U.S. Department of Commerce
NTRL
National Technical Reports Library

volume 7 • number 3 • *September 15th, 2014* *Newsletter*

# National Technical Reports Library

**The new generation NTRL V3.0 is now available!** *Developed by the Federal Science Repository Service*

## Hydraulic Fracturing

**DE2010982997**
Advanced Hydraulic Fracturing Technology for Unconventional Tight Gas Reservoirs. Final Report for the Project Period: April 1, 2006-April 1, 2007.
Texas A and M Univ., College Station.
2007, 73p
**Related Categories/Subcategories**
48A (Mineral Industries)
97A (Reserves)
97K (Fuels)
Keywords: Natural gas deposits, Hydraulic fracturing, Gas reservoirs.

**DE20121054498**
Hydraulic Fracturing and Shale Gas Production: Technology, Impacts, and Policy.
Argonne National Lab., IL. Environmental Science Division
2012, 36p
ANL/EVS/R-12/5
**Related Categories/Subcategories**
48A (Mineral Industries)
97G (Policies, Regulations & Studies)
Keywords: Hydraulic fracturing, Natural gas deposits, Black shales.

**DE20131054519**
Zero Discharge Water Management for Horizontal Shale Gas Well Development, (Final Report).
West Virginia Univ. Research Corp., Morgantown.
2012, 46p
**Related Categories/Subcategories**
68D (Water Pollution & Control)
48A (Mineral Industries), 97K (Fuels)
Keywords: Waste water disposal, Shale gas, Well drilling.

**DE84015216**
Conceptual Design of a Wireline Hydraulic Fracturing Tool.
Terra Tek, Inc., Salt Lake City, UT.
1980, 137p
**Related Categories/Subcategories**
97K (Fuels)
97A (Reserves)
48A (Mineral Industries)
48F (Geology & Geophysics)
94F (Tooling, Machinery, & Tools)
Keywords: Natural Gas Deposits, Stresses, Design, Hydraulic Fracturing.

**DE85000446**
Fracture Mechanics Analysis of Massive Hydraulic Fracturing Containment.
Sandia National Labs., Albuquerque, NM.
1984, 34p
SAND-84-1306
**Related Categories/Subcategories**
97K (Fuels)
97A (Reserves)
48F (Geology & Geophysics)
48A (Mineral Industries)
Keywords: Crack Propagation, Hydraulic Fractures, Hydraulic Fracturing.

**DE87007489**
New Method for Determining Fluid Flow Paths During Hydraulic Fracturing.
Los Alamos National Lab., NM.
1987, 6p
**Related Categories/Subcategories**
48A (Mineral Industries)
Keywords: Fractures, Microearthquakes, Data Analysis.

*Newsletter*
**National Technical Reports Library**

**Purpose:** To bring you a sampling of documents added to the NTIS Database and to help you gain a greater understanding of the wealth of scitech information available from the National Technical Information Service.

Bruce Borzino: **Director**

Don Hagen: **Associate Director for Product Management & Acquisition**

Wayne Strickland: **Manager, Product & Program Management**

Greg Guthrie: **Technical Information Specialist**

Rahsaan Williams: **508 & Accessibility**

Brian Congdon: **Design & Layout**

This Newsletter is published twelve times a year, and delivered via e-mail on or about the 15th of each month. You may subscribe or unsubscribe by writing to **ntrnews@ntis.gov**. We can only unsubscribe you if you receive your copy from **ntrnews@ntis.gov**. Copies are also re-distributed through listservs and by other subscribers. For back issues to the Newsletter **click here**.

The ntrnews subscribers list is not shared with any other entities for any purpose. Your comments are always welcome. Write us at **ntrnews@ntis.gov**.

***Connect*** **with NTIS on** ***Facebook & Twitter***

Permission to redistribute this newsletter is granted.

**National Technical Information Service**
**U.S. Department of Commerce**
**5301 Shawnee Road**
**Alexandria, VA 22312**

**DE88011780**
Dual Leakoff Behavior in Hydraulic Fracturing of Tight, Lenticular Gas Sands.
Sandia National Labs., Albuquerque, NM.
1988, 17p
Sandia National Labs., Albuquerque, NM.
**Related Categories/Subcategories**
48A (Mineral Industries)
48F (Geology & Geophysics)
Keywords: Natural Gas Wells, Hydraulic Fracturing, Sandstones.

**PB2011103667**
Our Drinking Water at Risk. What EPA and the Oil and Gas Industry Don't Want Us to Know About Hydraulic Fracturing.
Oil and Gas Accountability Project, Washington, DC.
2005, 76p
**Related Categories/Subcategories**
68D (Water Pollution & Control)
48A (Mineral Industries)
Keywords: *Drinking water, *Hydraulic fracturing, Injection wells.

