

NM OCD Oil and Gas Map

User Guide

This user guide will give you a brief overview of the functionality and features of the NM OCD Oil and Gas Map.

This application will run in most web browsers including Safari, Chrome, and Internet Explorer (Microsoft Edge is the exception to this). It is also compatible with most mobile devices. No additional software or plugins are necessary to run the application.

The map projection is currently **Web Mercator Auxiliary Sphere 1984** originally developed by Google. This has since become the standard projection for web mapping applications.

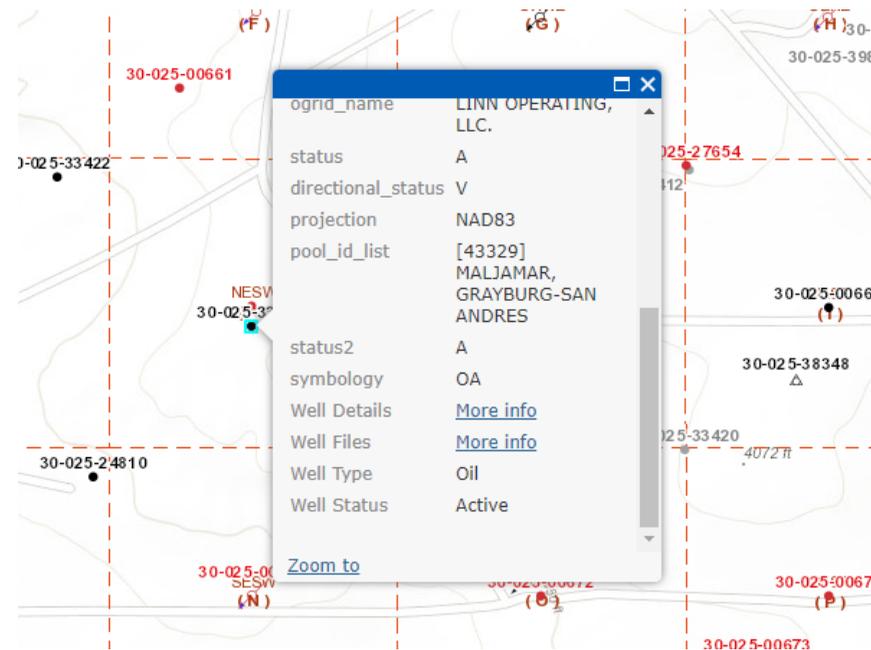
Click [here](#) for a list and description of the layers contained in the map.

Major features include:

- Nine different [base maps](#) including aerial imagery and roads.
- The ability to [search](#) for an individual well or township.
- A [measurement](#) tool.
- A [drawing](#) tool.
- The ability to [print](#) to pdf.
- The [Filter](#) widget.
- The [Near Me](#) widget.
- The [Screening](#) widget.

Coordinate Queries and Well Information

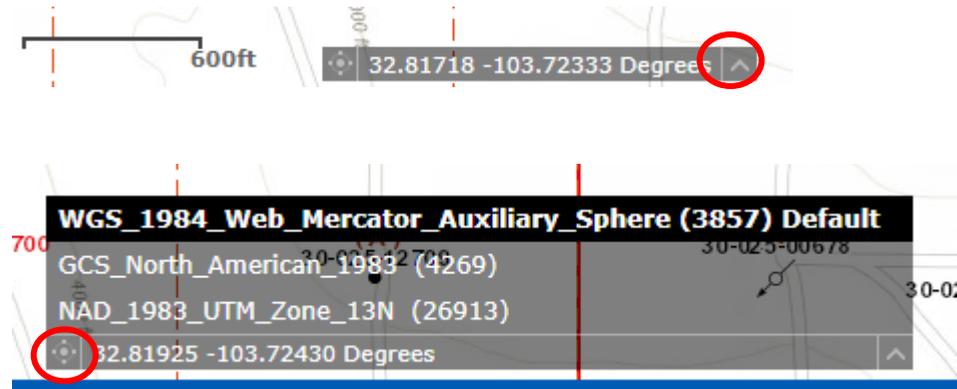
- Left clicking on a well will bring up a well information popup with some basic well information. There are two links at the bottom of the popup that will redirect you to the OCD well detail page and the OCD well files page. **A full attribute list is only available at a scale of more than 1:40,000.**



