

MAXIMIZE YOUR DATA POTENTIAL

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American Mapping Solutions

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Benefits

- Provide users with instant access to GIS data
- Increase value of data
 - Company Awareness of Data
 - Purchased 3rd party data
 - Mapped Data / Assets
- Reduce printed maps
- Remote Access
 - Field Offices
 - On site
- Easy to use
- Increase data quality (More eyes)

ESRI's Sample Flex Viewer (API for Flex)

- System works in any browser running Adobe Flash without installing any additional software. (Internet Explorer, Firefox, Safari, Chrome, etc)
- No software to install on clients
- Access the data from anywhere you have internet. (home, office, or in the field)
- Secure login with Windows Authentication or Token security
- Android Tablets

Data Examples

Company Data

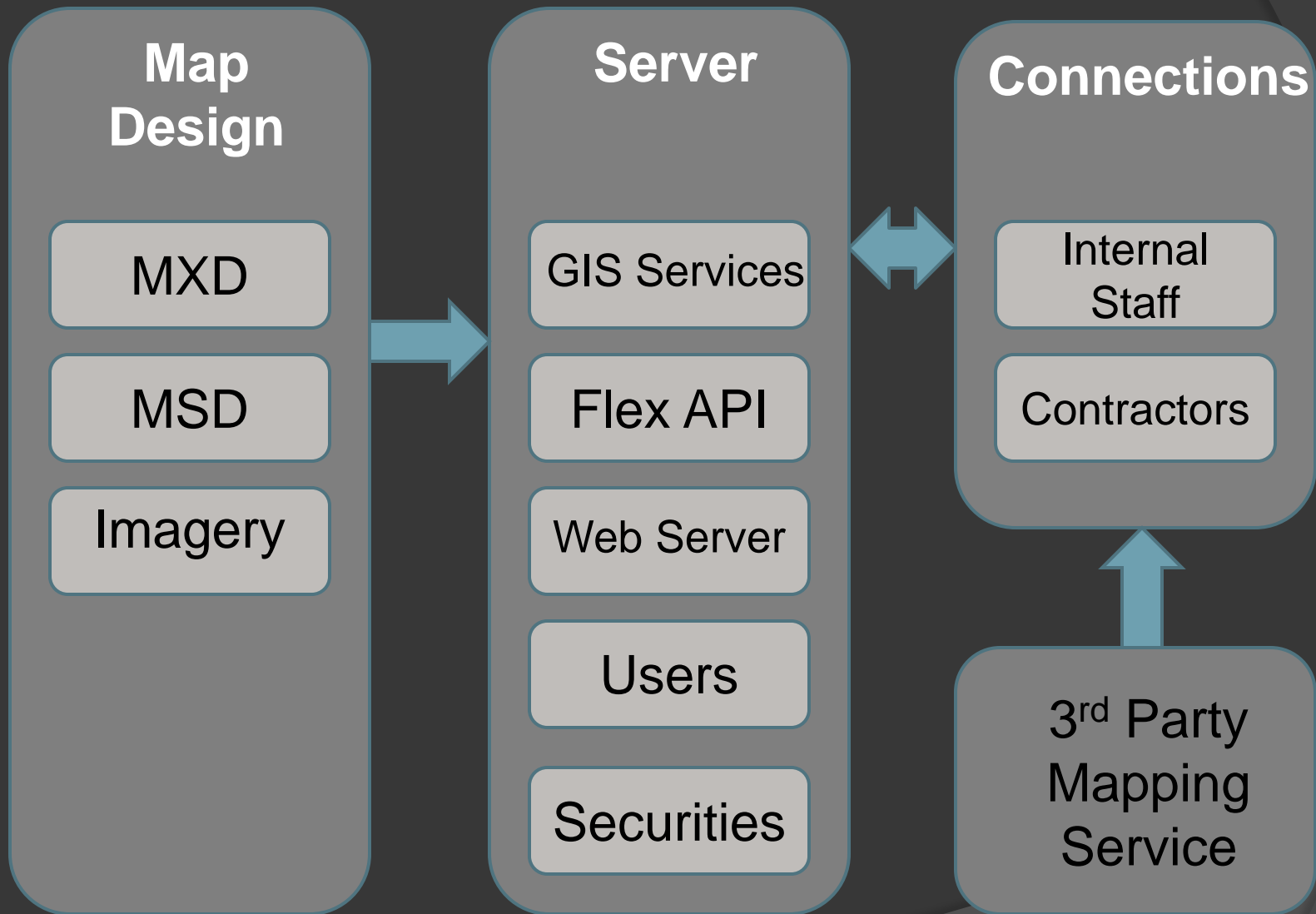
O & G Well Locations
Equipment (Tanks, Separators, EFMs)
Pipelines\Gathering
Leased Roads
Directional Bores
Bottom Holes
Leases (Restrictions and Expirations)
Elevation Contours
Access Gates (Combos)
Custom Imagery
Old Paper Maps overlays
Permitting Information
Production Data
Line Pressure
Water Volume

