

Using GIS to Manage Worldwide Drilling Assets

**A Case Study
Using ESRI Technology to provide
solutions to the Petroleum Industry.**

**Anastasia Aourik, GIS Consultant
Smith International, Inc.**

PEOPLE

TECHNOLOGY

RESULTS

My Background

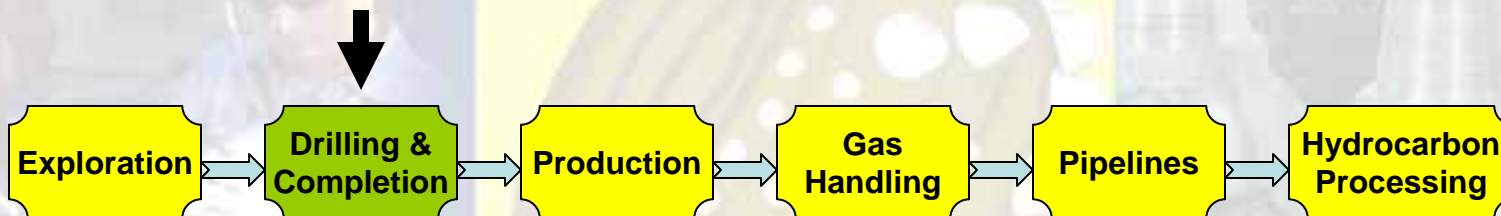
Anastasia Aourik

Software Engineer - Specialize in building Enterprise GIS
GIS Consultant for Smith International, Inc.

Smith International, Inc.

A major oilfield services company, engaged in providing a comprehensive line of products and engineering services to the oil and gas exploration and production industry, as well as to the petrochemical and other related industries.

Everything revolves around Drilling & Completions!



Smith Companies participating in our Enterprise GIS



All of these companies contribute their
business data to our Enterprise GIS

PEOPLE

TECHNOLOGY

RESULTS

Our GIS User Community

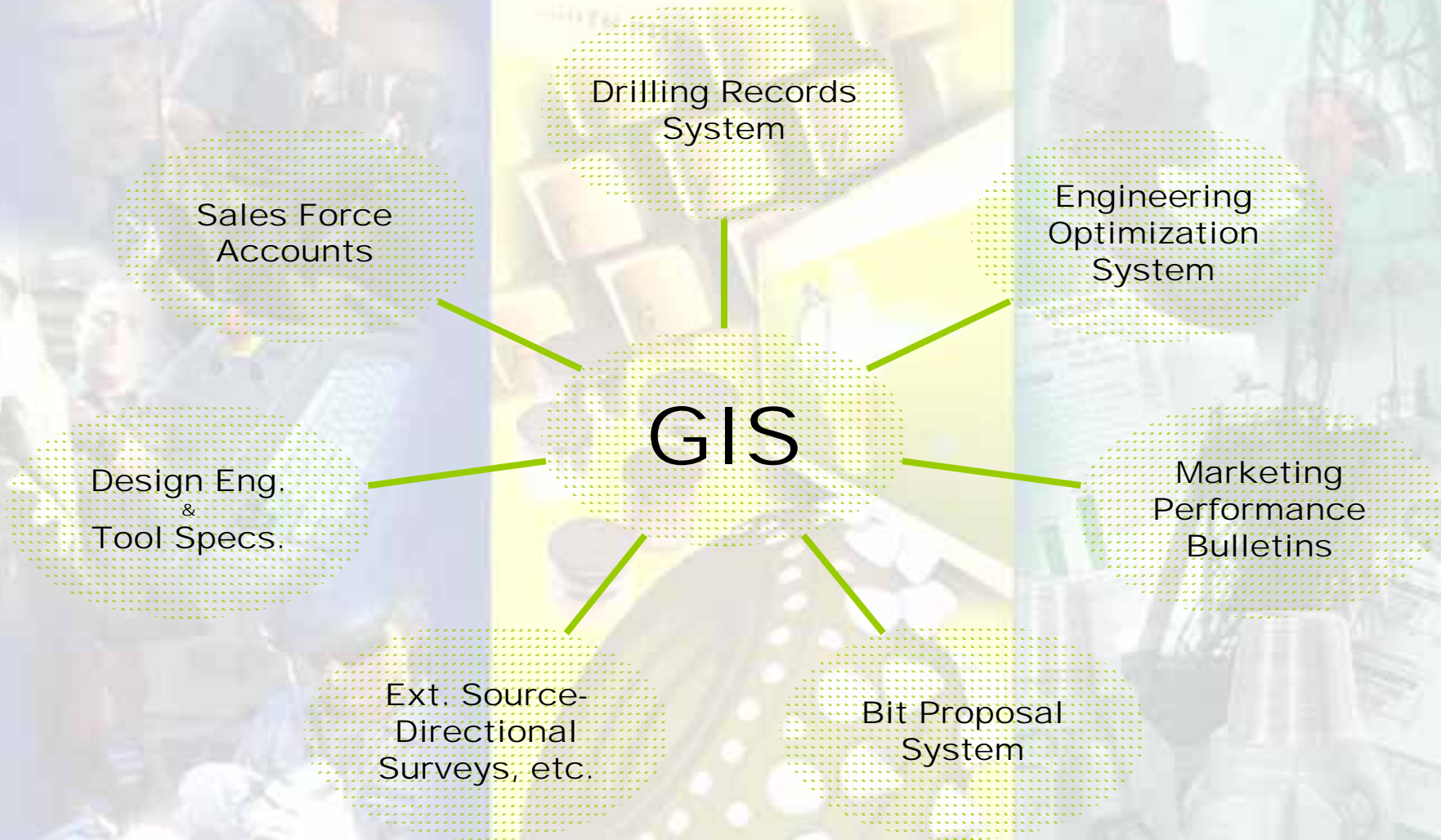
- Sales Managers
- Field Engineers
- Bit Design Engineers
- Drilling Optimization Engineers
- Bit Inventory Administrators
- Marketing Managers