- The default map projection is Web Mercator Auxiliary Sphere 84. If you wish to view coordinated in UTM or GCS NAD83, you may use the coordinates widget located in the lower left of the main map to change the coordinates displayed in the widget. The rollover functionality will only work with the default projection (WMAS84). To get



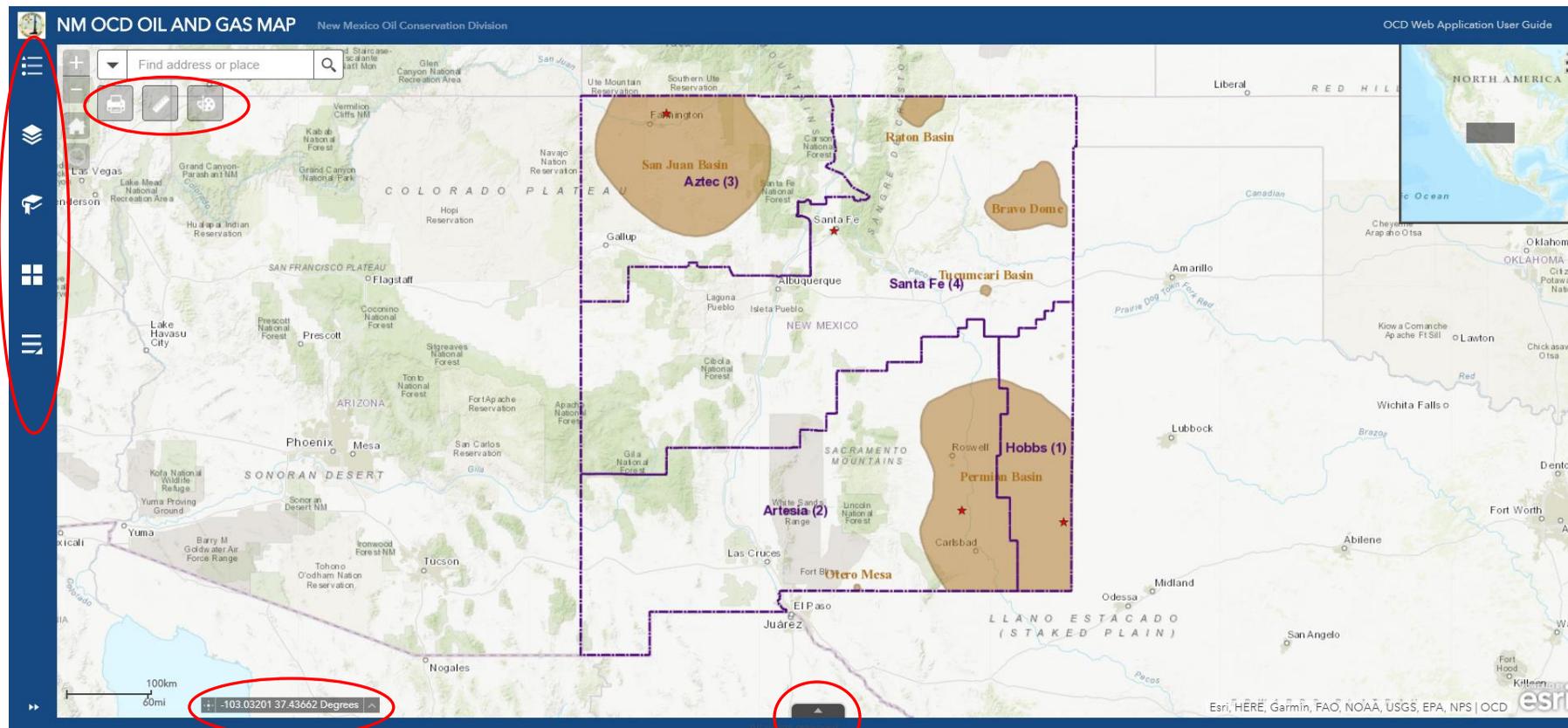
coordinates in UTM, or NAD83, you will need to click a location on the map after specifying the coordinate system you want using the target icon on the left side of the coordinate widget. More information on the coordinates widget can be found [here](#).

