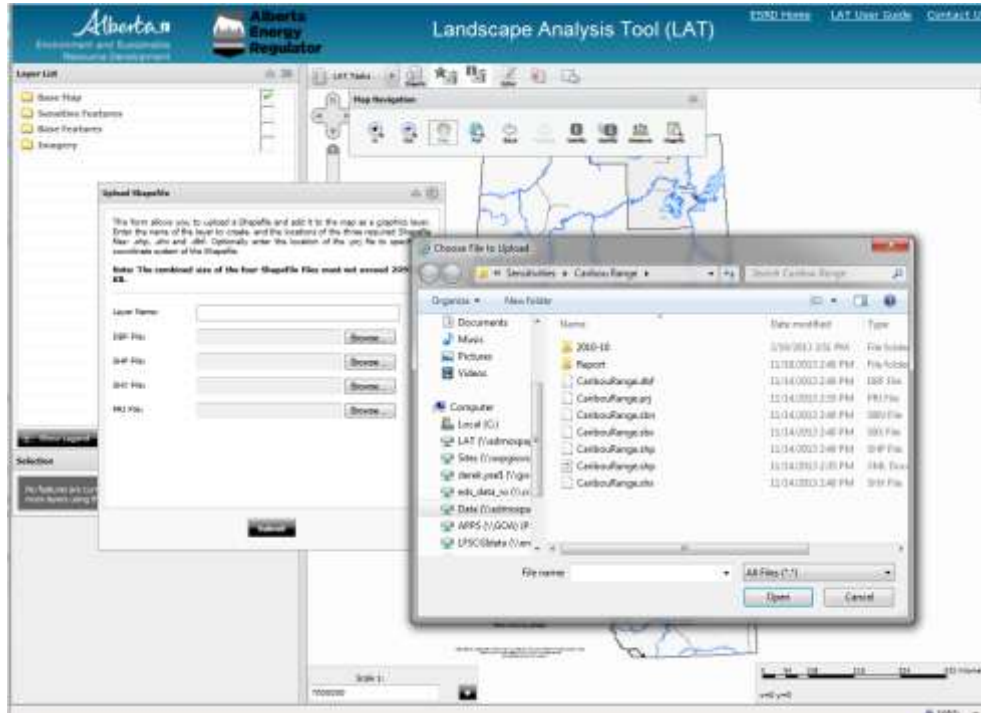
From the LAT Toolbox Dropdown at the top of the Toolbox menu bar – Select the “**LAT Tasks**” Toolbox:



Select “**Upload Shapefile**” Tool from the LAT Tasks Toolbox:



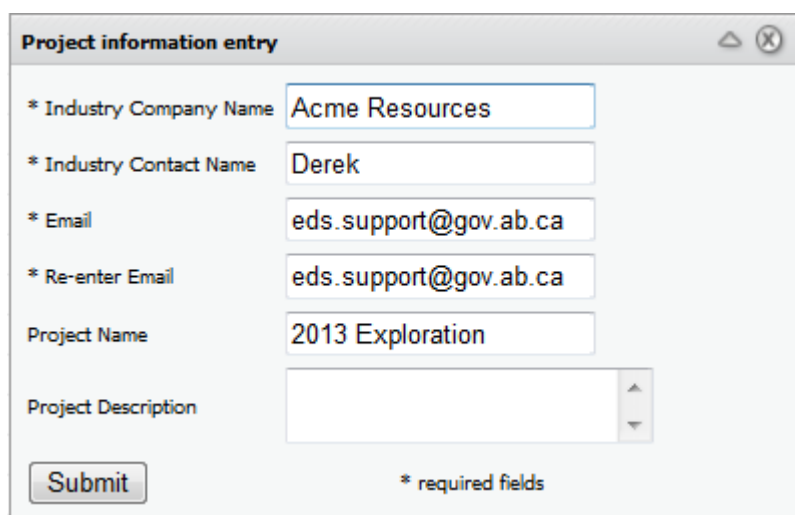
On the Upload Shapefile form, enter the name of your Proposed Activity Layer. Browse to the location on your workstation of the shapefile containing proposed activities. Enter in the location of the shapefile .dbf, .shp, .shx, .prj components.



Select “**Submit**” on the “Upload Shapefile” form. You will then be prompted to enter project information and render the colour of the proposed activity layer, if you do not like the default rendering chosen by the software.

Step 3B - Entering project information:

Enter project information into Project Information data entry form. The required fields (**marked with a ***) are used within the LAT Report and are used to email the LAT Report and other returns to the user. Once the required and optional fields are entered, select “**Submit**”.



The 'Project information entry' dialog box contains the following fields and controls:

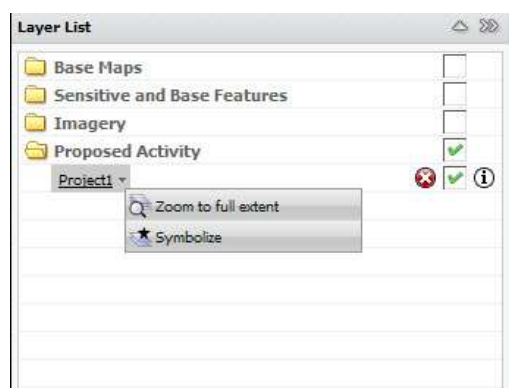
- * Industry Company Name: Text box with 'Acme Resources' entered.
- * Industry Contact Name: Text box with 'Derek' entered.
- * Email: Text box with 'eds.support@gov.ab.ca' entered.
- * Re-enter Email: Text box with 'eds.support@gov.ab.ca' entered.
- Project Name: Text box with '2013 Exploration' entered.
- Project Description: Text area (empty).
- Submit button.
- * required fields (text label).

At any time, Project Information can be modified using the **“Edit Project Information”** tool contained in the LAT Tasks toolbar.

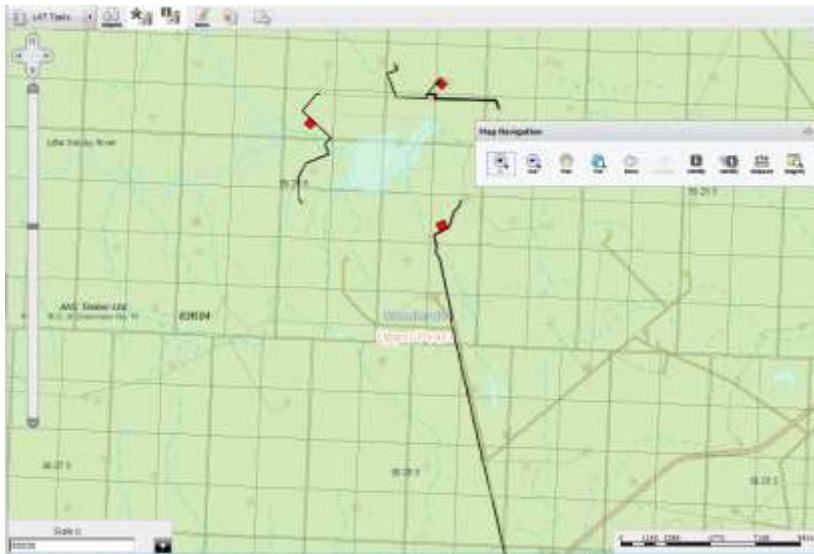


Zoom to the extent of the Proposed Activity Layer (Upload Shapefile), to view it:

In the Layer List box, **click on the small triangle** next to your Proposed Activity layer name (Project1, in the example below), and select **“Zoom to Full Extent”** from the layer actions.



The map display will zoom to the full extent of the shapefile uploaded.



Step 3C - How to create a Proposed Activity Layer from scratch.

Select “Create a new Proposed Activity Layer” from the LAT Tasks Toolbox:



You will then be prompted to enter the name of a new Proposed Activity layer. Select “**Submit**” once you have entered the name.

A screenshot of a dialog box titled 'Create a new proposed activity layer'. It has a close button (X) in the top right corner. Below the title, there is a text input field labeled 'Layer name'. At the bottom left of the dialog, there is a 'Submit' button.

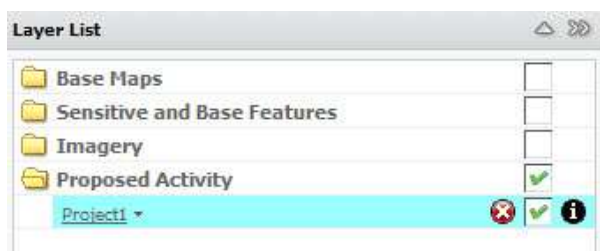
You will then be prompted to enter Project Information. Refer to Section 4.4 “Edit Project Information” for instructions on how to enter Project Information. Once the required and optional Project Information fields are entered, select “**Submit**”.

Once successfully submitted, the name of the Proposed Activity layer will appear as a layer in the Proposed Activity folder contained in the Layer List box. Navigate to the area of interest to enter in Proposed Activities using any of the zoom, pan, zoom to ATS, or zoom to co-ordinate tools provided by the LAT.

Step 3D - Entering new Proposed Activities into the LAT by using the Editor Tools:

Zoom into the area of interest where you wish to add new proposed activities using any of the zoom, pan, zoom to ATS, or zoom to co-ordinate tools provided by the LAT.

To add a new proposed activity, make the layer active, by highlighting the Proposed Activity layer in the Layer List. Select the **i** icon next to the layer and it will be highlighted in blue. This indicated that the Proposed Activity layer is now available for editing.



From the LAT Tasks toolbar, select the “**Editor**” tool.



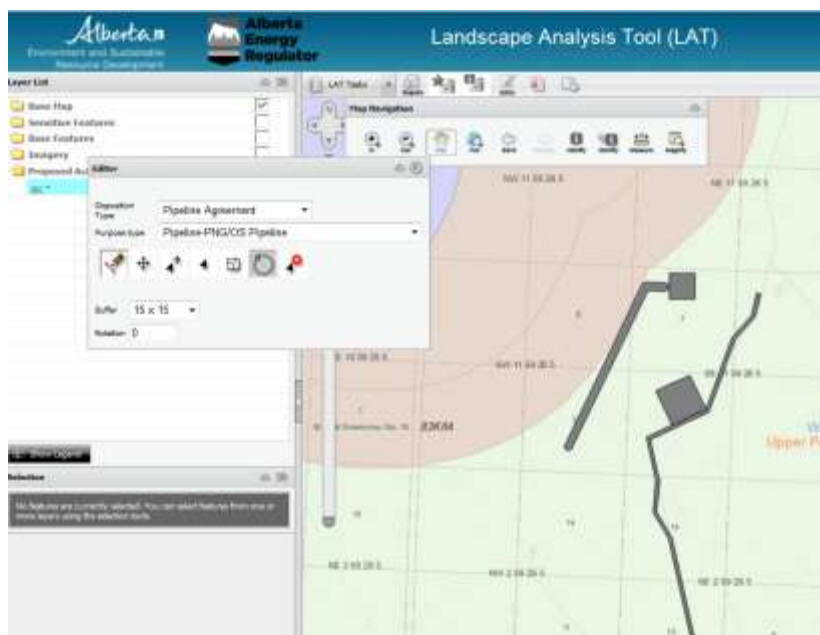
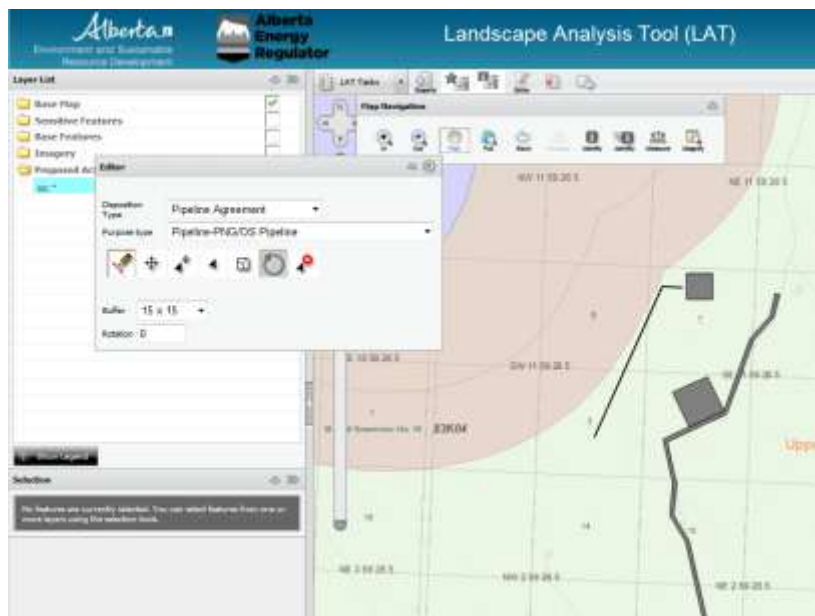
You will be presented with the “**Editor**” tool form. This form provides the capability to add Proposed Activities by adding either a point, line or polygon feature that represents a Proposed Activity. To add a new activity, select the Disposition Type and Purpose Type from the drop-downs in the Editor.

The image shows the 'Editor' tool form. It has a title bar with the word 'Editor' and standard window controls. Below the title bar, there are two dropdown menus. The first is labeled 'Disposition Type' and has 'Mineral Surface Lease' selected. The second is labeled 'Purpose type' and has 'PNG or OS Facility-Oil/Bitumen Battery site' selected. Below these dropdowns, there is a list of other purpose types: 'PNG or OS Facility-Compressor Site', 'PNG or OS Facility-Gas Processing Plant', 'PNG or OS Facility-Gas Processing Plant- Sulphur Recovery', 'PNG or OS Facility-Custom Treating Facility', 'PNG or OS-Satellite site', 'Drilling Waste Disposal-Remote Sump', 'Wellsite-Injection', 'Wellsite-PNG Production (MW)', and 'Wellsite-PNG Production (SW)'. To the left of the dropdowns, there is a small icon of a pencil and a red dot.

In the case of a MSL or Mineral Surface Lease activity (point feature), select the MSL dimensions from the drop-down box, as well as the rotation angle, if necessary.

The image shows the 'Editor' tool form with additional fields. Below the 'Purpose type' dropdown, there is a row of icons: a pencil and red dot, a crosshair, a left arrow, a right arrow, a square, a circular arrow, and a red X. Below these icons, there are two input fields. The first is labeled 'Buffer' and has '110 x 110' selected. The second is labeled 'Rotation' and has '50' entered.

To place a Pipeline Agreement activity (line feature), select the disposition and activity sites, proposed right of way buffer distance, angle of rotation (if required) in the Editor menu box. Position the mouse cursor within the map display and draw the proposed activity by clicking the start point, and vertices (bends) of the proposed activity using single mouse clicks. Double click the mouse to draw the end point of the activity.



The Editor menu also provides functions to select/unselect a proposed activity, move an activity, modify a vertex point of a proposed activity, rotate the proposed activity and to delete the shape. Refer to Section 4.4 “Edit Proposed Activities” of this document for details on how to select, move, modify or delete a Proposed Activity.

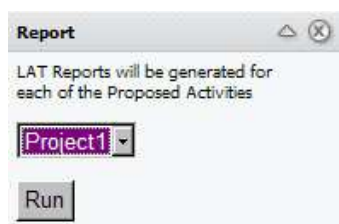
Step 4 - Generating my LAT Report(s) and associated returns:

Once you have completed adding your Proposed Activity(ies) to the LAT, you can generate LAT Reports and associated returns for all activities in your Proposed Activity Layer. To generate a LAT Report and returns, do the following:

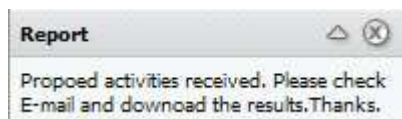
From the LAT Tasks toolbar, select the “**Generate LAT Report**” tool.



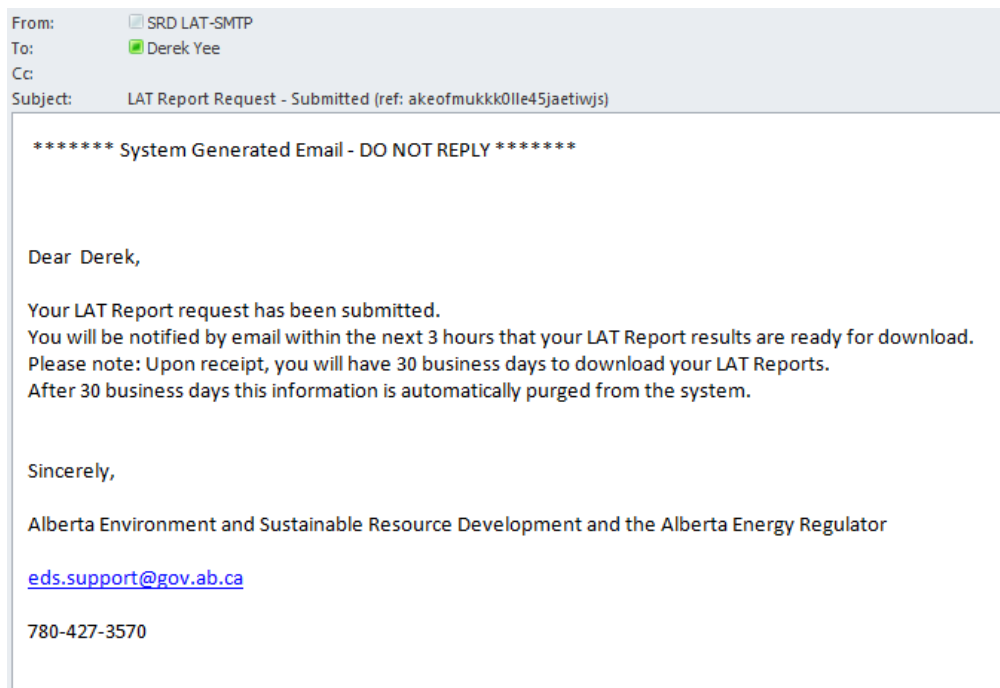
You will then be prompted to select the Proposed Activity Layer that you wish to generate LAT Reports for. Select the required Proposed Activity data layer from the drop-down list in the form, and select “**Run**”.



