How To Download Production Data From The Internet

March 16, 2004

There are two ways to download production history data from the Internet. This paper discusses both of them. The first method gets production data directly from various state agency web sites. Currently there are ten states accessible by MICA. The advantages of this method are that the data is current and there is no cost for the data. The disadvantage is that you must know an identification code for the specific well you are seeking. The identification code, called the WEB ID in MICA, is typically an API number or some other state identification such as the RRC ID in Texas, or the Department of Revenue Lease Code in Kansas. It will vary from state to state.

The second method obtains production history data through a direct data link from commercial data vendors. Currently MICA is set up with a direct data link for one data vendor, Petro Data Source, Inc. The advantage of this method of data retrieval is that you can select wells using the data vendor's selection methods. The disadvantage is that there is a cost for the data.

Additional state agencies and data vendors will be added to MICA as they become accessible.

Downloading Data From State Agencies

There are currently ten state agencies from which MICA can obtain production history data. They are: AL, CA, CO, KS, LA, MS, NM, TX, WV, and WY. In order to retrieve production history from the state you must know beforehand the WEB ID MICA uses for that state. The make up of the WEB ID's for each state are listed below:

State	WEB ID
AL	Permit Number
AK	API #
СА	API Number
СО	API Number
KS	Dept Of Rev. Lease Code
LA	Serial Number
MI	PRU #
MS	API Number
NM	API Number
ND	File # (Requires Subscription)
OK	API Number
TX	RRC District-RRC ID
UT	API Number
WV	API Number
WY	API Number

Example #1 – Downloading Production Data From The Texas RRC

Step 1 – Make sure that both MICA and the Petroleum Data Center are running. You can start the Petroleum Data Center (PDC) by clicking the "yellow key" button on MICA's main toolbar. You must be certain that you Internet connection is opened in your usual way.

🔗 MICA 3.20B	
<u>File</u> <u>Calculators</u> <u>U</u> tilities About	Help
	Memory Free

When you do this the PDC will open and a form similar to the one shown below will appear on your screen:

<mark> 🚰</mark> Petroleum Da	ita Center 3.20B		
<u>F</u> ile <u>C</u> lose			
Status Private Fi	les Public Files Messagi	es Data Provider	
Software Mainter	nance Expires Se	erver Storage	
Dec	31, 2099	0 KB Used Of 3	30000 0 % Used
Servers			
	Primary: UP	Secondary: UP	Tertiary: UP
Processor			
Memory			
	209.248.72.241/8000	209.248.72.241/8001	209.248.72.241/8002
Version			
Your Version:	3.20B		
Current Version:	3.20		
🙆 Get C	Current Version		
EQ1D-OUGI	-NEMH-D5JG9		
			Connect Refresh

The PDC will attempt to connect to three servers via the Internet. If you look at the center panel titled "Servers" you will see the status of the connections to the three servers. On the image above you can see that the Primary, Secondary, and Tertiary servers are all "UP". At least one must be up in order to retrieve data via the Internet.

Step 2 – Set up a well to retrieve the data. In order to retrieve data, a well must be set up in MICA's database that contains at least the state and the appropriate WEB ID for that state. If that information already exists in MICA's database then you simply need to open the well. For this example, we will set up a new well. From MICA's main tool bar select the menu item "File/ New". This will create a "No Name" or empty well as shown below:

🔁 N	o Name					
<u>E</u> dit	<u>R</u> eport	<u>G</u> raph	<u>U</u> tilities	<u>C</u> omposite	Close	
	O Re	perator Field servoir				
E	I	\$ ^F ™	♦ F	े 🧣 差	🔟 🛓 G1 🚦 💹	<u></u>

Now we need to enter two bits of information, the state and the WEB ID. From the No Name well select the "Edit/Well Information" menu item. This will display the Well Information form as shown below:

Well Information - No I	Name 🛛
Well ID Completion P	urchasers User Defined Notes
Lease Name	No Name
Operator	(C)
API Number	
County - State	
Location	
Sec - Town - Range	
Survey	
District	
Lat - Long	
Project ID	
RRC ID #	
Well Number	
Unique ID	
Web ID	
🗸 ОК 🛛 🧵 🤅	Qlose 🛛 🏂 Edit Directory 🚺 📀 Web ID

In our first example we will retrieve data from Texas. To do this we must enter the state, TX, the District, 6, and the RRC ID#, 158023. Enter the data as shown below:

Well Information - No	Name 🗙
Well ID Completion P	urchasers User Defined Notes
Lease Name	No Name
Operator	ß
API Number	
County - State	
Location	
Sec - Town - Range	
Survey	
District	6
Lat - Long	
Project ID	
RRC ID #	158023
Well Number	
Unique ID	
Web ID	
🗸 ОК 🛛 🦺 (Close 🛛 🛐 Edit Directory 🌍 Web ID

Since MICA knows how to combine the appropriate well information to create a WEB ID for each state, all we need to do now is click the "Web ID" button on the bottom right of the form and MICA will generate an appropriate WEB ID for the state of Texas. This is shown below:

Well Information - No Name 🛛 🛛 🔀
Well ID Completion Purchasers User Defined Notes
Lease Name No Name
Operator 🕞
API Number
County - State
Location
Sec - Town - Range
Survey
District 6
Lat - Long
Project ID
BRC ID # 158023
Well Number
Unique ID
Web ID 6-158023
🗸 OK 👖 Close 👸 Edit Directory 🚺 🚱 Web ID

You could have entered the WEB ID directly, which for Texas is the District number with a dash and then the RRC ID number. Once you have the WEB ID entered you can close the form by clicking the "OK" button.

Note: In Texas oil leases are designated with a five digit RRC ID number and gas leases with a six digit RRC ID number. PRECEDING ZEROES ARE REQUIRED. For example, if you have a gas lease where the RRC ID number is 398, you must enter 000398 in the RRC ID field.

Step 3 – Click the red telephone. Now all that is left to do is to click the red telephone on the well form as shown below:

<mark>8</mark> ª N	o Name					
<u>E</u> dit	<u>R</u> eport	<u>G</u> raph	<u>U</u> tilities	<u>C</u> omposite	Close	
	O Re	perator Field servoir				
E	I	\$ ^F ™	♦ F	्र 🔁	🔟 🕁 G1 🧔 💹	

When you do this, watch the PDC. On the white panel on the lower right of the PDC you will notice the status of the retrieval. As shown below you can see the state and the WEB ID that is being retrieved.

🔗 Petroleum Data Cen	iter 3.20B		_	
<u>File Close</u>				
Status Private Files Pu	blic Files 🛛 Messages	Data Provider		
-Software Maintenance E Dec 31, 2095	xpires Serv 9	er Storage 0 KB Used Of 3	30000 0 % Used	
Servers				
Prima Processor	ry: UP	Secondary: UP	Tertiary: UP	
Memory Memory 209.2	48.72.241/8000	209.248.72.241/8001	209.248.72.241/8002	
Version Your Version: 3.2 Current Version: 3.2	20B 20	16, 2004 (11:03:13) Retrie	ving: TX-6-158023	
🙆 Get Current V	'ersion			-
EQ1D-OUGI-NFMH	I-D5JG9		Connect Refresh	

When the retrieval is complete, it will be displayed on the same panel as shown below:

🚰 Petroleum Da	ita Center 3.20B		
<u>F</u> ile <u>C</u> lose			
Status Private Fil	les Public Files Message	es Data Provider	
Software Mainten	ance Expires Se	erver Storage	
Dec	31, 2099	0 KB Used Of 30	000 0 % Used
Servers			
	Primary: UP	Secondary: UP	Tertiary: UP
Processor [
Memory I			
	209.248.72.241/8000	209.248.72.241/8001	209.248.72.241/8002
Version		- 10, 2004, (11,02,12) Daties	n TV C 150033
Your Version:	3.20B	ar 16, 2004 (11:03:13) Remevi ar 16, 2004 (11:03:47) Complet	te: TX-6-158023
Current Version:	3.20		
😣 Get C	Current Version		v
EQ1D-OUGI	-NFMH-D5JG9	-	
<u> </u>			onnect Refresh

As you can deduce from the time, the retrieval took approximately 34 seconds.