State Regulatory Data

Well & Permit Locations
Oil and Gas Facilities
Restricted Areas
Wildlife Areas
100 yr Flood Plain boundaries
Riparian
Federal Lands\BLM
Water Wells
Permitted Mines
Minerals Ownerships
Hydrology
Land Ownership\Parcel Data
Land Grid (PLSS)
Soil Data
Noxious Weeds

Requirements

- Flexviewer
 - <http://help.arcgis.com/en/webapps/flexviewer/>
- ArcGIS Server
 - Standard Workgroup and up
- Web Server
- Flash Builder not needed for basic setup



Basic Setup

- Create MXD
- Create Services on ArcServer
- Configuration Files (text editor/ Notepad)
 - Config.xml
 - Pop-ups
 - Widgets
- Export to Webserver

Master Config.xml

```
<configuration>
  <title>American Mapping Solutions</title>
  <subtitle>Demo</subtitle>
  <style>
    <colors>0xFFFFFFFF,0x003366,0x000033,0x000000,0xFFFFFFFF</colors> <!--Custom Dark-->
    <alpha>0.8</alpha>
  </style>
  <geometryservice url="http://amsgis.com/ArcGIS/rest/services/Geometry/Geometry/GeometryServer" />

  <widget left="10" top="50" config="widgets/Navigation/NavigationWidget.xml" url="widgets/Navigation/NavigationWidget.swf"/>
  <widget right="-2" bottom="-2" config="widgets/OverviewMap/OverviewMapWidget.xml" url="widgets/OverviewMap/OverviewMapWidget.swf"/>
  <widget right="0" top="41" config="widgets/MapSwitcher/MapSwitcherWidget_Master.xml" url="widgets/MapSwitcher/MapSwitcherWidget.swf"/>
  <widget left="0" top="0" config="widgets/HeaderController/HeaderControllerWidget_Master.xml" url="widgets/HeaderController/HeaderControllerWidget.swf"/>
  <widget left="6" bottom="3" config="widgets/Coordinate/CoordinateWidget.xml" url="widgets/Coordinate/CoordinateWidget.swf"/>
  <widget right="40" top="2" config="widgets/ExportMap/ExportMap_Master.xml" url="widgets/ExportMap/exportMap.swf"/>
  <map wraparound180="true" wraparound90="false" logovisible="false" initialextent="-24672000 -1866000 2723000 13241000" fullextent="-20000000 -20000000" />

  <basemaps>
    <layer label="Streets" type="tiled" visible="true" alpha="1" url="http://server.arcgisonline.com/ArcGIS/rest/services/World_StreetMap/MapServer" />
    <layer label="Nat Geo" type="tiled" visible="true" alpha="1" url="http://server.arcgisonline.com/ArcGIS/rest/services/NatGeoWorldImage/MapServer" />
    <layer label="Aerial" type="tiled" visible="true" alpha="1" url="http://server.arcgisonline.com/ArcGIS/rest/services/World_Imagery/MapServer" />
    <layer label="World Topo" type="tiled" visible="false" alpha="1" url="http://server.arcgisonline.com/ArcGIS/rest/services/World_Topoographic/MapServer" />
  </basemaps>

  <operationallayers>
    <layer label="CO Supporting Data" type="dynamic" visible="false" imageFormat="png32" alpha="1" url="http://amsgis.com/ArcGIS/rest/services/CO_Supporting_Data/MapServer" />
      <sublayer id="1" popupconfig="popups/CO_Supporting_Data/PopUp_CO_Supporting_Data_WellLocations.xml"/>
      <sublayer id="4" popupconfig="popups/CO_Supporting_Data/PopUp_CO_Supporting_Data_PermitLocations.xml"/>
    </layer>
    <layer label="Demo Data" type="dynamic" visible="true" alpha="1" imageFormat="pngJ2" url="http://amsgis.com/ArcGIS/rest/services/DEM/MapServer" />
      <sublayer id="0" popupconfig="popups/DEM/PopUp_DEM_WellLocations.xml"/>
      <sublayer id="1" popupconfig="popups/DEM/PopUp_DEM_Permits.xml"/>
    </layer>
  </operationallayers>
</map>

<widgetcontainer layout="float" <!--horizontal(default)|float|vertical|fix-->
  <widget label="Search Engine" icon="assets/images/i_pin2.png" config="widgets/eSearch/SearchWidget_DEM.xml" url="widgets/eSearch/SearchWidget_DEM.swf"/>
  <widget label="Expiring Permits by Day" width="600" icon="assets/images/i_clock.png" config="widgets/Time/TimeWidget_Days_Demo.xml" url="widgets/Time/TimeWidget_Days_Demo.swf"/>
  <widget label="Permitting Docs" icon="assets/images/i_book.png" config="widgets/Link/LinkWidget_DEM_Permitting.xml" url="widgets/Link/LinkWidget_DEM_Permitting.swf"/>
</widgetcontainer>
```

