

The Deep Pools Atlas

DPA

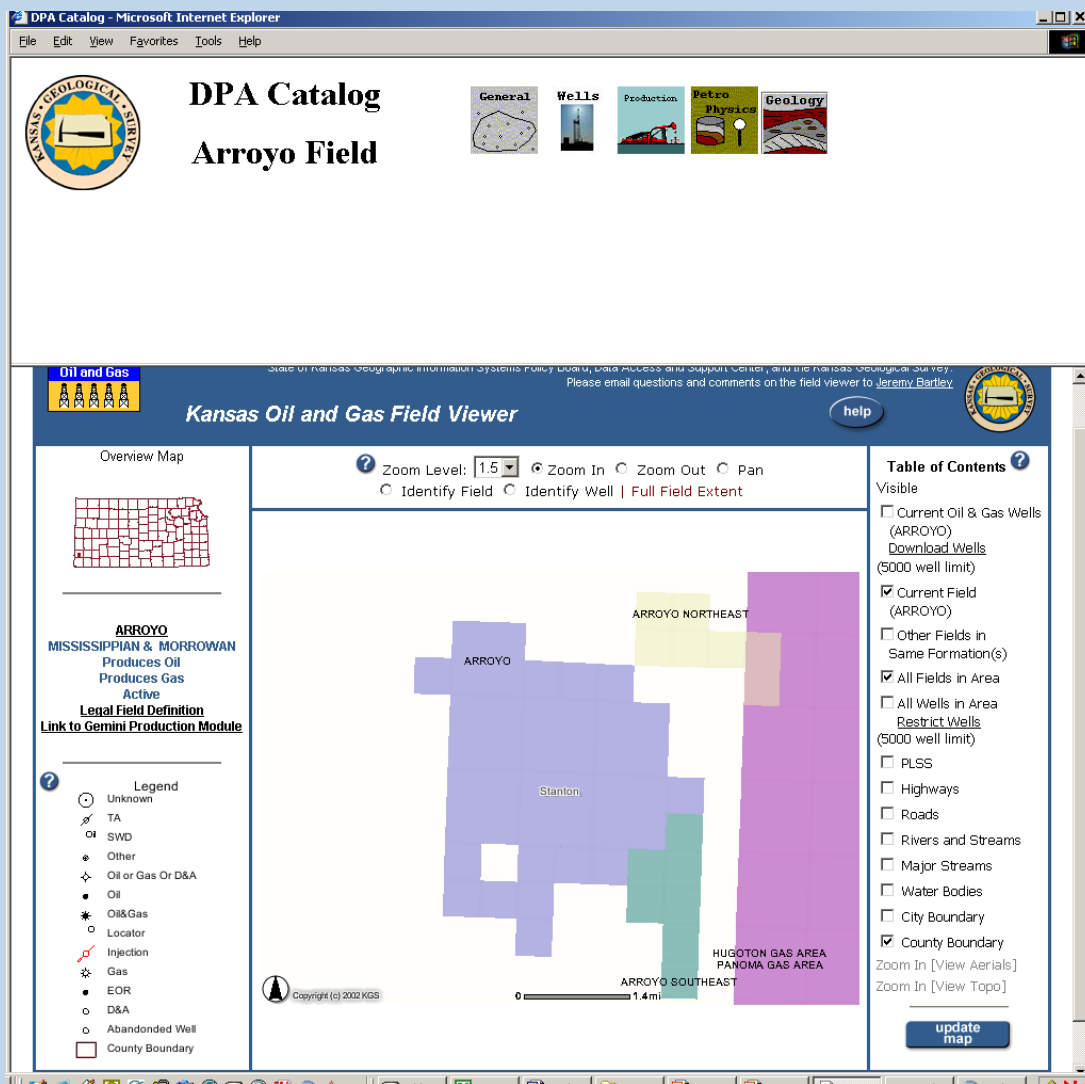
The Next Generation



Timeline and Goals

- Digital Petroleum Atlas
 - First Online Atlas of Oil and Gas Fields
- Generations
 - Generation 1 (1995-2000)
 - Static Web Pages
 - Generation 2 (Current Situation)
 - Dynamic Access to Raw Data
 - Limited Tools
 - Simple GIS Mapping and Production Plotting
 - Generation 3 (The next step)
 - Dynamic tools to provide flexible synthesis (Region, Play, Field, Reservoir or Horizon)
 - Dynamic Mapping, Log Analysis, Cross-section Construction, Core Examination
 - Integration of User Data.
 - Move into 3D world and multiple interacting windows
 - Generation 4 (Happening in NATCARB)
 - Distributed Internet Map Servers (IMS) and XML access





Map Viewer

- Interactive Front End
Real-time Field Outlines
Multiple Themes
Zoom and Query
- Real-time Access
Field Lines
Wells
Highlight Well Data

http://www.kgs.ku.edu/Gemini/jrv_test/DPACatalogA.html?sField=Arroyo&sKID=1000152060