When the LAT Report Generator has successfully run, you will receive a notification to indicate that your activities were received and that your results are being e-mailed to the e-mail address entered into the Project Information form. Please check your e-mail to receive your results. “**Exit**” the Report notice form to receive your results.



You will also receive an e-mail notification from the system indicating that your LAT Report request has been submitted. An example of the email is shown below:

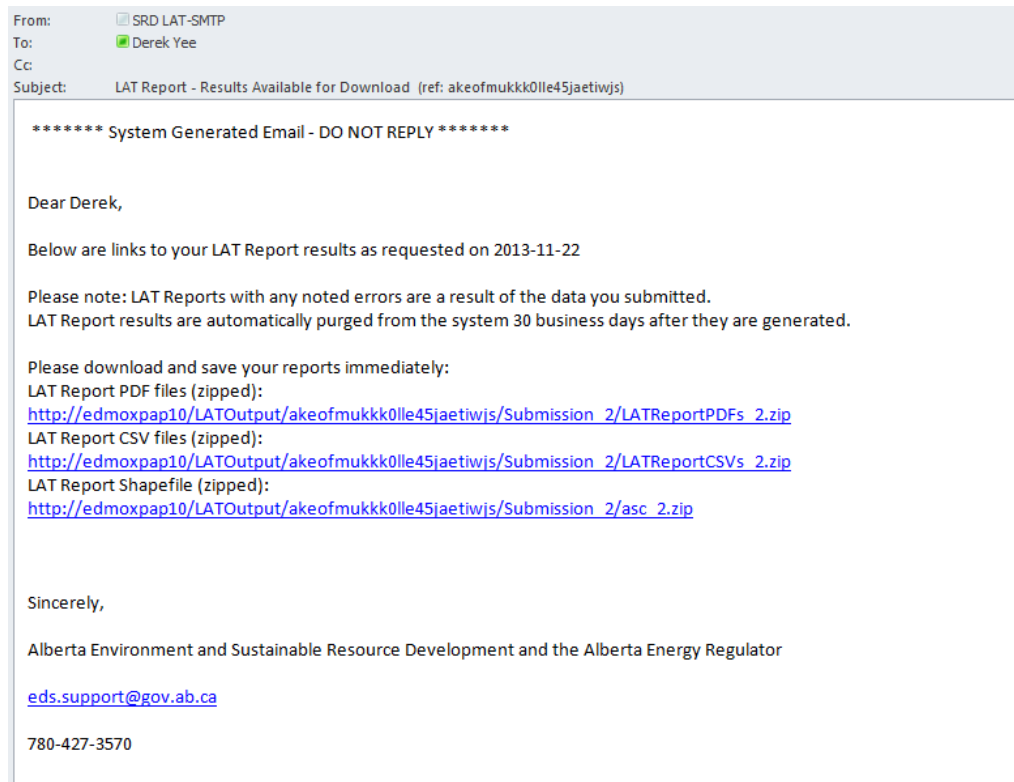


Step 5 - Receiving and viewing my LAT Report(s) and other returns:

Upon completion of the LAT Report generation, an e-mail confirmation in the format below will be sent to you.

The e-mail confirmation contains hyperlinks to:

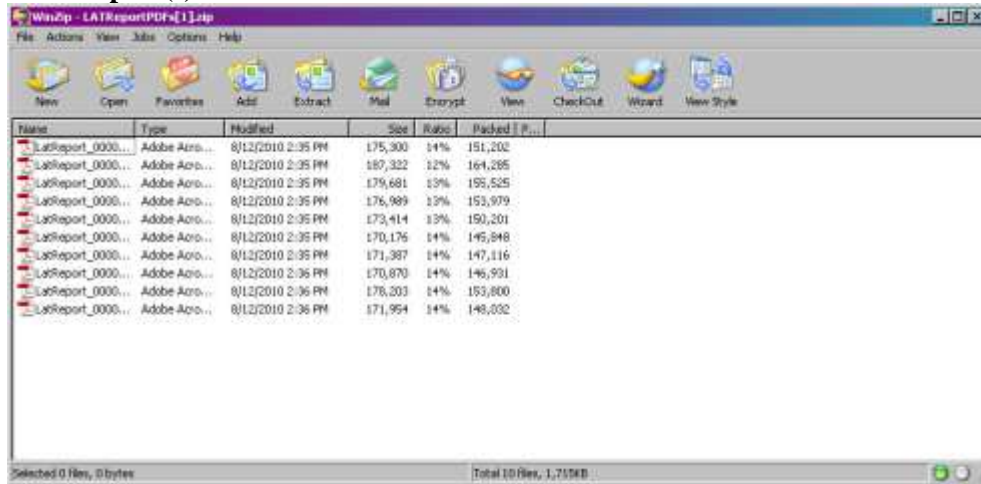
- The location of a zipped file containing your LAT Report(s).
- The location of a zipped file containing the LAT Report data in a CSV – (comma separated values) format. This format can be used to enter and analyse the LAT Report data in a spreadsheet, access database or software that accepts this format.
- The location of a zipped file containing a shapefile of the proposed activities used to generate the LAT Report (s).



Select the appropriate hyperlink(s) to download the zip file(s) and unzip files using your unzip file utility of choice.

The following screen shots show samples of the LAT Report and associated returns:

LAT Report(s):



Name	Type	Modified	Size	Ratio	Packed	P...
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	175,300	14%	151,202	
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	187,322	12%	164,285	
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	179,681	13%	156,525	
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	176,989	13%	153,979	
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	173,414	13%	150,201	
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	170,176	14%	145,848	
LatReport_0000...	Adobe Acro...	8/12/2010 2:35 PM	171,387	14%	147,116	
LatReport_0000...	Adobe Acro...	8/12/2010 2:36 PM	170,870	14%	146,931	
LatReport_0000...	Adobe Acro...	8/12/2010 2:36 PM	178,203	14%	153,800	
LatReport_0000...	Adobe Acro...	8/12/2010 2:36 PM	171,954	14%	148,032	

The LAT Report is in a .pdf file format and can be viewed and save within a .pdf viewer such as Adobe Acrobat Viewer.

The LAT Report cover page presents the LAT number, date, time, project information, disposition and purpose type.



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

00000002AA

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Time: 08:59 18 AM	
LAT Number:	00000002AA
LAT Date:	2013-11-27
Project Name:	
Project Description:	
Disposition Type:	Mineral Surface Lease (MSL)
Purpose Type:	PNG or OS Facility-Gas Processing Plant- Sulphur Recovery (FACGPLTSU)

Note to Applicants:

It is the applicant's responsibility to determine if an EAP application will be submitted to the regulating body as "Standard" or "Non-Standard". Applicants should complete a thorough review of EAP processes, IS&G documents and LAT Reports generated prior to making this determination.

- "Standard" EAP application submissions are those where the applicant chooses to meet all of the associated Approval Standards identified in the LAT Report submitted as part of the application and aligns those standards to the associated supplements and the application plan.
- "Non-Standard" EAP application submissions are those where the applicant chooses not to meet, or is not able to meet, one or more of the associated Approval Standards identified in the LAT Report submitted as part of the application, or the requirements of Reservations identified within the application supplement. Non-standard interim application submissions require the inclusion of a completed Non-standard Mitigation Supplement.

The information provided within the LAT Tool is a spatial representation of features provided for land use planning. The accuracy of these layers varies depending on the resource value being represented. Site visits, wildlife surveys and ground-truthing is required to ensure that the applicant will meet the applicable Pre-Application requirements, Approval Standards, Operating Conditions and Best Management Practices of the Integrated Standards and Guidelines.

The listing of the Geo-administrative Base Features upon which the Proposed Activity is located appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Base Features			
Crown Ownership:	Provincial/Untitled	FMU:	W15
Green/White Area:	Green Area	FMA:	ANC Timber Ltd.
Municipality:	M.D. of Greenview No. 16		
Higher Level Plans:		Provincial Grazing Reserve:	
		Rocky Mountain Forest Reserve:	
	Berland Smoky	PLUZ Areas:	
Provincial Sanctuaries			
Wildlife Corridors:		Game Bird:	
Restricted Area:		Seasonal:	

The listing of the Sensitive Features upon which the Proposed Activity is located appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Sensitive Features

Wildlife	
Burrowing Owl Range:	<input type="text" value="No"/>
Caribou Zones:	<input type="text" value="Yes"/>
Colonial Nesting Birds:	<input type="text" value="No"/>
Eastern Short-horned Lizard Range:	<input type="text" value="No"/>
Endangered and Threatened Plants Ranges:	<input type="text" value="No"/>
Greater Sage Grouse Habitat and Buffer:	<input type="text" value="No"/>
Greater Sage Grouse Leks and Buffer:	<input type="text" value="No"/>
Grizzly Bear Zone:	<input type="text" value="Yes"/>
Key Wildlife and Biodiversity Areas:	<input type="text" value="No"/>
Mountain Goat and Sheep Areas:	<input type="text" value="No"/>
Ord's Kangaroo Rat Range:	<input type="text" value="No"/>
Other Sensitive and Endangered Species:	<input type="text" value="No"/>
Piping Plover Waterbodies:	<input type="text" value="No"/>
Sensitive Amphibians Ranges:	<input type="text" value="No"/>
Sensitive Raptor Range:	<input type="text" value="No"/>
Sensitive Snake Species Range:	<input type="text" value="No"/>
Sharp-tailed Grouse Leks and Buffer:	<input type="text" value="No"/>
Sharp-tailed Grouse Survey:	<input type="text" value="No"/>
Special Access Area:	<input type="text" value="No"/>
Swift Fox Range:	<input type="text" value="No"/>
Trumpeter Swan Waterbodies/Watercourse:	<input type="text" value="No"/>
Water	
Proximity to Waterbody:	Industry will ensure that the Watercourse/Waterbodies standards and conditions as defined within the Integrated Standards and Guidelines are followed. To ensure these setbacks and buffers are addressed and maintained, it is recommended that a pre-site assessment occur.
Grassland and Parkland Natural Region:	
Grassland and/or Parkland Natural Region:	<input type="text" value="No"/>

The listing of Quarter Sections in which the Proposed Activity is located appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

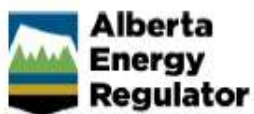
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Quarter	Section	Township	Range	Meridian	Road Allow.	Sensitive Features by Quarter Section
NE	11	59	26	5		Caribou Range, Grizzly Bear Zone
SE	11	59	26	5		Caribou Range, Grizzly Bear Zone

* The Road Allow.column indicates there is a Road Allowance that may have one of the following values:

1. RS=South
2. RW=West
3. RI=Intersection (SW segment)
4. A blank value indicates no Road Allowance.

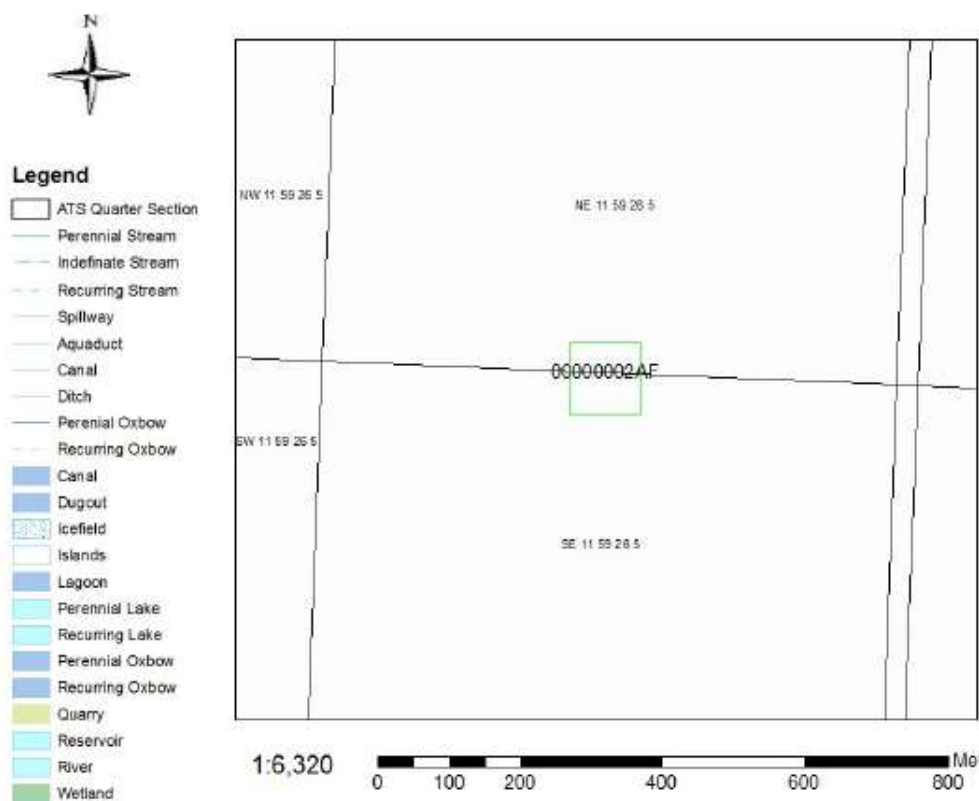
A map image of the Proposed Activity appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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The listing of applicable Provincial Approval Standards and Operating Conditions for the disposition appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Provincial Section Approval Standards and Operating Conditions

Approval Standards

100.1.1.

Location of proposed developments shall be sited as follows, unless alternative siting can be supported by Regulated Industry Standards:

- c. New well sites and pipeline installations shall:
 - i. Use existing, unoccupied, disturbances, regardless of quarter or section lines, that are within 250 metres of the proposed disposition boundary, or;
 - ii. Adjoin to all existing occupied industrial dispositions and/or existing linear disturbances that are within 250 metres of the proposed disposition boundary, regardless of quarter or section lines, unless doing so results in greater disturbance (i.e., footprint hectares), and/or negative environmental impacts (e.g., impacting sensitivities)

100.1.3

Locate wellsites and roads outside of natural forest openings (> 10 hectares) such as meadows when planning development activities, unless justifiable extra-ordinary conditions require alternative siting and are supported by Regulated Industry Standards.

100.1.4

The following wellsite sizes shall apply, unless alternative sizing can be supported by Regulated Industry Standards:

- a. Single rig sites shall not exceed 110 metres x 100 metres or equivalent area (1.10 hectares), except stratigraphic test wells which shall not exceed 80 metres x 100 metres or equivalent area (0.8 hectares).
- b. Double/Triple rig sites with less than 5 metres of elevation difference from any corner to the well centre shall not exceed 120 x 120 metres or equivalent area (1.44 hectares).
- c. Double/Triple rig sites with greater than 5 metres of elevation difference from any corner to well centre shall not exceed 130 x 130 metres or equivalent area (1.69 hectares).
- d. Horizontal well pad sites shall not exceed 130 metres x 130 metres or equivalent area (1.69 hectares).
- e. Multi-well pad sites shall not exceed 130 metres x 130 metres or equivalent area (1.69 hectares) for the first well, up to 0.72 hectares for the second well centre; and up to 0.20 hectares for each additional well centre. Total site size shall not exceed 3.5 ha of equivalent area.
- f. Single-well pads (with existing facilities) may be upgraded to a multi-well pad providing it is only extended up to 0.72 hectares to accommodate the second well centre; and up to 0.20 hectares for each additional well centre. Approval is required for these upgrades. Total site size shall not exceed 3.5 ha of equivalent area.

100.1.5

The difference in elevation from well centre to any corner of the wellsite shall not exceed 10 metres of cut/fill, unless alternatives can be supported by Regulated Industry Standards.

The listing of the applicable Approval Standards and Operating Conditions based upon sensitive features affected by the proposed activity appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Sensitivity Section Approval Standards and Operating Conditions

Caribou Range

Approval Standards

100.9.2.1

Initiate activity as early as possible in the winter to limit late winter activities. New site preparation or construction shall not be initiated between February 15th and July 15th, with the following exceptions:

- a. Site preparation or construction initiated on a disposition before February 15th can continue until adverse ground conditions are encountered. Site preparation must be at least 50% completed prior to February 15th.
- b. Well tie-in activities commenced before February 15th can continue until adverse ground conditions are encountered.
- c. All wellsites or pipeline installations accessed using Class V routes can be initiated at any time (including after February 15th) provided ground conditions are favourable, and may continue until adverse ground conditions are encountered.
- d. All activities planned within 100 metres of existing arterial all-weather roads can be initiated at any time (including after February 15th) provided ground conditions are favourable, and may continue until adverse ground conditions are encountered.