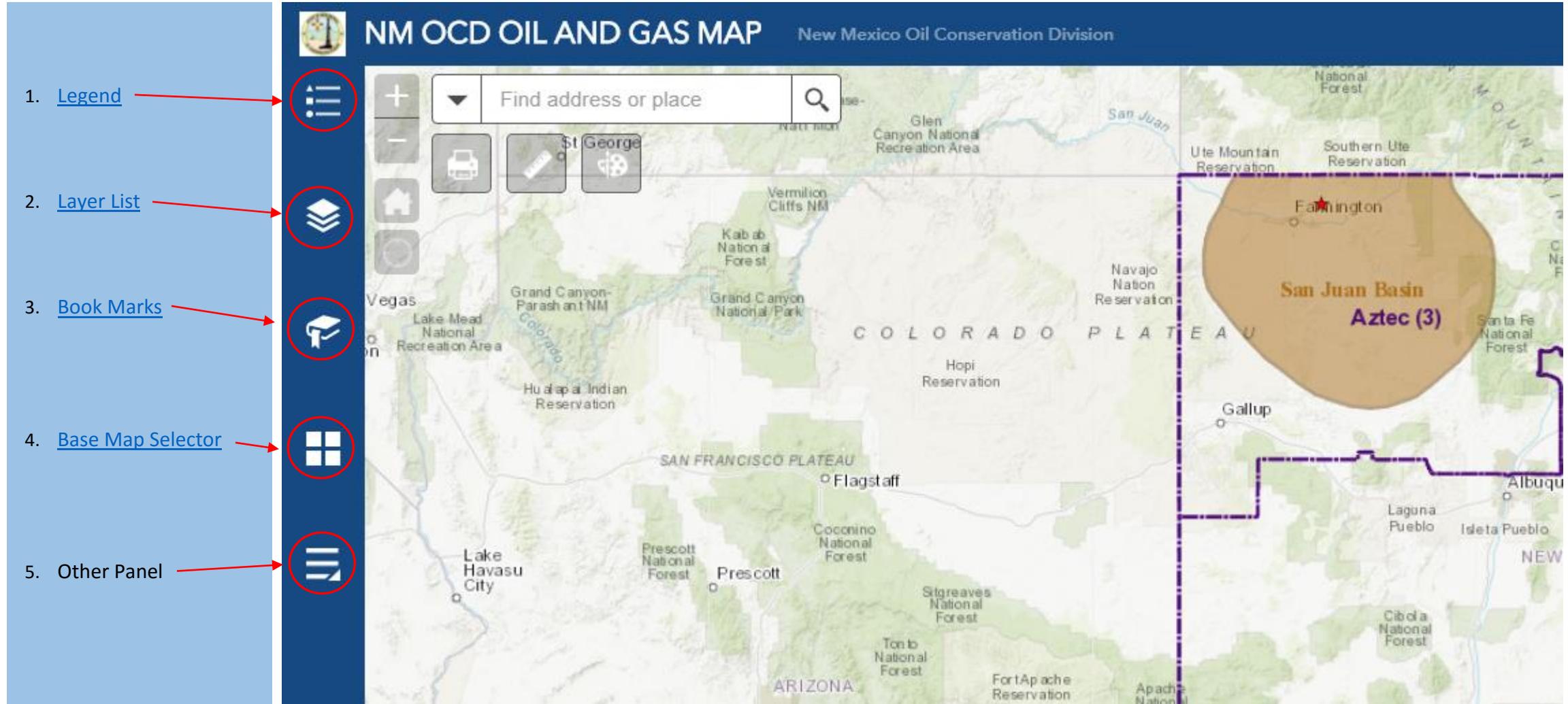


Map Controls and Widgets

This is the main screen of the application. You can scroll by holding the left mouse button and dragging the mouse. Zoom in and zoom out is accomplished by using the mouse wheel. Alternatively, you can hold the shift key and draw a box around the area you would like to zoom into.

The user interface elements are circled in red below.





NM OCD OIL AND GAS MAP New Mexico Oil Conservation Division

1. [Legend](#)
2. [Layer List](#)
3. [Book Marks](#)
4. [Base Map Selector](#)
5. [Other Panel](#)

The map displays the state of New Mexico with various geographical features and reserves. A large brown-shaded area in the eastern part of the state is labeled "San Juan Basin Aztec (3)". Other labeled areas include the Colorado Plateau and San Francisco Plateau. Major cities like Flagstaff, Gallup, and Albuquerque are marked. Reserves such as the Navajo Nation, Hopi, and Ute Mountain are also shown.