**PB2014105517**
Health Consultation: Chesapeake ATGAS 2H Well Site, Leroy Hill Road, Leroy, Leroy Township, Bradford County, Pennsylvania, October 29, 2013.
Agency for Toxic Substances and Disease Registry, Atlanta, GA.
2013, 41p
**Related Categories/Subcategories**
57U (Public Health & Industrial Medicine)
97K (Fuels)
68G (Environmental Health & Safety)
68D (Water Pollution & Control)
Keywords: Public health, Gas wells, Flange failure, Hydraulic fracturing.

## Key to Database Fields Used

The following NTIS database fields are used in this short listing of recently acquired technical reports.

- **NTIS Order Number**
- **Title**
- **Source**
- **Report Year, Page Count**
- **Report Number/ISBN13** (if available)
- **Related Categories/Sub-categories** (where the document is also indexed)
- **Keywords**

**RSS Feeds** are available in your choice of NTIS Subject Category. For information use the RSS link on the NTIS Homepage and look for the Category RSS Feeds button.

**PB94196284**
R and D Wells for Technology Transfer. Annual Report, October 1992-October 1993.
Eastern Reservoir Services, Inc. , Corry, PA.
1993, 85p
**Related Categories/Subcategories**
48A (Mineral Industries)
Keywords: Gas wells, Hydraulic fracturing, Research and development.

**DE84011991**
Eastern Gas Shales Subprogram.
Department of Energy, Morgantown, WV. Morgantown Energy Technology Center.
1984, 17p
DOE/METC/SP-207
**Related Categories/Subcategories**
48C (Natural Resource Surveys)
48B (Natural Resource Management)
48A (Mineral Industries)
48F (Geology & Geophysics)
97A (Reserves), 97K (Fuels)
Keywords: *Black Shales, *Natural Gas Deposits, *Natural Gas Wells, Appalachia.

**DE90007543**
Microseismic monitoring of the Chaveroo oil field, New Mexico.
Los Alamos National Lab., NM.
1990, 20p
LA-UR-90-564, CONF-900426-1
**Related Categories/Subcategories**
48F (Geology & Geophysics)
48A (Mineral Industries), 97K (Fuels)
Keywords: Oil Fields, Waterflooding, Seismicity.

**PB2005102496**
Public Comment and Response Summary for the Study on the Potential Impacts of Hydraulic Fracturing of Coalbed Methane Wells on Underground Sources of Drinking Water.
Environmental Protection Agency, Washington, DC. Office of Ground Water and Drinking Water.
2004, 42p
**Related Categories/Subcategories**
48A (Mineral Industries)
68D (Water Pollution & Control)
Keywords: Coal deposits, Hydraulic fracturing, Methane.

**PB2011114763**
Supplemental Generic Environmental Impact Statement On The Oil, Gas and Solution Mining Regulatory Program: Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs. (Revised Draft).
Ecology and Environment, Inc., Lancaster, NY.
2011, 34p
**Related Categories/Subcategories**
48A (Mineral Industries)
97A (Reserves)
97R (Environmental Studies)
68 (Environmental Pollution & Control)
68H (Environmental Impact Statements)
Keywords: Hydraulic fracturing, Natural gas wells, Permits, New York (State).

## FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER

**FLC** *advancing federal research and technology*

The Federal Laboratory Consortium for Technology Transfer (FLC) and the National Technical Information Service (NTIS) continuously collaborate on the process of Federal Technology Transfer.

The FLC is the nationwide network of federal laboratories that provides the forum to develop strategies and opportunities for linking laboratory mission technologies and expertise with the marketplace. The FLC consists of more than 250 federal laboratories.

As an agency of the U.S. Department of Commerce, the NTIS mission is to provide for the acquisition, archiving and dissemination of technological, scientific, and engineering information. Much of this permanent repository of information is the result of research conducted by federal laboratories that are members of the FLC. The collaborative effort of the FLC and NTIS ensures the perpetual availability of this vital research to American businesses and industries.

**www.federallabs.org**

**PB2007105482**
Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs.
Environmental Protection Agency, Washington, DC. Office of Ground Water and Drinking Water.
2004, 424p
EPA/816/R-04/003
**Related Categories/Subcategories**
48A (Mineral Industries)
68D (Water Pollution & Control)
Keywords: Coal deposits, Hydraulic fracturing, Methane.

**PB2012102876**
Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources.
Environmental Protection Agency, Washington, DC. Office of Research and Development.
2011, 190p
EPA/600/R-11/122
**Related Categories/Subcategories**
68D (Water Pollution & Control)
48A (Mineral Industries)
Keywords: Hydraulic fracturing, Drinking water, Study plan development.