100.9.2.5

Sites (e.g. plant sites, sumps) shall be constructed within 100 metres of an existing arterial all-weather permanent access.

Operating Conditions

200.9.2.1

No legumes are to be seeded for any re-vegetation.

Grizzly Bear Zone

Approval Conditions

100.9.3.6

Sites (e.g. plant sites, sumps) shall be constructed within 100 metres of an existing arterial all-weather permanent access.

Operating Conditions

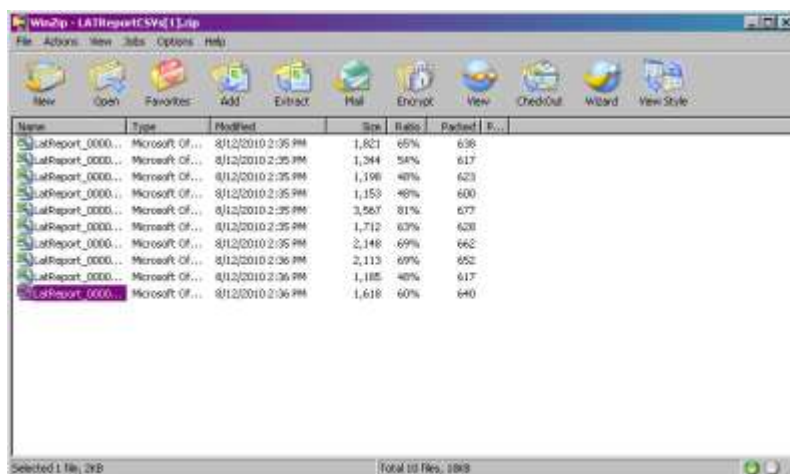
200.9.3.1

No legumes are to be seeded for any re-vegetation.

200.9.3.2

CSV File(s) containing LAT Report data:

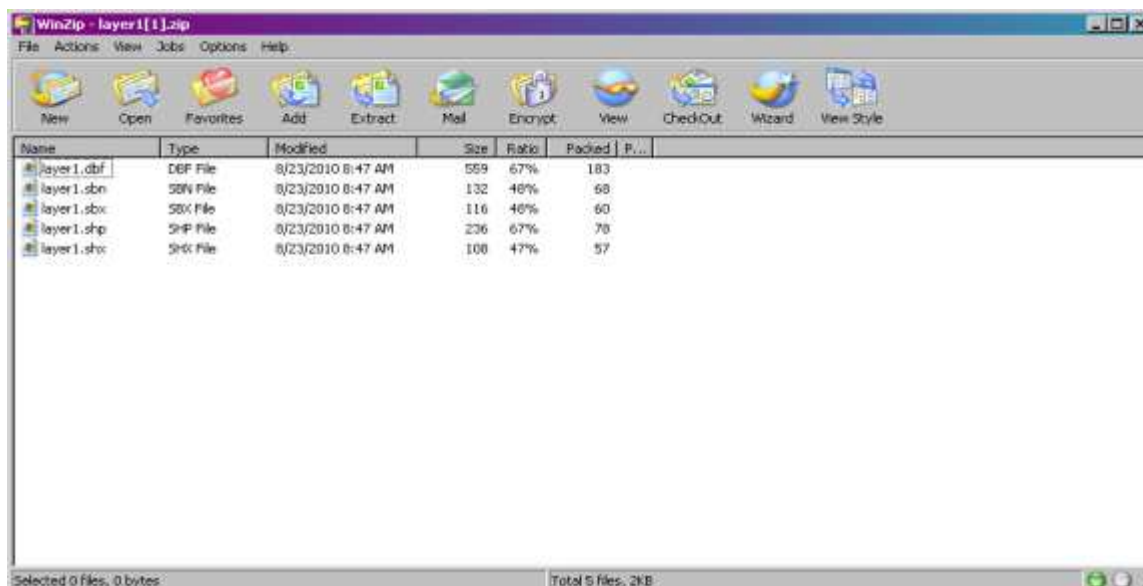
This is a zipped file containing the LAT Report data in a CSV – (comma separated values) format. This format can be used to enter and analyse the LAT Report data in a spreadsheet, access database or software that accepts this format.



LAT Report CSV file opened within an Excel spreadsheet:

	A	B	C	D	E	F	G	H
1	LATNumber	DateStr	TimeStr	CompanyN	ContactNa	EmailAddress	ProjectName	ProjectDesc
2	000000232D	5/18/2011	13:07:55 PM	Companv	Derek	eds.support@aov.ab.ca		

Zip file of the Proposed Activity Layer associated with the LAT Report(s):



2.0 Getting Started

2.1 Logging into the LAT

To start the Landscape Analysis Tool (LAT), you must first log into the Alberta Sustainable Resource Development (ASRD) Secure XNET login page. To login, you will require a:

- **GOA user id;**
- **Password;**
- **Account Type.**

You must also be a member of the LAT user group to be authenticated by Secure XNET. Please contact your system or network administrator if you do not have the necessary permission to access the LAT. All existing EDS (Electronic Disposition System) users will automatically be able to access the LAT. If you are an EDS user and are unable to access the LAT, please contact the EDS Help Desk at the following:

EDS central number 780-427-3570 and the following email address, eds.support@gov.ab.ca

To access the LAT, type the following URL into your browser:

https://securexnet.env.gov.ab.ca/lat_login.html

You will be directed to the SRD Applications SecureXNET login page for the Landscape Analysis Tool. If logging in for a new session –

Select the following option:

1 – Please proceed to... [the Landscape Analysis Tool](#)

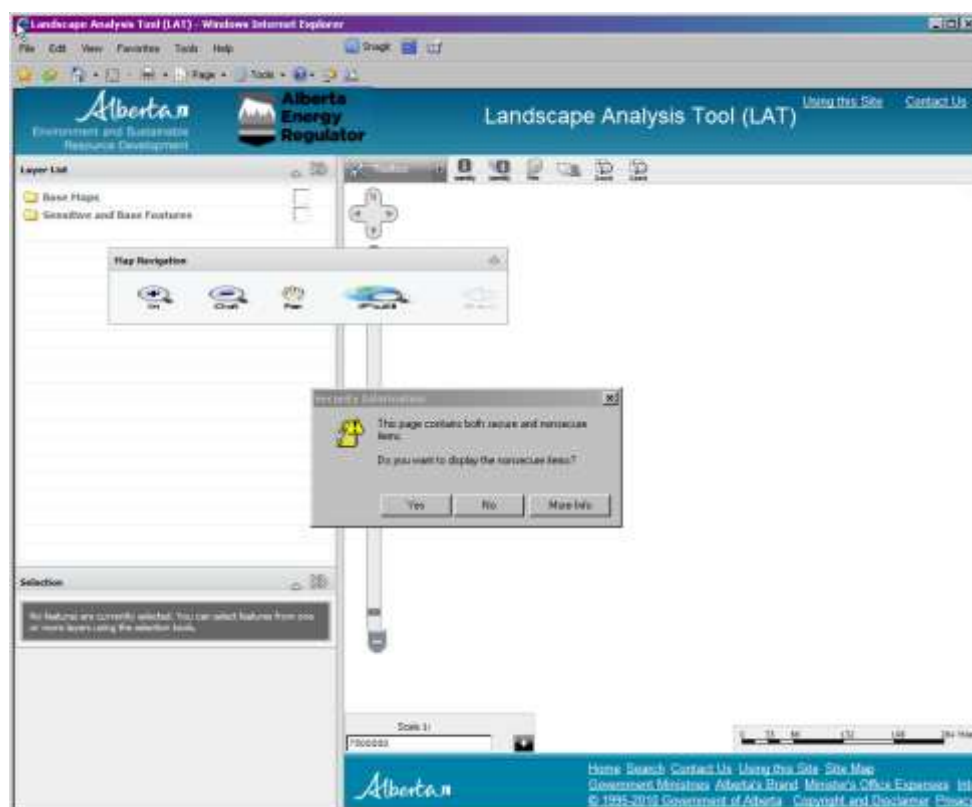
If you are not logged in to SecureXNET, you will be redirected to log in.



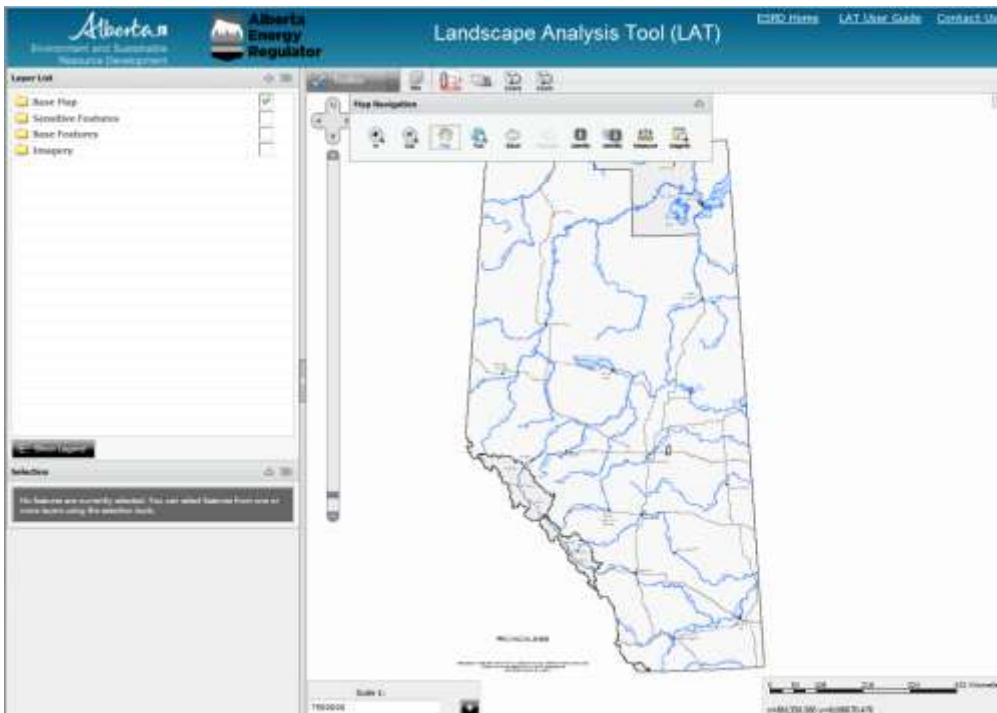
Enter in your **GOA user id**, **Password** and **Account Type**. If successful, you will be directed to the LAT user interface. If you are unable to login, please contact your system or network administrator.



On some IE browsers, when the LAT Tool is loading, you will be prompted by your browser whether to display unsecure items. Please select **“Yes”**.



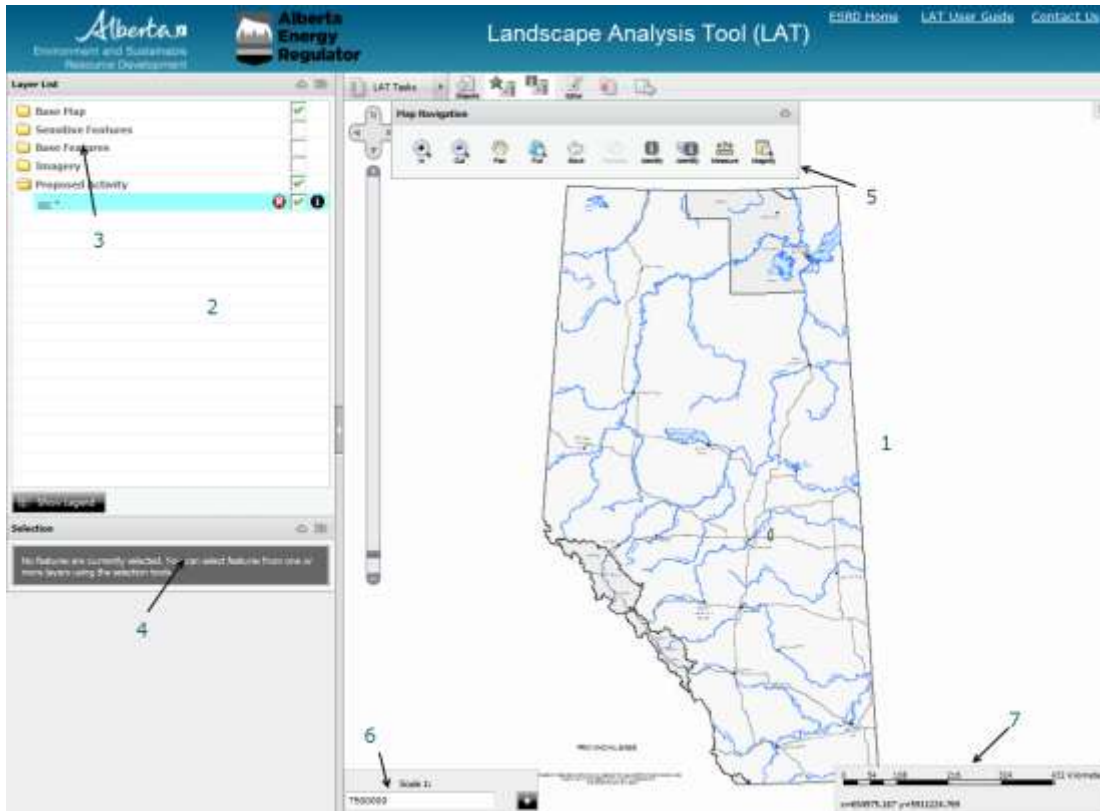
This will launch the LAT Tool within your browser and will display the provincial base map.



Note that if your session is in-active for a significant period of time, your session will be ended by the system. You will then be required to re-login to the LAT through Secure XNET.

3.0 The LAT User Interface

When you open the LAT Viewer in your Internet browser, you should see something that looks like the image shown below.



The LAT Viewer contains the following components:

1. The Map Window – this displays the mapping information;
2. The Information Panel - this displays information about the map and lets you interact with the map;
3. The Layer List – this provides a listing of all Base Features and Sensitive Features data layers that can be viewed within the LAT;
4. The selections and interfaces for various LAT Tools;
5. The Toolbars, located at the top of the viewer. There are three static toolbars (General, Markup and LAT Tasks) at the top of the viewer and one floating panel toolbar (Map Navigation) used for navigating around the map. These tools allow you to navigate around the map, ask questions of the map, upload, create and edit Proposed Activities on the map and to perform the workflow required to generate LAT Reports.

At the bottom of the viewer are:

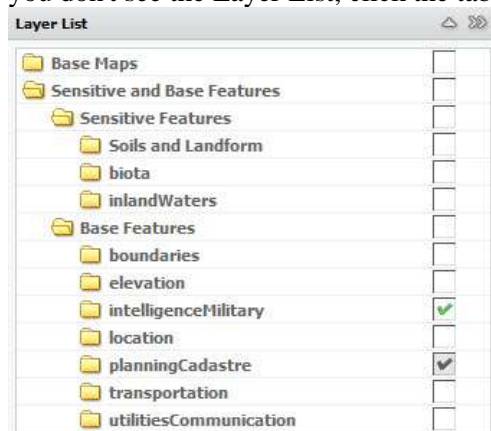
6. The scale box and
7. The scale bar.

The scale bar changes dynamically with the value shown in the scale box. The scale box provides of zooming by keying in scale values. To change the scale, type the desired ratio and click the **Arrow**. This is a quick way to zoom directly to the scale you need.

Note that the Scale Box and Scale Bar are for map navigation only, and may not be perfectly accurate. Without information about the size of your monitor or display device, it is impossible to accurately provide a ratio scale. An error will be most pronounced if you are operating a large monitor or a projection device running at a very low resolution, or if you are running a small monitor at a very high resolution. A 17" monitor running at a resolution of 800x600 or 1024x768 represents the scale more accurately. Some maps have limits on the scales at which you can view the data, and some layers and map labels may only appear at certain scales. If the layer you need is unavailable at your current map scale zoom in until the layer becomes available.

3.1 LAT Map Layers

The LAT has many map layers. Map layers are organized into folders and group layers in the Layer List. (If you don't see the Layer List, click the tab in the Information Panel).



The LAT contains map layers grouped according to the following data categories:

1. **Base Maps** – these data layers are contained in a cached map service showing Provincial Base Mapping data provided by the Resource Information Branch (RIMB) of ASRD. Base Map data is viewable in the Map Window from the Provincial extent, down to a scale of 1:500,000.
2. **Sensitive Features** – these are dynamic data layers used in the generation of the LAT Report for a Proposed Activity (e.g. sensitive caribou, grizzly bear habitat) Many of the Sensitive Feature layers have guidelines associated with them as contained in the Integrated Guidelines Package (IGP). Other Sensitive Feature layers are provided for information only. Sensitive Feature data layers are grouped according to ISO data categories.
3. **Base Features** – these are data layers that comprise the Provincial Government Base Features data, such as Alberta Township System (ATS), Access, Geo-Administrative boundaries, elevation contours etc. Certain Base Features data layers are used for the LAT Report (such as FMA, First Nation Reserves, Provincial Parks, etc.), while others are available to provide context and a way to reference yourself. (for example, Digital Integrated Dispositions, Access, etc.). Base Feature data layers are grouped according to ISO data categories.
4. **Imagery** – the LAT provides several imagery data layers that can be used for visualization and referencing. They are 2009 SPOT5 five meter resolution satellite imagery, the Provincial Hillshade and the Provincial Painted Relief.