Basemaps

My Data

Tools

Tools \ Widgets

- Pop-ups
- Search
- Charting
- Query
- Time Slider
- Elevation Profiles
- Buffers
- Draw / Measure
- Bookmarks
- Routing



Well Location

Scout Card

Well 31-7 WARDELL-UPRR
 Operator KERR MCCEE OIL & GAS
 ONSHORE L.P.
 API 05-123-12795

Facility Status PR
 Facility Type WELL
 Field Name WATTENBERG

COGCC Wildlife Areas

Type Bald Eagle Winter Night
 Roost Sites
 Category SWH
 Data Date 10/17/08
 ID 26

Zoom to

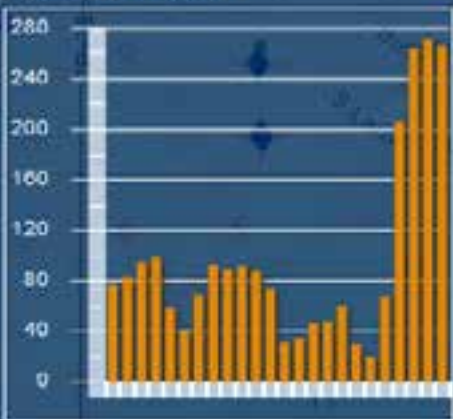
COGIS - WELL Information

Scout Card [Related](#) [Insp](#) [MIT](#) [GIS](#) [Doc](#) [Wellbore](#) [Orders](#)
 Surface Location Data for API # 05-123-12795 Status: PR

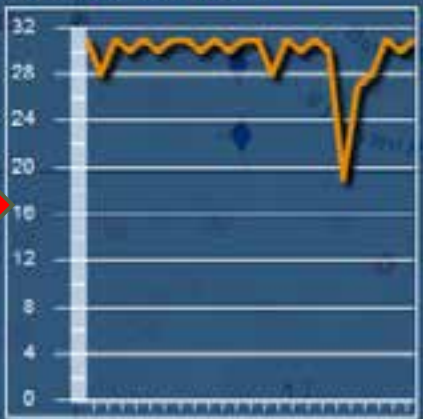
Well Image



Oil or Gas Production



Days per Month Operation



10/17/08 7:34:55W 5:PM
 5,012 ft.
 Lat/Long Calculated From Footages
 Lat/Long Source: Field Measured
 6/5/2008
 ACTUAL
 3/7/1986
 Y
 e 80, Drill Unit: W2NE
 7490

Sample Pop-up xml

```
<?xml version="1.0" ?>
<configuration>
  <title>COGCC Well</title>
  <description>
    <![CDATA[<a href="http://cogcc.state.co.us/cogis/FacilityDetail.asp?facid=[sdf_key]"><b>COGCC Scout Card</b></a> ]]>
  </description>

  <fields>
    <field name="attrib_3"      alias="Well"      visible="true"/>
    <field name="attrib_2"      alias="Operator"   visible="true"/>
    <field name="attrib_1"      alias="API"        visible="true"/>
    <field name="facility_s"     alias="Facility Status" visible="true"/>
    <field name="facility_t"     alias="Facility Type" visible="true"/>
    <field name="field_name"     alias="Field Name" visible="true"/>
    <field name="sdf_key"       alias="COGCC Link" visible="false"/>
  </fields>

  <medias> <!--type=harchart,columnchart,harchart,piechart,linechart-->
    <!--<media type="piechart" title="Well Production" chartfields="GasProd,OilProd"/>
  </medias>
</configuration>
```