**PB2012104141**
Oklahoma Hydraulic Fracturing State Review.
Interstate Oil and Gas Compact Commission, Oklahoma City, OK.
2011, 30p
**Related Categories/Subcategories**
48A (Mineral Industries)
97K (Fuels)
97G (Policies, Regulations & Studies), 43E (Energy)
Keywords: Hydraulic fracturing, Oil, Natural gas, Oklahoma.

National Technical Reports Library *Newsletter*
volume 7 • number 3 • *September 15th, 2014*

# NTRL Increases Access to Federal S&T Reports

NTIS is launching greater access to federally funded science & technology information and reports. Starting in October 2014, U.S. citizens will have free access to all electronically-available documents in the NTIS collection.

Currently there are more than 850,000 documents digitized for free public access. For the first time, Individuals will have the option to subscribe to the NTRL in order to benefit from the Premium features of the database, such as advanced search and more free downloads (NTRL Premium Individual).

Premium Institutional subscribers (including corporations) will continue to have access to the more than 2.8 million records with a variety of enhanced features as listed in the chart below.

Please feel free to contact me if you have any questions.

**Greg Guthrie,** Program Manager
***National Technical Reports Library (NTRL)***
gguthrie@ntis.gov
(703)-605-6344

| | NTRL Free Public Access (Password) | NTRL Subscription Premium Individual (Password) | NTRL Subscription Premium Institutional (IP) |
|---|---|---|---|
| **SEARCH CAPABILITIES** | | | |
| **Basic Search** | ✓ | ✓ | ✓ |
| **Advanced Search** | - | ✓ | ✓ |
| **Email of Search Results** | - | ✓ | ✓ |
| **DOCUMENT DOWNLOADS** | | | |
| **Limit Downloads per Session** | 5 | 20 | 20 |
| **SOCIAL NETWORKING** | | | |
| **View Document's Comments** | - | ✓ | ✓ |
| **Post Document's Comments** | - | ✓ | ✓ (Available when users create individual accounts within the Institution) |
| **PERSONALIZATION** | | | |
| **Save Personal Notes** | - | ✓ | ✓ (Available when users create individual accounts within the Institution) |
| **Save Favorite Documents** | - | ✓ | ✓ (Available when users create individual accounts within the Institution) |
| **Email Favorite Documents Per Session** | - | ✓ | ✓ |
| **DIGITAL-ON-DEMAND** | | | |
| **Digital-On-Demand Requests** | - | - | ✓ (Mediated: Limit of 5 per week) |
| **Digital-On-Demand Administrator Tool** | - | - | ✓ |
| **INSTITUTION ACCESS** | | | |
| **IP Access** | - | - | ✓ |
| **Branded Site** | - | - | ✓ |
| **REPORTING** | | | |
| **Administrator Usage statistics** | - | - | ✓ |
| **NTIS STORE** | | | |
| **Links to Store for Purchase** | ✓ | ✓ | Digital-On-Demand |

**PB2012106387**
Evaluation of Well Logs for Determining the Presence of Freshwater, Saltwater, and Gas above the Marcellus Shale in Cyemung, Tioga, and Broome Counties, New York.
Geological Survey, Reston, VA.
2010, 35p
**Related Categories/Subcategories**
48A (Mineral Industries)
97K (Fuels)
48G (Hydrology & Limnology)
Keywords: Well logging, Natural gas resource development, Hydraulic fracturing.

**PB2012109944**
Hydraulic Fracturing: Chemical Disclosure Requirements. April 4, 2012.
Congressional Research Service, Washington, DC.
2012, 21p
**Related Categories/Subcategories**
48A (Mineral Industries)
68D (Water Pollution & Control)
99B (Industrial Chemistry & Chemical Process Engineering)
Keywords: Hydraulic fracturing, Chemical composition, Oil flow.

**PB2012109998**
Hydraulic Fracturing and Safe Drinking Water Act Issues. April 10, 2012.
Congressional Research Service, Washington, DC.
2012, 38p
**Related Categories/Subcategories**
48A (Mineral Industries)
68D (Water Pollution & Control)
Keywords: Hydraulic fracturing, Oil production, Drinking water.

**PB2012111185**
Hydraulic Fracturing and the National Environmental Policy Act (NEPA): Selected Issues. April 25, 2012.
Congressional Research Service, Washington, DC.
2012, 10p
**Related Categories/Subcategories**
48A (Mineral Industries)
97A (Reserves)
97R (Environmental Studies)
68D (Water Pollution & Control)
Keywords: Hydraulic fracturing, Natural gas wells, Horizontal drilling.