Digital Petroleum Atlas – Next Generation



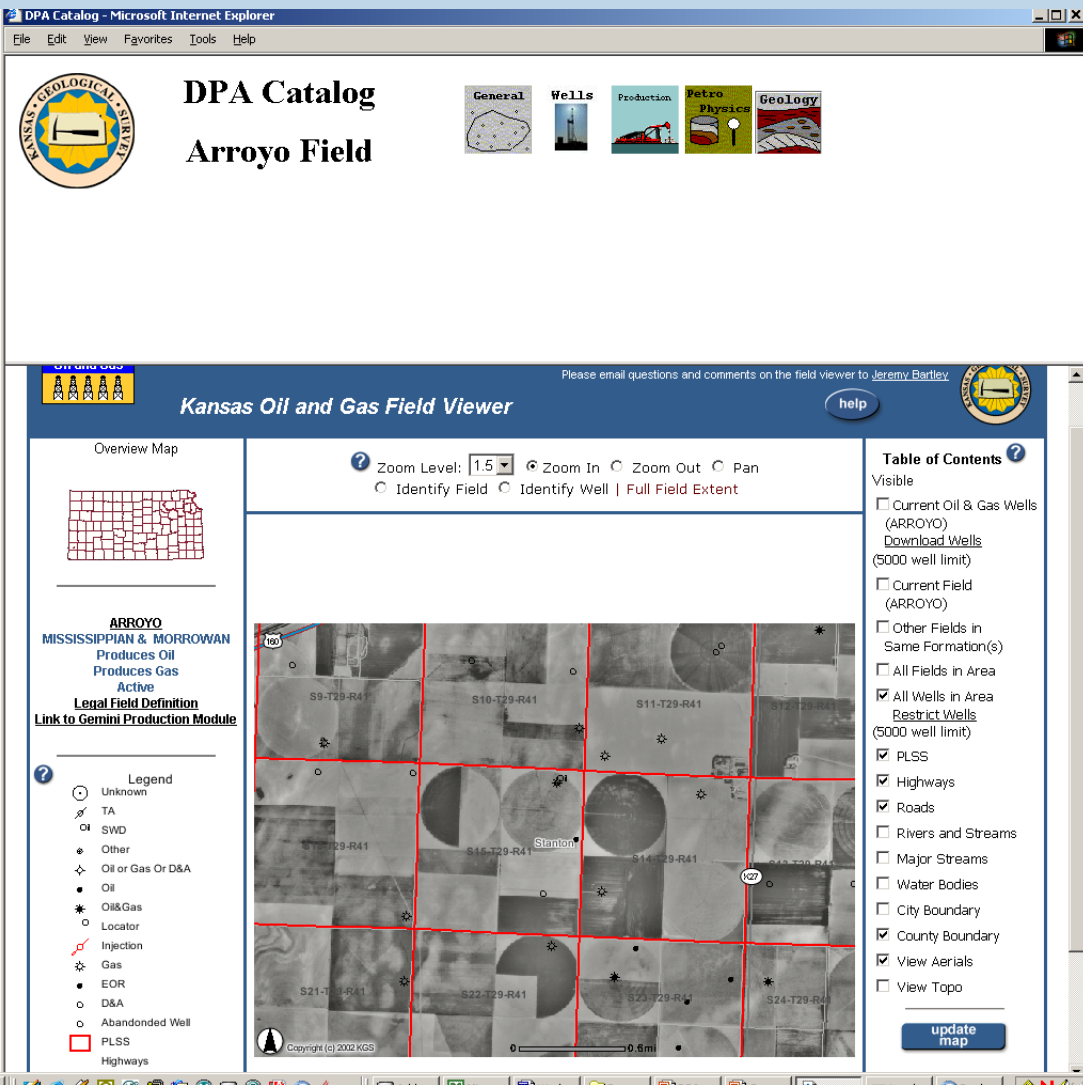
Map Viewer

- Interactive Front End
- Real-time Field Outlines
- Multiple Themes
- Zoom and Query
- Real-time Access
- Field Lines
- Wells
- Highlight Well Data

http://www.kgs.ku.edu/Gemini/jrv_test/DPACatalogA.html?sField=Arroyo&sKID=1000152060



Digital Petroleum Atlas – Next Generation



Map Viewer

- Interactive Front End
- Real-time Field Outlines
- Multiple Themes
- Zoom and Query
- Real-time Access
- Field Lines
- Wells
- Highlight Well Data

http://www.kgs.ku.edu/Gemini/jrv_test/DPACatalogA.html?sField=Arroyo&sKID=1000152060



Digital Petroleum Atlas – Next Generation

DPA Catalog - Microsoft Internet Explorer

File Edit View Favorites Tools Help

DPA Catalog
Arroyo Field

General Wells Production Petro Physics **Geology** ←

Oil and Gas

Kansas Oil and Gas Field Viewer

Overview Map

Zoom Level: 1.5 Zoom In Zoom Out Pan
Identify Field Identify Well Full Field Extent

ARROYO
MISSISSIPPIAN & MORROWAN
Produces Oil
Produces Gas
Active
Legal Field Definition
Link to Gemini Production Module

Legend

- Wells that contain: LAS Files
- Unknown
- TA
- SWD
- Other
- Oil or Gas Or D&A
- Oil
- Oil&Gas
- Locator
- Injection
- Gas
- EOR
- D&A
- Abandoned Well

Table of Contents

Visible

- ☐ Current Oil & Gas Wells (ARROYO)
- ☐ Download Wells (5000 well limit)
- ☐ Current Field (ARROYO)
- ☐ Other Fields in Same Formation(s)
- ☐ All Fields in Area
- ☒ All Wells in Area

Restrict Wells - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Links

Well Counts for Current Viewing Window

Total Number of Wells	62	
Number of Wells with Scanned Elogs	6	☐
Number of Wells with LAS Files	20	☒
Number of Wells with Paper Logs	48	☐
Number of Wells with Cores	1	☐
Number of Wells with DSTs	5	☐

Highlight Wells

Done Internet

Map Viewer

- Interactive Front End
- Real-time Field Outlines
- Multiple Themes
- Zoom and Query
- Real-time Access
- Field Lines
- Wells
- Highlight Well Data

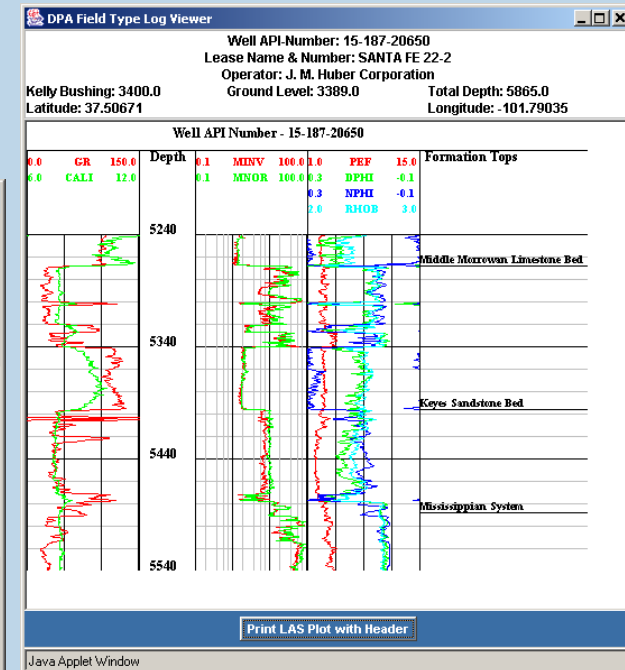
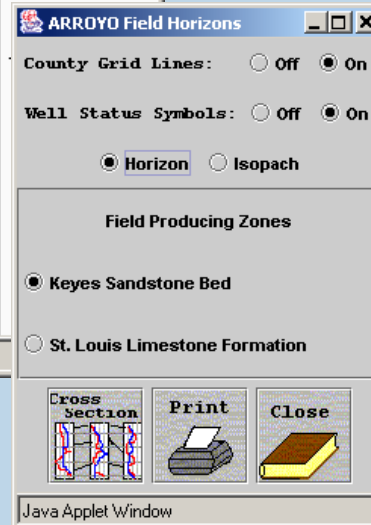
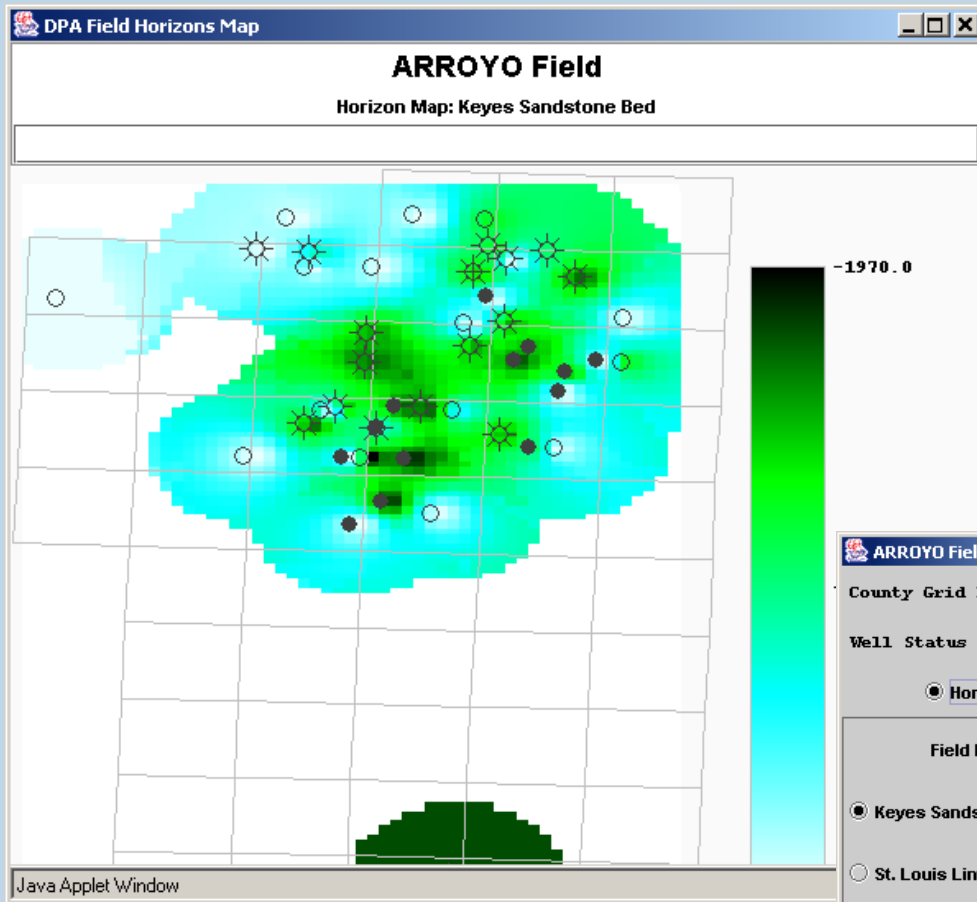
http://www.kgs.ku.edu/Gemini/jrv_test/DPACatalogA.html?sField=Arroyo&sKID=1000152060