When you first open a map, some folders and group layers may be open while others are closed. Similarly, some layers may be visible on the map while others are not. To open a folder, click the folder icon. A list of the layers contained in the folder will display. To close the folder, click the icon again. To open and close a group layer, click the group layer icon. Notice that opening and closing folders and group layers doesn't change which layers are visible on the map; it simply helps you stay organized.

3.2 Showing and Hiding Map Layers

Beside every layer in the Layer List, you will see a check box. Folders and group layers also have a check box beside them. In order for a layer to be visible on the map, both check boxes must be selected: the layer's check box and the check box of its folder or group layer.

Folders and group layers work differently. When you select or clear a folder's check box, the check boxes of all its layers also become selected or cleared. Selecting and clearing a group layer's check box never changes the check boxes of its sub-layers.

When you select a group layer's check box, every sub-layer whose check box is already selected becomes visible on the map, provided they're visible at the current scale. You can also change layer check boxes individually.

3.3 Making Map Layers Active

Some layers are only available at certain scales. Layers that are available at your current scale are shown with an Available icon next to the layer name, while layers that are unavailable at the current scale are shown with an Unavailable icon. A layer can be made active by clicking its Available icon.



Active



Inactive

An active layer is represented by an Active icon and its name is highlighted in blue in the Layer List. Making a layer active is your way of telling the LAT software that you want to work with the layer. For example, when a layer is active, you can search for points of interest on the layer. You can have multiple layers active at one time.

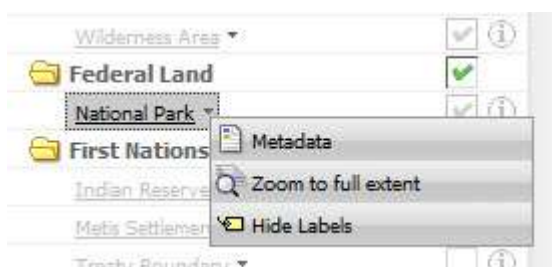
3.4 Viewing the Map Legend

In addition to the functions previously described, the Layer List can also display a Map Legend. To make the legend visible, click the Show Legend button at the bottom of the Layer List. To hide the legend, click the Hide Legend button. Legend symbols are shown for available layers only.



3.5 Using Layer Actions

This section describes the operations, or *actions*, that you can perform on layers. To perform a layer action, click the layer's name or its down arrow (**the small triangle**) in the Layer List and select the action from the menu.



The following layer actions are available in the LAT:

3.5.1 Viewing Layer Metadata

The Metadata action displays Metadata for the layer in a browser window. The layer metadata provides information on the source, currency and accuracy of the data layer. The layer metadata provided in the LAT is compatible with the metadata standard established for GeoDiscover Alberta (GDA).

3.5.2 Zoom to the Full Extent of a Layer

The Zoom to Full Extent layer action zooms directly to the extent that is just large enough to show all the layer's features.

3.5.3 Hiding Labels

The Hide Labels layer action removes a visible layer's labels from the map display. For example, selecting Hide Labels for the National Parks layer turns the National Park name labels off for the layer.

3.6 Viewing the Attributes of Features

Features have attributes associated with them in Geographic Information Systems (GIS). Suppose you are interested in the attributes associated with a Sensitive Feature. To see a Sensitive Features attribute information, make the Sensitive Feature data layer active, click the Identify tool and then click the Sensitive Feature on the map. Use the Identify tool whenever you want to examine the attributes of features on the map.

4.0 The LAT Toolbars

There are three static toolbars (General, Markup and LAT Tasks) at the top of the viewer and one floating panel toolbar (Map Navigation) used for navigating around the map. The following sections provide details on the various tools available with the LAT.



Static Toolbars

Map Navigation Floating Panel

4.1 Map Navigation Floating Panel Tools

The Map Navigation Floating Panel is accessible at all times throughout the LAT session. The Map Navigation tools contained in the floating panel are:



Zoom In

The Zoom In tool allows you to zoom in on any part of the map. To zoom in, click the Zoom In tool and then click the map location that you want to zoom in on. Alternatively, click and hold the mouse button to drag a box that defines the area that you want to zoom in on.



Zoom Out

The Zoom Out tool allows you to zoom away from the map. To zoom out, click the Zoom Out tool and then click the map location that you want to zoom out from. Alternatively, click and hold the mouse button to drag a box that defines the area that you want to zoom out from.



Pan

The Pan tool lets you navigate around the map. Use the Pan tool by clicking and dragging the mouse on the map. The area of the map that you grab will end up wherever you release the mouse button. For example, if you want to move north (up the map), click and hold near the top and drag the map down.



Zoom to Full Extent

The Zoom to Full Extent tool is a quick and easy way to zoom out as far as possible. Click the tool and the map will zoom out to its maximum extent. This is especially useful when you want to make a fresh start without losing the changes you made to the map.

**Map Back**

Clicking the Map Back tool will return your map to the previous extent that you viewed. For example, if you are currently viewing the map extent at a scale of 1:250,000 and you zoom to 1:100,000, clicking the Map Back button will return the map to the previous scale (1:250,000).

**Map Forward**

If you have used the Map Back button, clicking the Map Forward tool will return the map to the next extent.

**Identify Features**

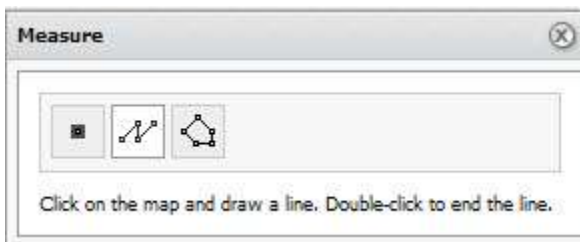
Use this tool to see a list of a feature's attributes. First make the feature's layer active and then click the feature whose information you want to see.

**Identify Visible Features**

The Identify Visible Features tool identifies features from all the layers that are currently visible. Click the tool and then click a location on the map to see the attributes of all the features that are visible at that location.

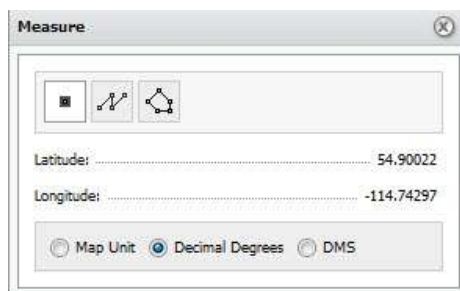
**Measure**

The Measure tool allows you to measure areas (polygons), distances (lines), and coordinates (points) on the map. Click the Measure tool to open the Measure window.

**Measure Coordinates**

To view the coordinates of a particular location, click the Measure Coordinates tool in the Measure window, and then click the location on the map.

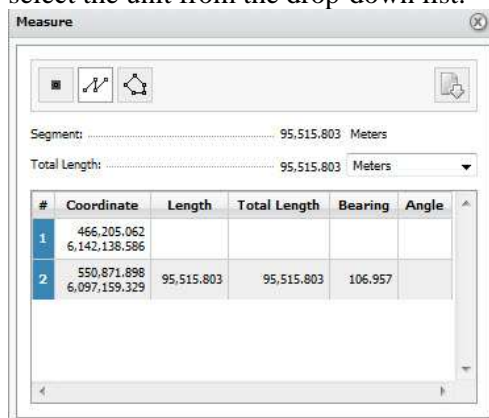
The coordinates for that location will display in the Measure window. You can view the coordinates in map units, decimal degrees, or degrees, minutes and seconds.



Measure Distance

Distance is measured as a sequence of line segments that you draw on the map. To measure a distance, click the Measure Distance tool, click one end of the path you want to measure, and then click the first point where the path changes direction. Continue clicking points until there is one point left. You can undo points by right-clicking if you make a mistake. Double-click the last point to end the measurement.

The results of the measurement are shown in the Measure window. To change the unit of measurement, select the unit from the drop-down list.

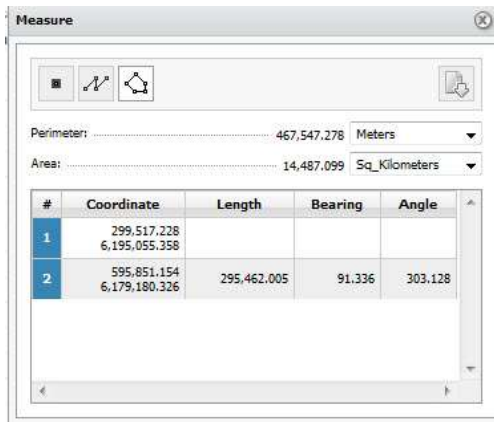


To save the measurements to a CSV file, click the Export Measurement button.



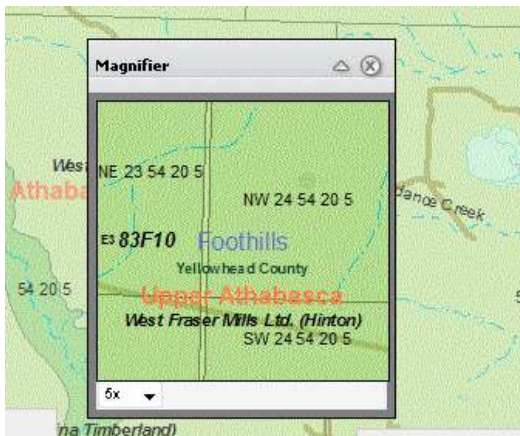
Measure Area

Area is measured as the area within a polygon that you draw on the map. To measure an area, click the Measure Area tool and draw the polygon just as you would draw a polyline. Double-clicking closes the polygon and ends the measurement. The results will be shown in the Measure window.



Magnify

When you click the Magnify tool, the Magnifier window appears on the map. To magnify an area, click and hold the grey bar at the top of the Magnifier to drag the window on top of the desired location. You can change the degree of magnification using the drop-down list at the bottom of the window.



Note that when you increase the magnification, the current map is not simply enlarged. Rather, new map data are displayed, often showing additional features that are not visible at a smaller scale.

4.2 General Toolbar

The General Tool bar contains the Generate Map Report, Zoom to ATS, Zoom to Projected Co-ordinate and Zoom to Geographic Co-ordinate and LAT News Panel Tools.





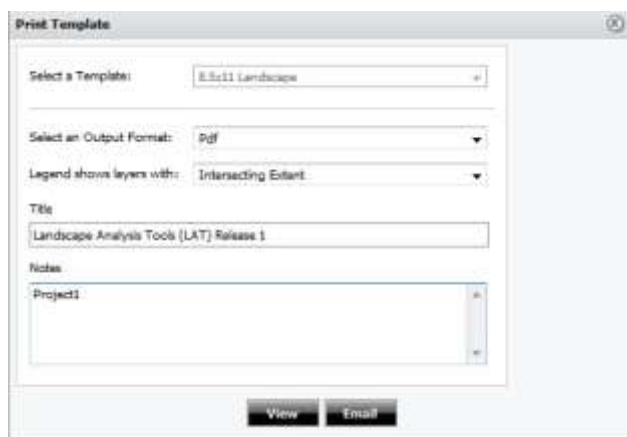
Generate Map Report

The Generate Map Report Tool is a WYSIWYG (“what you see is what you get”) report generator that allows you to export a printable map of the data that is currently viewable within the map display window.

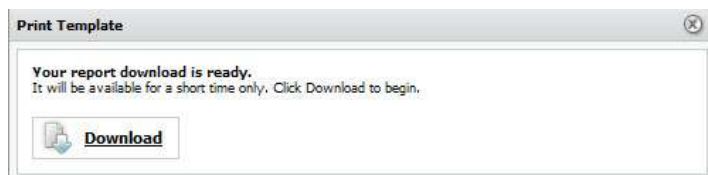
** Note: at map scales less than 1:400,000 (eg. 1:250,000 1:50,000 etc.) you must ensure that the cached Base Maps layers are not viewable. To do this, simply “**un-check**” the check box next to the Base Maps folder as shown in the figure below.



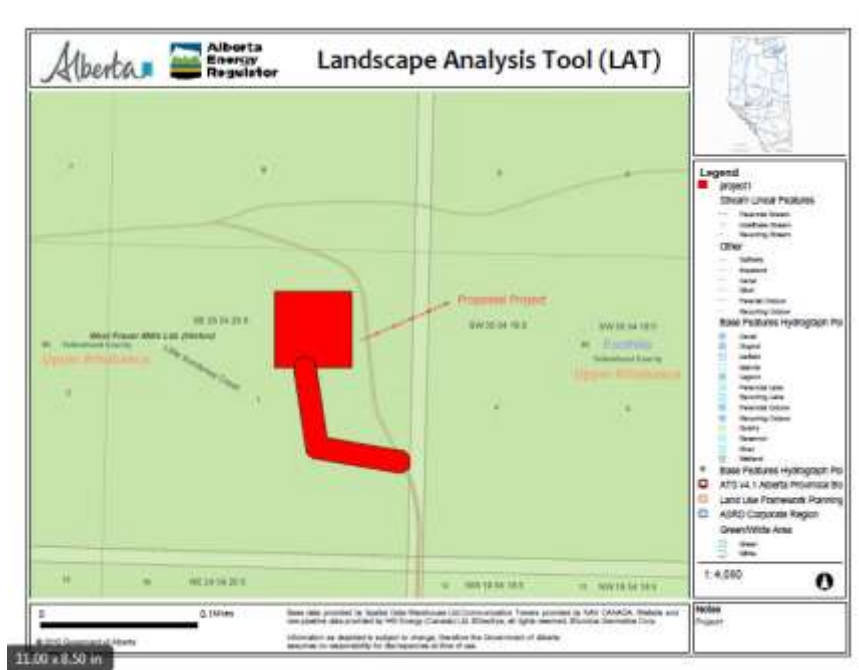
By selecting the Generate Map Report Tool, the Print Template form is initialized that allows you to select a pre-defined LAT map template, output format (pdf), map legend, map title and map notes.



To download your Map Report, select “View” from the Print Template, and then select download. This will generate a pdf map report that you can download.



A sample Map Report is shown below:



Zoom to ATS

The Zoom to ATS Tool provides the user with the capability to quickly zoom the map display to an area of interest defined by and ATS (Alberta Township System) Township or Quarter Section. Selecting the Zoom to ATS Tool initiates the Zoom to ATS menu.

To zoom to a Township extent, select “**Township**” from the drop-down list, and key in the Township, Range and Meridian values.

Zoom To AT5

Select: Township

Township 55

Range 21

Meridian 5

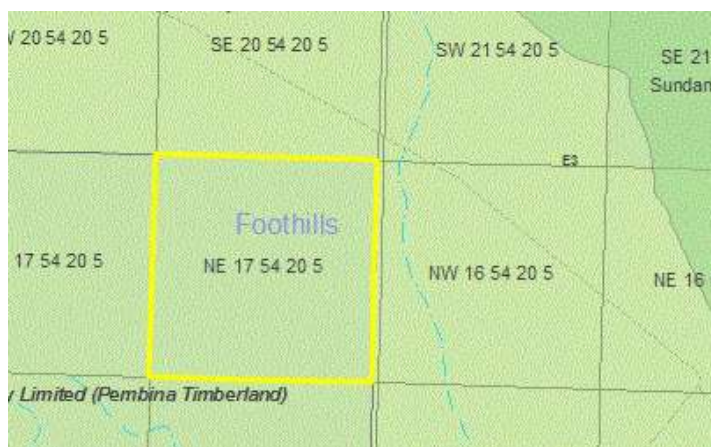
Apply Erase

To zoom the map display to the selected township, select “**Apply**”. This will change to view extent of the map display to the selected township polygon which will be outlined in yellow. The yellow outline will remain until the “**Erase**” button is selected.



To zoom to a Quarter Section extent, select **“Quarter Section”** from the drop-down list, select the Quarter Section value from the drop-down (NE,NW,SE,SW) and key in the Section, Township, Range and Meridian values.

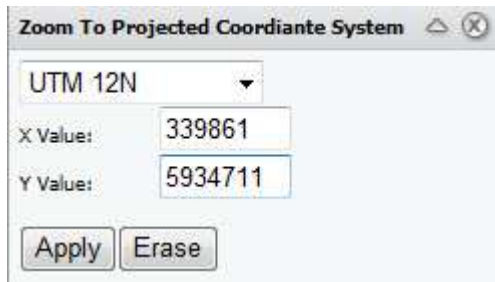
To zoom the map display to the selected quarter section, select **“Apply”**. This will change to view extent of the map display to the selected quarter section polygon which will be outlined in yellow. The yellow outline will remain until the **“Erase”** button is selected.



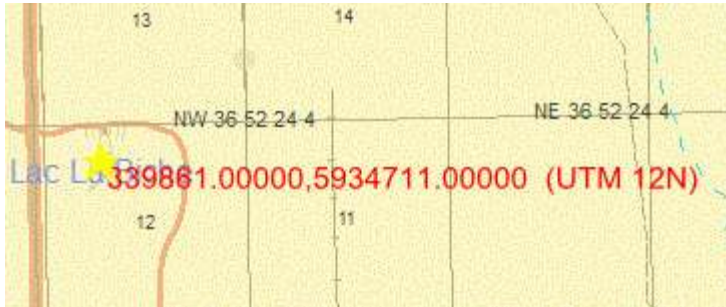
Zoom to Projected Co-ordinate

The Zoom to Projected Co-ordinate Tool provides the user with the capability to quickly zoom the map display to an area of interest centred on a specific projected map co-ordinate. Supported projections are 10TM Forest (500,000 false easting), 1-TM Resource, and UTM Zones 11 and 12. Selecting the Zoom to

Projected Co-ordinate Tool initiates the Zoom to Projected Co-ordinate System menu form. From the menu form, select the co-ordinate system of choice and enter in the x value (easting) and y value (northing).