**PB2014106927**
Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels: Response to Summary Comments.
Environmental Protection Agency, Washington, DC. Office of Water.
2014, 45p
**Related Categories/Subcategories**
48A (Mineral Industries)
97K (Fuels)
97G (Policies, Regulations & Studies)
68D (Water Pollution & Control)
Keywords: Oil wells, Natural gas wells, Hydraulic fracturing.

**PB2014107744**
Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources. Progress Report.
Environmental Protection Agency, Washington, DC. Office of Research and Development.
2012, 278p
**Related Categories/Subcategories**
68D (Water Pollution & Control)
48A (Mineral Industries)
Keywords: Hydraulic fracturing, Drinking water, Study plan development.

**PB85198497**
Investigate Means of Stimulating Tight Gas Sands in the Presence of Weak Barriers by Modified Hydraulic Fracturing Techniques.
Terra Tek, Inc., Salt Lake City, UT.
1985, 171p
**Related Categories/Subcategories**
48A (Mineral Industries)
97K (Fuels)
Keywords: Gas fields, Stimulation, Fracturing, Rocks.

## Major Subject Categories

| Category Codes*/Title | New for August Quantity** |
|---|---|
| 41 Manufacturing Technology | 31 |
| 43 Problem Solving Information for State & Local Governments | 106 |
| 44 Health Care | 143 |
| 45 Communication | 44 |
| 46 Physics | 171 |
| 47 Ocean Sciences & Technology | 94 |
| 48 Natural Resources & Earth Sciences | 194 |
| 49 Electrotechnology | 39 |
| 50 Civil Engineering | 147 |
| 51 Aeronautics & Aerodynamics | 84 |
| 54 Astronomy & Astrophysics | 55 |
| 55 Atmospheric Sciences | 41 |
| 57 Medicine & Biology | 488 |
| 62 Computers, Control & Information Theory | 147 |
| 63 Detection & Countermeasures | 61 |
| 68 Environmental Pollution & Control | 160 |
| 70 Administration & Management | 146 |
| 71 Materials Sciences | 85 |
| 72 Mathematical Sciences | 73 |
| 74 Military Sciences | 403 |
| 75 Missile Technology | 3 |
| 76 Navigation, Guidance, & Control | 14 |
| 77 Nuclear Science & Technology | 20 |
| 79 Ordnance | 32 |
| 81 Combustion, Engines, & Propellants | 23 |
| 82 Photography & Recording Devices | 9 |
| 84 Space Technology | 94 |
| 85 Transportation | 112 |
| 88 Library & Information Sciences | 51 |
| 89 Building Industry Technology | 57 |
| 90 Government Inventions for Licensing | 0 |
| 91 Urban & Regional Technology & Development | 103 |
| 92 Behavior & Society | 524 |
| 94 Industrial & Mechanical Engineering | 34 |
| 95 Biomedical Technology & Human Factors Engineering | 40 |
| 96 Business & Economics | 121 |
| 97 Energy | 118 |
| 98 Agriculture & Food | 81 |
| 99 Chemistry | 66 |

** Scope Notes define the specific topical content for each category;*
http://www.ntis.gov/pdf/scopenotes.pdf
*** Quantities represent each new report assigned on average to 3-5 categories.*

## Subject Category Codes/Classification

NTIS classifies citations into 39 subject categories. Each of these subject categories is divided into subcategories. This method provides sorting categories for both hard and soft sciences. All subject categories consist of three character codes: two numerics and one alpha character. The numeric codes represent entire categories the alpha codes are used to designate subcategories within these broad categories. The number of NTIS subcategories posted to an information product average from three to five, although there are some reports with more.

**PB86178969**
Development of Hydraulic Fracturing Models for Application to Coal Seam Methane Drainage. Final Report January 17, 1983-June 30, 1984.
Comdisco Resources, Inc., Mountain View, CA.
1985, 135p
**Related Categories/Subcategories**
48A (Mineral Industries)
Keywords: Coal deposits, Methane, Drainage, Hydraulic fracturing.

**PB88181946**
Spalling and the Development of a Hydraulic Fracturing Strategy for Coal. Semiannual Report February-July 1987.
Terra Tek, Inc., Salt Lake City, UT.
1987, 112p
**Related Categories/Subcategories**
48A (Mineral Industries)
97K (Fuels)
Keywords: Hydraulic mining, Coal, Methane, Spalling.

**PB88236773**
Evaluation of Massive Hydraulic Fracturing Experiments in the Devonian Shale in Lincoln County, West Virginia.
Holditch (S.A.) and Associates, Inc., College Station, TX.
1987, 300p
**Related Categories/Subcategories**
48A (Mineral Industries)
Keywords: Black shales, Natural gas, Natural gas wells.