Digital Petroleum Atlas – Next Generation

Map Viewer

- Real-time Mapping
- Multiple Horizons
- Structure & Isopach
- Type Log

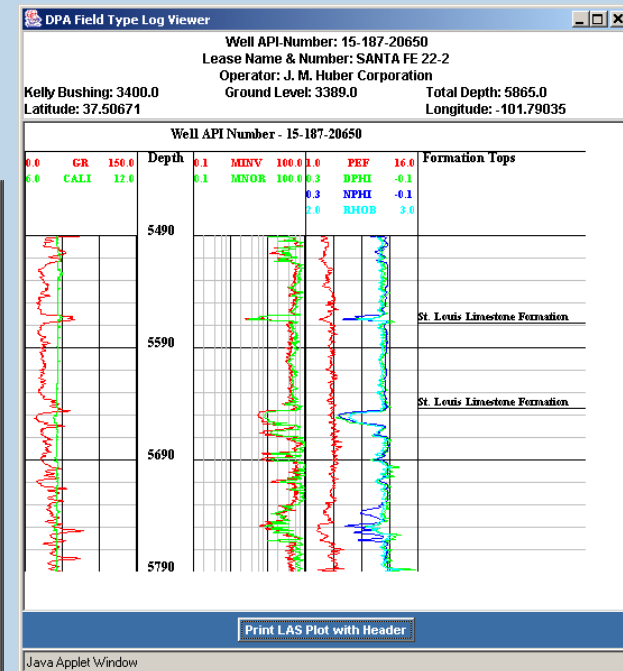
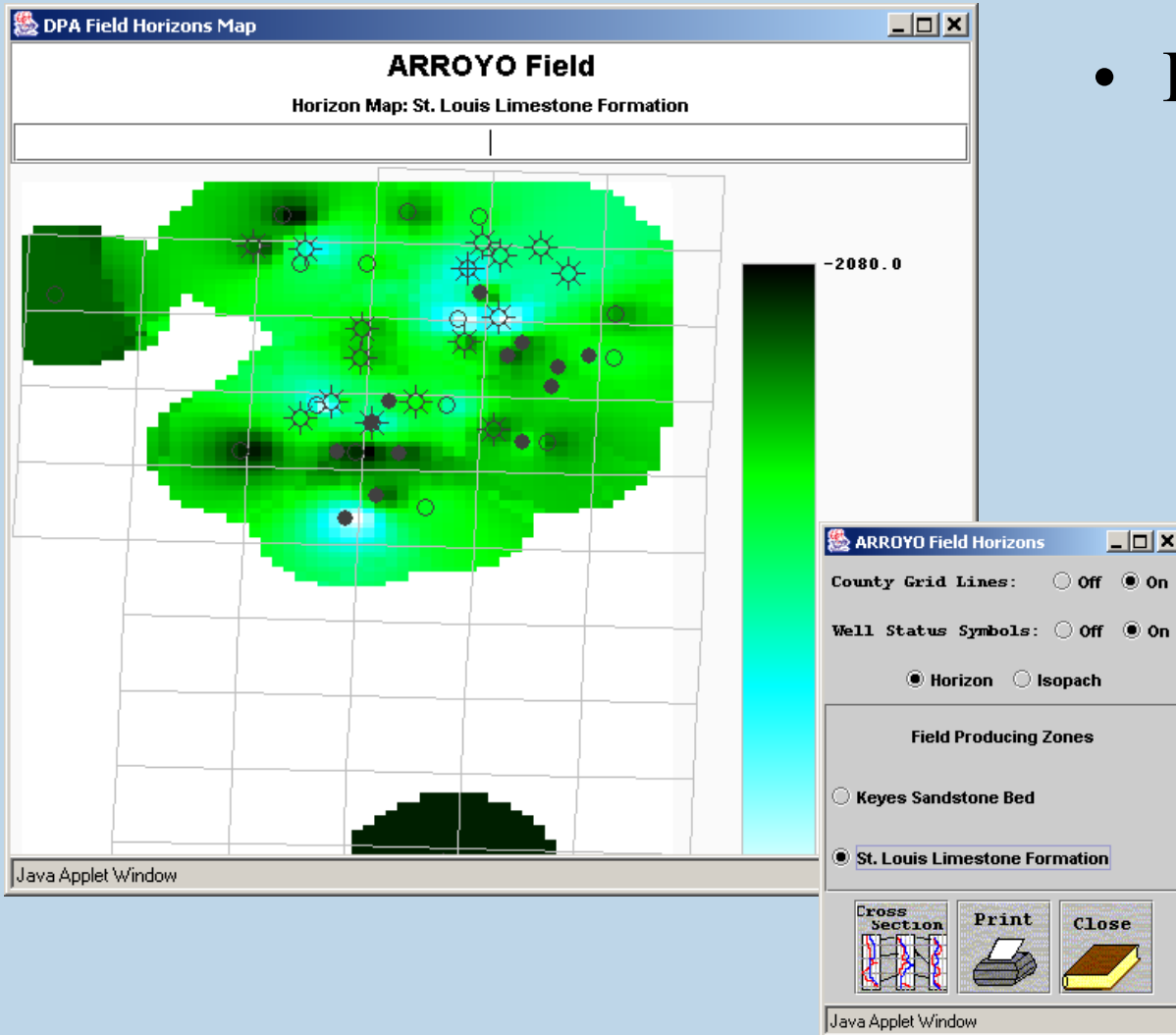