If you look back at the well form you will see that some of the Well Information was automatically filled in for you. Unfortunately in Texas not much more information beyond the Lease Name is available on the state web site.

Step Review:

Step 1 – Make sure that both MICA and the Petroleum Data Center are running.

Step 2 – Set up a well to retrieve the data.

Step 3 – Click the red telephone.

Example #2 – Downloading Production Data From The Wyoming Oil and Gas Conservation Commission.

Step 1 – Make sure that both MICA and the Petroleum Data Center are running. Remember to click the "yellow key" button on MICA's main toolbar if the PDC is not running. Once the PDC is displayed, make sure that the three servers are "UP".

Step 2 – Set up a well to retrieve the data. For Wyoming we need to know the API number of a well before we can retrieve it. To enter an API number create a new well by selecting the "File/New" menu item from MICA's main tool bar. The will create a "No Name" lease. On the "No Name" lease select the "Edit/Well Information" menu item and complete the State field and API number field as shown below:

Well Information - No N	Name 🗙
Well ID Completion P	urchasers User Defined Notes
Lease Name	No Name
Operator	101
API Number	4901306185
County State	
Location	
Sec - Town - Range	
Survey	
District	
Lat - Long	
Project ID	
RRC ID #	
Well Number	
Unique ID 🛛	
Web ID	
🗸 ок 👖 🧰	Close 🛛 🕅 Edit Directory 🖉 🚱 Web ID

As you can see above, you do not need to enter dashes in the API number. Once you have entered the two items above, click the "Web ID" button on the bottom right of the form to have MICA generate the correct Web ID. The results are shown below:

Well Information - No Name
Well ID Completion Purchasers User Defined Notes
Lease Name No Name
Operator 🕞
API Number 49-013-06185-0000
County - State
Location
Sec - Town - Range
Survey
District
Lat - Long
Project ID
RRC ID #
Well Number
Unique ID
Web ID 01306185
🗸 OK 👖 Close 🎉 Edit Directory 🚺 🚫 Web ID

Note: When dealing with states that use the API number for the WEB ID, it is best to place the API number in the appropriate API Number field and then let MICA generate the WEB ID by clicking the "Web ID" button. Although you can enter the WEB ID directly, some states require the full API number including the state code. Other states, such Wyoming shown above, only require the county code and well code. And still other states may need dashes in the WEB ID. Since MICA knows the format of the WEB ID for each state, simply let MICA generate it for you.

Step 3 – Click the red telephone. When you click the red telephone on the well form, watch the PDC to view the progress of the download. After the download is complete you can view the Well Information or Production History. You can see from the form below that Wyoming provides much more data.

Well Information - MCE	BRIDE FEE 3-	77		×
Well ID Completion Purchasers User Defined Notes				
Lease Name	MCBRIDE FEE	MCBRIDE FEE 3-7		
Operator	FAMILY TREE	FAMILY TREE CORPORATION		
API Number	49-013-06185-0	49-013-06185-0000		
County - State	FREMONT			
Location	SE SE 28-3 NO	RTH 1 WEST		
Sec - Town - Range	28	3 NOR	1 WES	
Survey				
District				
Lat - Long	43.19989	108.8	37417	
Project ID				
RRC ID #				
Well Number	7			
Unique ID				
Web ID	01306185			
🗸 ОК 🔄 🦺 !	Close 💦	Edit Directory	🌍 Web ID	

Comments:

- 1. If the well already exists in MICA's database you do not need to set it up again. Simply open the well, make sure the PDC is up, and click on the red telephone on the Lease Form of the well. If the WEB ID and State are entered properly, the PDC will retrieve the latest data from the state regulatory agency.
- 2. You can retrieve multiple wells at once. To do so select the "File/Import From WEB/State Agency" menu item from MICA's main tool bar. This will present a "Select" form. Select the wells you want to retrieve and then click "OK" on the select form. Observing the PDC after you do this you will see the selected wells being retrieved.