6. [Search](#)

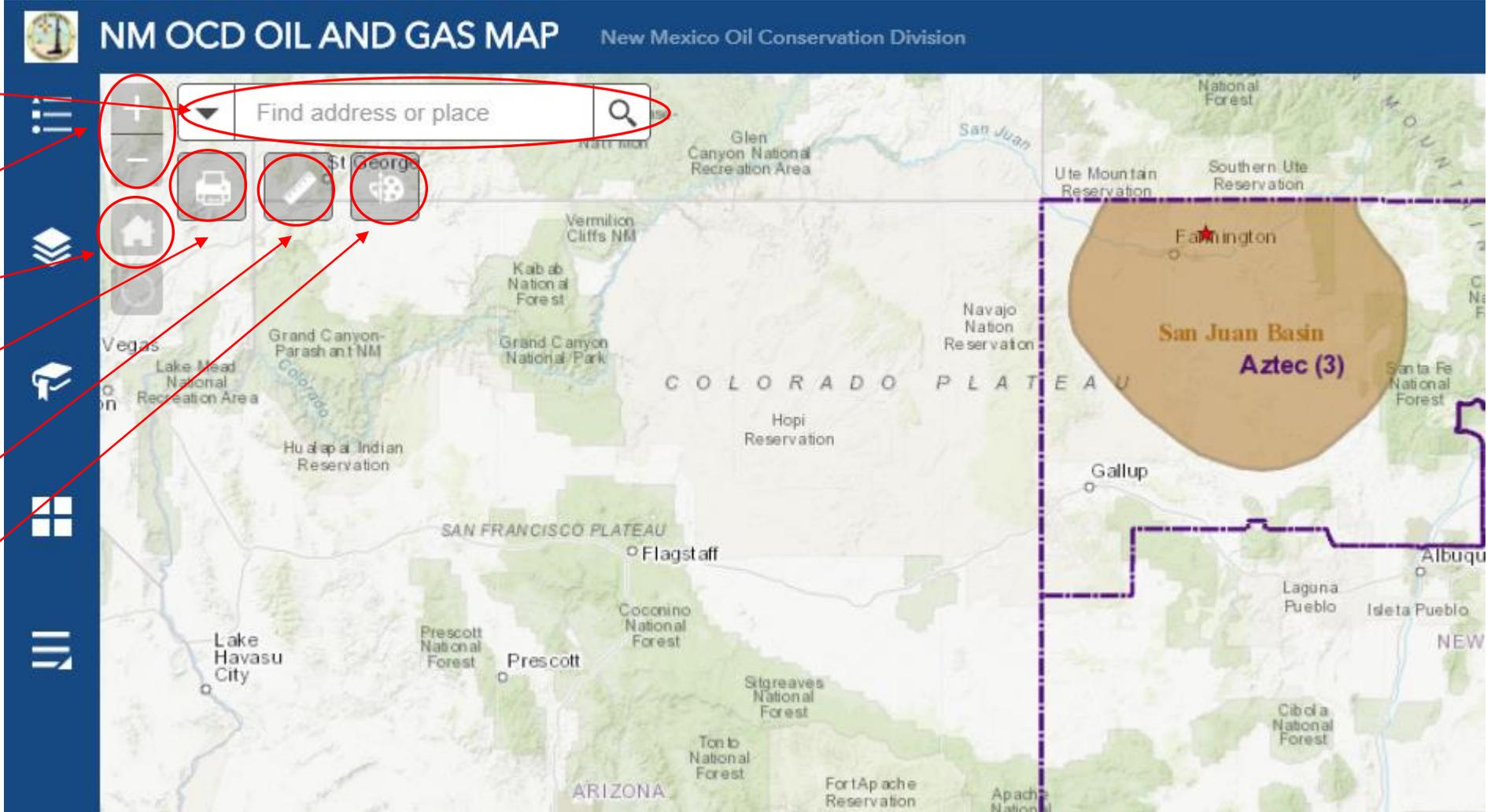
7. [Zoom In/Zoom Out](#)