To zoom the map display to the co-ordinate entered, select **“Apply”**. This will change to view extent of the map display to an area centered on the co-ordinate entered. The location will be identified with a gold star, with the easting and northing co-ordinates annotated on the map display. The annotation will remain in the map display until the **“Erase”** button is selected.

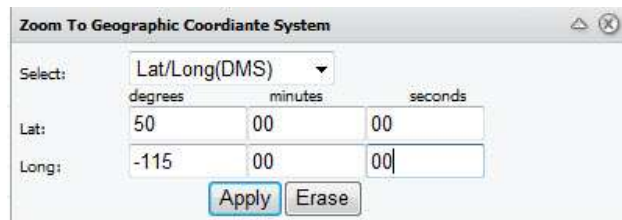


Zoom to Geographic Co-ordinate

The Zoom to Geographic Co-ordinate Tool provides the user with the capability to quickly zoom the map display to an area of interest centred on a specific geographic (latitude, longitude) map co-ordinate.

Supported formats are decimal degrees and degrees, minutes and seconds (DMS).

Selecting the Zoom to Geographic Co-ordinate Tool initiates the Zoom to Geographic Co-ordinate System menu form. From the menu form, select the format (decimal degrees or DMS) and enter in the appropriate values. West longitude values (for Alberta) must be entered in as a negative value. See the example below:



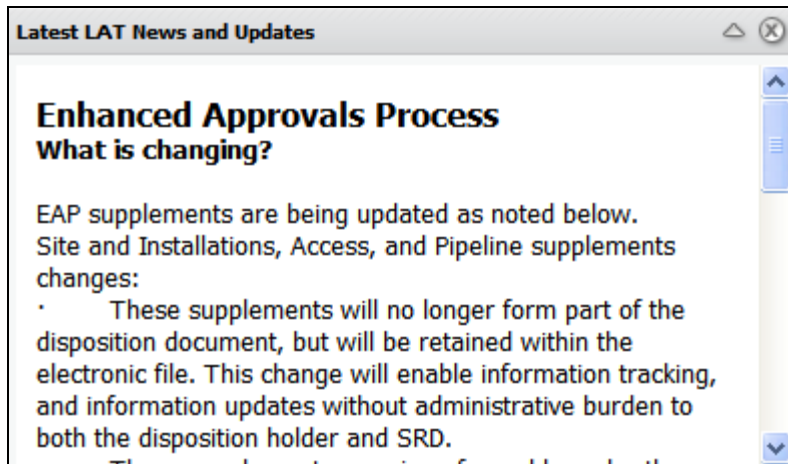
To zoom the map display to the co-ordinate entered, select **“Apply”**. This will change to view extent of the map display to an area centred on the co-ordinate entered. The location will be identified with a gold star, with the Latitude and Longitude co-ordinates annotated on the map display. The annotation will remain in the map display until the **“Erase”** button is selected.



Bring up the LAT News Panel...

The LAT News Panel provides a way to keep the user informed of changes to LAT and to the Enhanced Approval Process

To see the LAT News Panel simply click on the icon.



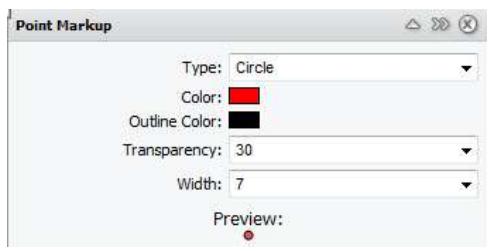
4.3 Markup Toolbar

The Markup Toolbar provides tools to add points, lines, areas and text to your map. Each tool has many options for changing the attributes of your markup, such as fill type, color, transparency and line width. Markup tools are used only to draw lines and annotate features on the map display. The features created using these tools are **Not** Proposed Activity features. Tools to create and modify Proposed Activity features are provided in the LAT Tasks Toolbar. Mark-ups are visible on the Map Report that results from initiating the LAT Generate Map Report Tool.



Point Markup

To add points to your map, click the Point Markup tool and then select the attributes of your point in the Point Markup area of the Information panel.

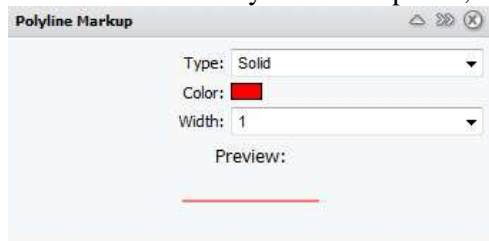


Click the map at the desired locations to add points.



Polyline Markup

Use the Polyline Markup tool to draw lines on your map. Select the attributes of your line from the drop-down lists in the Polyline Markup area, then click the map where you want your line to start.

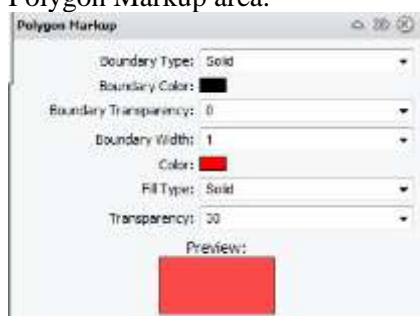


Move the mouse to begin drawing and click wherever you want your line to change direction. Double-click to complete your line.



Polygon Markup

To draw a polygon, select the Polygon Markup tool and choose the attributes of your polygon from the Polygon Markup area.

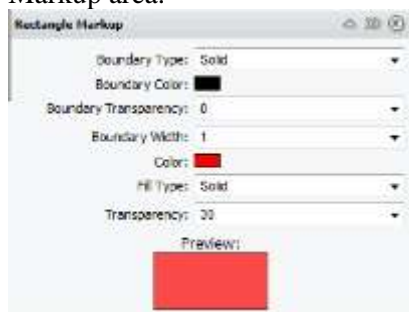


Click the map to mark a starting point for your polygon. Next, add at least two more points by clicking the map in the desired locations. Double-click to close the polygon.



Rectangle Markup

To add a rectangle to your map, select the Rectangle Markup tool and choose the attributes in the Rectangle Markup area.



Click and hold the mouse button down on the desired location on the map. Drag the mouse to size the rectangle and release the mouse button to complete it.



Oval Markup

Draw an oval on your map using the Oval Markup tool. Select the tool and choose the attributes in the Oval Markup area.

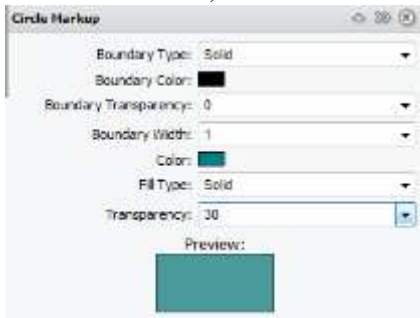


Click the map to position the corner of your oval and drag the mouse in any direction until the oval is the desired size. Click again to complete the oval.



Circle Markup

To create a circle, choose the Circle Markup tool and select attributes in the Oval Markup area.

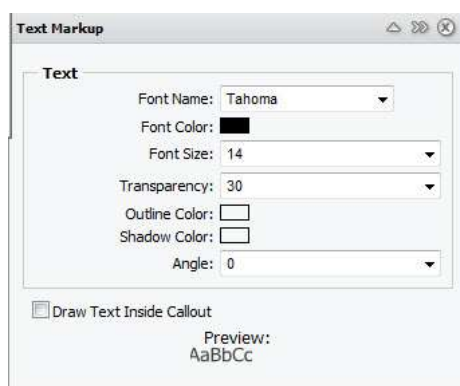


Next, click the map where you want the center of your circle. Move the mouse away from the center to enlarge the circle and back towards the center to shrink it. To complete the circle, click the mouse button again.



Text Markup

The Text Markup tool allows you to place text on the map, optionally contained in a callout. Specify a format for the text and callout using the options in the Text Markup panel and then click the location on the map that you want to place the markup.



Type your text in the window that opens. Use the buttons to insert the location's coordinates or attributes of features that are visible at the markup location.



Buffer Markup

Use the Buffer Markup tool to create buffers around any of your markup, including points and polyline. Click the Buffer Markup tool, and then click the map and drag your mouse to draw a rectangle around any geometries you want to use for creating buffers.

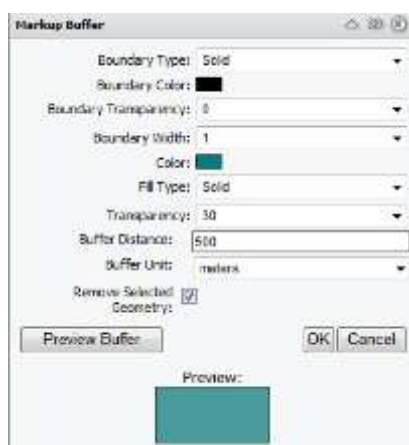


Drawing Rectangle

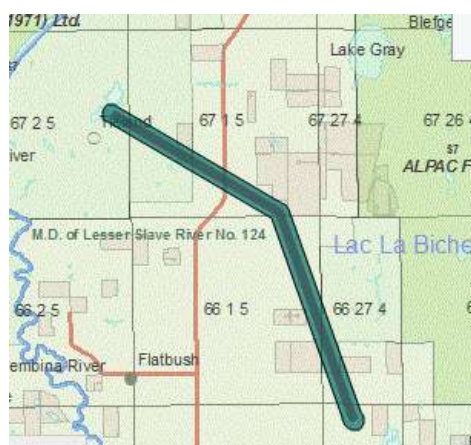


Selected polyline feature

Specify the attributes of your buffers (including buffer distance and unit of measurement) in the Markup Buffer panel. You can choose to have the original geometries displayed or removed after the buffer is created by selecting or clearing the Remove Selected Geometry check box in the Markup Buffer panel.



Markup Buffer Panel



Buffer of selected graphic



Erase Markup

The Erase Markup tool allows you to selectively delete markup that you have made. To erase markup, select the tool and then click once on any added text or graphic. To erase multiple graphics at once, click and drag the mouse to create a box around added text or graphics. Release the mouse when the box encloses the markup you want to erase. Note that when a portion of a graphic is enclosed within the eraser box, the entire shape is deleted.



Clear All Markups

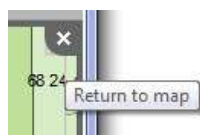
To quickly erase all of the existing markups from the map, select the Clear All Markups tool. Before the markup is deleted, you will be asked to confirm or cancel the operation.



Swipe Markup Layer

The Swipe Markup Layer tool allows you to interactively clear the contents of the Markup layer from the map, like pulling a blind. When you click the Swipe Markup Layer tool, the map redraws with a swipe window overlaying the Map Window. To swipe the layer, drag one of the overlay window's borders.

You can swipe vertically or horizontally. To close the overlay window, click in the window's upper right corner.



4.4 LAT Tasks Toolbar

The LAT Tasks toolbar contains custom tasks developed following the LAT workflow required to enter Proposed Activities into the system and to generate an LAT Report and other deliverables. The LAT Tasks Toolbar is show below, and contains the Upload Shapefile, Create Proposed Activity Layer, Edit Project Information, Edit Proposed Activities, Generate LAT Report and Download Shapefile Tools.

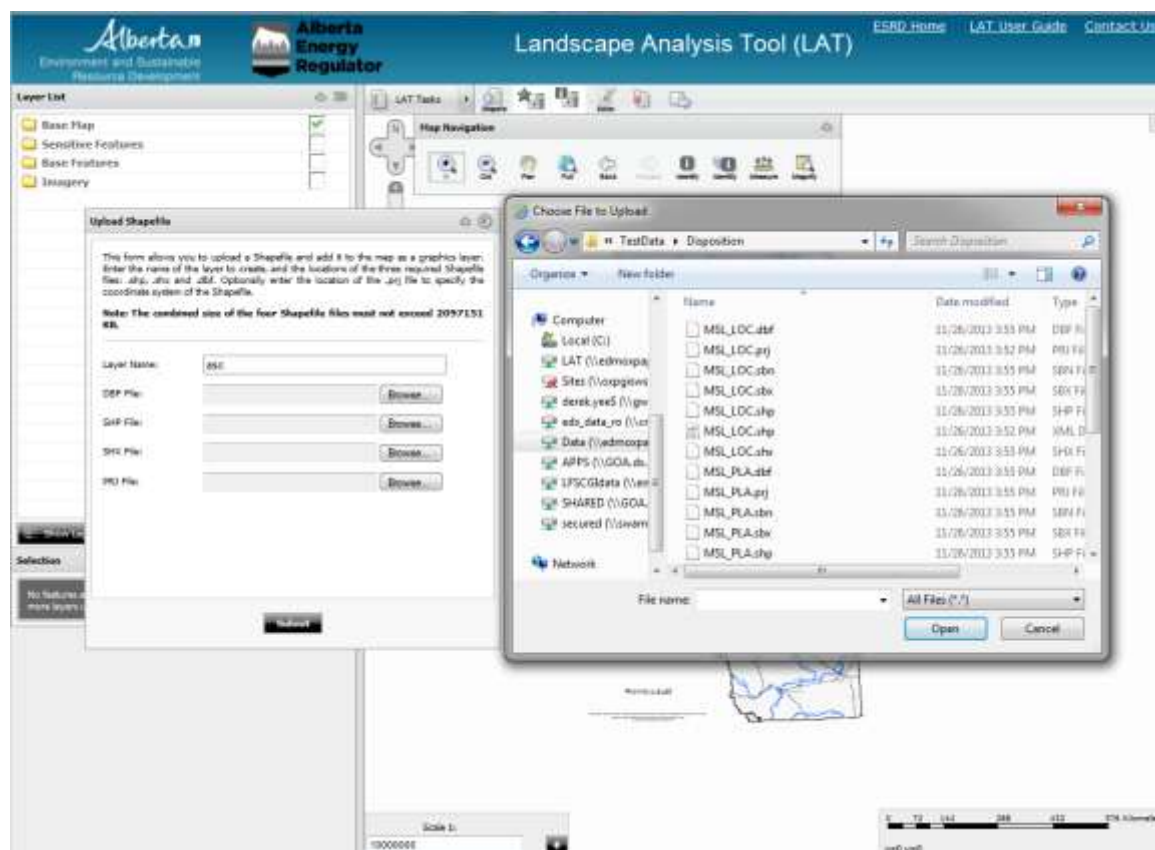


Upload Shapefile

The Upload Shapefile Tool is one method of entering Proposed Activities into the LAT. You can upload one or many shapefiles representing Proposed Activities in the LAT. The LAT requires all shapefiles to be uploaded to conform with the specifications contained within **Appendix A – LAT Shapefile Specification for Proposed Activities**.

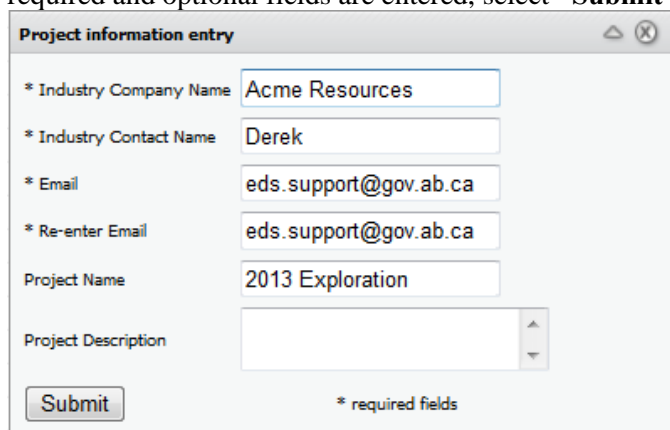
Please refer to this specification to ensure that your shapefile will be processed. Failure to comply with this specification will result in incomplete and invalid LAT Reports.

Selecting the Upload Shapefile Tool will initiate the Upload Shapefile Form. On the Upload Shapefile form, enter the name of your Proposed Activity Layer. Browse to the location on your workstation of the shapefile containing proposed activities. Enter in the location of the shapefile .dbf, .shp, .shx, .prj components.



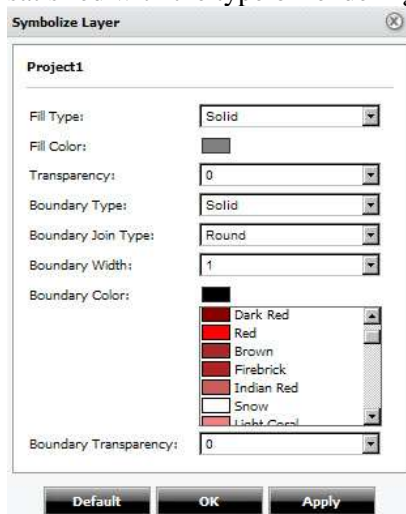
Select “**Submit**” on the “Upload Shapefile” form. You will then be prompted to enter project information and render the color of the proposed activity layer, if you do not like the default rendering chosen by the software.