PEOPLE

TECHNOLOGY

RESULTS












Our Global GIS Library

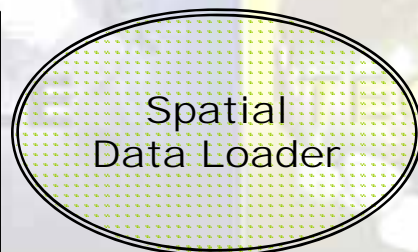


**Making it EASY to locate any asset
And find potential customers.**

Our Global GIS Library

Drilling Records System

Wells & Bits	
<input type="checkbox"/>	<input type="radio"/>  SPUD COMPLETED
<input type="checkbox"/>	<input type="radio"/>  SPUD-NO VISIT
<input type="checkbox"/>	<input type="radio"/>  TURBODRILL RUNS <small>TH</small>
<input type="checkbox"/>	<input type="radio"/>  FIELD RUNS <small>TH</small>
<input type="checkbox"/>	<input type="radio"/>  INTENT TO DRILL / PERMITS <small>1:500 Miles</small>
<input type="checkbox"/>	<input type="radio"/>  ACTIVE RIGS <small>TH</small>
<input type="checkbox"/>	<input type="radio"/>  BIT RECORDS <small>TH</small> <small>1:500 Miles</small>
<input type="checkbox"/>	<input type="radio"/>  BIT RUNS <small>TH</small> <small>1:200 Miles !</small>
<input type="checkbox"/>	<input type="radio"/>  SIIDRILL PROPOSALS
<input checked="" type="checkbox"/>	<input type="radio"/>  PERFORMANCE BULLETINS 



TECHNOLOGY

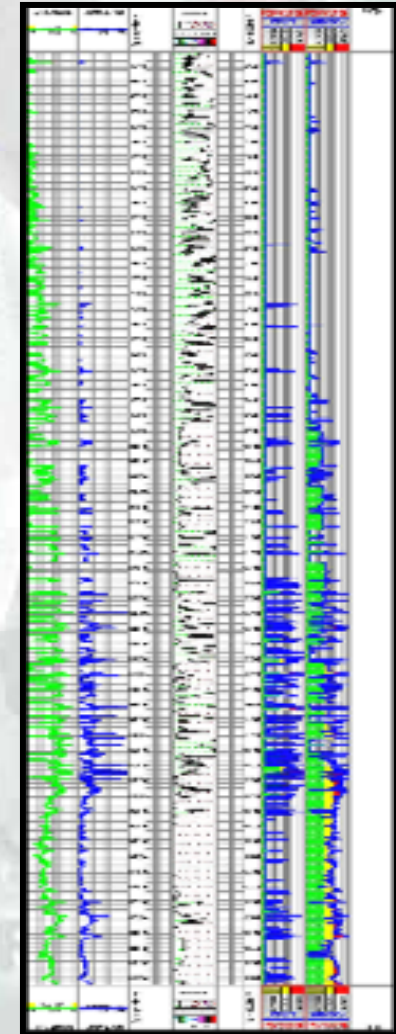
RESULTS

Our Global GIS Library

Engineering Optimization System

The screenshot shows the DBOS web application interface. On the left is a map of the LGC District with a callout for 'Miami Corp. #H-9'. The right panel shows search results for 'DBOS within Select Rectangle' with 2 records found. A 'Generate Report' button is visible. Below the table is another 'Generate Report' button and a 'Zoom to these records' link.

Select	Highlight	DBOS ID	Operator Name	Well Name	Total Depth	Total Vertical Depth	Country	
<input type="checkbox"/>	1	LA-StMarW13	HUNT OIL	Miami Corp. #H-9	10030	10007	USA	Saint Ma
<input type="checkbox"/>	2	LA-WR-OVW04	ChevronTexaco	WR 670 #2 OCS-0-21245	29028	28937	USA	Walker Ri



SOA
Web Service
Auto Loader

CHNOLOGY

Our Global GIS Library

Marketing Performance Bulletins

PERFORMANCE BULLETIN

Map Layers Filters Legend Tools Selections

Performance Bulletins within Select Rectangle

Record(s) Found: 9

Generate Report Zoom to Rec Done

Select	Highlight	Performance ID	Bit Type	Bit Size	Well Name	Operator
<input type="checkbox"/>	1	20200	DSJ	13.750	BELL #1-20	FLAINS PET E ALE
<input type="checkbox"/>	2	20430	F3	8.875	HESTON MARTIN #2	AMOCO RED O
<input type="checkbox"/>	3	20401	H45M1		ROY REED TRUST #2: 35	ARHLA EXPL
<input type="checkbox"/>	4	20319	SDT	17.800	E M CARLSON #1	EXXON H DWE
<input type="checkbox"/>	5	20365	SDS	17.800	WALLACE JAMES A #2	AMOCO SW HA
<input type="checkbox"/>	6	20400	H45M1		HOWELL #19-1	UNKNOWN CALIQ

SMITH BITS
PERFORMANCE

Smith Tool
15.75" DSJ
S/N: SAX287

2005 Single Run Footage
World Record for
15.75" Milled Tooth.

Smith Bits is the 2005 World Records Leader in:

- PDC Bits
- Natural Diamond/Impregnated Bits
- Tungsten Carbide Insert Bits
- Milled Tooth Bits
- Hammer Bits

Smith Bits has been the World Records Leader for Seven Consecutive Years.

Ref: Harris 66P 2005 Drilling & Production Yearbook

Run	Bit	Type	Bit Size	Serial	Well	Depth (ft)	Depth (m)	Area	Area (sq mi)	Well Condition
2005	DSJ	DSJ	15.75	SAX287	BELL #1-20	1000	305	ET	0.00	Production