http://www.kgs.ku.edu/Gemini/jrv_test/DPACatalogA.html?sField=Arroyo&sKID=1000152060



Map Viewer

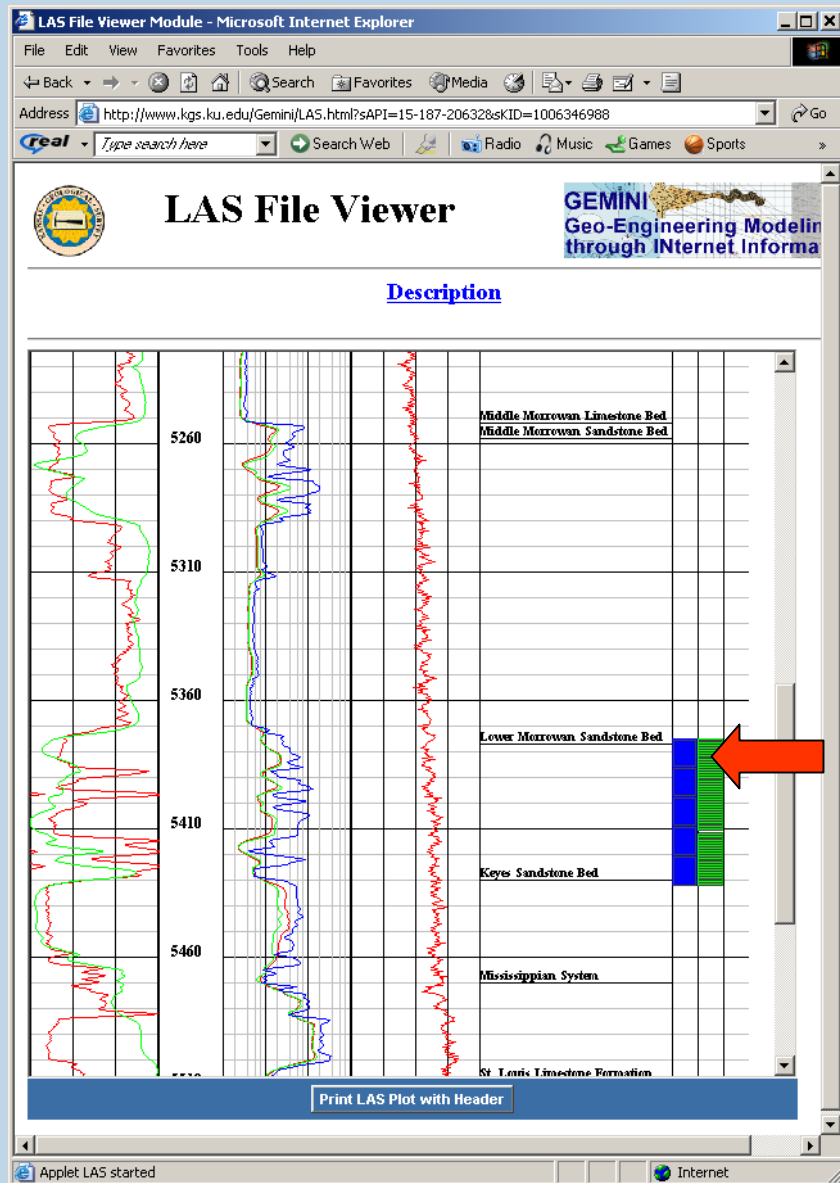
- Real-time Mapping
- Multiple Horizons
- Structure & Isopach
- Type Log



http://www.kgs.ku.edu/Gemini/jrv_test/DPACatalogA.html?sField=Arroyo&sKID=1000152060



Digital Petroleum Atlas – Next Generation



Log & Core Viewer

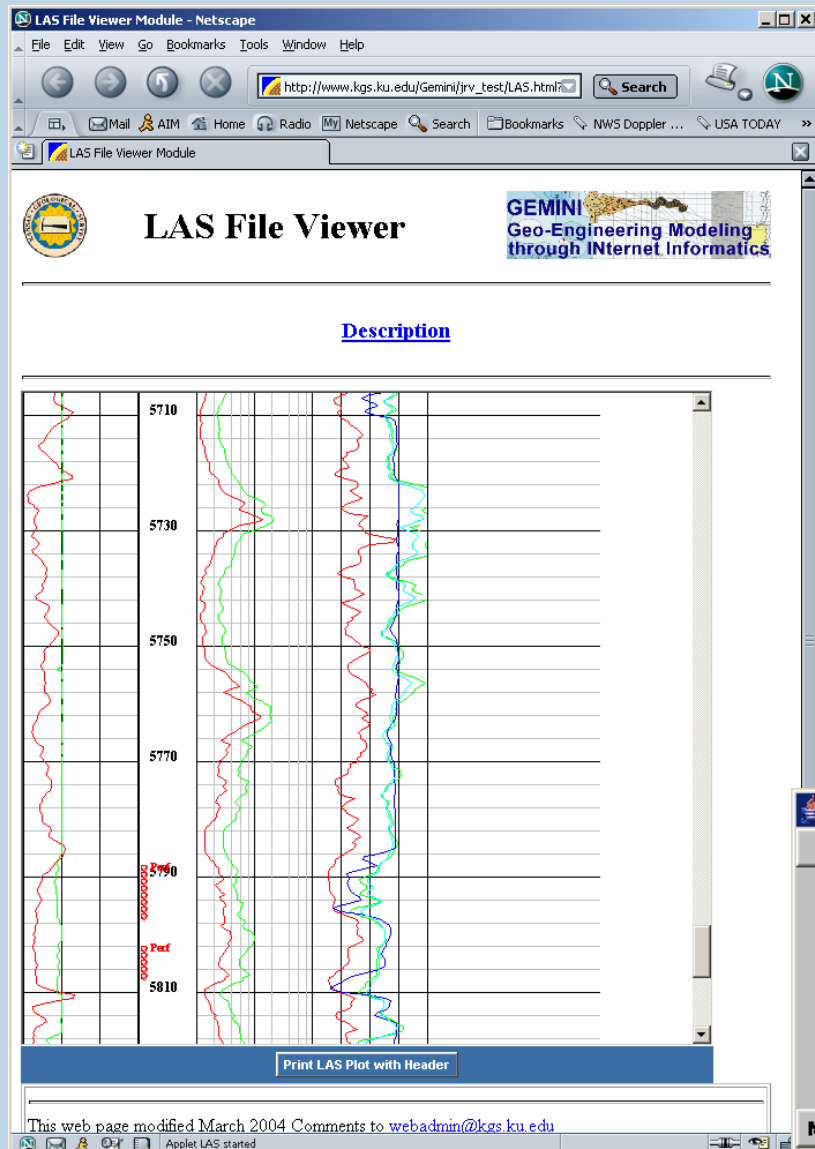
- Interactive
 - Adjust Scale
 - Scroll Through Depth
- Real-time Access
 - Well-logs
 - Geologic Tops
 - Core Images
 - Perforations
 - DST's