8. [Home](#)

9. [Print](#)

10. [Measure](#)

11. [Draw](#)





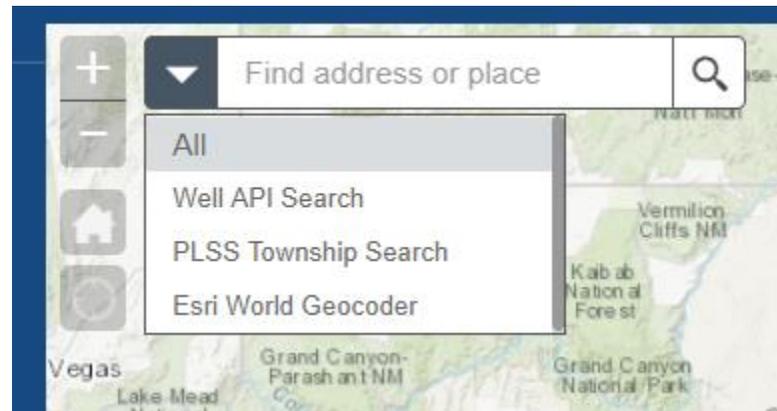
12. [Filter](#)

13. [Near Me](#)

14. [Screening](#)

The screenshot shows the "NM OCD OIL AND GAS MAP" interface. On the left, a dark blue sidebar titled "Other panels" contains three icons: a funnel, a location pin, and a magnifying glass over a document. Red arrows point from the numbered text on the left to these icons. The main map area shows a topographic map of the Colorado Plateau region, with various geographical features and labels such as "St. George", "Vermilion Cliffs NM", "Grand Canyon National Park", "Flagstaff", and "Prescott". A search bar at the top of the map area contains the text "Find address or place".

1. **Search:** This tool will allow you to search for a well or township. To select a type of search, use the pulldown arrow on the left-hand side of the search box.



- For a well, enter the API with dashes (e.g. 30-043-20305).
- For township, enter the township number and direction followed by a space and the range number and direction (e.g. 24N 3W).

2. **Legend:** This will display the legend for the various data layers. Please note that only visible layers will be displayed in the legend.



3. **Layer List.** This is a list of available layers than can be turned on and off at any time. This is especially useful if you want to improve the performance or unclutter the application by turning off unnecessary layers. All layers are not turned on by default. Please note that data layers will only display at certain scales meaning you will need to be zoomed in to a certain level before they will display on the map. If a layer is not in a visible scale range, it will be greyed out.

The screenshot shows a 'Layer List' panel with the following layers and their states:

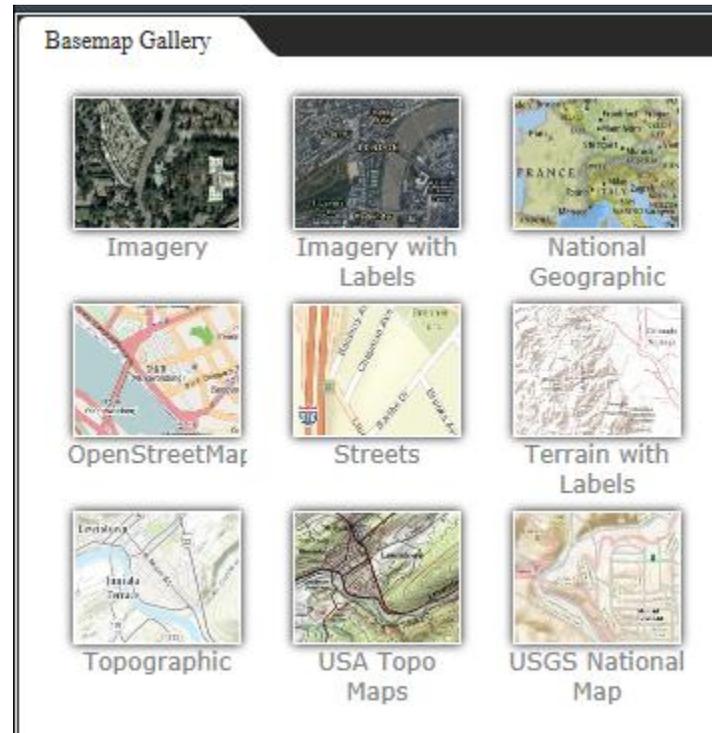
- Operational layers** (Group header)
- New Mexico Oil and Gas Wells (Group, turned on)
- Well Locations - Large Scale (Layer, turned on but not visible)
- Well Locations - Small Scale (Layer, turned on and visible)
- OCD Districts and Offices (Layer, turned on and visible)
- NM Oil and Gas Production Areas (Layer, turned on but not visible)
- Public Land Survey System (Layer, turned on but not visible)
- Leases and Units (Layer, turned off)

