

TBR Website & Database



Current Work

- Work on Cross Section data:
 - Implement into IMS
 - Redesign of TBR basemap
 - Add Michigan and Indiana
 - Provide new user features
 - Provide new layer
 - Provide downloadable files on website
 - Incorporate associated LAS files on website and IMS
- Integrate TBR Production data:
 - Implement into IMS
 - Provide new layer
 - Provide downloadable files on website
- Incorporate SEM data into website/database
 - Into IMS?
- Acquire more data!
 - Well info (headers, location data, etc)
 - Other

Current Work

- **Work on Cross Section data:**
 - **Implement into IMS**
 - **Redesign of TBR basemap**
 - Add Michigan and Indiana
 - Provide new user features
 - **Provide new layer**
 - **Provide downloadable files on website**
 - **Incorporate associated LAS files on website and IMS**
- **Integrate TBR Production data:**
 - **Implement into IMS**
 - **Provide new layer**
 - **Provide downloadable files on website**
- **Incorporate SEM data into website/database**
 - **Into IMS?**
- **Acquire more data!**
 - Well info (headers, location data, etc)
 - Other

Current Work

- To Revamp FTP
 - Clean up current structure
 - Add new directories
- Work on Cross Section data:
 - Implement into IMS
 - Redesign of TBR basemap
 - Add Michigan and Indiana
 - Provide new user features
 - Provide new layer
 - Provide downloadable files on website
 - Incorporate associated LAS files on website and IMS
- Integrate TBR Production data:
 - Implement into IMS
 - Provide new layer
 - Provide downloadable files on website
- Incorporate SEM data into website/database
 - Into IMS?
- **Acquire more data!**
 - **Well info (headers, location data, etc)**
 - **Other**

TABLE:
Trenton Wells Header

API (PK)
NEEDINFO
StateNo
CntyNo
PrmtNo
LatDD
LonDD
UTME
UTMN
Suffix
SpudMn
SpudDy
SpudYr
PlugMn
PlugDy
PlugYr
CompMn
CompDy
CompYr
Status
Farm
WellNum
CoNum
Mineral_owner
Operator
Elev
Datum type
Field
DeepFm
DeepFmTstd
InitClass
FinalClass
WellTyp
RigTyp
CmpMth
TD
NewFtg
ExplFtg
GasBfr
GasAfr
NatPress
NatTime
TrtPress
TrtTime
top TRNT md
datum-TRNT top
datum type TRNT top
TRNT top subsea
Logs_Avail
Log_intl
Logs_Lnk
Samples_Avail
Samples_Lnk
Cores_Avail
Cores_Lnk
Comments

TABLE:
Trenton Wells LAS

API
LogType
TopIntvl
BotIntvl
FormTotalDepth
LAS_Filename
LAS_Filesize (KB)
Comments
Entered
Provided_By

TABLE:
Trenton Wells TIFFs

API
LogType
TIFF_Filename
TIFF_Filesize(KB)
Entered
Provided_By

TABLE:
Trenton Wells XSecs

API
Xsec_ID
Xsec_Filename
Xsec_Filesize(KB)
Entered
Provided_By

TABLE:
Trenton Wells Cores

API
CoreNo
Core_Filename
Core_Filesize(KB)
Entered
Provided_By

TABLE:
API Codes

country
state_code
state_name
state_abbrev
county_code
county_long_name
county_short_name

TABLE:
Production Oil

API (PK)
ProdFirstYr
yr1947
yr1970
yr1971
yr1972
yr1973
yr1974
yr1975
yr1976
yr1977
yr1978
yr1979
yr1980
yr1981
yr1982
yr1983
yr1984
yr1985
yr1986
yr1987
yr1988
yr1989
yr1990
yr1991
yr1992
yr1993
yr1994
yr1995
yr1996
yr1997
yr1998
yr1999
yr2000
yr2001
yr2002
yr2003
yr2004
Cummulative
Entered
Provided_By