The screenshot shows the 'Modify LAS Plot Depth Range & Depth Scale' dialog box. It contains two main sections: 'Depth Range' and 'Log Depth Scale'. The 'Depth Range' section has two sub-sections: 'Original Depth Range' and 'Modify Depth Range'. Both sections have 'From' and 'To' input fields with values 4914.0 and 5660.5 respectively. The 'Log Depth Scale' section has a dropdown menu with options: 5 Feet / Inch, 10 Feet / Inch, 20 Feet / Inch, 50 Feet / Inch, and 100 Feet / Inch. The '100 Feet / Inch' option is currently selected. At the bottom, there are buttons for 'Modify Depth', 'Reset to Original', and 'Close'. The dialog box is titled 'Java Applet Window'.

<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arroyo&sKID=1000152060>



Digital Petroleum Atlas – Next Generation



Log & Core Viewer

- Interactive
 - Adjust Scale
 - Scroll Through Depth
- Real-time Access
 - Well-logs
 - Geologic Tops
 - Core Images
 - Perforations
 - DST's

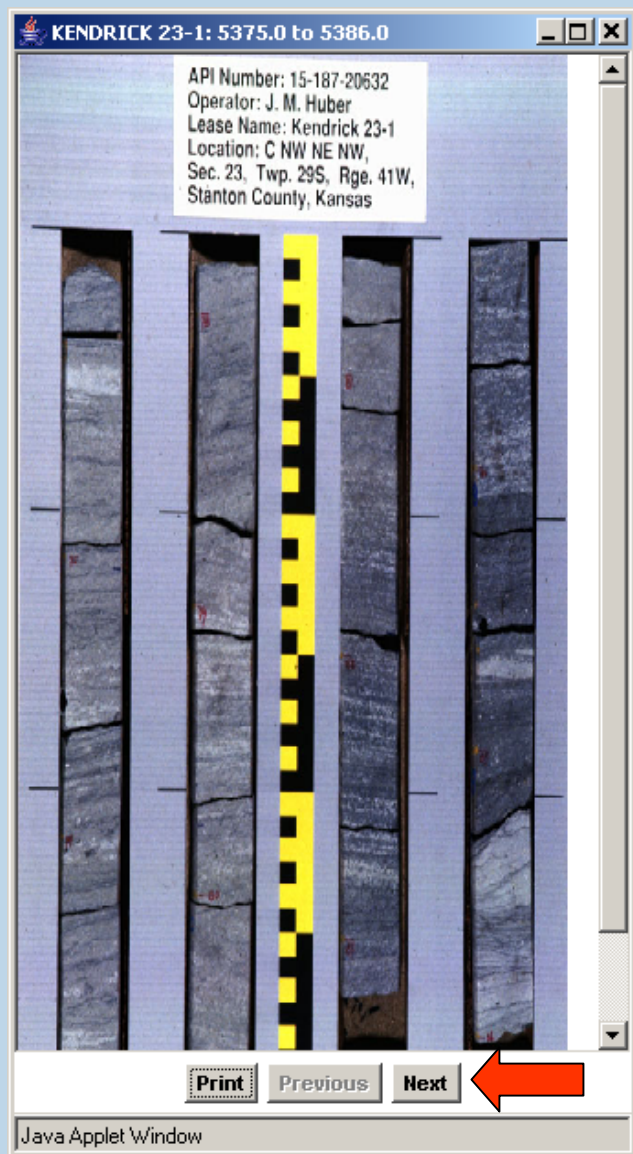
Depth Range		Log Depth Scale
Original Depth Range		5 Feet / Inch
From: 4632.0	To: 5926.0	10 Feet / Inch
Modify Depth Range		20 Feet / Inch
From: 4632.0	To: 5926.0	50 Feet / Inch
Modify Depth	Reset to Original	100 Feet / Inch

Java Applet Window

<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arroyo&sKID=1000152060>



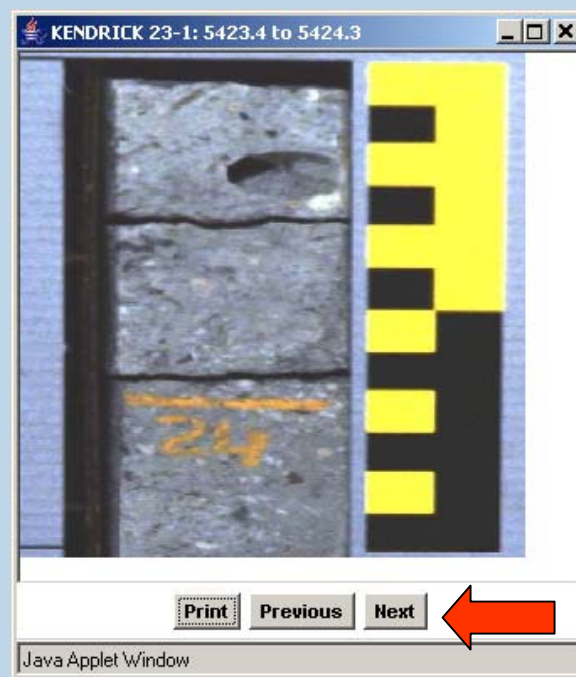
Digital Petroleum Atlas – Next Generation