Annotations on the left side of the image point to these states:

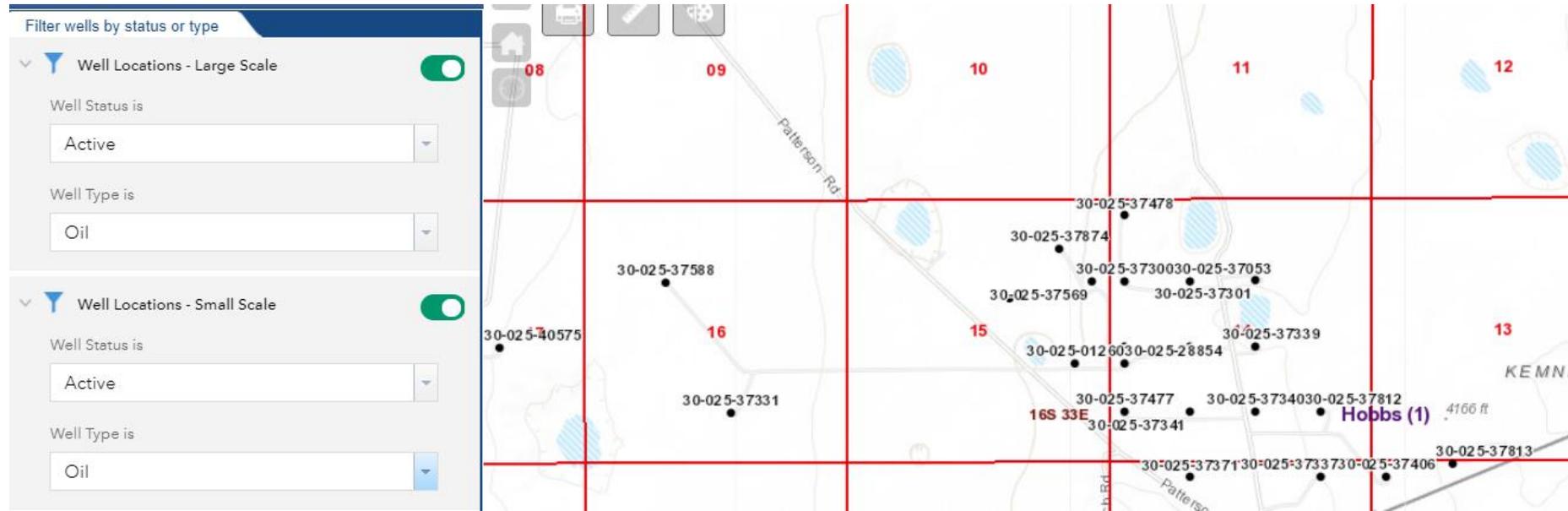
- Layer group turned on. (points to 'New Mexico Oil and Gas Wells')
- Layer turned on but not visible. (points to 'Well Locations - Large Scale')
- Layer turned on and visible. (points to 'Well Locations - Small Scale')
- Layer Group turned on by not visible. (points to 'NM Oil and Gas Production Areas')
- Layer Group turned off. (points to 'Leases and Units')

4. **Bookmarks:** This will allow you to bookmark areas of interest to be used at a later time. Certain areas have been pre-configured. Additional bookmarks can be created by the user to rapidly zoom into specific locations of their own choosing.

5. **Base Map Selector:** This tool will allow you to select the base map for the application. There are nine different base maps available. Keep in mind that some base maps could potentially negatively affect the performance of the application more than others. This is particularly true of the aerial photography. Also, some base-maps do not display at higher zoom levels, which is typically indicated by either a blank base-map or a "Data not available" message displayed across the map."