PEOPLE • TECHNOLOGY • RESULTS

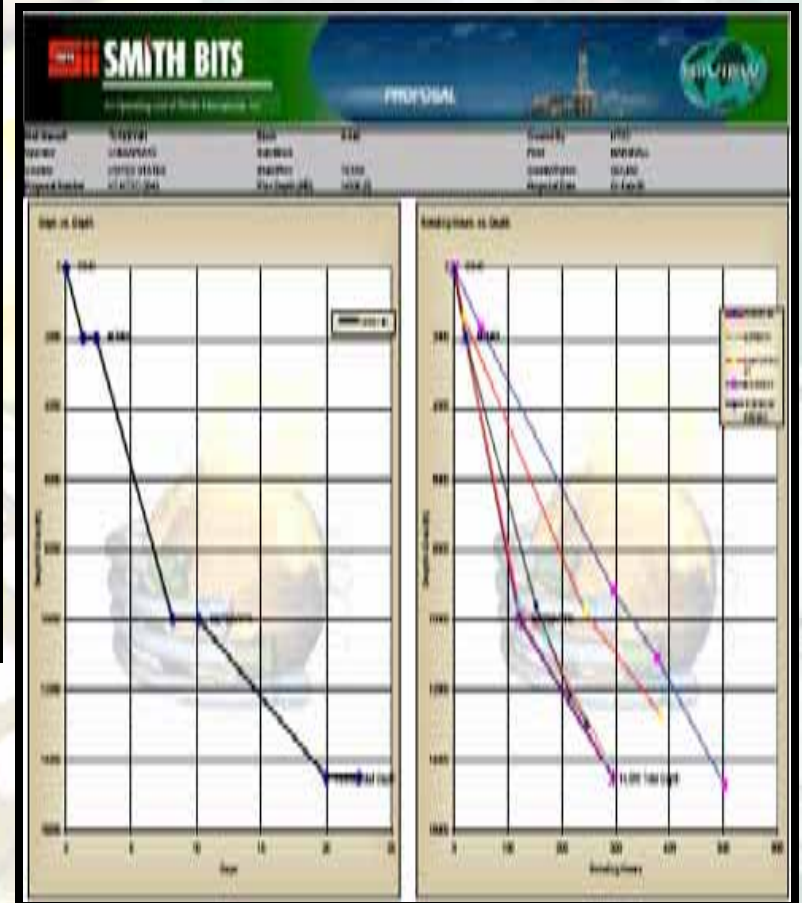
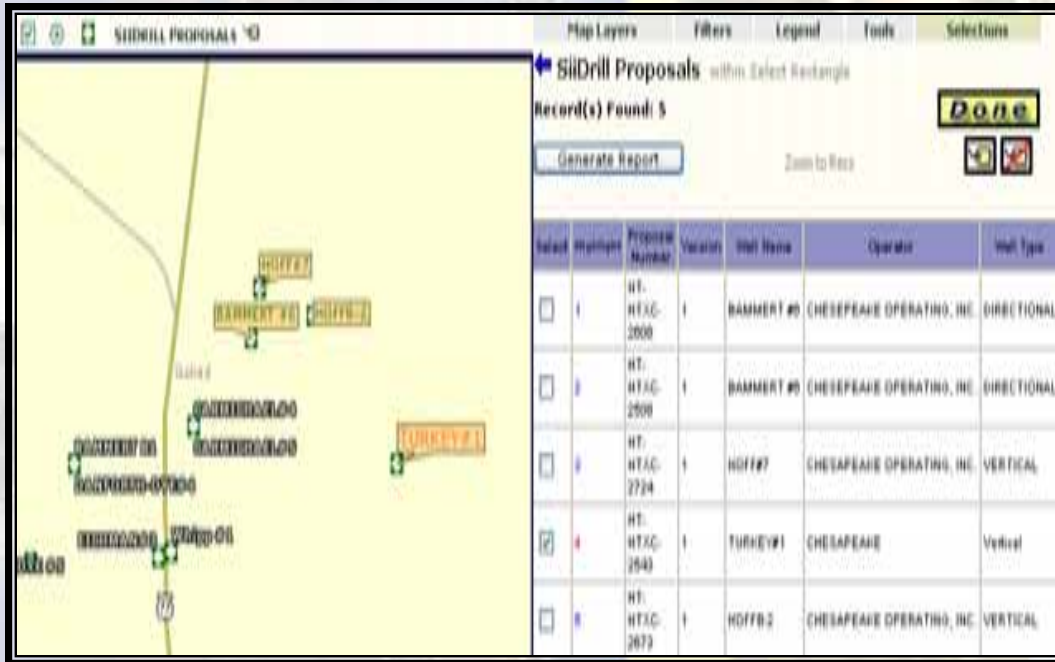
SMITH BITS



SOA
Web Service
Auto Loader

Our Global GIS Library

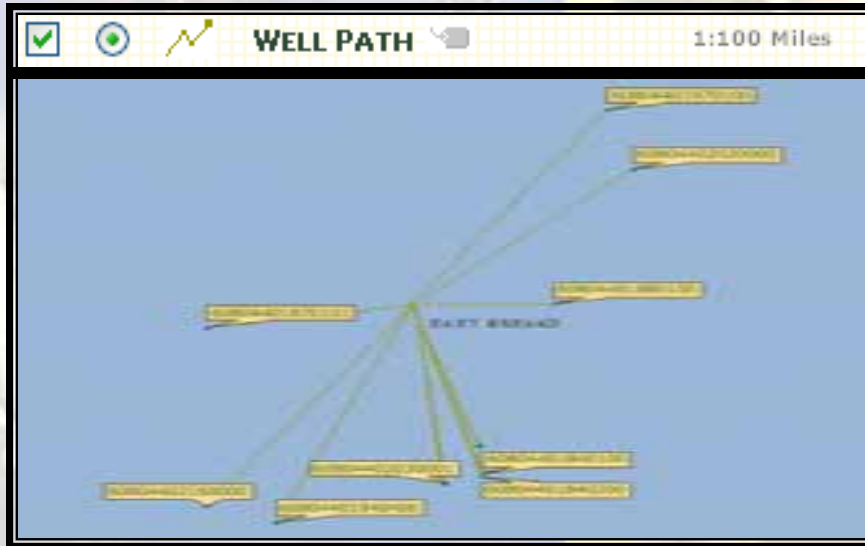
SiiDrill Proposal System



SOA
Web Service
Auto Loader

Our Global GIS Library

External Sources: Directional Surveys



SurMan5 Defective Survey

NO.	DATE	TIME	WELL	DEPTH	...
1
2
3
4
5
6
7
8
9
10
11
12
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Survey Loader Application

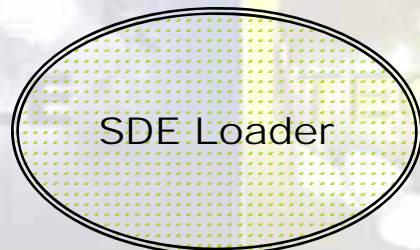
TECHNOLOGY

RESULTS

Our Global GIS Library

External Sources: Petrochemical Facilities

Plants, Refineries, and other Facilities			
<input checked="" type="checkbox"/>	<input checked="" type="radio"/>		Wilson Branch Offices
<input type="checkbox"/>	<input type="radio"/>		Power Plants By Summer Capacity
<input type="checkbox"/>	<input type="radio"/>		Chemical Plants By \$Sales
<input type="checkbox"/>	<input type="radio"/>		Crude Oil Refineries
<input type="checkbox"/>	<input type="radio"/>		Gas Processing Plants - LPG
<input type="checkbox"/>	<input type="radio"/>		Gas Processing Plants - NGL
<input type="checkbox"/>	<input type="radio"/>		Industrial Plants
<input type="checkbox"/>	<input type="radio"/>		LNG Terminals








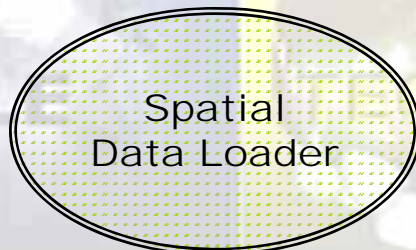
TECHNOLOGY

RESULTS

Our Global GIS Library

Design Engineering & Tool Specifications

Tool Runs from Smith Services			
<input type="checkbox"/>	<input type="radio"/>		WELLBORE ENLARGEMENT RUNS
<input type="checkbox"/>	<input type="radio"/>		LINER HANGER RUNS TH
<input type="checkbox"/>	<input type="radio"/>		DEPARTURE/SIDETRACK RUNS TH
<input checked="" type="checkbox"/>	<input type="radio"/>		COMPLETION STRINGS TH
<input type="checkbox"/>	<input type="radio"/>		PLUG AND ABANDONS