Search Tool

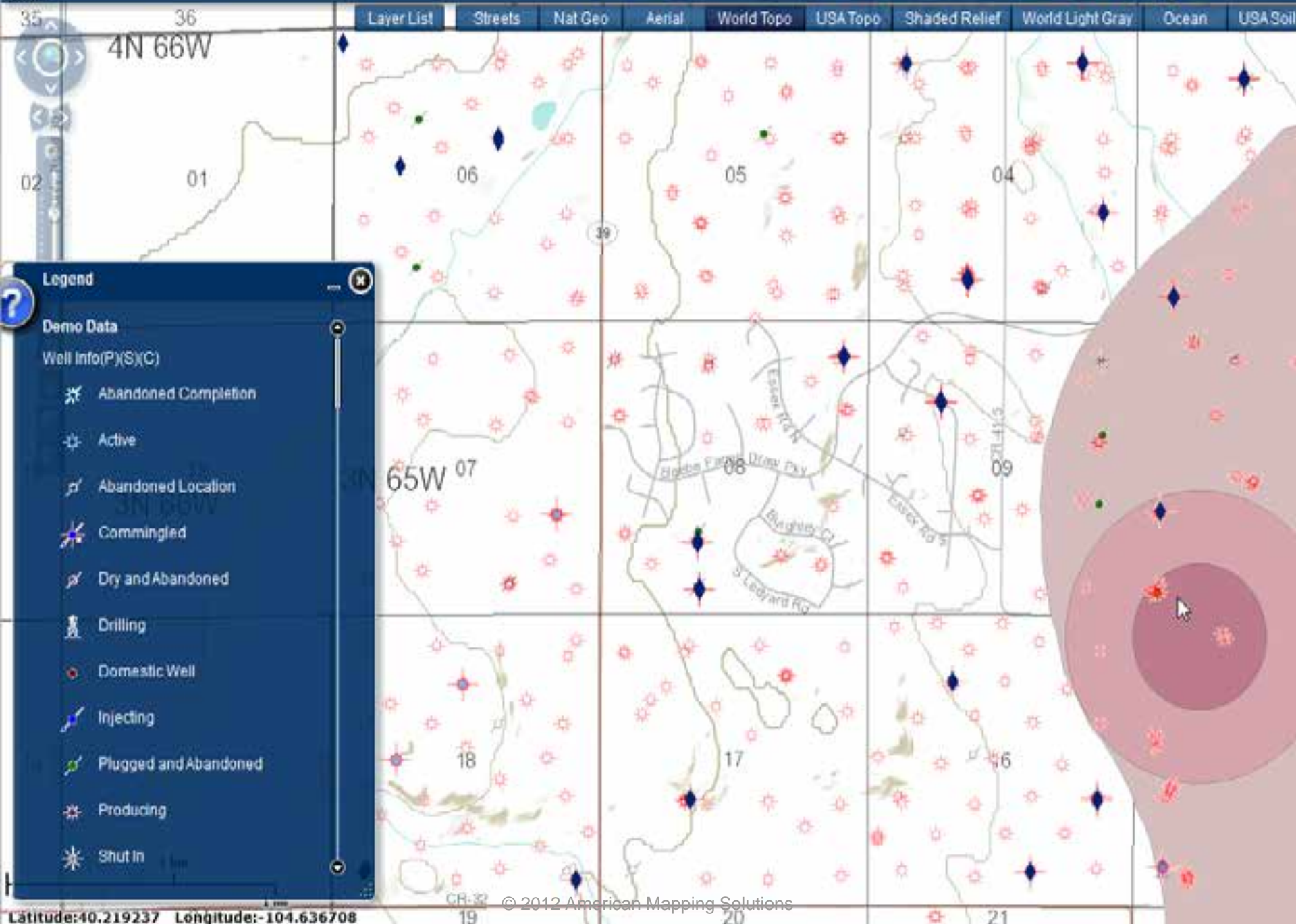
- Attribute search
- Wildcards
- Web site/ Document linking
- Sort by columns
- Export results to CSV
- Graphic selection