TABLE:
Production Gas

API (PK)
ProdFirstYr
yr1947
yr1970
yr1971
yr1972
yr1973
yr1974
yr1975
yr1976
yr1977
yr1978
yr1979
yr1980
yr1981
yr1982
yr1983
yr1984
yr1985
yr1986
yr1987
yr1988
yr1989
yr1990
yr1991
yr1992
yr1993
yr1994
yr1995
yr1996
yr1997
yr1998
yr1999
yr2000
yr2001
yr2002
yr2003
yr2004
Cummulative
Entered
Provided_By

TABLE:
Production Water

API (PK)
ProdFirstYr
yr1947
yr1970
yr1971
yr1972
yr1973
yr1974
yr1975
yr1976
yr1977
yr1978
yr1979
yr1980
yr1981
yr1982
yr1983
yr1984
yr1985
yr1986
yr1987
yr1988
yr1989
yr1990
yr1991
yr1992
yr1993
yr1994
yr1995
yr1996
yr1997
yr1998
yr1999
yr2000
yr2001
yr2002
yr2003
yr2004
Cummulative
Entered
Provided_By

| Attribute Name | Attribute Description | Attribute Type | Given Actual Attribute Values or Examples (in quotations) |
|-----------------|--|----------------|--|
| API | Well's full 14 digit API Number (unique key) | num, 14d | "47001123450000" |
| NEEDINFO | (have info for well but no header data) | varchar | (where I only have info from) "LAS", "TIFF", "Prod_Gas" |
| StateNo | State API Number (incorporated in API) | num, 2d | 13, 16, 21, 31, 34, 37, 47, 78 |
| CntyNo | County API Number (incorporated in API) | Num, 3d | |
| PrmtNo | Permit Number (incorporated in API) | num, 5d | |
| LatDD | Latitude (in NAD83) | num, 10d | |
| LonDD | Longitude (in NAD83) | num, 10d | |
| UTME | UTM Easting (in NAD83) | num | |
| UTMN | UTM Northing (in NAD83) | num | |
| Suffix | | varchar(25) | Original Loc, Drilled Deeper, Worked Over, Dvtd Drld Dpr, Dvtd Worked Over, Dvtd Orig Drillg |
| SpudMn | Spud Month | num, 2d | |
| SpudDy | Spud Day | num, 2d | |
| SpudYr | Spud Year | num, 4d | |
| PlugMn | Plug Month | num, 2d | |
| PlugDy | Plug Day | num, 2d | |
| PlugYr | Plug Year | num, 4d | |
| CompMn | Completion Month | num, 2d | |
| CompDy | Completion Day | num, 2d | |
| CompYr | Completion Year | num, 4d | |
| Farm | Farm | varchar(100) | |
| WellNum | Well Number | varchar(15) | |
| CoNum | Company Number | num? | |
| Mineral_owner | Mineral Owner | varchar | |
| Operator | Operator | varchar | |
| Elev | Elevation | num, 5d | |
| Datum type | Datum (Elevation) Type | varchar(25) | Barometer, Casing, Derrick Floor, Casing Flange, Ground Level, Kelly Bushing, Questionable, Spirit Level, Topo Estimation, Unknown |