**DE85008615**
Preliminary Sensitivity Analysis of the Devonian Shale in Ohio.
Department of Energy, Morgantown, WV. Morgantown Energy Technology Center.
1985, 8p
DOE/METC-85/4009
**Related Categories/Subcategories**
48A (Mineral Industries)
97A (Reserves)
Keywords: Black Shales, Shale Gas, Well Stimulation, Ohio.

Photo: Architect of the Capitol

**PB89125298**
Enhanced Gas Production through Hydraulic Fracturing of Coal Seams. Annual Report January-December 1987,.
Holditch (S.A.) and Associates, Inc., College Station, TX.
1988, 139p
**Related Categories/Subcategories**
97K (Fuels)
48A (Mineral Industries)
Keywords: Coal deposits, Manuals, Methane.

**PB89159909**
Investigate Means of Stimulating Tight Gas Sands in the Presence of Weak Barriers by Modified Hydraulic Fracturing Techniques. Annual Report November 1981-October 1982.
Terra Tek Research, Salt Lake City, UT.
1982, 284p
**Related Categories/Subcategories**
48A (Mineral Industries)
97K (Fuels)
Keywords: Gas fields, Stimulation, Fracturing.

**PB93156800**
Improvements in Formation Evaluation and Hydraulic Fracturing in the Upper Cotton Valley Sands, Kerr McGee Corporation, Knight-Strong No. 2, Panola County, Texas. Topical Report, January 1993.
NSI Technologies, Inc., Tulsa, OK.
1993, 190p
**Related Categories/Subcategories**
48A (Mineral Industries)
Keywords: Hydraulic fracturing, Fractured reservoirs, Well logging.

**DE141127306**
Modifications of Carbonate Fracture Hydrodynamic Properties by CO(sup2)-Acidified Brine Flow.
National Energy Technology Lab., Morgantown, WV.
2014, 42p
**Related Categories/Subcategories**
48F (Geology & Geophysics)
68A (Air Pollution & Control)
Keywords: Hydrodynamic properties, Carbon dioxide, Calcites.

**ADA561364**
America's Water Future and Deep Energy.
Army War Coll., Carlisle Barracks, PA.
2012, 46p
**Related Categories/Subcategories**
68D (Water Pollution & Control)
Keywords: Energy, Water resources, Drinking water, Natural gas.

U.S. Department of Commerce
NTRL v 3.0
National Technical Reports Library

***The National Technical Reports Library (NTRL)* enhances accessibility to the NTIS technical reports collection. It provides access to:**

- Bibliographic records of more than 2,000,000 technical reports
- Downloadable full text of 800,000 of these reports in PDF format

Subscription rates are based on institutional FTE levels.

The NTRL operates on a system interface that allows users to do queries on the large NTIS bibliographic database. The intent is to broadly expand and improve access to over 2 million bibliographic records (pre-1960 to present) and 800k full-text documents in PDF format that are directly linked to that bibliographic database.

For more information, go to:
***http://www.ntis.gov/products/ntrl.aspx***

## NTIS e-Alerts

Every week, NTIS receives more than 1,000 publications, studies and valuable data from over 350 U.S. government agencies and international sources. This information is the result of billions of dollars of R&D and studies sponsored by the United States Government.

NTIS *eAlerts*, delivers summaries of these publications right to your desktop, bi-weekly, in your field of interest. For more information visit
***http://www.ntis.gov/products/alerts.aspx***

**Subject selections:**
Agriculture and Food
Biomedical Technology and Human Factor Engineering
Building Industry Technology
Business & Economics
Civil Engineering
Communication
Computers, Control & Information Theory
Electrotechnology
Energy
Environmental Pollution and Control
Government Inventions for Licensing
Health Care
Manufacturing Technology
Materials Sciences
Ocean Sciences and Technology
Transportation

**ADA594674**
Strategic Importance of Shale Gas (Issue Paper, Volume 16-11, September 2011).
Army War Coll., Carlisle Barracks, PA. Center for Strategic Leadership.
2011, 6p
**Related Categories/Subcategories**
92 (Behavior & Society)
48F (Geology & Geophysics)
41G (Quality Control & Reliability)
97K (Fuels)
68D (Water Pollution & Control)
Keywords: Domestic, Geopolitics, Industrial production.

**PB2012105395**
Choride Concentration Gradients in Tank-stored Hydrualic Fracturing Fluids Followng Flowback.
Forest Service, Newton Square, PA. Northern Research Station.
2012, 18p
**Related Categories/Subcategories**
48A (Mineral Industries)
48D (Forestry)
48G (Hydrology & Limnology),
68D (Water Pollution & Control)
Keywords: Hydraulic fracturing, Natural gas wells, Chlorides.