Enter project information into Project Information data entry form. The required fields (**marked with a ***) are used within the LAT Report and are used to email the LAT Report and other returns to the user. Once the required and optional fields are entered, select **“Submit”**.



The screenshot shows a window titled "Project information entry" with a close button. It contains several input fields: "* Industry Company Name" (Acme Resources), "* Industry Contact Name" (Derek), "* Email" (eds.support@gov.ab.ca), "* Re-enter Email" (eds.support@gov.ab.ca), "Project Name" (2013 Exploration), and "Project Description" (empty). A "Submit" button is at the bottom left, and a legend "* required fields" is at the bottom right.

Optionally, you can render the Proposed Activity layer a different colour than the default. Select **“Apply”** to apply the new rendering to the data layer. Select **“OK”** to cancel the form, once you are satisfied with the type of rendering.



The screenshot shows a window titled "Symbolize Layer" with a close button. It contains settings for "Project1": "Fill Type" (Solid), "Fill Color" (black), "Transparency" (0), "Boundary Type" (Solid), "Boundary Join Type" (Round), "Boundary Width" (1), and "Boundary Color" (a list of colors including Dark Red, Red, Brown, Firebrick, Indian Red, Snow, and Light Coral). "Boundary Transparency" is set to 0. At the bottom are "Default", "OK", and "Apply" buttons.



Create a New Proposed Activity Layer

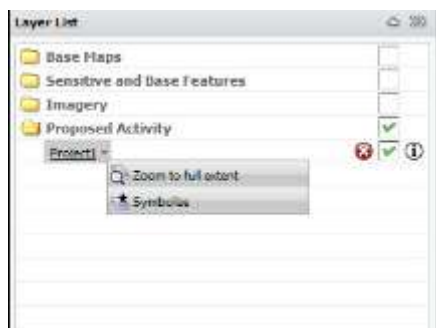
The “Create a New Proposed Activity Layer” is the other method of entering Proposed Activities into the LAT. Once you select this Tool, you will be prompted to enter the name of a new Proposed Activity layer. Select **“Submit”** once you have entered the name.



The screenshot shows a window titled "Create a new proposed activity layer" with a close button. It contains a "Layer name" input field and a "Submit" button.

You will then be prompted to enter Project Information. The same Project Information Form available in the Upload Shapefile Tool is initiated. Once the required and optional Project Information fields are entered, select **“Submit”**.

Once successfully submitted, the name of the Proposed Activity layer will appear as a layer in the Proposed Activity folder contained in the Layer List box. Navigate to the area of interest to enter in Proposed Activities using any of the zoom, pan, zoom to ATS, or zoom to co-ordinate tools provided by the LAT.



Edit Project Information


At any time, Project Information can be modified using the **“Edit Project Information”** tool contained in the LAT Tasks toolbar. This will initiate the Project Information entry form, where any of the values can be edited at any time during the session.

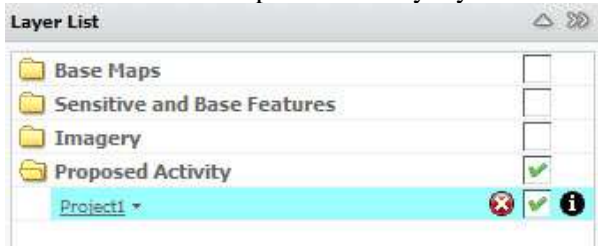
N.B. The “Industry Company Name” and “Industry Contact Name” textboxes only permit the following characters:

a-z A-Z 0-9 ! @ # \$ % ^ * . , _ -



Edit Proposed Activities

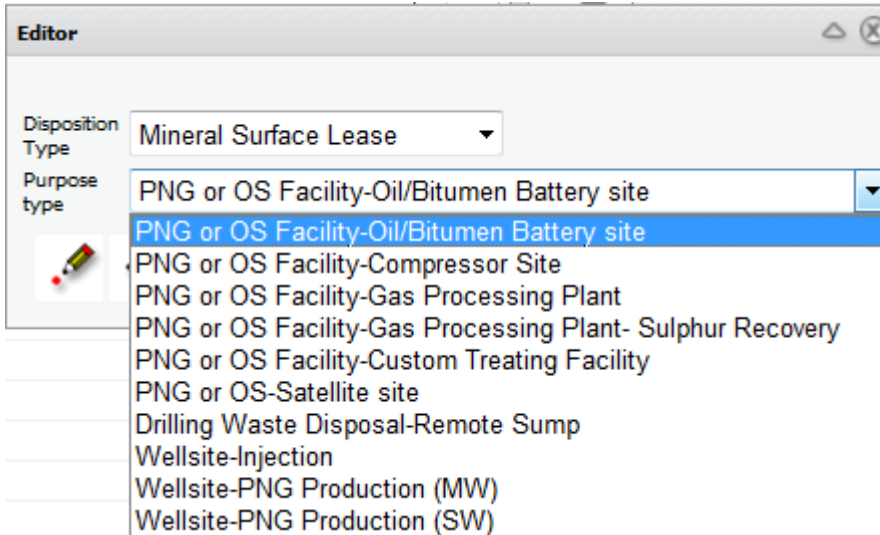
To add a new proposed activity, make the layer active, by highlighting the Proposed Activity layer in the Layer List. Select the  icon next to the layer and it will be highlighted in blue. This indicates that the Proposed Activity layer is now available for editing.



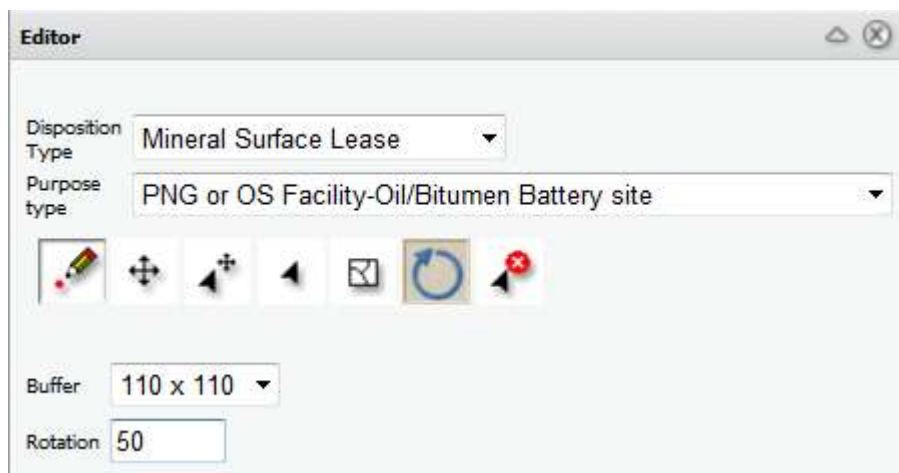
From the LAT Tasks toolbar, select the **“Editor”** tool.



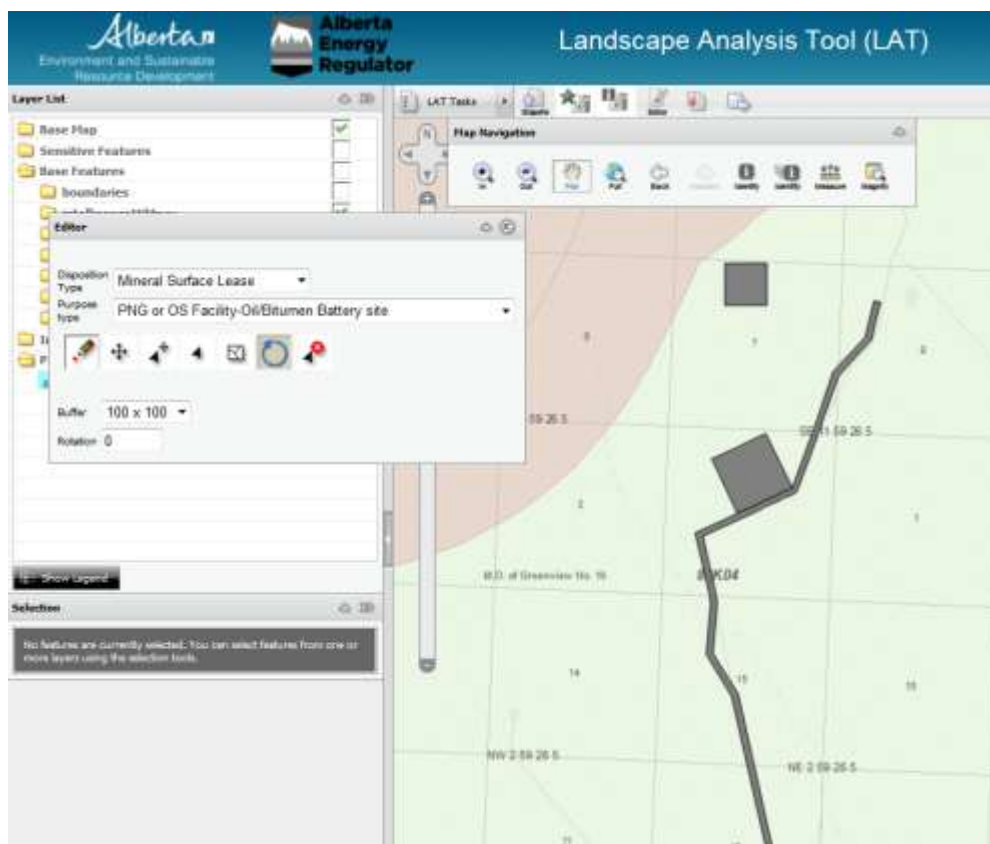
You will be presented with the **“Editor”** tool form. This form provides the capability to add Proposed Activities by adding either a point, line or polygon feature that represents a Proposed Activity. To add a new activity, select the Disposition Type and Purpose Type from the drop-downs in the Editor.



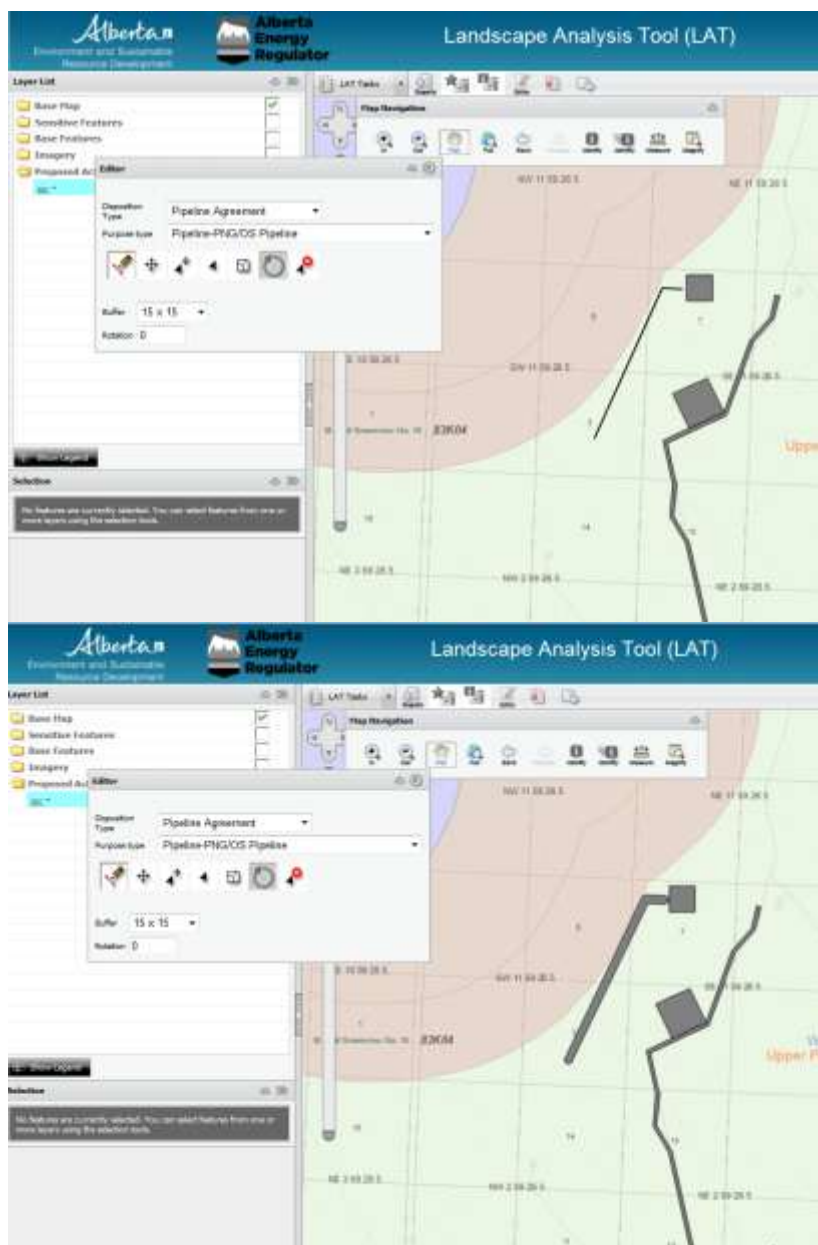
In the case of a MSL or Mineral Surface Lease activity (point feature), select the MSL dimensions from the drop-down box, as well as the rotation angle, if necessary.



Place a point on the map display by clicking in the desired location for the centre of the MSL. A polygon representing the proposed MSL will be created in the map display.



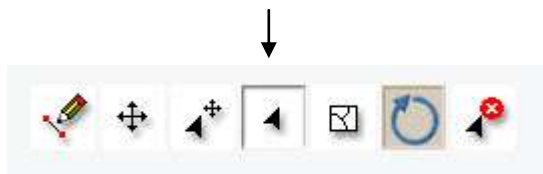
To place a Pipeline Agreement activity (line feature), select the disposition and activity sites, proposed right of way buffer distance, angle of rotation (if required) in the Editor menu box. Position the mouse cursor within the map display and draw the proposed activity by clicking the start point, and vertices (bends) of the proposed activity using single mouse clicks. Double click the mouse to draw the end point of the activity.



The Editor menu also provides functions to select/unselect a proposed activity, move an activity, modify a vertex point of a proposed activity, rotate the proposed activity and to delete the shape. Refer to Section 4.4.1 of this document for details on how to select, move, modify or delete a Proposed Activity.

4.4.1 Selecting, Unselecting and Clearing Selection of Proposed Activities

From the Editor tool, choose “Select Shape”.

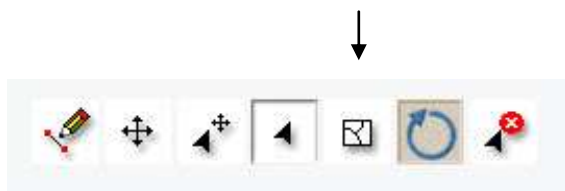


In the map display window, click on the Proposed Activity you wish to select and it will be highlighted in blue, indicating that it has been selected.



To unselect the feature, select another feature. The feature will no longer be highlighted.

To clear all select features, choose “**Clear Selection**” in the Editor Tool. The feature will no longer be highlighted.

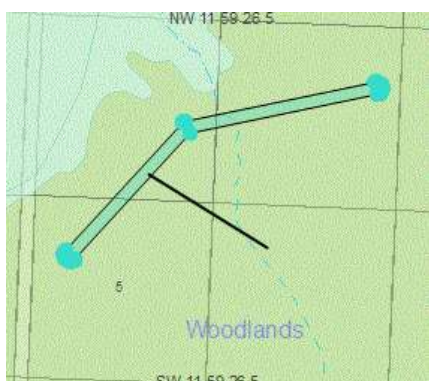


4.4.2 Moving a Proposed Activity:

To move a Proposed Activity, make sure it is selected and then choose “**Move Shape**” in the Editor Tool.



To move the shape, place the mouse cursor inside the shape and hold down the left mouse key and drag the shape with your mouse to the desired location. Release the left mouse key, and the shape will move to the new location.

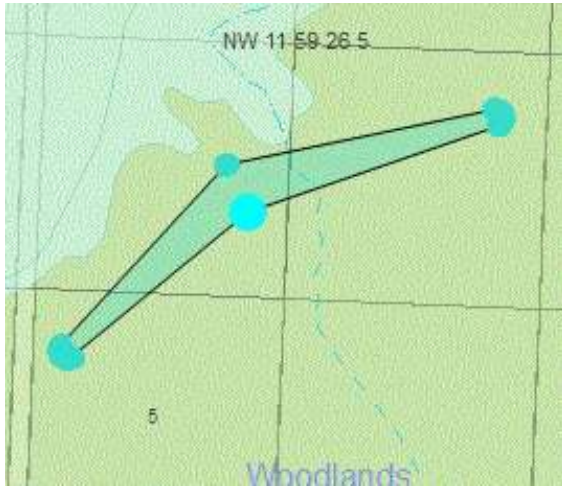


4.4.3 Editing the shape (vertex) of a Proposed Activity:

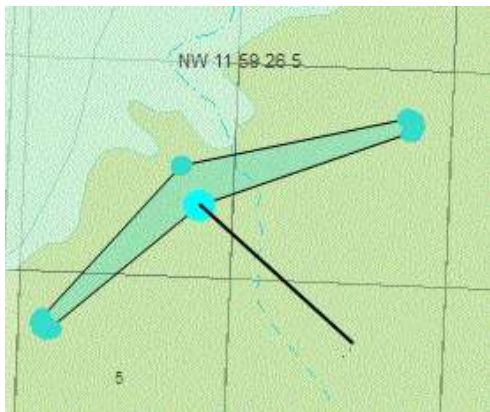
To edit the vertex of a Proposed Activity, make sure it is selected and then choose “**Move Vertex**” in the Editor Tool.