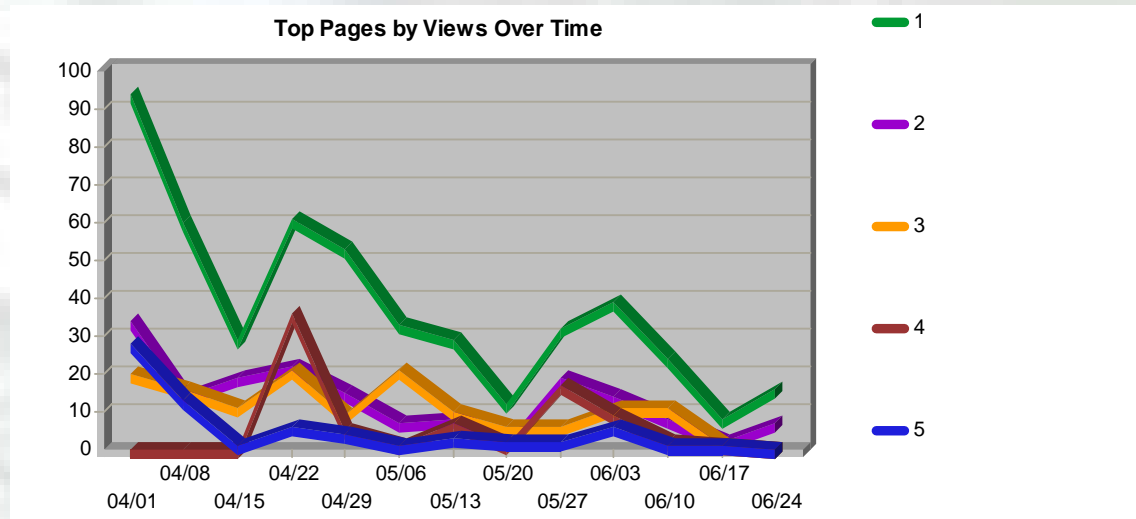
| Attribute Name | Attribute Description | Attribute Type | Given Actual Attribute Values or Examples (in quotations) |
|----------------|--|----------------|--|
| Field | Field name as assigned by the state | varchar(100) | |
| DeepFm | Deepest Formation penetrated by well | varchar(100) | |
| DeepFmTstd | Deepest Formation fully Tested by well | varchar(100) | |
| InitClass | Initial Classification | varchar(25) | New-Field Wildcat, Deeper-Pool Test, Shallower-Pool Test, Outpost (Extn) Test, Development Well, Stratigraphic Test, Service Well, Misc Well, Unclassified, NA |
| FinalClass | Final Classification | varchar(25) | Unsuccessful, New-field Discovery, New-pool Discovery, Deeper-pool Discovery, Shallower-Pool Discover, Outpost (Extension) Well, Discovery Well, Misc Well, Unclassified, NA |
| WellTyp | Well type as originally drilled | varchar(50) | Gas, Oil, Oil&Gas, Dry Hole, Gas with Oil Show, Oil with Gas Show, Dry with Gas Show, Dry with Oil Show, Dry with Oil and Gas Show, Storage Well, Brine (Salina), Salt Water (Salt Sands), Industrial Waste Disposal, Salt Water Disposal, Gas Injection, CO2 Injection, Water Injection, Injection for In-Situ Comb, Observation, Other, NA |
| RigTyp | Rig Type | varchar(15) | Unknown, Rotary, Spudder, Cable Tool |
| CmpMth | Completion Method | varchar | Unknown, Nat/Open H, Acid, Frac, Acid&Frac, Shot, Shot+, Unstim, Unfin Stim |
| TD | Total Depth (in feet) | num, 5d | |
| NewFtg | New Footage (in feet) | num, 5d | |
| ExplFtg | Exploratory Footage (in feet) | num, 5d | |
| GasBfr | Gas Vol Before Treatment (Mcf/day) | num, 5d | |
| GasAfr | Gas Vol After Treatment (Mcf/day) | num, 5d | |
| NatPress | Natural Pressure (psi) | num, 4d | |
| NatTime | Natural Time (hours shut in) | num, 4d | |

| Attribute Name | Attribute Description | Attribute Type | Given Actual Attribute Values or Examples (in quotations) |
|---------------------|--------------------------------|----------------|--|
| TrtTime | Treated Time (hours shut in) | num, 4d | |
| top_TRNT_md | Top Trenton (in feet) | num, 4d | |
| datum_TRNT_top | Datum Trenton top (in feet) | num, 4d | |
| datum_type_TRNT_top | Datum Type Trenton Top | varchar(25) | Barometer, Casing, Derrick Floor, Casing Flange, Ground Level, Kelly Bushing, Questionable, Spirit Level, Topo Estimation, Unknown |
| TRNT_top_subsea | Trenton Top Subsea (in feet) | num, 5d | |
| Comments | Comments | varchar(250) | |
| Entered_Date | Date info added to database | date | "3/5/2005" |
| Provided_By | Provider of data for well info | varchar | "John Doe, OGS" |