**DE141110802**
Integration of Water Resource Models with Fayetteville Shale Decision Support and Information System, Final Technical Report, October 01, 2009-September 30, 2013.
Arkansas Univ., Fayetteville. Center for Advanced Spatial Technologies.
2013, 161p
**Related Categories/Subcategories**
48G (Hydrology & Limnology)
48A (Mineral Industries)
97K (Fuels)
68D (Water Pollution & Control)
Keywords: Water resources, Shales , Decision support.

**PB2013107360**
Groundwater Quality and Simulation of Sources of Water to Wells in the Marsh Creek Valley at the U.S. Geological Survey Northern Appalachian Research Laboratory, Tioga County, Pennsylvania.
Geological Survey, Reston, VA.
2012, 54p
USGS/SIR-2012-5042
**Related Categories/Subcategories**
68D (Water Pollution & Control)
48G (Hydrology / Limnology)
Keywords: Water quality, Ground water, Water wells.

**PB2014107265**
Brine Contamination to Aquatic Resources from Oil and Gas Development in the Williston Basin, United States.
Geological Survey, Reston, VA.
2014, 140p
**Related Categories/Subcategories**
68D (Water Pollution & Control)
97K (Fuels)
97R (Environmental Studies)
97B (Energy Use, Supply, & Demand)
Keywords: Brines, Contamination, Oil production, Gas production.

**DE20131060014**
Subtask 1.8: Investigation of Improved Conductivity and Proppant Applications in the Bakken Formation. Final Report for the Period of May 1, 2011 through July 31, 2012.
North Dakota Univ., Grand Forks. Energy and Environmental Research Center.
2012, 120p
**Related Categories/Subcategories**
48A (Mineral Industries)
48F (Geology & Geophysics)
Keywords: Hydraulic conductivity, Propping agents, Drill cores.

**DE20131062482**
Executive Summary: Natural Gas and the Transformation of the U.S. Energy Sector: Electricity.
National Renewable Energy Lab., Golden, CO.
2013, 19p
NREL/TP-6A50-57702
**Related Categories/Subcategories**
97K (Fuels)
97G (Policies, Regulations & Studies)
68 (Environmental Pollution & Control)
Keywords: Natural gas, Energy sector, Carbon dioxide, Coal.

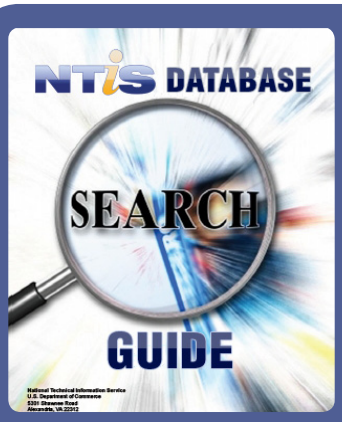
**PB87190963**
Seismic Measurements during Hydrofracturing (Seismiska Maetningar vid Hydraulisk Bergspraeckning).
Foersvarets Forskningsanstalt, Stockholm (Sweden).
1987, 42p
FOA-C-20653-2.2
**Related Categories/ Subcategories**
48A (Mineral Industries)
48F (Geology & Geophysics)
Keywords: Seismology, Earthquakes, Boreholes.

**PB2013107923**
Proceedings of the Technical Workshops for the Hydraulic Fracturing Study: Water Resources Management.
Environmental Protection Agency, Washington, DC Office of Research and Development.
2011, 125p
**Related Categories/ Subcategories**
46B (Fluid Mechanics)
48G (Hydrology & Limnology)
Keywords: Hydraulic fracturing, Drinking water resources, Workshops.

**PB2013102087**
Landscape Consequences of Natural Gas Extraction in Greene and Tioga Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2012, 37p
USGS-OFR-2012-1220
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2013107008**
Landscape Consequences of Natural Gas Extraction in Allegheny and Susquehanna Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 38p
USGS-OFR-2013-1025
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2013108487**
Landscape Consequences of Natural Gas Extraction in Fayette and Lycoming Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 40p
USGS-OFR-2013-1119
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.




**Just Revised: the NTIS Database Search Guide**

Gain an in-depth understanding of the NTIS database structure with this new guide:

- Comprehensive list of NTIS Categories
- Helpful information and search hints
- Reference Guide to online commercial services and the NTRL
- Great Reference Manual & Teaching Tool

**Free Download: http://www.ntis.gov/pdf/dbguide.pdf**

**PB2014107263**
Landscape Consequences of Natural Gas Extraction in Bedford, Blair, Cambria, Centre, Clearfield, Clinton, Columbia, Huntingdon, and Luzerne Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2014, 55p
USGS-OFR-2014-1089
**Related Categories/ Subcategories**
68 (Environmental Pollution & Control)
48B (Natural Resource Management)
98D (Agronomy, Horticulture, & Plant Pathology)
97A (Reserves)
Keywords: Landscapes, Natural gas, Extractions, Consequences.