Charting

- ž Production Values
- ž Water Production
- ž Days in Production

```
<?xml version="1.0"?>
<configuration label="Charts (example)">
  <highlightcolor>0x336699</highlightcolor>
  <labels>
    <layerselectionlabel>Select layer</layerselectionlabel>
    <drawtoolmenulabel>Select draw tool</drawtoolmenulabel>
  </labels>
  <layers>
    <layer label="Well Production" url="http://amsgis.com/ArcGIS/rest"
      <labelfield>attrib_3</labelfield>
      <fields>
        <field name="attrib_3"/>
        <field name="O2011_01"/>
        <field name="W2011_01"/>
        <field name="D2011_01"/>
      </fields>
      <medias>
        <media chartfields="O2011_01"
          title="Oil or Gas Production"
          type="columnchart"/>
        <media chartfields="W2011_01"
          title="Water Production"
          type="barchart"/>
        <media chartfields="D2011_01"
          title="Days Operational"
          type="linechart"/>
        <media chartfields="O2011_01"
          title="2011 Production"
          type="picchart"/>
      </medias>
    </layer>
  </layers>
</configuration>
```



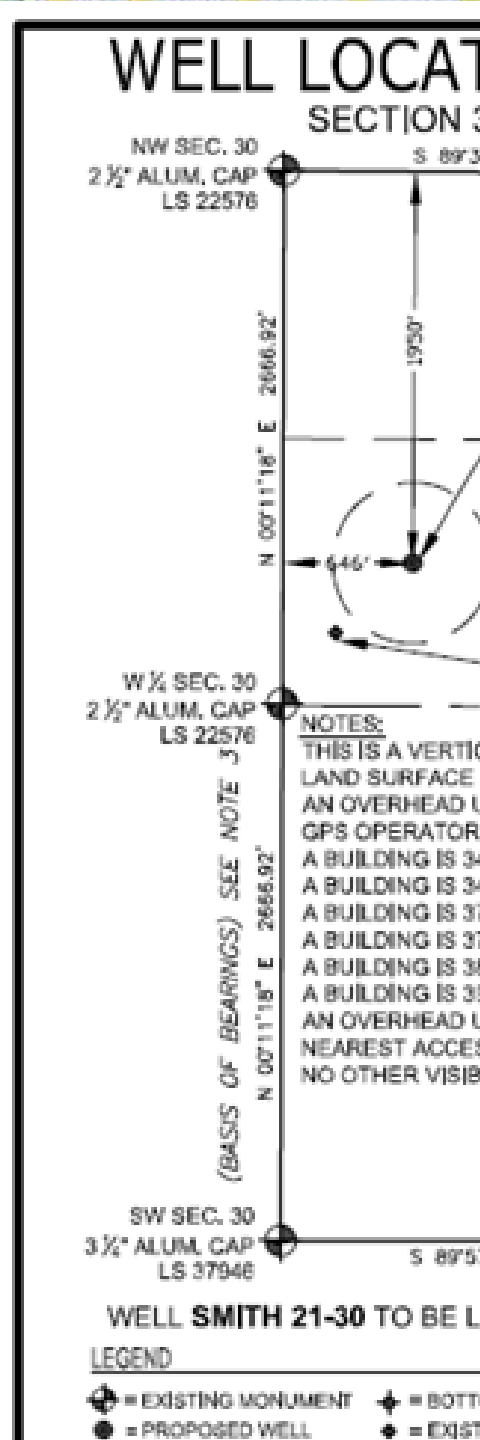
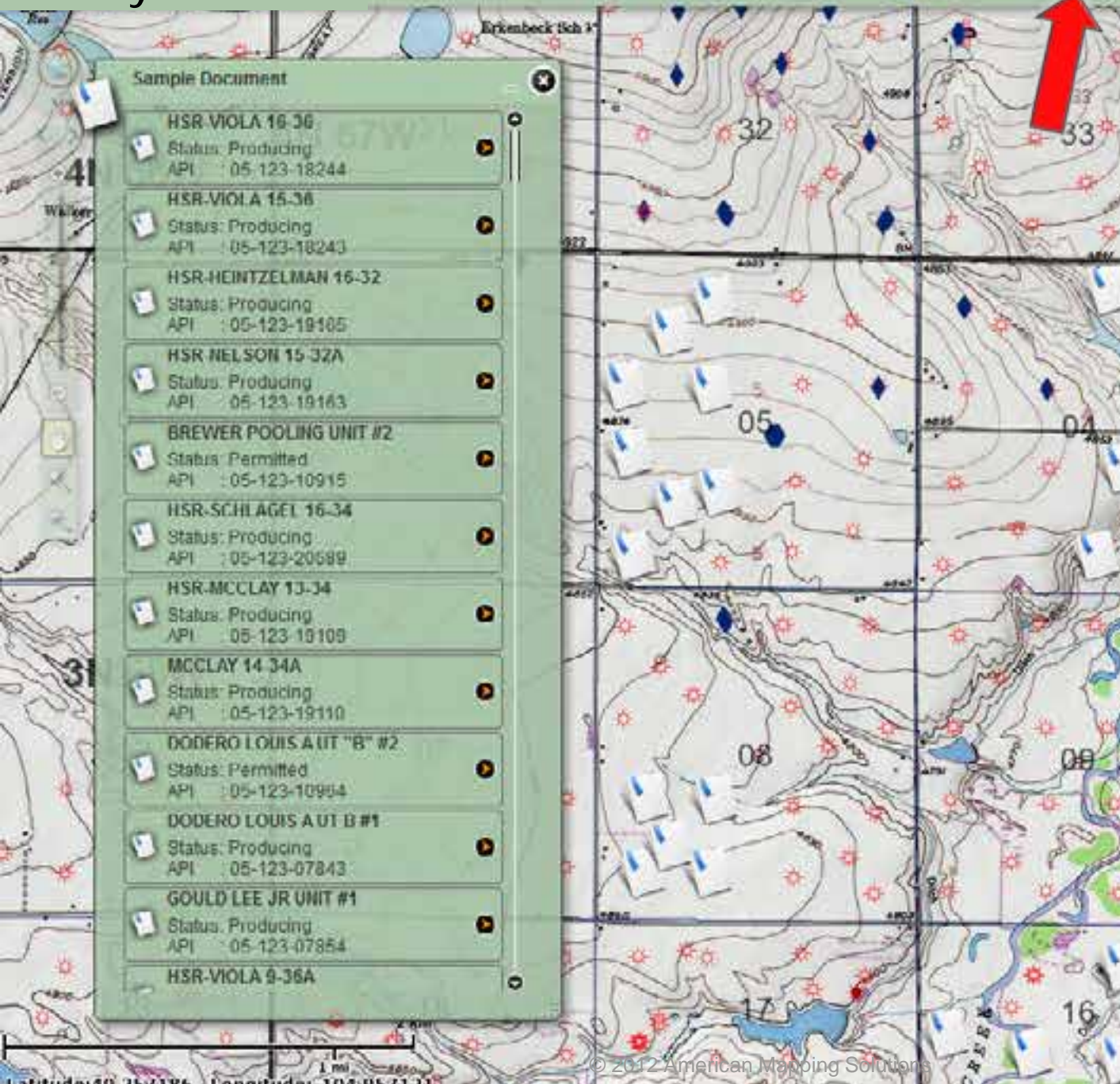
Legend