Website Reports

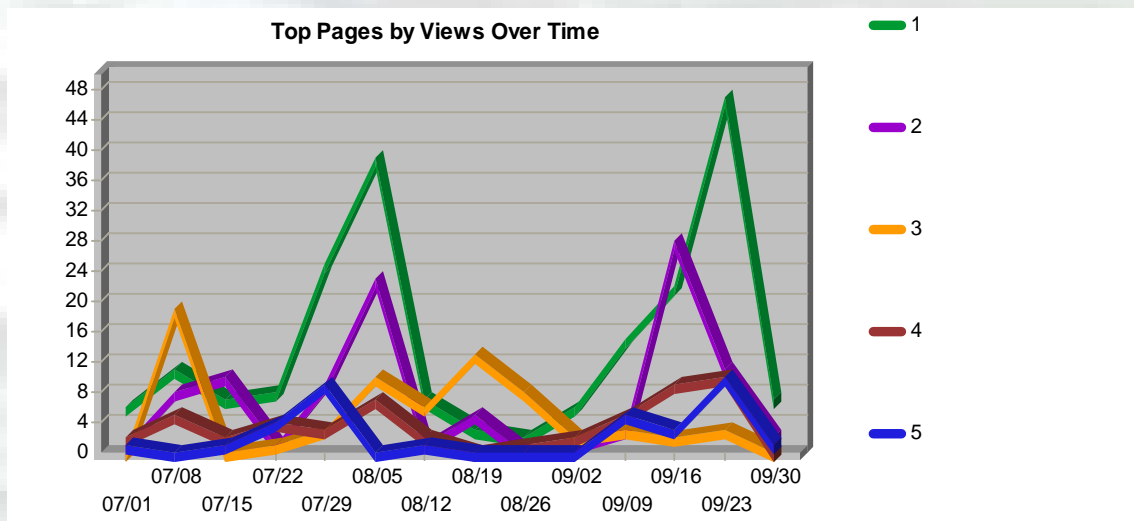


2nd Quarter, 2005 – Top Pages Viewed Over Time



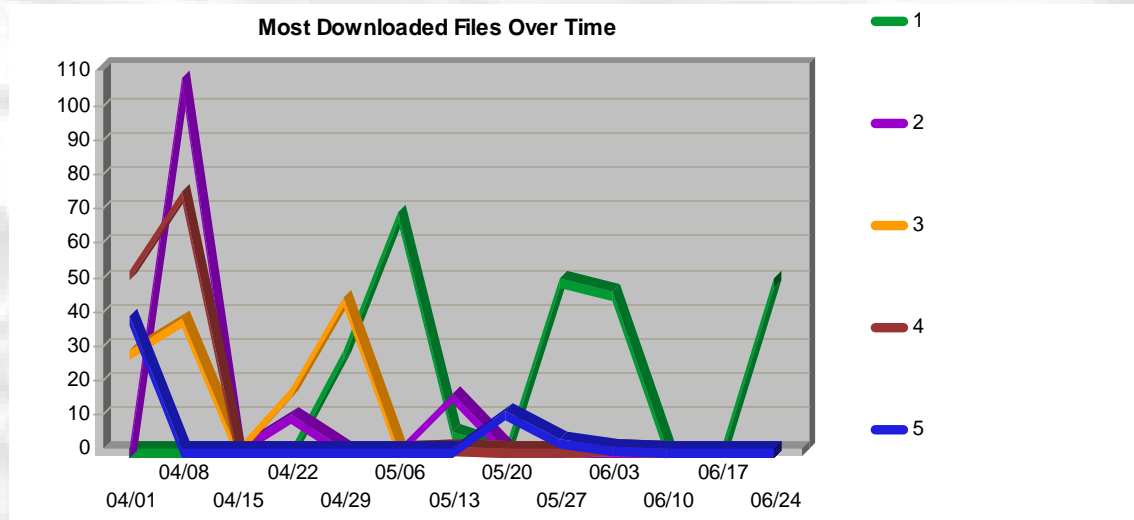
| Top Pages by Views Over Time | | | | |
|------------------------------|--|--------------|----------------|-----------------|
| | Pages | Views | % | Avg Time Viewed |
| 1. | (Entrance - Login) http://dolomite.wvgs.wvnet.edu/website/TBR0405/ | 490 | 32.32% | 00:00:31 |
| 2. | (Entrance – Login/Welcome) http://dolomite.wvgs.wvnet.edu/website/TBR0405/ | 171 | 11.28% | 00:00:20 |
| 3. | (Gateway) http://dolomite.wvgs.wvnet.edu/trenton/ | 143 | 9.43% | 00:00:18 |
| 4. | (Well Logs Page) http://dolomite.wvgs.wvnet.edu/website/TBR0405/TBR_well_logs.asp | 79 | 5.21% | 00:00:37 |
| 5. | (Technical Presentations) http://dolomite.wvgs.wvnet.edu/website/TBR0405/technical_presentations.asp | 68 | 4.49% | 00:02:25 |
| | Subtotal | 951 | 62.73% | 00:00:34 |
| | Other | 565 | 37.27% | 00:02:12 |
| | Total | 1,516 | 100.00% | 00:01:05 |