**PB2013108633**
Landscape Consequences of Natural Gas Extraction in Somerset and Westmoreland Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 39p
USGS-SIR-2013-1126
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
68A (Air Pollution & Control)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2013110884**
Landscape Consequences of Natural Gas Extraction in Lackawanna and Wayne Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 37p
USGS-OFR-2013-1227
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2013110885**
Landscape Consequences of Natural Gas Extraction in Beaver and Butler Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 39p
USGS-OFR-2013-1226.
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2014102006**
Landscape Consequences of Natural Gas Extraction in Sullivan and Wyoming Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 39p
USGS-OFR-2013-1261
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
68A (Air Pollution & Control)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2014102007**
Landscape Consequences of Natural Gas Extraction in Armstrong and Indiana Counties, Pennsylvania, 2004-2010.
Geological Survey, Reston, VA.
2013, 41p
USGS-OFR-2013-1263
**Related Categories/ Subcategories**
97K (Fuels)
97A (Reserves)
97R (Environmental Studies)
68A (Air Pollution & Control)
Keywords: Natural gas, Landscapes, Extractions, Pennsylvania.

**PB2013100251**
Exploring the Environmental Effects of Shale Gas Development in the Chesapeake Bay Watershed. Workshop Report on April 11-12, 2012 at State College, PA.
Chesapeake Bay Program Scientific and Technical Advisory Committee, Gloucester Point, VA.
2013, 30p
STAC PB NO 13-01
**Related Categories/Subcategories**
68D (Water Pollution & Control)
48A (Mineral Industries)
48G (Hydrology & Limnology)
Keywords: Chesapeake Bay, Water quality, Gas wells.

**PB88183264**
Hydraulic Fracturing Stress Measurements. Proceedings of a Workshop Held at Monterey, California on December 2-5, 1981.
National Research Council, Washington, DC.
1981, 284p
**Related Categories/Subcategories**
46B (Fluid Mechanics)
89D (Structural Analyses)
48F (Geology & Geophysics)
Keywords: Meetings, Determination of stress, Hydraulics, Fracturing.

**PB2011109830**
World Shale Gas Resources: An Initial Assessment of 14 Regions Outside the United States.
Energy Information Administration, Washington, DC.
2011, 365p
**Related Categories/Subcategories**
97K (Fuels)
97A (Reserves)
48A (Mineral Industries)
48F (Geology & Geophysics)
Keywords: Shale gas resources, Well drilling, Hydraulic fracturing.

**PB97124549**
Pressure (Pp), Overburden (Sv), and Minimum Horizontal Stress (Shmin) in Eugene Island Block 330, Offshore Gulf of Mexico. Topical Report, April 1-July 1, 1996.
Pennsylvania State Univ., University Park. Dept. of Geosciences.**Stanford Univ., CA. Stanford Borehole Geophysics Lab.
1996, 41p
**Related Categories/Subcategories**
48A (Mineral Industries)
97A (Reserves)
Keywords: Mexico Gulf, Natural gas fields, Reservoir pressure.

**FREE DOWNLOAD DE96004866**
Development of a data management system for assistance in conducting Area of Reviews (AORs) on Class II injection wells in Oklahoma. Quarterly report, July--September, 1995.
Oklahoma Corp. Commission, Oklahoma City
1995, 4p
DOE/MT/95003-2
**Related Categories/ Subcategories**
68 (Environmental Pollution & Control)
88B (Information Systems)
Keywords: Injection Wells, Oklahoma, Data Base Management.

**FREE DOWNLOAD DE93011668**
Observations of broad-band micro-seisms during reservoir stimulation.
Sandia National Labs., Albuquerque, NM.
1993, 4p
SAND-93-0811C, CONF-930901-1
**Related Categories/ Subcategories**
48A (Mineral Industries)
Keywords: Hydraulic Fracturing, Natural Gas Wells, Oil Wells, Colorado.

**FREE DOWNLOAD DE95001136**
Reserves in western basins. Third quarterly technical progress report, Uinta Basin option.
Scotia Group., Inc., Dallas, TX.
1994, 4p
DOE/MC/28130-3910
**Related Categories/ Subcategories**
48A (Mineral Industries)
97A (Reserves)
Keywords: Oil Shale Deposits, Uinta Basin, Well logging, Data Analysis.

Any of the technical reports listed in this newsletter can be ordered directly from the National Technical Information Service, simply click on the title to go to the product detail page on NTIS.GOV.