TECHNOLOGY

RESULTS

Our Global GIS Library

Sales Force Related Assets

SalesForce.com				
<input type="checkbox"/>	<input type="radio"/>		SALES CONTACTS	
<input checked="" type="checkbox"/>	<input type="radio"/>		SMITH OFFICES	
<input checked="" type="checkbox"/>	<input type="radio"/>		SMITH BITS SALES DISTRICTS	 1:1199 Miles
<input type="checkbox"/>	<input type="radio"/>		SMITH SERVICES SALES DISTRICTS	1:1199 Miles
<input type="checkbox"/>	<input type="radio"/>		WILSON SALES DISTRICTS	1:1199 Miles



RESULTS

Why all these layers..

Locate any asset!

*Improve Customer
Service*

Identify New Customers

PEOPLE

TECHNOLOGY

RESULTS

SiiView GIS™

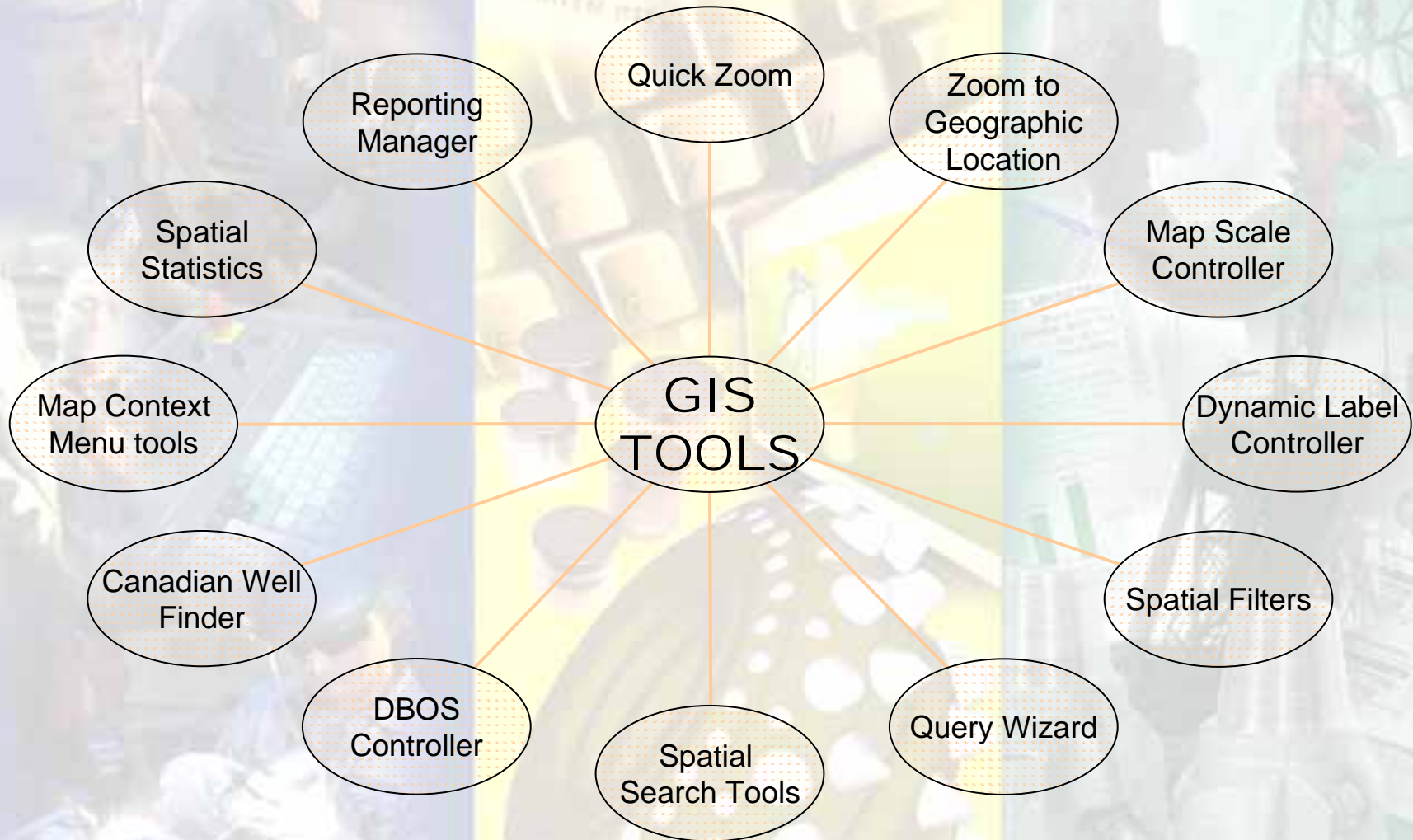
Our Enterprise GIS

The screenshot displays the SiiView GIS web application running in a Microsoft Internet Explorer browser. The browser's address bar shows the URL: <http://jshardydev06/webgate/production/viewer.asp>. The application interface includes a toolbar with various navigation and tool icons, a search bar, and a "Refresh Map" button. The main map area shows a yellow-shaded region representing the Houston Metro Area, with various well locations and paths overlaid. The legend on the right side is organized into several sections:

- Well & Drilling from Smith Technologies:**
 - SPUD COMPLETED
 - SPUD-NO VISIT
 - TURBOCHILL RIMS
 - FIELD RIMS
 - INTENT TO DRILL / PERMITS
 - ACTIVE RIMS
 - BIT RECORDS
 - BIT RIMS
 - SIDRILL PROPOSALS
 - PERFORMANCE BULLETIN
 - DEOS
 - WELL PATH
- Tool Runs from Smith Services:**
 - WELLBORE ENLARGEMENT RIMS
 - LINER HANGER RIMS
 - DEPARTURE/SIDETRACK RIMS
 - COMPLETION STRENGTH
 - PLUG AND ABANDONS
- SalesForce.com:**
 - SALES CONTACTS
 - SMITH OFFICES
 - SMITH BITS SALES DISTRICTS
 - SMITH SERVICES SALES DISTRICTS
 - WILSON SALES DISTRICTS