Demo Data

Well Info(P)(S)(C)

- Abandoned Completion
- Active
- Abandoned Location
- Commingled
- Dry and Abandoned
- Drilling
- Domestic Well
- Injecting
- Plugged and Abandoned
- Producing
- Shut In

Query/Document Store



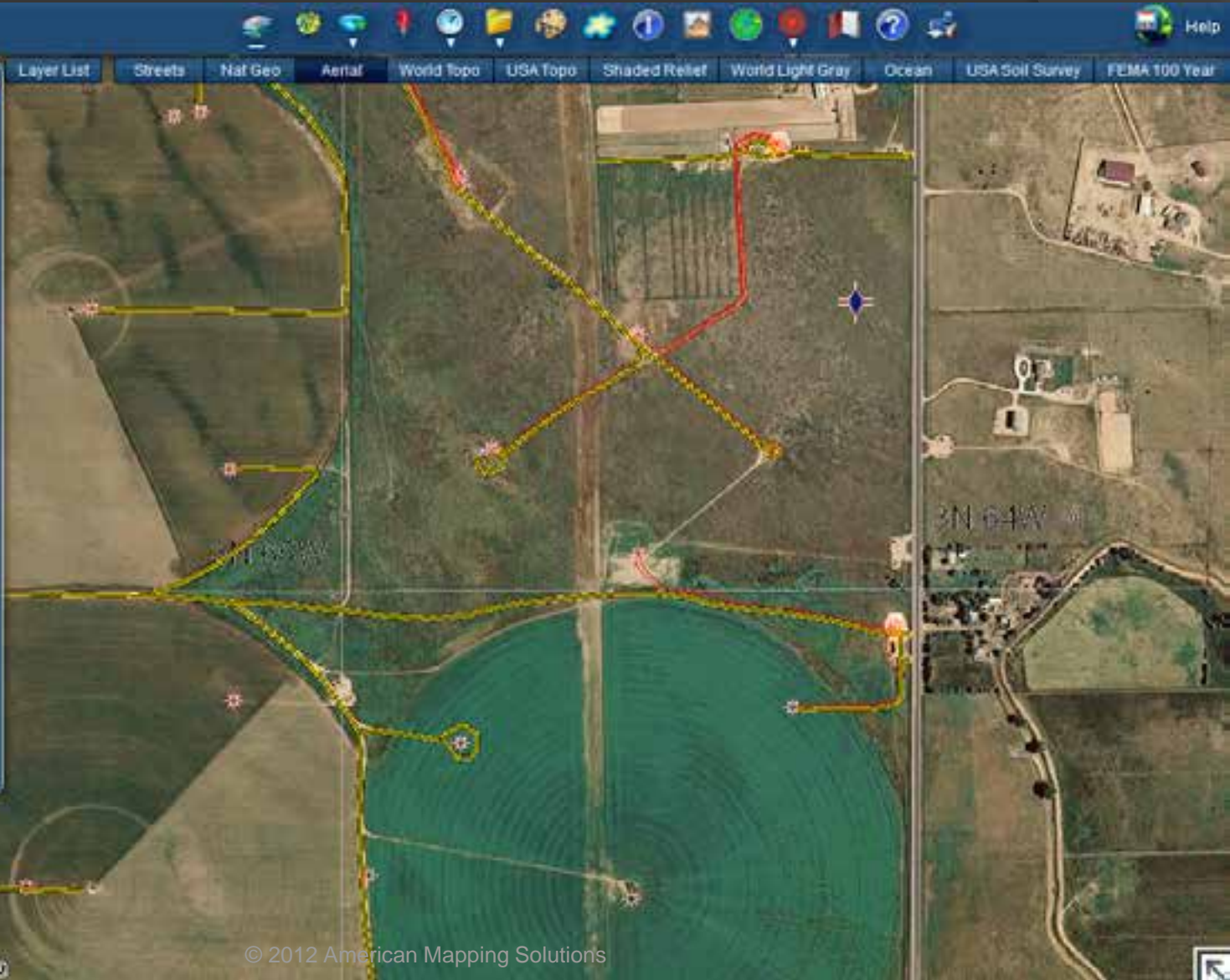
Alerts/Labels

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Demo

Layer List

Layer Visibility

- Demo Data
 - Well Info(P)(S)(C)
 - Well Info - Labels (1:20K)
 - Permits (P)(S)(T)
 - Permits - Labels (1:20K)
 - Production Alerts
 - Permits Alerts
- Assets
- CO Supporting Data
 - CO Oil and Gas Data
 - Wildlife
 - Hydrology
 - Land
 - Soils
 - Transportation
 - Geology
 - Misc Data
- WY Supporting Data
- PLSS



100m
1000 ft
Latitude: 30.251100
Longitude: -101.610000

Data by Department

- **Permitting**
 - Drilling restrictions
 - Time slider for expiring permits
 - Document storage
- **Field Operations**
 - Pumper maps
 - Location info/combos
 - Parts / Model info of equipments
 - Pipeline locations
- **Land / Lease Management**
 - Leases / Land ownership
 - Time Slider on expiring
 - Lease restrictions
- **Executive Dashboard**
 - Production
 - Wells not producing
- **Environmental**
 - Disturbance areas
 - Report storage
- **Sale of Assets**
 - Presentation of site
 - Photos
 - Documents
 - Mapping data

Your System

- All GIS data and documents can be displayed and accessed by all staff given permission.
- Custom data and functionality displayed to your needs, laid out the way you want to see it.
- Data refreshed to your standards and needs.
- Display public data overlaid with your internal data.

Questions ?

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