3rd Quarter, 2005 – Top Pages by Views Over Time



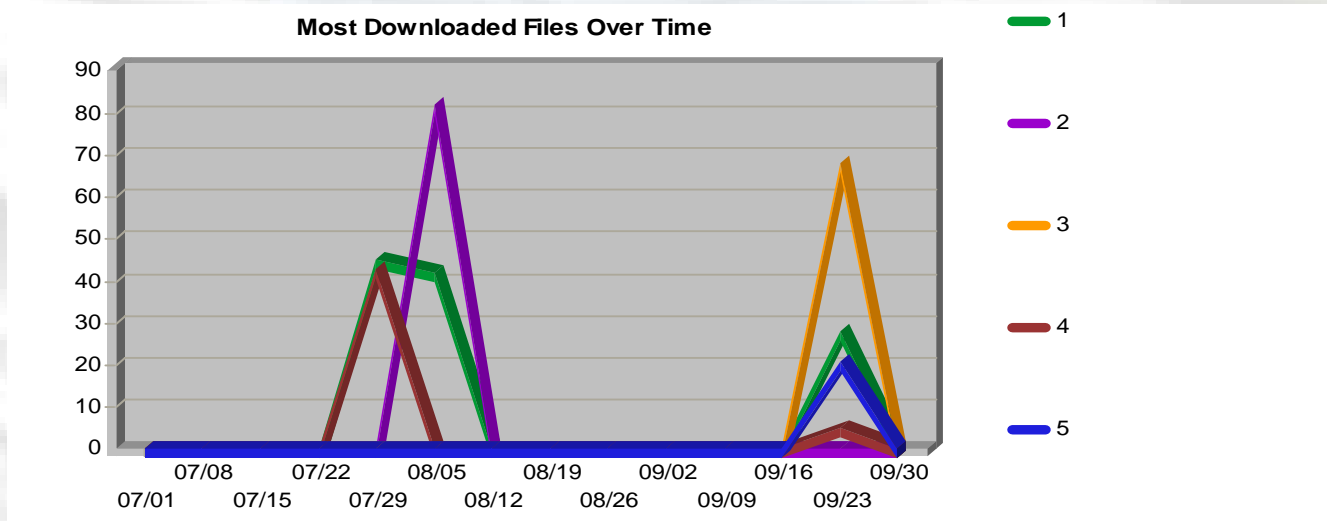
| Top Pages by Views Over Time | | | | |
|------------------------------|---|------------|----------------|-----------------|
| | Pages | Views | % | Avg Time Viewed |
| 1. | (Entrance - Login) http://dolomite.wvgs.wvnet.edu/website/TBR0405/ | 205 | 27.33% | 00:00:30 |
| 2. | (Entrance – Login/Welcome) http://dolomite.wvgs.wvnet.edu/website/TBR0405/ | 103 | 13.73% | 00:00:27 |
| 3. | (Dolomite server) http://129.71.50.42/ | 70 | 9.33% | 00:14:08 |
| 4. | (Gateway) http://dolomite.wvgs.wvnet.edu/trenton/ | 52 | 6.93% | 00:00:35 |
| 5. | (Well Logs Page) http://dolomite.wvgs.wvnet.edu/website/TBR0405/TBR_well_logs.asp | 35 | 4.67% | 00:00:19 |
| | Subtotal | 465 | 62.00% | 00:00:33 |
| | Other | 285 | 38.00% | 00:01:45 |
| | Total | 750 | 100.00% | 00:00:57 |