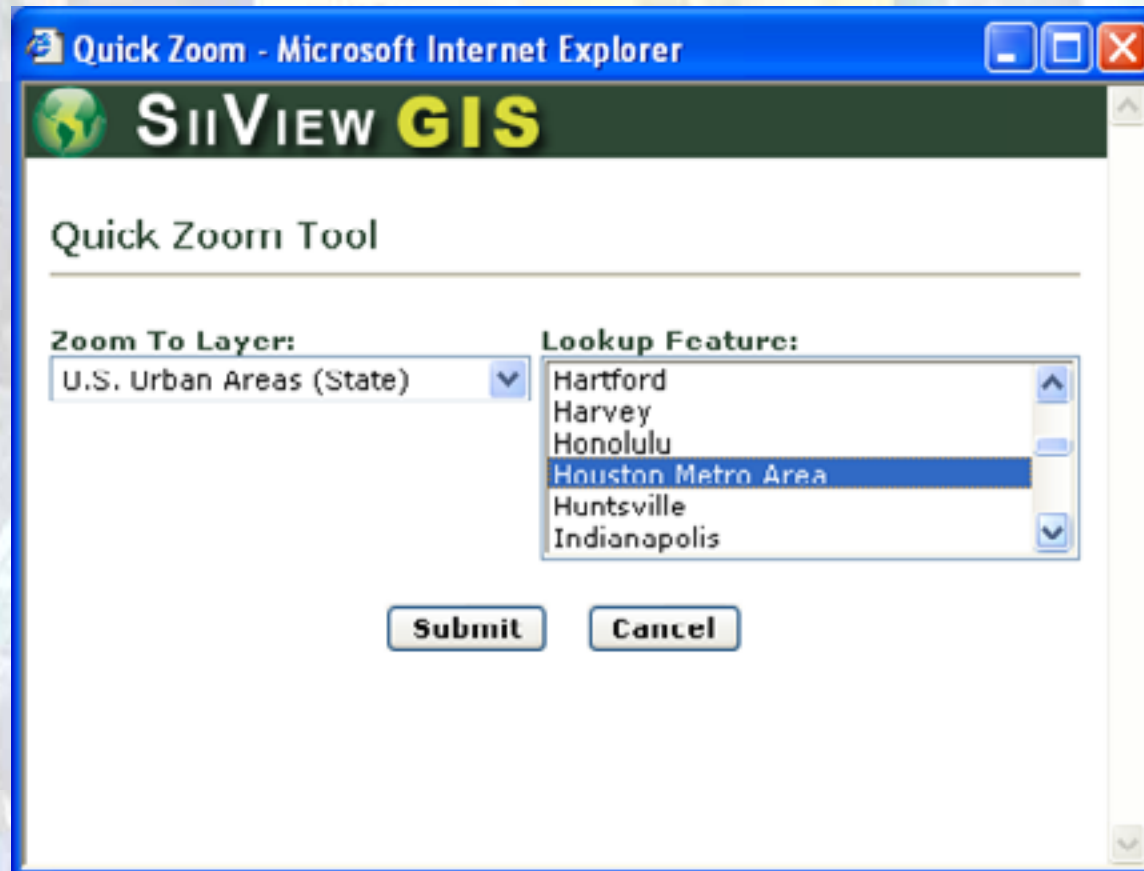
Additional Geographic Features are listed at the bottom of the legend. The map includes a scale bar, a north arrow, and a copyright notice for Smith International. The browser's status bar at the bottom shows "Done" and "Local intranet".

Our GIS Toolset



**Making it EASY to locate any asset
And find potential customers.**

Quick Zoom



The screenshot shows a web browser window titled "Quick Zoom - Microsoft Internet Explorer". The browser displays the "SIIVIEW GIS" logo at the top. Below the logo is the "Quick Zoom Tool" interface. It features two main sections: "Zoom To Layer:" and "Lookup Feature:". The "Zoom To Layer:" section has a dropdown menu currently set to "U.S. Urban Areas (State)". The "Lookup Feature:" section has a list box containing the following items: Hartford, Harvey, Honolulu, Houston Metro Area (which is highlighted in blue), Huntsville, and Indianapolis. At the bottom of the tool are two buttons: "Submit" and "Cancel".

Helps users quickly navigate
to their Area Of Interest

Quick Zoom

Zoom to Lat/Long

Zoom to Lat/Long Tool - Microsoft Internet Explorer

SIIVIEW GIS

Zoom To Lat/Long Tool Current Scale: 5,99163
Map Screen Width: 5"

Enter Zoom To Point
Latitude and Longitude may be entered in either Decimal Degrees or DMS:

LATITUDE: (-90 to +90) **LONGITUDE:** (-180 to +180)

Decimal Degrees: **Decimal Degrees:**

Or

Degree Minutes Seconds N/S **Degree Minutes Seconds W/E**

Enter Map Scale Information: 1:

1 inch = x miles

Leave entry blank to remain at current map scale indicated above.
Note: The Map Scale is dynamically provided on the SiiView GIS browser for convenience.

Enter Your Custom Label:

Scale List:

- Zoom To...
- Zoom To...
- 1:1
- 1:5
- 1:10
- 1:25
- 1:50
- 1:100
- 1:250
- 1:500
- 1:1,000
- 1:5,000

Zoom to Geographic Location

Map Scale Controller

SiiVIEW GIS Departure/Sidetrack Runs is now the Active Layer

Zoom In, Zoom Out, Pan, World View, Default Region, Go Back, Identify, Select, Clear Selections, Print Map, News, Help

Toggle KeyMap, API, METRIC, Quick Zoom, Zoom To Lat/Long, Map Scale 1: 5.99163, Go

Within Zoom To Lat/Long

User Controls Map Scale

Zoom To Lat/Long Tool

Enter Zooms To Point
Latitude and Longitude may be entered in either Decimal Degree or DMS:

LATITUDE: LONGITUDE:
Decimal Degree: Decimal Degree:

Or

Degree Minutes Seconds N/S Degree Minutes Seconds W/E

Enter Map Scale Information: Zoom To:

Enter Your Custom Labels:

Submit Cancel

Layer Scale Factor Shown for all layers

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SPUD COMPLETED	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SPUD-NO VISIT	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TURBODRILL RUNS TH	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FIELD RUNS TH	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	INTENT TO DRILL / PERMITS	1:500 Miles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ACTIVE RIGS TH	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BIT RECORDS TH	1:500 Miles
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BIT RUNS TH	1:200 Miles

Copyright (C) 2005 Smith International

Map Lat/Long: 29.57412 , -95.29776 -- Map Scale 1:5.99163

Map Scale is Always Shown on Browser Statusbar

Map Scale Controller

Dynamic Label Controller

<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	SPUD COMPLETED	
<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	SPUD-NO VISIT	
<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	TURBODRILL RUNS TH	
<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	FIELD RUNS TH	
<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	INTENT TO DRILL / PERMITS	1:500 Miles
<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	ACTIVE RIGS TH	
<input checked="" type="checkbox"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	BIT RECORDS TH	1:500 Miles
<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	BIT RUNS TH	1:200 Miles

Control whether to show or hide labels...