6. **Zoom In/ Zoom Out:** An alternative for using the mouse wheel to zoom in and zoom out of the application.
7. **Home:** This will take you back to default view of the application.
8. **Print:** This will allow you to print a PDF file of the current view of the map.
9. **Measure:** this tool can be used to measure distance and areas. You can select the units you wish to measure in. The defaults are feet and sq. feet.
10. **Draw:** This will allow you to place custom annotation on top of the map.
11. **Filter:** The Filter widget allows you to limit the visibility of wells by type or status in a layer. Both large scale and small scale can be filtered. It is recommended that you filter both layers so that the results are consistent at all scales when viewing the map.



12. **Near Me:** The Near Me widget allows you to find features within a buffer of a defined well location and view detailed information about those features. More information on the Near me widget can be found [here](#).

The screenshot displays the 'NM OCD OIL AND GAS MAP' interface. On the left, the 'Near Me' widget is active, showing a search input with '30-025-37300' and a slider set to '5 Miles'. Below the widget is a list of well locations with their respective distances from the search point. The main map area shows a grid of sections with various oil fields labeled, including South Caprock, East Anderson, West Anderson, Robinson, North Maljamar, and East Maljamar. A yellow circular buffer is drawn around a well location labeled 'Hobbs (1)'. The map also shows other well locations as small black dots and larger labels like 'Artesia (2)'. The bottom of the map displays coordinates and a scale bar.

Well Locations - Large Scale	Distance
Well Locations - Large Scale: SNAPPER STATE #002	0 mi
Well Locations - Large Scale: ANGLER STATE ...	0.15 mi
Well Locations - Large Scale: SNAPPER STATE #...	0.3 mi
Well Locations - Large Scale: POGO NAPA #002	0.3 mi
Well Locations - Large Scale: SNAPPER STATE #...	0.3 mi
Well Locations - Large Scale: ANGLER STATE ...	0.33 mi
Well Locations - Large Scale: POGO NAPA #001	0.37 mi
Well Locations - Large Scale: SNAPPER STATE ...	0.42 mi
Well Locations - Large Scale: PURE STATE G #...	0.44 mi
Well Locations - Large Scale: PURE STATE G #...	0.53 mi
Well Locations - Large Scale: SNAPPER STATE #...	0.6 mi
Well Locations - Large Scale: SNAPPER STATE #...	0.6 mi

13. Screening Tool: The Screening widget allows you to define an area of interest and analyze the NN Well Location layer for potential impacts. The area of interest can be defined through a place name search, by well API, by drawing on the map, or by geographic location. Analysis results can be inspected in the widget and, optionally, shared via a printed report or by CSV file download. More information on how to use the screening widget can be found [here](#).

The screenshot displays the 'NM OCD OIL AND GAS MAP' web application interface. The top navigation bar includes the title, 'New Mexico Oil Conservation Division', and a 'User Guide' link. Below the navigation bar is a search bar with the placeholder text 'Find address or place'. The main map area shows a grid of well locations with a red circle highlighting a specific area. A search result popup is visible over the map, displaying the following information:

Search result
17 Kemnitz Ln, Lovington, New Mexico, 88260
Show more results
Zoom to

The left sidebar contains the 'Screening' widget, which includes a 'Report' section and a 'Well Locations' section. The 'Well Locations' section shows a list of well details for two wells:

API:	30-025-01940
apilong:	30025019400000
wellname:	KEMNITZ WOLFCAMP UNIT #016
Well Status:	Active
Well Type:	Oil
section:	30
township:	16S
range:	34E
unit_ltr:	A
ogrid_name:	MGM OIL & GAS CO
directional_status:	V
pool_id_list:	[35530] KEMNITZ, LOWER WOLFCAMP
Well Details:	https://wwwapps.emnrd.state.nm.us/ocd/ocdpermitting/Date/WellDetails.aspx?api=30-025-01940&GISReferenceSource=ArcGISOnline
Well Files:	http://ocdimage.emnrd.state.nm.us/imaginq/WellFileView.aspx?RefType=Wf&RefID=30025019400000&GISReferenceSource=ArcGISOnline
Count:	1

The second well entry is partially visible:

API:	30-025-01256
apilong:	30025012560000
wellname:	PRE-ONGARD WELL #001
Well Status:	Plugged (Site Released)
Well Type:	Gas

The map also shows a scale bar (1mi, 2km) and coordinate information (-103.79906 32.93214 Degrees). The bottom right corner features the Esri logo and a list of data providers: OGD, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA.