2nd Quarter, 2005 – Most Downloaded Files Over Time



| Most Downloaded Files Over Time | | | |
|---------------------------------|---|------------|----------------|
| | Files | Downloads | % |
| 1. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/41856R03.pdf | 249 | 33.16% |
| 2. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/050328_Laughrey_rev.pdf | 134 | 17.84% |
| 3. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/050328_Riley_final.pdf | 131 | 17.44% |
| 4. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/050328_Smith_rev.pdf | 129 | 17.18% |
| 5. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/050328_Hickman_edit.pdf | 54 | 7.19% |
| | Subtotal | 697 | 92.81% |
| | Total | 751 | 100.00% |

3rd Quarter, 2005 – Most Downloaded Files Over Time



| Most Downloaded Files Over Time | | | |
|---------------------------------|---|------------|----------------|
| | Files | Downloads | % |
| 1. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/41856R03.pdf | 115 | 28.40% |
| 2. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/050328_Smith_rev.pdf | 82 | 20.25% |
| 3. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/41856R02r.pdf | 68 | 16.79% |
| 4. | http://dolomite.wvgs.wvnet.edu/website/tbr0405/docs/050328_Hickman_edit.pdf | 48 | 11.85% |
| 5. | http://dolomite.wvgs.wvnet.edu/website/TBR0405/docs/41856R01.pdf | 21 | 5.19% |
| | Subtotal | 334 | 82.47% |
| | Total | 405 | 100.00% |

2nd Quarter, 2005 – Most Downloaded Files Over Time

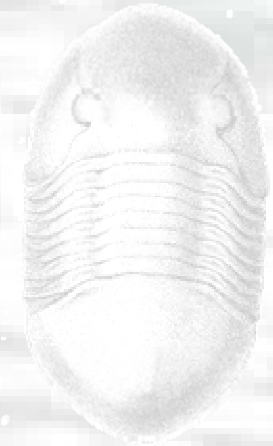
| | |
|-------------------------|---|
| 41856R03.pdf | Third Semi-Annual Report (April, 2005) |
| 050328_Laughrey_rev.pdf | Petrography of the Upper Ordovician Trenton and Black River Group Carbonate Reservoirs, Appalachian Basin (C. Laughrey and J. Kostelnik - PAGS) |
| 050328_Riley_final.pdf | Regional Stratigraphy of the Trenton-Black River Interval (R. Riley and M. Baranoski - OGS) |
| 050328_Smith_rev.pdf | Update on Geochemistry and Diagenetic Models (T. Smith, R. Nyahay and Reservoir Characterization Group - NYSM) |
| 050328_Hickman_edit.pdf | Geologic Structure and Seismic Analysis - revised (J. Hickman, P. Lake, D. Harris, and J. Drahovzal - KGS) |

3rd Quarter, 2005 – Most Downloaded Files Over Time

| | |
|-------------------------|--|
| 41856R03.pdf | Third Semi-Annual Report (April, 2005) |
| 050328_Smith_rev.pdf | Update on Geochemistry and Diagenetic Models (T. Smith, R. Nyahay and Reservoir Characterization Group - NYSM) |
| 41856R02r.pdf | Second Semi-Annual Report (October, 2004) |
| 050328_Hickman_edit.pdf | Geologic Structure and Seismic Analysis - revised (J. Hickman, P. Lake, D. Harris, and J. Drahovzal - KGS) |
| 41856R01.pdf | First Semi-Annual Report (April, 2004) |

TBR Website & Database

- John Bocan, WVGES,
bocan@geosrv.wvnet.edu
- K. Lee Avary, WVGES,
avary@geosrv.wvnet.edu
- Michael Hohn, WVGES,
hohn@geosrv.wvnet.edu



(304) 594-2331