PEOPLE

TECHNOLOGY

RE

Dynamic Label Controller

Dynamic Label Controller

The screenshot displays the SiView GIS web application in a Microsoft Internet Explorer browser. The browser's address bar shows the URL: `http://sihar@dev01/webote/producer/viewer.asp`. The application interface includes a top navigation bar with the SiView GIS logo and a toolbar with various map controls. A prominent yellow callout bubble points to a set of icons in the 'Tools' section of the interface, with the text: "Control how you view Labels of your search results...".

The main map area shows a yellow-shaded region representing the Houston Metro Area. On the right side, there is a search results panel for "SiDrill Proposals" within a selected rectangle. It indicates "Record(s) Found: 2" and includes buttons for "Generate Report" and "Zoom To Results". Below the search results is a table with the following data:

Select	Highlight	Proposal Number	Version	Well Name	Owner	Ver
<input type="checkbox"/>	1	PA-DNLS-2701	1	WHELESM1	BALLARD ESTIMATION CO. DRE	
<input type="checkbox"/>	2	W-ENDBLE-2005	1	LAKE HOUSTON PROJECT	NEW CO	VER

Below the table, there is a "Generate Report" button and a link that says "Zoom to these records".

Spatial Filters

Map Layers **Filters** Legend Tools Selections

Filter On: Turbodrill Runs

Turbodrill Runs Filter

Apply Clear Filter

Operator: .. clr

Contractor: .. clr

Well Type: All Types

Turbo Bit Size: = (inch)

Turbo Model: All Models

Manufacturer: All Manufacturers

Turbo Blade: All Blades

Top Turbine: All Top Turbines

Depth Out Range [in API Units]

From: (ft)

To: (ft)

Turbo Run-Date Range [DD-MON YYYY]

From: 10-Jan 1990

To: 10-Jan 2008

Apply Clear Filter

Spatial Filters

Query Wizard

Map Layers | Filters | Legend | **Tools** | Selections

The Query Tool Wizard Page 1 of 5

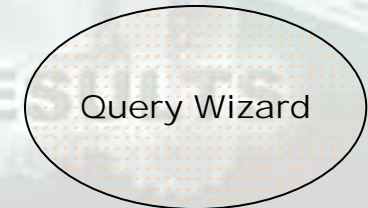
Progress
0% 50% 100%

What are you looking for:

- SiiDrill Proposals
- Spud Completed
- Spud-No Visit
- Turbodrill Runs
- Field Runs
- Intent to Drill / Permits
- Active Rigs
- Bit Records
- Bit Runs
- SiiDrill Proposals**
- Performance Bulletins
- DBOS
- Well Path
- Wellbore Enlargement Runs
- Liner Hanger Runs
- Departure/Sidetrack Runs
- Completion Strings
- Plug and Abandons
- Sales Contacts
- Smith Offices
- Smith Bits Sales Districts

← **TOOLS MENU**

Next



Map Layers	Filters	Legend	Tools	Selections
<p> The Query Tool Wizard Page 1 of 5</p> <p style="text-align: center;">Progress</p> <p style="text-align: center;">0% 50% 100%</p>				
<p> The Query Tool Wizard Page 2 of 5</p> <p style="text-align: center;">Progress</p> <p style="text-align: center;">0% 50% 100%</p>				
<p> The Query Tool Wizard Page 3 of 5</p> <p style="text-align: center;">Progress</p> <p style="text-align: center;">0% 50% 100%</p>				
<p> The Query Tool Wizard Page 4 of 5</p> <p style="text-align: center;">Progress</p> <p style="text-align: center;">0% 50% 100%</p>				
<p> The Query Tool Wizard Page 5 of 5</p> <p style="text-align: center;">Progress</p> <p style="text-align: center;">0% 50% 100%</p>				
<p>Your Query Summary:</p> <hr/> <p>Find SiiDrill Proposals features Where Operator STARTS-WITH NOBLE ENERGY</p> <hr/> <p>If this is not what you would like to search for, press the BACK button to change your options.</p>				
<p><input type="button" value="Back"/> <input type="button" value="Finish"/></p>				

QUERY WIZARD IN ACTION

Query Wizard

← TOOLS MENU

Spatial Search Tools

Map Layers	Filters	Legend	Tools	Selections
Spatial Tools				
 Select By Polygon (Customized AOI) Use this tool to select Smith Bit layer features within a custom Area Of Interest. This Area Of Interest (AOI) is defined by your custom-drawn polygon of unlimited number of Vertices (Edges).				
 The Query Tool (Select By Attributes) Find Smith Bit layer features by identifying the attribute to search, and the value you are looking for. The Query Tool supports various attribute operators to help you find the records you are interested in.				
 Proximity Search (Search Within Features) This tool allows you to select Smith Bit layer features that are within your specified geographic boundary such as states, countries, etc.				
 Canadian Well Finder (Search By Dominion Land Survey) This tool allows you to find Smith Bit layer features by DLS value. Wells may be searched by attribute or spatially within your specified DLS value.				
 Generate Spatial Statistics This tool allows you to generate your requested statistics for all features within your specified geographic boundary. Use this tool to generate Bit or Tool Run statistics for your Sales District.				
 DBOS Automation Status Report Shows all DBOS projects that have been transmitted to SiiView GIS via the DBOS Automation Adapter.				
 DBOS Uploader - Manual Process Manually upload a DBOS record with associated well log image generated by DBOS. This tool is made available for DBOS engineers with older versions of DBOS Desktop.				
 Smith Offices Uploader - Manual Process Manually identify and upload a New Smith Offices.				

Searches Geographically

Spatial Search Tools

DBOS Controller Tools

Map Layers	Filters	Legend	Tools	Selections
Spatial Tools				
 Select By Polygon (Customized AOI) Use this tool to select Smith Bit layer features within a custom Area Of Interest. This Area Of Interest (AOI) is defined by your custom-drawn polygon of unlimited number of Vertices (Edges).				
 The Query Tool (Select By Attributes) Find Smith Bit layer features by identifying the attribute to search, and the value you are looking for. The Query Tool supports various attribute operators to help you find the records you are interested in.				
 Proximity Search (Search Within Features) This tool allows you to select Smith Bit layer features that are within your specified geographic boundary such as states, countries, etc.				
 Canadian Well Finder (Search By Dominion Land Survey) This tool allows you to find Smith Bit layer features by DLS value. Wells may be searched by attribute or spatially within your specified DLS value.				
 Generate Spatial Statistics This tools allows you to generate your requested statistics for all features within your specified geographic boundary. Use this tool to generate Bit or Tool Run statistics for your Sales District.				
 DBOS Automation Status Report Shows all DBOS projects that have been transmitted to SiiView GIS via the DBOS Automation Adapter.				
 DBOS Uploader - Manual Process Manually upload a DBOS record with associated well log image generated by DBOS. This tool is made available for DBOS engineers with older versions of DBOS Desktop.				
 Smith Offices Uploader - Manual Process Manually identify and upload a New Smith Offices.				