Select one of the vertices (blue circles) that comprise the shape and it will highlighted in a light blue color.



Place the mouse cursor inside the shape and hold down the left mouse key and drag the vertex with your mouse to the desired location. Release the left mouse key, and the vertex will move to the new location.



4.4.4 Rotating a Proposed Activity:

To rotate a Proposed Activity, make sure it is selected, enter in a new rotation value and then choose the **“Rotation”** button in the Editor Tool.



Place the mouse over the activity to be rotated and click the mouse inside the feature. The feature will then be rotated by the angle of rotation entered in the form.

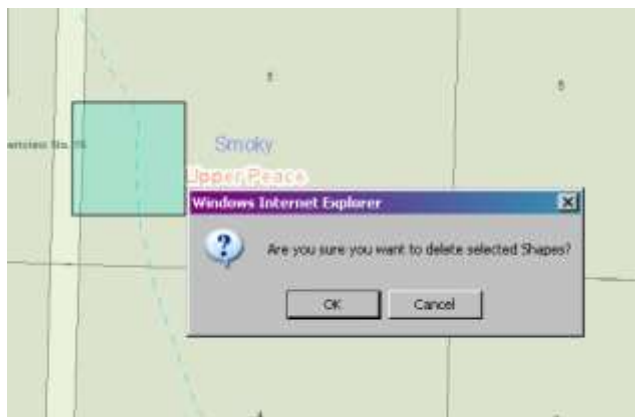


4.4.5 Deleting a Proposed Activity:

To delete a Proposed Activity, select **“Delete Shape”** from the Editor Tool.



Place the mouse over the Proposed Activity to be deleted and click the left mouse button. You will be prompted whether you wish to delete the selected shape prior to deleting it. Select **“OK”** to delete the feature and this will delete the selected Proposed Activity from the Proposed Activity layer. Select **“Cancel”** to cancel the operation.



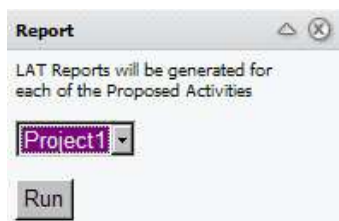
Generate LAT Report

Once you have completed adding your Proposed Activity(ies) to the LAT, you can generate LAT Reports and associated returns for all activities in your Proposed Activity Layer. To generate a LAT Report and returns, do the following:

From the LAT Tasks toolbar, select the “**Generate LAT Report**” tool.



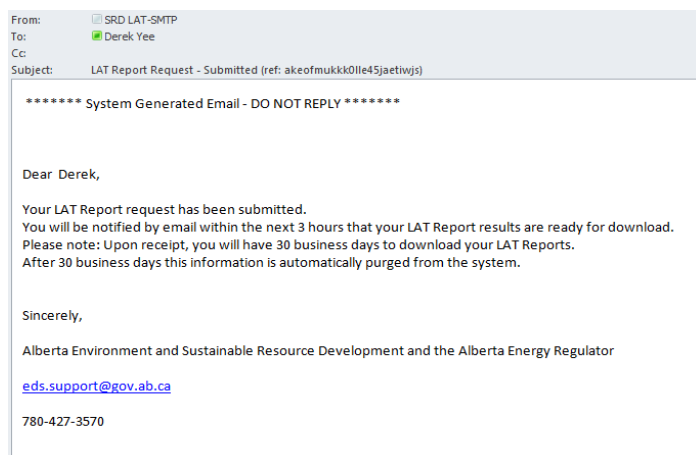
You will then be prompted to select the Proposed Activity Layer that you wish to generate LAT Reports for. Select the required Proposed Activity data layer from the drop-down list in the form, and select “**Run**”.



When the LAT Report Generator has successfully run, you will receive a notification to indicate that your activities were received and that your results are being e-mailed to the e-mail address entered into the Project Information form. Please check your e-mail to receive your results. “**Exit**” the Report notice form to receive your results.



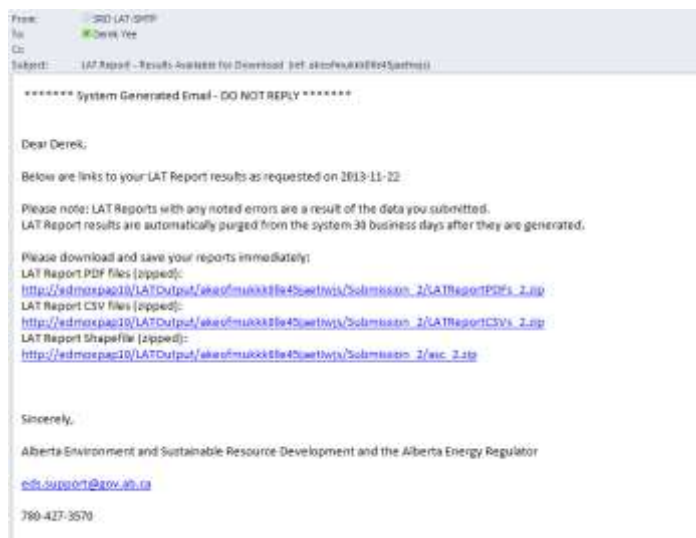
You will also receive an e-mail notification from the system indicating that your LAT Report request has been submitted. An example of the email is shown below:



Upon completion of the LAT Report generation, an e-mail confirmation in the format below will be sent to you. The e-mail confirmation contains hyperlinks to:

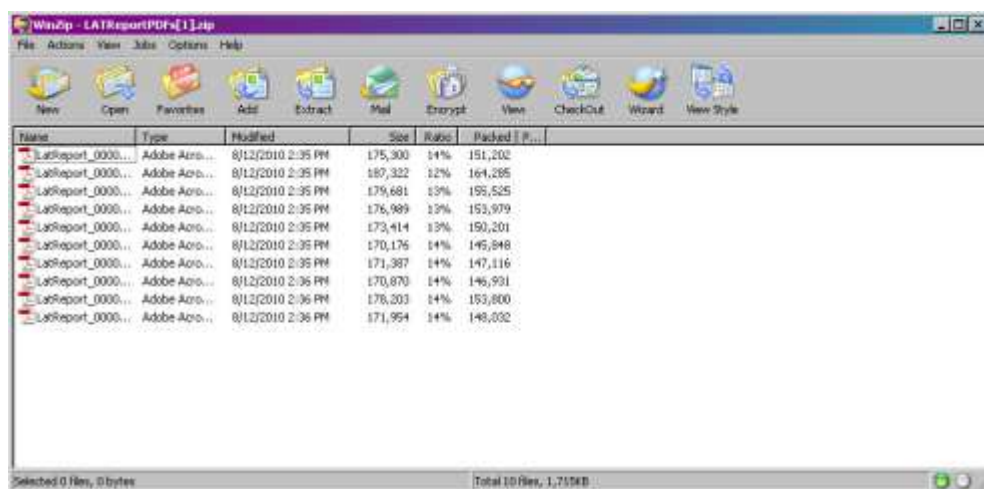
- The location of a zipped file containing your LAT Report(s).
- The location of a zipped file containing the LAT Report data in a CSV – (comma separated values) format. This format can be used to enter and analyse the LAT Report data in a spreadsheet, access database or software that accepts this format.
- The location of a zipped file containing a shapefile of the proposed activities used to generate the LAT Report (s).

A sample LAT email is shown below:



Select the appropriate hyperlink(s) to download the zip file(s) and unzip files using your unzip file utility of choice. The following screen shots show samples of the LAT Report and associated returns:

LAT Report(s):



The LAT Report is in a .pdf file format and can be viewed and save within a .pdf viewer such as Adobe Acrobat Viewer.

The LAT Report cover page presents the LAT number, date, time, project information, disposition and purpose type.



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Time: 08:59 18 AM	
LAT Number:	00000002AA
LAT Date:	2013-11-27
Project Name:	
Project Description:	
Disposition Type:	Mineral Surface Lease (MSL)
Purpose Type:	PNG or OS Facility-Gas Processing Plant- Sulphur Recovery (FACGPLTSU)

Note to Applicants:

It is the applicant's responsibility to determine if an EAP application will be submitted to the regulating body as "Standard" or "Non-Standard". Applicants should complete a thorough review of EAP processes, IS&G documents and LAT Reports generated prior to making this determination.

- "Standard" EAP application submissions are those where the applicant chooses to meet all of the associated Approval Standards identified in the LAT Report submitted as part of the application and aligns those standards to the associated supplements and the application plan.
- "Non-Standard" EAP application submissions are those where the applicant chooses not to meet, or is not able to meet, one or more of the associated Approval Standards identified in the LAT Report submitted as part of the application, or the requirements of Reservations identified within the application supplement. Non-standard interim application submissions require the inclusion of a completed Non-standard Mitigation Supplement.

The information provided within the LAT Tool is a spatial representation of features provided for land use planning. The accuracy of these layers varies depending on the resource value being represented. Site visits, wildlife surveys and ground-truthing is required to ensure that the applicant will meet the applicable Pre-Application requirements, Approval Standards, Operating Conditions and Best Management Practices of the Integrated Standards and Guidelines.

The listing of the Geo-administrative Base Features upon which the Proposed Activity is located appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Base Features	
Crown Ownership:	Provincial/Untitled
Green/White Area:	Green Area
Municipality:	M.D. of Greenview No. 16
Higher Level Plans:	
	Berland Smoky
FMU:	W15
FMA:	ANC Timber Ltd.
Provincial Grazing Reserve:	
Rocky Mountain Forest Reserve:	
PLUZ Areas:	
Provincial Sanctuaries	
Wildlife Corridors:	
Restricted Area:	
Game Bird:	
Seasonal:	

The listing of the Sensitive Features upon which the Proposed Activity is located appears as follows:

Sensitive Features	
Wildlife	
Burrowing Owl Range:	<input type="text" value="No"/>
Caribou Zones:	<input type="text" value="Yes"/>
Colonial Nesting Birds:	<input type="text" value="No"/>
Eastern Short-horned Lizard Range:	<input type="text" value="No"/>
Endangered and Threatened Plants Ranges:	<input type="text" value="No"/>
Greater Sage Grouse Habitat and Buffer:	<input type="text" value="No"/>
Greater Sage Grouse Leks and Buffer:	<input type="text" value="No"/>
Grizzly Bear Zone:	<input type="text" value="Yes"/>
Key Wildlife and Biodiversity Zones:	<input type="text" value="No"/>
Mountain Goat and Sheep Areas:	<input type="text" value="No"/>
Ord's Kangaroo Rat Range:	<input type="text" value="No"/>
Other Sensitive and Endangered Species:	<input type="text" value="No"/>
Piping Plover Waterbodies:	<input type="text" value="No"/>
Sensitive Amphibians Ranges:	<input type="text" value="No"/>
Sensitive Raptor Range:	<input type="text" value="No"/>
Sensitive Snake Species Range:	<input type="text" value="No"/>
Sharp-tailed Grouse Range:	<input type="text" value="No"/>
Special Access Zone:	<input type="text" value="No"/>
Swift Fox Range:	<input type="text" value="No"/>
Trumpeter Swan Waterbodies/Watercourse:	<input type="text" value="No"/>
Water	
Proximity to Waterbody:	Industry will ensure that the Watercourse/Waterbodies standards and conditions as defined within the Integrated Standards and Guidelines are followed. To ensure these setbacks and buffers are addressed and maintained, it is recommended that a pre-site assessment occur.
Grassland and Parkland Natural Region:	
Grassland and/or Parkland Natural Region:	<input type="text" value="No"/>

The listing of Quarter Sections in which the Proposed Activity is located appears as follows:



Mineral Surface Lease (MSL)

Landscape Analysis Tool Report

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Quarter	Section	Township	Range	Meridian	Road Allow.	Sensitive Features by Quarter Section
NE	11	59	26	5		Caribou Range, Grizzly Bear Zone
SE	11	59	26	5		Caribou Range, Grizzly Bear Zone

* The Road Allow. column indicates there is a Road Allowance that may have one of the following values:

1. RS=South
2. RW=West
3. RI=Intersection (SW segment)
4. A blank value indicates no Road Allowance.

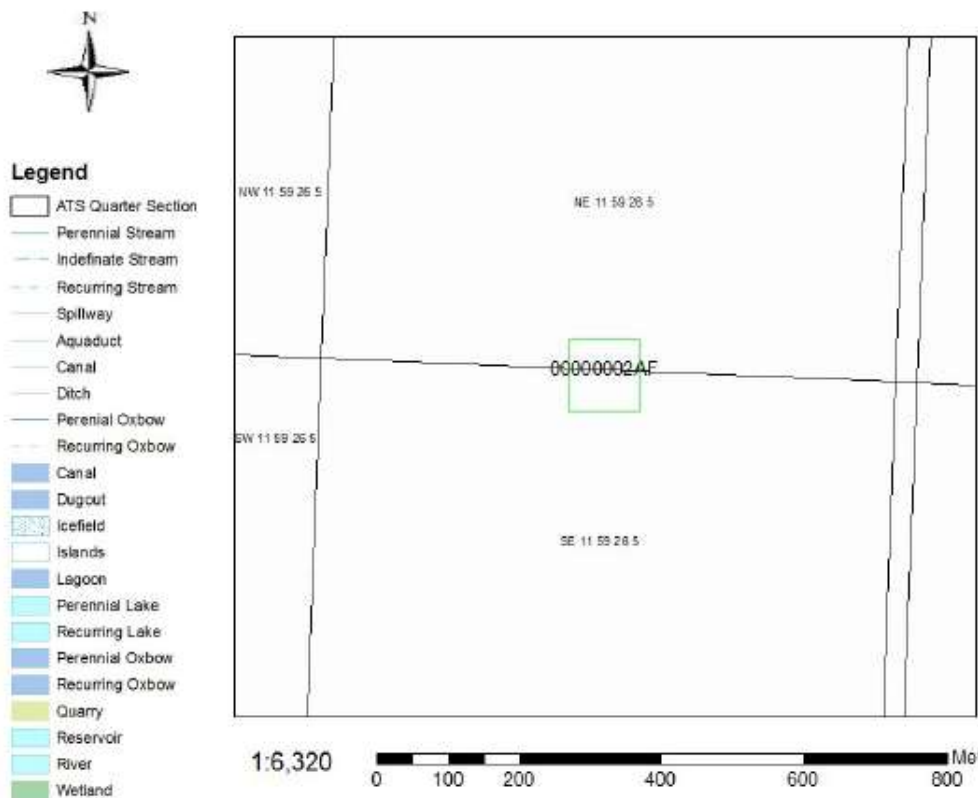
A map image of the Proposed Activity appears as follows:



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Landscape Analysis Tool Report

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The listing of applicable Provincial Approval Standards and Operating Conditions for the disposition appears as follows:



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Provincial Section Approval Standards and Operating Conditions

Approval Standards

100.1.1.

Location of proposed developments shall be sited as follows, unless alternative siting can be supported by Regulated Industry Standards:

c. New well sites and pipeline installations shall:

- i. Use existing, unoccupied, disturbances, regardless of quarter or section lines, that are within 250 metres of the proposed disposition boundary, or;
- ii. Adjoin to all existing occupied industrial dispositions and/or existing linear disturbances that are within 250 metres of the proposed disposition boundary, regardless of quarter or section lines, unless doing so results in greater disturbance (i.e., footprint hectares), and/or negative environmental impacts (e.g., impacting sensitivities)

100.1.3

Locate wellsites and roads outside of natural forest openings (> 10 hectares) such as meadows when planning development activities, unless justifiable extra-ordinary conditions require alternative siting and are supported by Regulated Industry Standards.

100.1.4

The following wellsite sizes shall apply, unless alternative sizing can be supported by Regulated Industry Standards:

- a. Single rig sites shall not exceed 110 metres x 100 metres or equivalent area (1.10 hectares), except stratigraphic test wells which shall not exceed 80 metres x 100 metres or equivalent area (0.8 hectares).
- b. Double/Triple rig sites with less than 5 metres of elevation difference from any corner to the well centre shall not exceed 120 x 120 metres or equivalent area (1.44 hectares).
- c. Double/Triple rig sites with greater than 5 metres of elevation difference from any corner to well centre shall not exceed 130 x 130 metres or equivalent area (1.69 hectares).
- d. Horizontal well pad sites shall not exceed 130 metres x 130 metres or equivalent area (1.69 hectares).
- e. Multi-well pad sites shall not exceed 130 metres x 130 metres or equivalent area (1.69 hectares) for the first well, up to 0.72 hectares for the second well centre; and up to 0.20 hectares for each additional well centre. Total site size shall not exceed 3.5 ha of equivalent area.
- f. Single-well pads (with existing facilities) may be upgraded to a multi-well pad providing it is only extended up to 0.72 hectares to accommodate the second well centre; and up to 0.20 hectares for each additional well centre. Approval is required for these upgrades. Total site size shall not exceed 3.5 ha of equivalent area.

100.1.5

The difference in elevation from well centre to any corner of the wellsite shall not exceed 10 metres of cut/fill, unless alternatives can be supported by Regulated Industry Standards.