Core Images

- Interactive

Click on Log or Scroll Down
Through Core
View Box Images or Close-ups

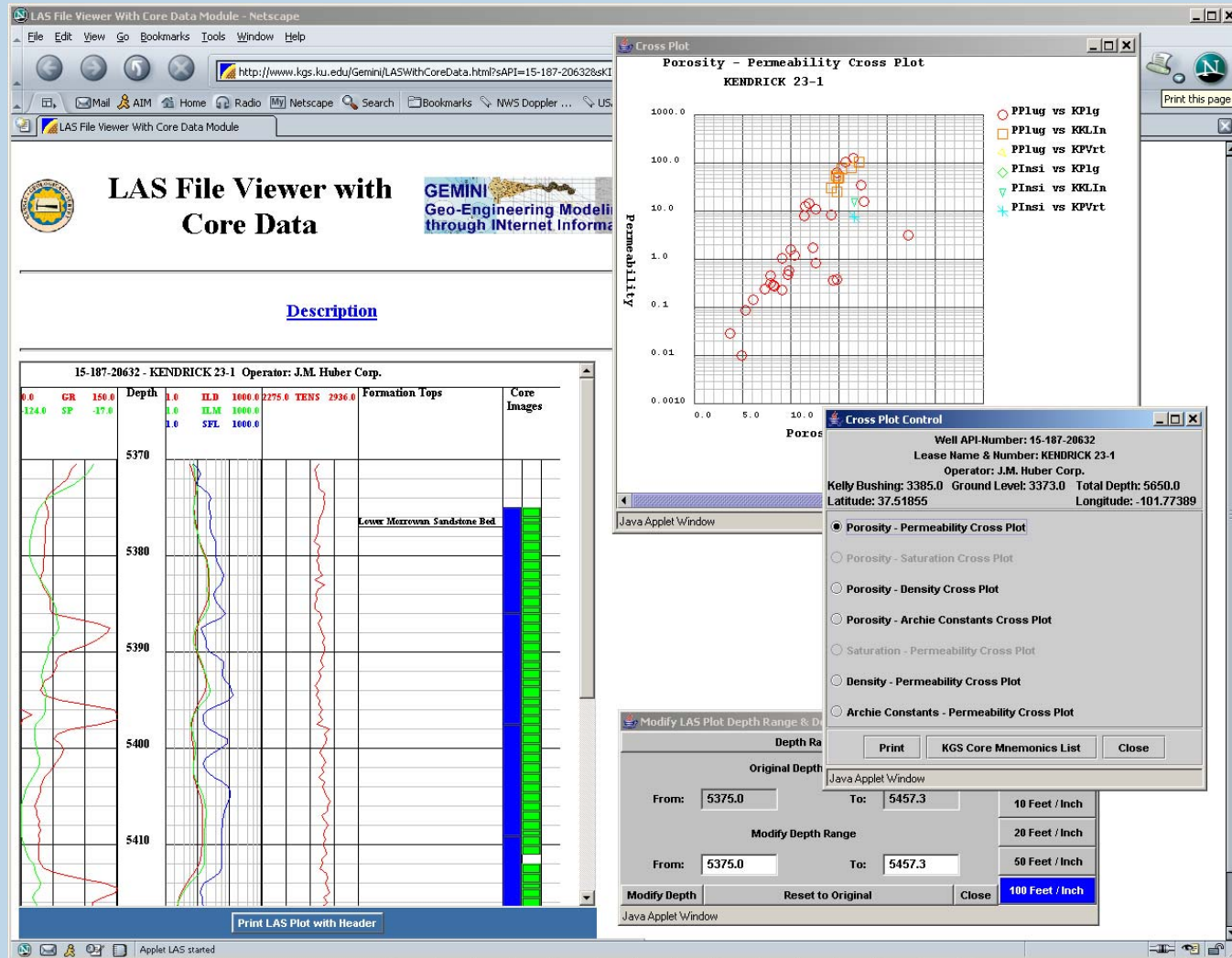


<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arroyo&sKID=1000152060>



Digital Petroleum Atlas – Next Generation

Interactive Core Data

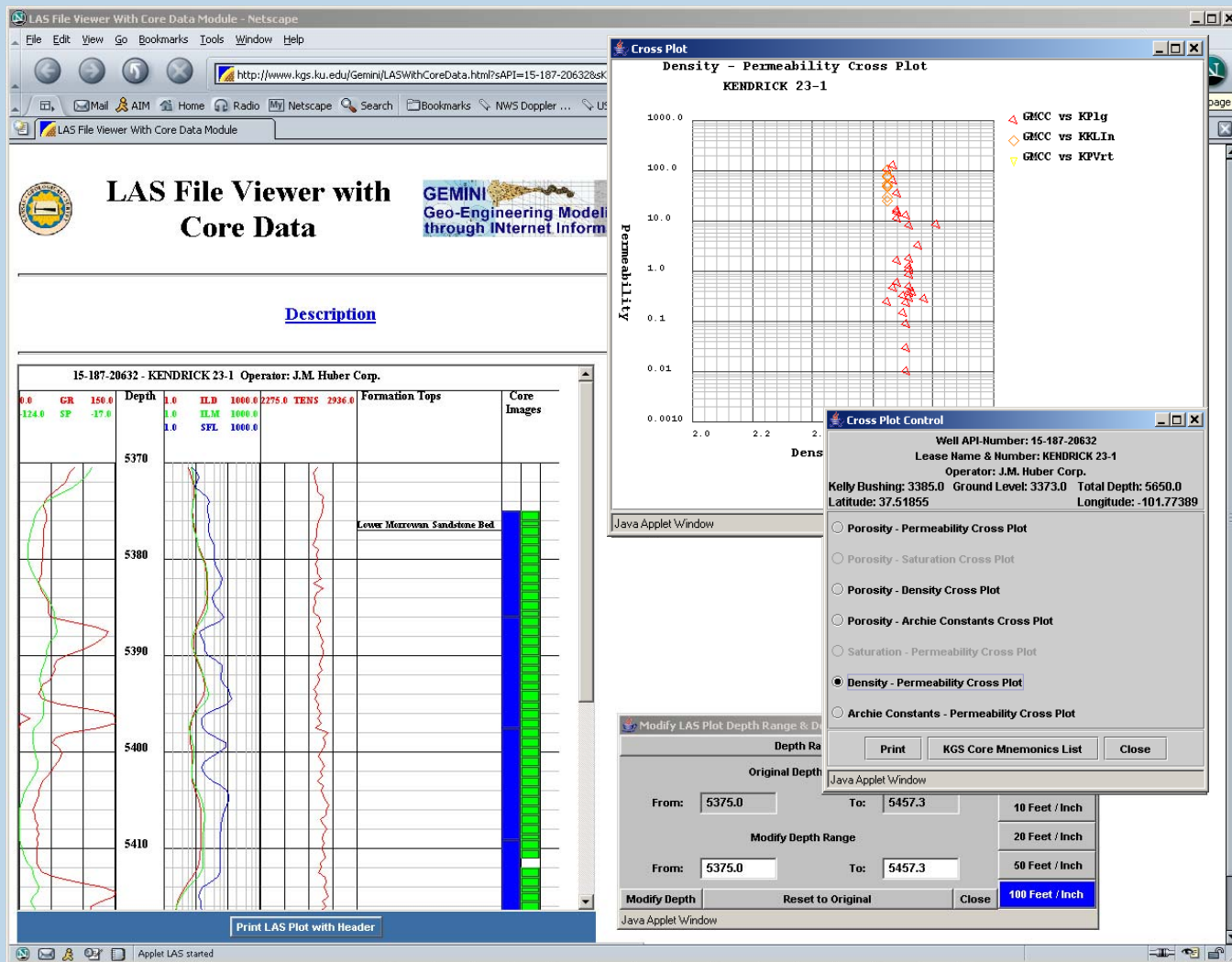


<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arroyo&sKID=1000152060>



Digital Petroleum Atlas – Next Generation

Interactive Core Data

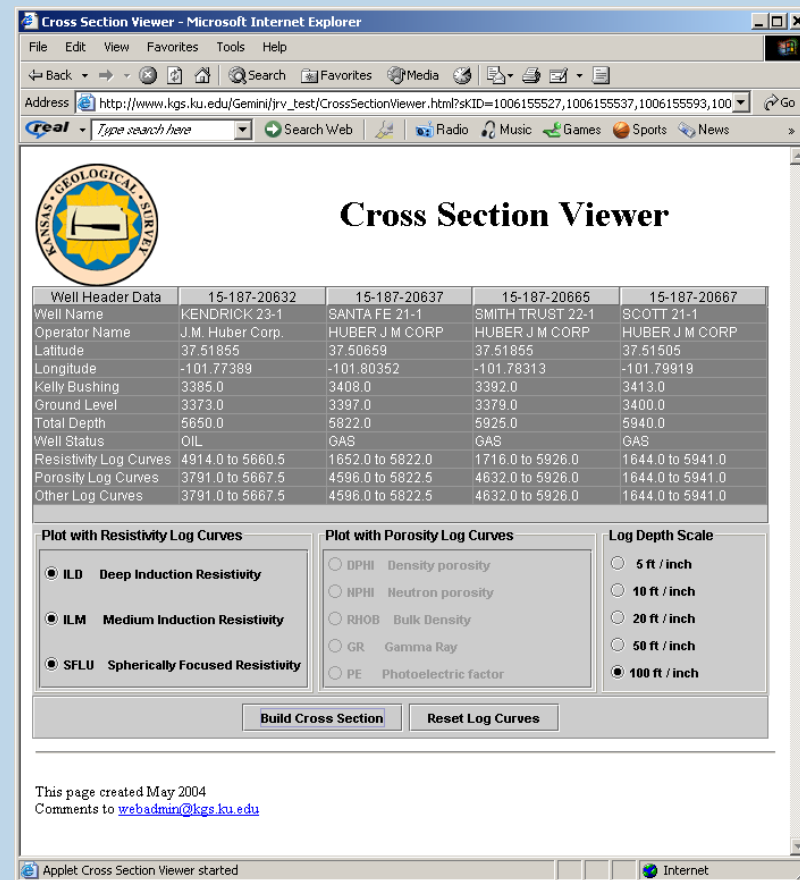
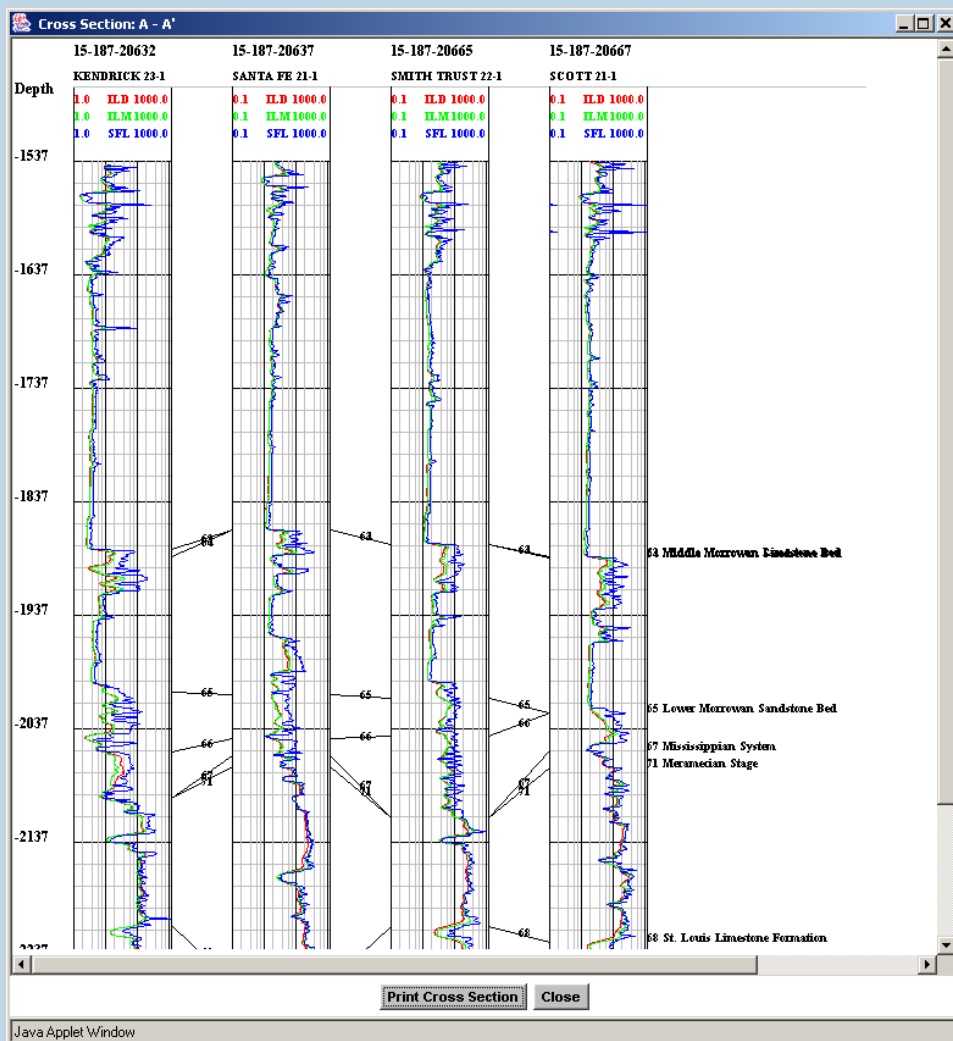


<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arroyo&sKID=1000152060>



Digital Petroleum Atlas – Next Generation

Interactive Cross-Sections



<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arrovo&sKID=1000152060>



Digital Petroleum Atlas – Next Generation

Interactive Field Data

DPA Catalog General Information - Microsoft Internet Explorer

Address: http://abyss.kgs.ku.edu/pls/abyss/gemini.dpa_general.plg.build_general_web_page?sFieldID=1000152060



DPA Catalog General Information

Arroyo Field

Discovery Well(s)

Discovery Date	Lease & Well Number	Well Location	Production Zone	Rotary Total Depth	Available Well Data
23 JUN 1992	KENDRICK 23-1	30'E NW NE NW 23-T29S-R41W	Mississippian System	5650	
12 APR 1990	PRO FARMS 27-1	20'S NW NE SW 27-T29S-R41W	Lower Kearny Member	5680	