DBOS Tools

Canadian Well Finder

Map Layers Filters Legend **Tools** Selections

 **Canadian Well Finder** Wizard Page 1 of 4

Progress
0% 50% 100%

What are you looking for:

SiiDrill Proposals

- Spud Completed
- Spud-No Visit
- Turbodrill Runs
- Field Runs
- Intent to Drill / Permits
- Active Rigs
- Bit Records
- Bit Runs
- SiiDrill Proposals**
- Performance Bulletins
- DBOS
- Well Path
- Wellbore Enlargement Runs
- Liner Hanger Runs
- Departure/Sidetrack Runs
- Completion Strings
- Plug and Abandons
- Sales Contacts
- Smith Offices
- Smith Bits Sales Districts

← TOOLS MENU

PEOPLE

TECHNOLOGY

RESULTS

Canadian Well Finder

Map Layers Filters Legend **Tools** Selections

Canadian Well Finder Wizard Page 1 of 4

Progress

0% 50% 100%

Map Layers Filters Legend **Tools** Selections

Canadian Well Finder Wizard Page 2 of 4

Progress

0% 50% 100%

Map Layers Filters Legend **Tools** Selections

Canadian Well Finder Wizard Page 3 of 4

Progress

0% 50% 100%

Map Layers Filters Legend **Tools** Selections

Canadian Well Finder Wizard Page 4 of 4

Progress

0% 50% 100%

Your DLS Query Summary:

Find Intent to Drill / Permits features where DLS value is:

Twnshp - Range Mrd

006 - 16 - W2

If this is not what you would like to search for, press the BACK button to change your options.

←TOOLS MENU

In Action

Map Context Menu

The screenshot displays the SiiVIEW GIS interface. At the top, the title bar reads "SiiVIEW GIS" and "TurboMill Run is now the Active Layer". Below the title bar is a toolbar with various icons for navigation and analysis, including "Zoom In", "Zoom Out", "Full", "World View", "Default Region", "Go Back", "Identify", "Select", "Clear Selections", "Print Map", "News", and "Help". A secondary toolbar below contains "Zoom KeyMap", "API", "METRO", "Quick Zoom", "Zoom To Lat/Long", and "Map Scale 1: 218,76347".

The main map area shows a geographical view of the United States with several districts highlighted in green: "Central U.S. District", "Northeast District", "NTX District", "West Texas District", "TGC District", "LGC District", and "Offshore GoM". A context menu is open over the map, listing the following options:

- Identify All
- Label Features
- Zoom Here (10 mi.)
- Clear Zoom Task
- Clear Selections
- Toggle Highways/Roads
- Toggle Key Map
- Print this Map

In the bottom left corner, there is a copyright notice: "Copyright (C) 2005 Smith International". A scale bar in the bottom right corner indicates "181mi".

Spatial Statistics Tool

Map Layers Filters Legend **Tools** Selections

Spatial Tools

 **Select By Polygon (Customized AOI)**
Use this tool to select Smith Bit layer features within a custom Area Of Interest. This Area Of Interest (AOI) is defined by your custom-drawn polygon of unlimited number of Vertices (Edges).

 **The Query Tool (Select By Attributes)**
Find Smith Bit layer features by identifying the attribute to search, and the value you are looking for. The Query Tool supports various attribute operators to help you find the records you are interested in.

 **Proximity Search (Search Within Features)**
This tool allows you to select Smith Bit layer features that are within your specified geographic boundary such as states, countries, etc.

 **Canadian Well Finder (Search By Dominion Land Survey)**
This tool allows you to find Smith Bit layer features by DLS value. Wells may be searched by attribute or spatially within your specified DLS value.

 **Generate Spatial Statistics**
This tool allows you to generate your requested statistics for all features within your specified geographic boundary. Use this tool to generate Bit or Tool Run statistics for your Sales District.

 **DBOS Automation Status Report**
Shows all DBOS projects that have been transmitted to SiiView GIS via the DBOS Automation Adapter.

 **DBOS Uploader - Manual Process**
Manually upload a DBOS record with associated well log image generated by DBOS. This tool is made available for DBOS engineers with older versions of DBOS Desktop.

 **Smith Offices Uploader - Manual Process**
Manually identify and upload a New Smith Offices.

Spatial Statistics
via
Published
ArcGIS Server
Geoprocessing
Tool

Map Layers | Filters | Legend | **Tools** | Selections

Generate Spatial Statistics Wizard Page 1 of 5

Progress

0% 50% 100%

Map Layers | Filters | Legend | **Tools** | Selections

Generate Spatial Statistics Wizard Page 2 of 5

Progress

0% 50% 100%

Map Layers | Filters | Legend | **Tools** | Selections

Generate Spatial Statistics Wizard Page 3 of 5

Progress

0% 50% 100%

Map Layers | Filters | Legend | **Tools** | Selections

Generate Spatial Statistics Wizard Page 4 of 5

Progress

0% 50% 100%

Map Layers | Filters | Legend | **Tools** | Selections

Generate Spatial Statistics Wizard Page 5 of 5

Progress

0% 50% 100%

Your Spatial Statistics Summary:

Generate Turbo Model Count Distribution Statistics on
Turbodrill Runs features within LGC District