List of Available Data Layers

Metadata can be accessed by the by the hyperlink on the layer name if available. Please contact the source agency for more information on the data sets.

Layer Name	Credits/Data Source	Description	Scale Range Min	Scale Range Max
New Mexico Oil and Gas Wells				
Well Locations – Large Scale	OCD	NM oil and gas wells detailed view with labels.	1:1	1:40,000
Well Locations – Small Scale	OCD	NM oil and gas wells overview.	1:40,001	1:750,000
OCD Districts and Offices				
OCD Districts	OCD	OCD management districts.	1:24,000	∞
OCD District Offices	OCD	OCD district offices.	1:1	∞
NM Oil and Gas Production Areas				
NM Oil and Gas Production Areas	OCD	General areas of oil and gas production in New Mexico.	1:750,000	∞
Public Land Survey System				
PLSS Township	BLM	PLSS townships.	1:10,000	1:1,000,000
PLSS First Division	BLM	PLSS 640-acre sections.	1:1	1:100,000
PLSS Second Division	BLM	PLSS 40-acre quarter/quarter sections.	1:1	1:24,000
Leases and Units				
BLM Fluid Mineral Leases	BLM	Bureau of Land Management fluid mineral leases.	1:1	1:100,000
BLM Fluid Mineral Units	BLM	Bureau of Land Management fluid mineral units.	1:1	1:500,000
NMSLO Oil and Gas Leases	NMSLO	NM State Land Office oil and gas leases.	1:1	1:100,000



BLM Communitization Agreements and Participating Areas				
BLM Communitization Agreements	BLM	Bureau of Land Management communitization agreements.	1:1	1:100,000
BLM Participating Areas	BLM	Bureau of Land Management participating areas.	1:1	1:100,000
Political Boundaries and Transportation				
Railroads	UC CENSUS	US Census Bureau 2010 tiger line railroads.	1:1	1:750,000
NMDOT GPS Roads	NMDOT	NMDOT GPS roads.	1:1	1:750,000
New Mexico Towns	EDAC	New Mexico towns and cities metro areas from 2009.	1:1	1:750,000
New Mexico Counties	RGIS	New Mexico counties from US Census Bureau 2008.	1:100,000	∞
Mineral and Surface Ownership				
Land Ownership	BLM	Bureau of Land Management surface land ownership.	1:1	1:500,000
Mineral Ownership	BLM	Bureau of Land Management subsurface mineral rights.	1:1	1:500,000
Hydrology				
OSE streams	OSE	Office of State Engineer streams and waterways.	1:1	1:100,000
PLJV Probable Playas	PLJV	Playa Lakes Joint Venture Probable Playas Version 4	1:1	1:100,000
OSE Water Bodies	OSE	Office of State Engineer water bodies.	1:1	1:100,000

Attribute Descriptions for NM Well Locations.

Attribute Name	Description
API	American Petroleum Institute Well Number
Wellname	Well Name
Well_type	Well Type (see below)
ulstr	Unit Letter, Section, Township, Range
ogrid_cde	Operator Code
ogrid_name	Operator Name
status	Well Status (see below)
dir_status	Directional Status (see below)
meas_depth	Measured Depth
tot_depth	Total Depth
spud_date	SPUD date
plug_date	Plugged Date
eff_date	Effective Date
apr_date	APR Date
projection	Projection
district	OCD District



Well Status Descriptions

Status	Description
A	Active
C	Cancelled APD
D	Dry and abandoned
H	Plugged (Not Released)
N	New(Not drilled/completed)
P	Plugged (Site Released)
T	Approved TA
E	Expired TA
X	Never drilled
Z	Zones TEMP. Plugged
Q	Zones Perm. Plugged
L	Lost Authority to Inject
S	Shut In



Well Type Descriptions

Type	Description
C	CO2
G	Gas
I	Injection
M	Miscellaneous
O	Oil
S	Salt Water Disposal
W	Water Source
GST	Gas Storage
GEO	Geothermal