Download Production Data From A Data Vendor

As of this date there is only one data vendor that has a direct data link with MICA and that is Petro Data Source, Inc. in Denver, Colorado. Although MICA can import data files from many data vendors such as HIS Energy and Drilling Info, those vendors with a direct data link make the downloading process much easier. With a direct data link you query the data vendor's database as you normally would on their web site and when you have selected the wells you want to purchase, those wells are automatically downloaded into MICA's database.

Step 1 – Make sure that both MICA and the Petroleum Data Center are running. From MICA's main tool bar start the Petroleum Data Center (PDC) by clicking the "yellow key" button.

🚰 MICA 3.20B	
<u>File Calculators Utilities About</u>	Help
<u>e d n (s)</u>	Memory Free

🚰 Petroleum Data Center 3.20B . 🗆 🛛 File Close Status | Private Files | Public Files | Messages | Data Provider | Software Maintenance Expires Server Storage 0 KB Used Of 0 0 % Used Servers Primary: UP Secondary: UP Tertiary: UP Processor Memory 209.248.72.241/8000 209.248.72.241/8001 209.248.72.241/8002 Version ,e., Your Version: 3.20B Current Version: 3.20 Get Current Version EQ1D-OUGI-NFMH-D5JG9 Connect Refresh

When the PDC starts you will see a form similar to the one shown below:

The PDC will attempt to connect to three servers via the Internet. If you look at the center panel titled "Servers" you will see the status of the connections to the three servers. On the image above you can see that the Primary, Secondary, and Tertiary servers are all "UP". At least one must be up in order to retrieve data via the Internet.

Step 2 – Set up the data vendor's login information. (This step only needs to be done once.) On the PDC select the File/Options menu item. A form similar to the one show below will appear:

Servers Directories Data Provider	
Data Vender Login UBL http://www.petrodatasource.com/Secure/Lo	gin/LoginMica.asp
Login ID frank@mcsi.com	Login Password
ОК	X Cancel

On the Options form select the "Data Provider" tab at the top of the form. This allows you to set up the information for one data provider. The form above shows the information necessary for Petro Data Source, Inc. Once you have entered the information click the "OK" button.

Step 3 – Use the PDC to select the desired wells from the data vendor. Select the Data Provider tab at the top of the PDC form.

<mark>8°</mark> Petroleum Da	ta Center 3.20B		
<u>File Close</u>		\sim	
Status Private Fil	les Public Files Message	s Data Provider	
Software Mainten	nance Expires	erver Storage	
Dec	31, 2099	0 KB Used Of	30000 0 % Used
Servers			
	Primary: LIP	Secondary: UP	Tertiary: LIP
Processor			
Memory			
	209.248.72.241/8000	209.248.72.241/8001	209.248.72.241/8002
Version			
Your Version:	3.20B		<u> </u>
Current Version:	3.20		
😣 Get C	Current Version		-
EQ1D-OUGI	-NFMH-D5JG9		
1		_	Connect Refresh

When you do this, MICA will log into the data vendor's web site and present to you the same well search/select screen that you would see if you had logged into their web site directly. The screen for Petro Data Source is shown below:

🚰 Petroleum Data Center 3.20B	
<u>File</u> <u>Close</u>	
Status Private Files Public Files Messages Data Provider	
	Log Ir 📥
real real real	
People Data Value	Petro Data Sour
Welcome	
Welcome Back to Petro Data Source	Saich
	New Search
Frank Molli, thank you for coming back to visit us. Please select a menu item to the right.	Manage Searche
	Order History
By using this site you are agreeing to the terms of our License Agreement	Modify Account
Copyright © 1994-2003 Petro Data Source, Inc.	
All Rights Reserved	

To continue using Petro Data Source's data selection methods, select the "New Search" menu item as shown above. This will display the search page as shown below:

🚰 Petroleum Data Center 3.20B				_ 🗆 ×
<u>File</u> <u>Close</u>	,. <u></u>			
Status Private Files Public Files Messa	ages Data Prov			
				Log Ir 📥
real	real	real		
People	Dat	a Value		Petro Data Sour
Search				
Search Criteria				Search
				New Searc
Press the red button below to	preview or p	urchase the selected wells or pr	ess the green	Manage S
button to purchase the selecter	u wens			Order Hist
Buy View Wells Found:	54877	Edit Currently Searching:	Michigan	Modify Ac
				Log Out
Edit Lease:	0	Edit County:	0	
Edit VVell:	0	Edit Basin:	0	
Edit VVell Type:	0	Edit District:	0	
Edit API:	0	Edit Operator:	0	
Edit Field:	0	Edit Formation:	0	
Edit Meridian:	0	Edit Status:	0	
Edit S/T/R:	0	Edit Dates:	0	
Edit Lat/Long:	0	Edit Gov't and Other IDs:	0	
Edit Distance from a	0	Edit Cum. Production:	0	
l i onic.				
Clear All		Save Sear	ch Load Search	
•				

First select the state. Click the Edit button next to the "Currently Searching" label and select Texas. Then click the Edit button next to Operator to select an operator. When you do this the following screen will appear:

🚰 Petroleum Data Center 3.20B File Close			
Status Private Files Public Files Messag	es Data Provider		
real r People	eal re Data	al Value	Log Ir fro Data Sour
Search			
Edit Operator Criteria Use the left and right arrow buttons specific names like SMITH*. <u>More</u>	: to move items between t <u>help</u> .	he boxes. Use the Search box to look for	Search New Search Manage Sear Order History
Selected Operators:	1	Available Operators:	Modify Accou
<nothing currently="" selected=""></nothing>	<- ->	9194420 - NAME UNKNOWN 9403070 - NAME UNKNOWN 9733800 - NAME UNKNOWN 9823320 - NAME UNKNOWN 9893700 - NAME UNKNOWN 1-2-3 OPERATING LL.C. 1226 PRODUCTIONS, INC. 12TH MAN OIL & GAS 1988 INDEXGEO JV 2 R OPERATING CO. 2 T PRODUCTION 2 W PETROLEUM	
		There are more choices available. Er search criteria: V Search	_

At the bottom of the screen enter the name of the operator you want to search for. You do not need to enter the entire name, just the first characters will be sufficient. Enter "V" as shown above and click the "Search" button. When you do the following screen will appear:



A list of all operators in Texas that begin with the letter "V" will appear. Select "V-F Petroleum, Inc." and click the left arrow button. When you do this, the following screen will appear:



As shown above, you can see that V-F Petroleum, Inc. operates 141 wells in Texas. To select only those wells in Midland County, Texas, click the "Edit" button next to the County label. This will display the following form:



Select "Midland (TX)" and then click "Save My Changes". This will select only those wells in Midland County operated by V-F Petroleum, Inc. As shown below there are only four such wells.



Step 4 – Approve the purchase. Once you have selected the desired wells you must purchase them. With Petro Data Source, Inc. you must click the "Buy" button shown above. You will be shown the total cost of the purchase and when you approve it, the data will be automatically downloaded into MICA's database. You will see a form similar to the one shown below:

Import × Source File 20040316_41270_682176.zip
File Type Petro Data Source - CSV
Entity
Import Only One Well Per Lease
Go X Cancel

When this form disappears, the data download is complete and the data will be stored in MICA's database from which you can view or graph it.

Step Review:

- Step 1 Make sure that both MICA and the Petroleum Data Center are running.
- Step 2 Set up the data vendor's login information.
- Step 3 Use the PDC to select the desired wells from the data vendor.
- Step 4 Approve the purchase.

Comments:

- 1. Each data vendor will have a different method to search and select wells for downloading. The one shown above is specifically for Petro Data Source, Inc.
- 2. You must set up and account with the data vender and you will be billed by the data vendor for the data you retrieve. You are not billed by Molli Computer Services, Inc.