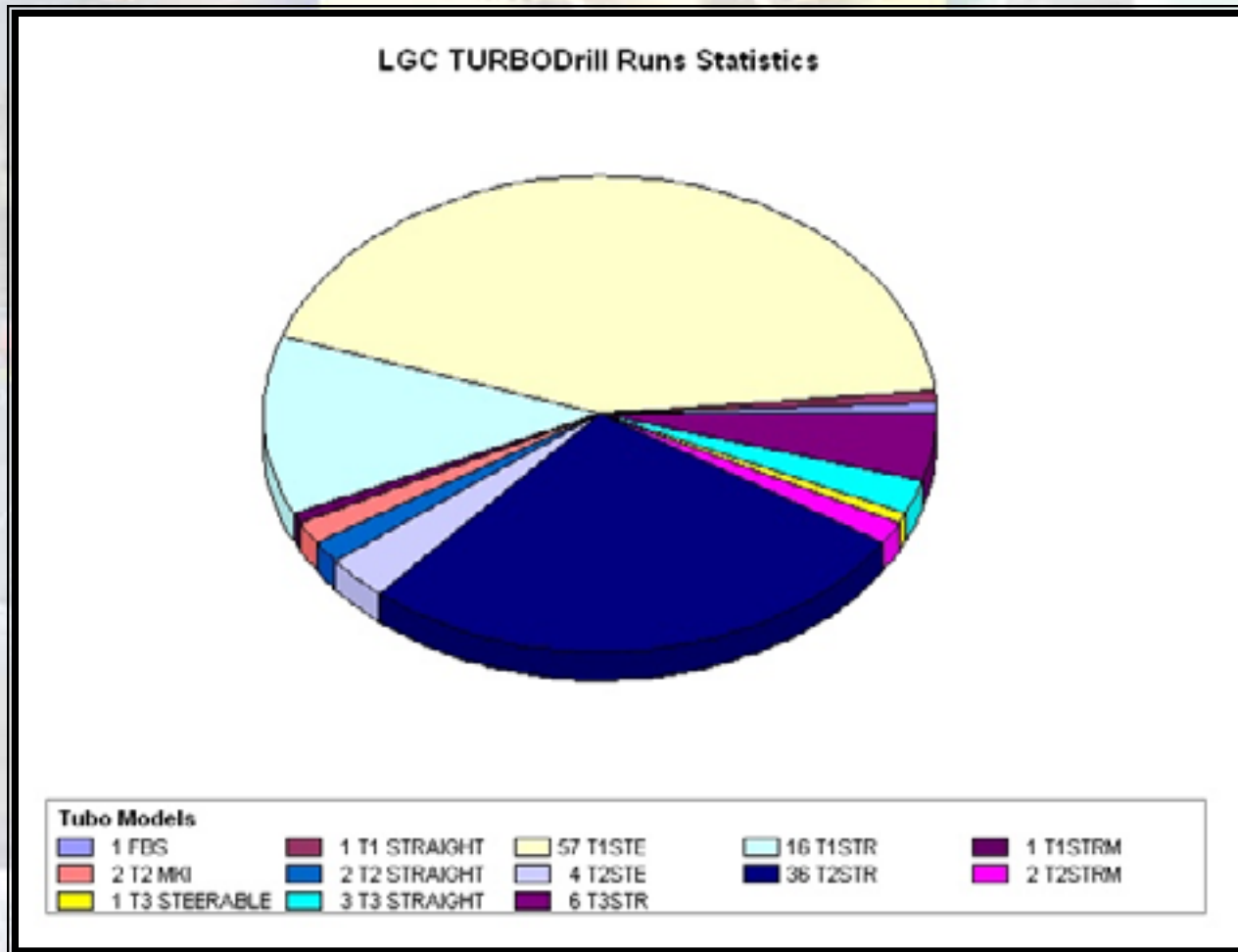
If this is not what you would requested, press the BACK button to
change your options.

← TOOLS MENU

In Action



Spatial Statistics Tool



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RESULTS

Report Manager

Map Layers Filters Legend Tools **Selections**

← Intent to Drill / Permits within Select Rectangle **Done**

Record(s) Found: 3

Generate Report Zoom To Results  

Select	Highlight	Well Name	Operator	Planned Total Depth	Well Type	Field
<input checked="" type="checkbox"/>	1	191-03-10-006-16-2	MISSION O & G	4877	Horizontal	Tatagwa
<input checked="" type="checkbox"/>	2	191-01-20-006-16-2	MISSION O & G	4785	Horizontal	Tatagwa
<input checked="" type="checkbox"/>	3	191-03-03-006-16-2	CANETIC RESOURCES	4898	Horizontal	Tatagwa

Start Report Manager

Select items to include in report

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RESULTS

Reporting Services

Adobe Reader - [SiiView%5FPermitIntent[1].pdf]

File Edit View Document Tools Window Help

70% Help Organize your digital photos

SiiVIEW GIS *Permit / Intent to Drill* **DRS**
Drilling Record System

Well Name / Nbr	191-03-10-006-16-2	Operator	MISSION O & G		
Country	CANADA	State/Prov	SASKATCHEWAN	County/Parish	
Block #		Sub-Block		Field	Tatagwa
Latitude	49.451711N	Longitude	104.083266W		
Section	10	Township	6	Range	16
Well Type	HORIZONTAL	Plan Total Depth (ft)	4.877	APIUWI	061181
Well Name / Nbr	191-01-20-006-16-2	Operator	MISSION O & G		
Country	CANADA	State/Prov	SASKATCHEWAN	County/Parish	
Block #		Sub-Block		Field	Tatagwa
Latitude	49.40023N	Longitude	104.116904W		
Section	20	Township	6	Range	16
Well Type	HORIZONTAL	Plan Total Depth (ft)	4.785	APIUWI	061185
Well Name / Nbr	191-03-03-006-16-2	Operator	CANETIC RESOURCES		
Country	CANADA	State/Prov	SASKATCHEWAN	County/Parish	
Block #		Sub-Block		Field	Tatagwa
Latitude	49.437081N	Longitude	104.083261W		
Section	3	Township	6	Range	16
Well Type	HORIZONTAL	Plan Total Depth (ft)	4.898	APIUWI	06K148

1 of 1

Why all these tools..

- *Be more productive*
- *Improve Customer Service*
- *Identify Potential Customers*

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TECHNOLOGY

RESULTS

ESRI Software Used...

ArcIMS 9.2

Fully mature ArcIMS intranet web application using HTMLVIEWER with custom tools built using ArcXML.

ArcSDE 9.2 & Oracle 10G

Enterprise Spatial Repository for GIS library.

ArcGIS Server 9.2

We chose NOT to replace our mature & widely used ArcIMS production application. Instead we introduced new tools using ArcGIS Server that consumes published GeoProcessing tools from our existing web application.

Summary

Design Choice # 1:

Generate multiple well-centric map layers for each client's business need rather than generating a single well map layer where user would subsequently drill down to determine what, if any, tools or runs exist on the well.

Result:

Greater global acceptance of our Enterprise GIS.

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TECHNOLOGY

RESULTS

Summary

Design Choice # 2:

We chose to piecemeal our move to ArcGIS Server by building new custom tools within our existing ArcIMS Enterprise GIS that consume published GP tools.

Result:

Able to gain expertise with the ArcGIS Server web ADF while still maintaining our existing Enterprise GIS.

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TECHNOLOGY

RESULTS

The background is a collage of three vertical panels. The left panel, with a blue tint, shows a person in a blue shirt working at a computer workstation. The middle panel, with a yellow tint, shows a person in a white lab coat and mask working in a laboratory setting with various pieces of equipment. The right panel, with a green tint, shows a person in a green shirt climbing a tall metal tower structure. The text 'Thank You' is centered over the top half of the collage.

Thank You

Any Questions?

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TECHNOLOGY

RESULTS