The listing of the applicable Approval Standards and Operating Conditions based upon sensitive features affected by the proposed activity appears as follows:



Mineral Surface Lease (MSL)**Landscape Analysis Tool Report**

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Sensitivity Section Approval Standards and Operating Conditions**Caribou Range****Approval Standards****100.9.2.1**

Initiate activity as early as possible in the winter to limit late winter activities. New site preparation or construction shall not be initiated between February 15th and July 15th, with the following exceptions:

- a. Site preparation or construction initiated on a disposition before February 15th can continue until adverse ground conditions are encountered. Site preparation must be at least 50% completed prior to February 15th.
- b. Well tie-in activities commenced before February 15th can continue until adverse ground conditions are encountered.
- c. All wellsites or pipeline installations accessed using Class V routes can be initiated at any time (including after February 15th) provided ground conditions are favourable, and may continue until adverse ground conditions are encountered.
- d. All activities planned within 100 metres of existing arterial all-weather roads can be initiated at any time (including after February 15th) provided ground conditions are favourable, and may continue until adverse ground conditions are encountered.

100.9.2.5

Sites (e.g. plant sites, sumps) shall be constructed within 100 metres of an existing arterial all-weather permanent access.

Operating Conditions**200.9.2.1**

No legumes are to be seeded for any re-vegetation.

Grizzly Bear Zone**Approval Conditions****100.9.3.6**

Sites (e.g. plant sites, sumps) shall be constructed within 100 metres of an existing arterial all-weather permanent access.

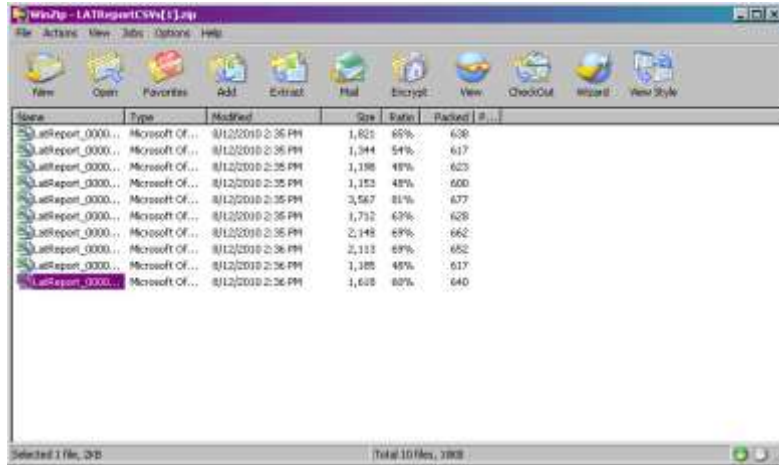
Operating Conditions**200.9.3.1**

No legumes are to be seeded for any re-vegetation.

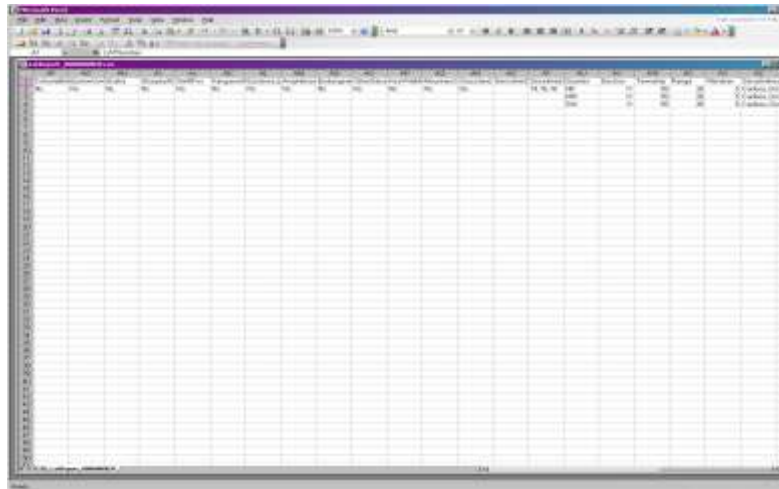
200.9.3.2

CSV File(s) containing LAT Report data:

This is a zipped file containing the LAT Report data in a CSV – (comma separated values) format. This format can be used to enter and analyse the LAT Report data in a spreadsheet, access database or software that accepts this format.




LAT Report CSV file opened within an Excel spreadsheet:





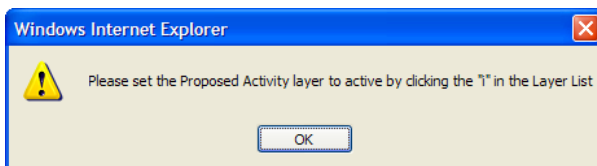
Download Shapefile Download Proposed Activity Layer


The Download Proposed Activity Layer Tool can be initialized at any time during the LAT session. This tool provides you with the capability of downloading a shapefile of your Proposed Activity layer and storing it on your local workstation for later use. An example of when you might wish to use this tool would be the circumstance where you are working within the LAT, locating Proposed Activities, and may wish to end your session prior to generating a LAT Report(s). By using the Download Proposed Activity Layer Tool, you can save your work to your local workstation and then re-submit the Proposed Activity Layer to the LAT using the “Upload Shapefile Tool”. This saves you from having to re-draw any data.

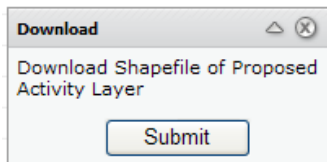
To download a shapefile of your Proposed Activities, you must make a Proposed Activity layer active in the Layer List box. Make the layer active by selecting the  icon next to the layer. When the layer is active, it will be highlighted in blue.



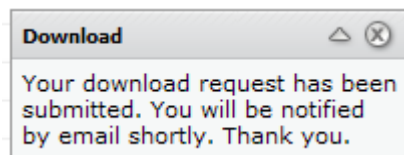
If you do not make a layer active, you will receive the following message:



Select the Download Proposed Activity Tool , and you will receive request box from the LAT asking you to submit your request to download the shapefile. Select “**Submit**” to submit your request.

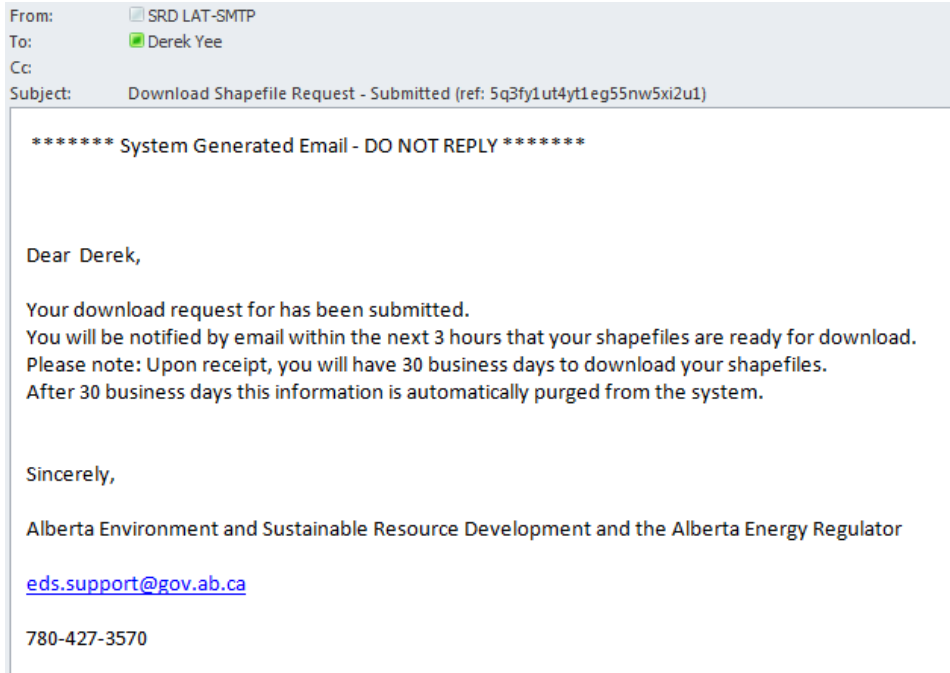


Upon successful receipt of your request by the LAT, you will receive a confirmation message box as shown below:

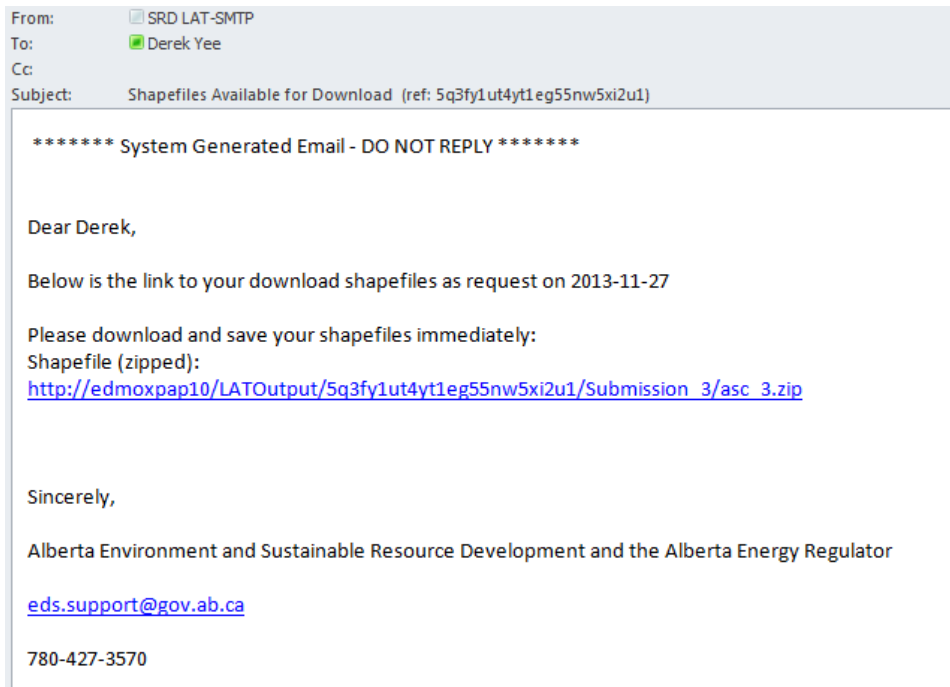


Select the “x” to cancel the message box.

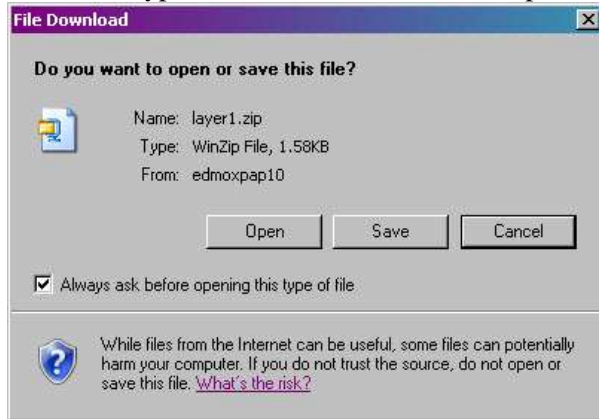
You should receive an email confirming your request to download data. See the example below:



Within 3 hours, you should receive an email that contains instructions on how to retrieve and download your shapefile request.



Select the hyperlink text to download the .zip file containing your shapefile to your local workstation.



Navigate to the location on your workstation where you wish to save the file, open the file using your .zip utility or cancel.

Appendix A – LAT Shapefile Specification for Proposed Activities

Introduction:

The shapefile format is the native format of Environmental Systems Research Institute's (ESRI) ArcView product. Shape records store both geometry and attributes for features. Shape records consists of six files, however only four are required for the LAT "Upload Shapefile". The files required are:

- Shape records (geometry) are stored in the *.shp* file. This is the main file.
- Attribute records are stored in the *.dbf* file. This is a dBase file.
- An index to each shape is stored in the *.shx* file.
- A projection *.prj* file that contains the map projection and datum information.

These extensions are added to the *basename* of the file. (e.g.. test.shp, test.dbf, test.shx, etc.)

**** Please note the following:**

- For LAT, the shapefile can only contain **polygon** features
- The shapefile extension must be in **lowercase** (i.e. *.shp*, *.dbf*, *.shx*, *.prj*)

File naming:

There are no standards with respect to the naming convention for the *basename*, as long as it is supported by the ESRI shapefile format.

Map Projection and Datum:

All shapefiles must be in 10TM_AEP_FOREST projection. The following *.prj* file parameters are required.

```
PROJCS["NAD_1983_10TM_AEP_Forest",GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Transverse_Mercator"],PARAMETER["False_Easting",500000.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",115.0],PARAMETER["Scale_Factor",0.9992],PARAMETER["Latitude_Of_Origin",0.0],UNIT["Meter",1.0]]
```

Geo-referencing:

There are no standards with respect to geo-referencing, however for optimal results users should consider geo-referencing their data to the DIDS (Digital Integrated Dispositions) layer, or to the Base Features ATS Version 4.3.1

Shapefile Size Limitations:

The combined size of the four Shapefile files must not exceed 20480 KB.

Proposed Activity Size Limitations:

To optimize system performance, the following size limitations have been applied to Proposed Activities:

1. Using the online LAT Editor tool, the maximum area of a Mineral Surface Lease (MSL) and Pipeline Installation Lease (PIL) is 80 hectares (800,000 square metres);
2. Using the online LAT Editor tool, the maximum length of a License of Occupation (LOC) and Pipeline Agreement (PLA) Activity is 20 kilometres;
3. The overall maximum area of all uploaded shapefile Proposed Activities is 110 hectares (1,100,000 square metres);

****Note that these limits may be adjusted from time to time.**

Using Multipart Features:

Multiple polygons in a shapefile can be merged together as a single Proposed Activity. Using multipart features will allow for a single LAT Report to be generated. Please refer to your GIS software to determine how this can be done with your shapefile. If you are using ArcGIS Desktop, you can refer to the online help for “Merging and separating features”:

http://webhelp.esri.com/arcgisDEsktop/9.3/index.cfm?TopicName=Merging_and_separating_features

Shapefile Attributes and Attribute Values:

The following Table 1 contains a description of the required attributes and attribute values represented as fields within the shape .dbf file.

Table 1

Field Name	Type	Description	Purpose	Mandatory
DISP_TYPE	TEXT(10)	The disposition type code of the proposed activity.	<p>This information is used to determine the types of Integrated Guidelines that may apply to the proposed activity.</p> <p>The disposition type will be displayed in the LAT Report.</p>	Yes – this information must be pre-populated before uploading the shapefile. Refer to Table 2 for valid codes.
ACT_TYPE	TEXT(10)	The purpose type code for the proposed activity.	<p>This information is used to determine the types of Integrated Guidelines that may apply to the proposed activity.</p> <p>The purpose type will be displayed in the LAT Report.</p>	Yes – this information must be pre-populated before uploading the shapefile. Refer to Table 2 for valid codes.

Disposition/Purpose Type Codes

The table below lists the Disposition and Purpose Type Codes that are to be used within a Proposed Activity Shapefile.

The validation of disposition/purpose types are only performed when generating a LAT Report. If either are invalid, the corresponding proposed activity will generate a LAT Report noting that an error occurred due to the invalid/missing activity.

Table 2

Disposition Type Code	Disposition Type	Purpose Code	Purpose Description
MSL	Mineral Surface Lease	BATT	PNG or OS Facility-Oil/Bitumen Battery site
		COMPSITE	PNG or OS Facility-Compressor Site
		FACGPLT	PNG or OS Facility-Gas Processing Plant
		FACGPLTSU	PNG or OS Facility-Gas Processing Plant- Sulphur Recovery
		FACTREAT	PNG or OS Facility-Custom Treating Facility
		SAT	PNG or OS-Satellite site
		WELLINJECT	Wellsite-Injection
		WELLPRODMW	Wellsite-PNG Production (MW)
		WELLPRODSW	Wellsite-PNG Production (SW)
LOC	License of Occupation	CLS1RD	Access Road-Class I - All Weather
		CLS2RD	Access Road-Class II - All Weather or Dry
		CLS3RD	Access Road-Class III - All Weather or Dry
		CLS4RD	Access Road-Class IV - Frozen/Dry Conditions
		CLS5RD	Access Road-Class V - Frozen
		CLS6RD	Access Road-Class VI - Frozen
		DRAIN	Water Diversion-Drainage or Irrigation Ditch
PIL	Pipeline Installation Lease	CATHPROTAG	Pipeline Installation-Cathodic protection / anode bed-above grd
		COMPSTN	Pipeline Installation-Compressor Station
		HDRISESITE	Pipeline Installation-Header or Riser Site
		HEATERSITE	Pipeline Installation-Heater Site
		METERSITE	Pipeline Installation-Meter Station Site
		PUMPSTN	Pipeline Installation-Pumping Station
		SEPSITE	Pipeline Installation-Separator Site
		VLVSITE	Pipeline Installation-Valve Site
PLA	Pipeline Agreement	CATHPROTBG	Pipeline-Cathodic protection / anode bed-below grd
		MULTIPIPE	Pipeline-Multiple Pipeline ROW
		PNGOSPIPE	Pipeline-PNG/OS Pipeline
		WTRPIPEFW	Pipeline-Fresh Water
		WTRPIPEINJ	Pipeline-Produced or Waste Water