Field Size: 6240 acres
Total Wells: 52
Productive Oil Wells: 12
Productive Gas Wells: 25
Abandoned Wells: 14
Cumulative Oil: 1,327,149.14 bbls as of February 2004
Cumulative Gas: 32,515,340.00 mcf as of February 2004

Producing Formation: Keyes Sandstone Bed

Depth Top: 5396 feet
Formation Lithology: Sandstone
Formation Geometry: Upward coarsening shoreface deposits
Trap Type: Combination, channel scour with subsequent anticlinal folding

Keyes Sandstone Bed Thickness

Maximum Thickness: 60 feet

Internet

<http://www.kgs.ku.edu/Gemini/Tools/DPA/DPACatalogA.html?sField=Arroyo&sKID=1000152060>



Digital Petroleum Atlas – Next Generation

Online Status

DPA Fields Support - Summary Page - Netscape

File Edit View Go Bookmarks Tools Window Help

http://www.kgs.ku.edu/Gemini/Tools/DPA/support/Kansas.html

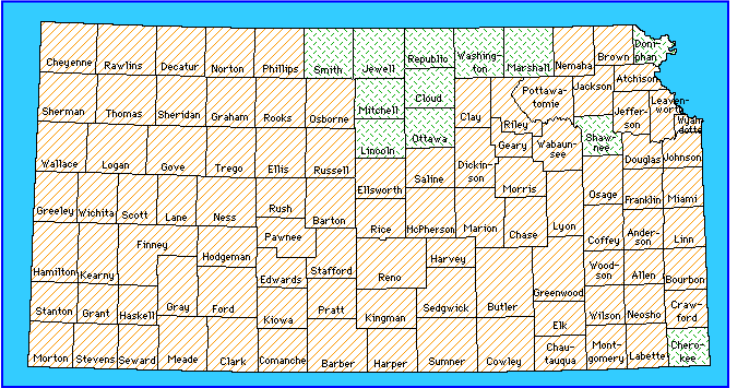
Search

Mail AIM Home Radio My Netscape Search Bookmarks NWS Doppler ... USA TODAY The Economist Geology 791 Weather Unde...

DPA Fields Support - Summary Page

DPA Fields Support Pages

Click on the county you wish to examine, or select from the list below. Counties colored in  include oil and gas field data. Counties colored in  have had no oil or gas production.



[Allen](#) || [Anderson](#) || [Atchison](#) || [Barber](#) || [Barton](#) || [Bourbon](#) || [Brown](#) || [Butler](#) || [Chase](#) || [Chautauqua](#) || [Cherokee](#) || [Cheyenne](#) || [Clark](#) || [Clay](#) || [Cloud](#) || [Coffey](#) || [Comanche](#) || [Cowley](#) || [Crawford](#) || [Decatur](#) || [Dickinson](#) || [Doniphan](#) || [Douglas](#) || [Edwards](#) || [Elk](#) || [Ellis](#) || [Ellsworth](#) || [Finney](#) || [Ford](#) || [Franklin](#) || [Geary](#) || [Gove](#) || [Graham](#) || [Grant](#) || [Gray](#) || [Greeley](#) || [Greenwood](#) || [Hamilton](#) || [Harper](#) || [Harvey](#) || [Haskell](#) || [Hodgeman](#) || [Jackson](#) || [Jefferson](#) || [Jewell](#) || [Johnson](#) || [Kearny](#) || [Kingman](#) || [Kiowa](#) || [Labette](#) || [Lane](#) || [Leavenworth](#) || [Lincoln](#) || [Linn](#) || [Logan](#) || [Lyon](#) || [Marion](#) || [Marshall](#) || [McPherson](#) || [Meade](#) || [Miami](#) || [Mitchell](#) || [Montgomery](#) || [Morris](#) || [Morton](#) || [Nemaha](#) || [Neosho](#) || [Ness](#) || [Norton](#) || [Osage](#) || [Osborne](#) || [Ottawa](#) || [Pawnee](#) || [Phillips](#) || [Pottawatomie](#) || [Pratt](#) || [Rawlins](#) || [Reno](#) || [Republic](#) || [Rice](#) || [Riley](#) || [Rooks](#) || [Rush](#) || [Russell](#) || [Saline](#) || [Scott](#) || [Sedgwick](#) || [Seward](#) || [Shawnee](#) || [Sheridan](#) || [Sherman](#) || [Smith](#) || [Stafford](#) || [Stanton](#) || [Stevens](#) || [Sumner](#) || [Thomas](#) || [Trego](#) || [Wabauunsee](#) || [Wallace](#) || [Washington](#) || [Wichita](#) || [Wilson](#) || [Woodson](#) || [Wyandotte](#)

Kansas Geological Survey
Comments to webadmin@kgs.ku.edu

DPA Su... Calend... Deep_P... DPA Ca... DPA FL... ARROY... DPA Fie... DPA Fie...

<http://www.kgs.ku.edu/Gemini/Tools/DPA/support/Kansas.html>



Digital Petroleum Atlas – Next Generation

Online Status

DPA Support - Stanton County - Netscape

File Edit View Go Bookmarks Tools Window Help

http://abyss.kgs.ku.edu/pls/abyss/gemini.dpa_support_pkg.build_support_web_page?code=187

Search

Mail AIM Home Radio My Netscape Search Bookmarks NWS Doppler ... USA TODAY The Economist Geology 791 Weather Unde...

DPA Support - Stanton County

 **DPA Catalog Support**
Stanton County

Click on icons to view Database Tables and Column Names that need to be filled.

Complete **Partial** **Empty**

Field Name	General							Geology		Number of Wells				
	Discovery Wells	Production	Porosity	Permeability	Oil Chemistry	Gas Chemistry	Water Chemistry			TOTAL WELLS	LAS FILES	TOPS	CORE DATA	CORE IMAGES
Arroyo	Complete	Partial	Partial	Empty	Empty	Empty	Empty	Complete		52	20	47	1	1
Arroyo Northeast	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		11	2	11	0	0
Arroyo Southeast	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		12	0	9	0	0
Barber Farms	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		1	0	0	0	0
Beauchamp	Complete	Partial	Empty	Empty	Empty	Empty	Empty	Partial		67	0	54	0	0
Beauchamp North	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		6	0	6	0	0
Beauchamp Northeast	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		12	1	9	0	0
Beauchamp Northwest	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		5	0	5	0	0
Beauchamp Southwest	Partial	Partial	Empty	Empty	Empty	Empty	Empty	Partial		44	3	37	0	0

DPA Su... Calend... Deep_P... DPA Ca... DPA Su... ARROY... DPA Fie... DPA Fie...

<http://www.kgs.ku.edu/Gemini/Tools/DPA/support/Kansas.html>



Digital Petroleum Atlas – Next Generation