If your organization is a subscriber to the National Technical Reports Library, most of the reports listed can be downloaded free there. For information on how to subscribe to NTRL, go to ***http://www.ntis.gov/products/ntrl.aspx***.

## Title Index - For NTRL Users

The following is a list of the titles included in this month's issue, without links to the NTIS Web site. The list is in alphabetical order by title.

| NTIS Number | Category | Title |
|---|---|---|
| DE2010982997 | 48 | Advanced Hydraulic Fracturing Technology for Unconventional Tight Gas Reservoirs. Final Report for the Project Period: April 1, 2006-April 1, 2007. |
| ADA561364 | 68 | America's Water Future and Deep Energy. |
| PB2014107265 | 68 | Brine Contamination to Aquatic Resources from Oil and Gas Development in the Williston Basin, United States. |
| PB2012105395 | 48 | Choride Concentration Gradients in Tank-stored Hydrualic Fracturing Fluids Followng Flowback. |
| DE84015216 | 97 | Conceptual Design of a Wireline Hydraulic Fracturing Tool. |
| PB86178969 | 48 | Development of Hydraulic Fracturing Models for Application to Coal Seam Methane Drainage. Final Report January 17, 1983-June 30, 1984. |
| DE88011780 | 48 | Dual Leakoff Behavior in Hydraulic Fracturing of Tight, Lenticular Gas Sands. |
| DE84011991 | 48 | Eastern Gas Shales Subprogram. |
| PB89125298 | 97 | Enhanced Gas Production through Hydraulic Fracturing of Coal Seams. Annual Report January-December 1987,. |
| PB2007105482 | 48 | Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs. |
| PB88236773 | 48 | Evaluation of Massive Hydraulic Fracturing Experiments in the Devonian Shale in Lincoln County, West Virginia. |
| PB2012106387 | 48 | Evaluation of Well Logs for Determining the Presence of Freshwater, Saltwater, and Gas above the Marcellus Shale in Cyemung, Tioga, and Broome Counties, New York. |
| DE20131062482 | 97 | Executive Summary: Natural Gas and the Transformation of the U.S. Energy Sector: Electricity. |
| PB2013100251 | 68 | Exploring the Environmental Effects of Shale Gas Development in the Chesapeake Bay Watershed. Workshop Report on April 11-12, 2012 at State College, PA. |
| DE85000446 | 97 | Fracture Mechanics Analysis of Massive Hydraulic Fracturing Containment. |
| PB2013107360 | 68 | Groundwater Quality and Simulation of Sources of Water to Wells in the Marsh Creek Valley at the U.S. Geological Survey Northern Appalachian Research Laboratory, Tioga County, Pennsylvania. |
| PB2014105517 | 57 | Health Consultation: Chesapeake ATGAS 2H Well Site, Leroy Hill Road, Leroy, Leroy Township, Bradford County, Pennsylvania, October 29, 2013. |
| PB2012109998 | 48 | Hydraulic Fracturing and Safe Drinking Water Act Issues. April 10, 2012. |
| DE20121054498 | 48 | Hydraulic Fracturing and Shale Gas Production: Technology, Impacts, and Policy. |
| PB2012111185 | 48 | Hydraulic Fracturing and the National Environmental Policy Act (NEPA): Selected Issues. April 25, 2012. |
| PB88183264 | 46 | Hydraulic Fracturing Stress Measurements. Proceedings of a Workshop Held at Monterey, California on December 2-5, 1981. |
| PB2012109944 | 48 | Hydraulic Fracturing: Chemical Disclosure Requirements. April 4, 2012. |
| PB93156800 | 48 | Improvements in Formation Evaluation and Hydraulic Fracturing in the Upper Cotton Valley Sands, Kerr McGee Corporation, Knight-Strong No. 2, Panola County, Texas. Topical Report, January 1993. |
| DE141110802 | 48 | Integration of Water Resource Models with Fayetteville Shale Decision Support and Information System, Final Technical Report, October 01, 2009-September 30, 2013. |
| PB85198497 | 48 | Investigate Means of Stimulating Tight Gas Sands in the Presence of Weak Barriers by Modified Hydraulic Fracturing Techniques. |
| PB89159909 | 48 | Investigate Means of Stimulating Tight Gas Sands in the Presence of Weak Barriers by Modified Hydraulic Fracturing Techniques. Annual Report November 1981-October 1982. |
| PB2013107008 | 97 | Landscape Consequences of Natural Gas Extraction in Allegheny and Susquehanna Counties, Pennsylvania, 2004-2010. |
| PB2014102007 | 97 | Landscape Consequences of Natural Gas Extraction in Armstrong and Indiana Counties, Pennsylvania, 2004-2010. |
| PB2013110885 | 97 | Landscape Consequences of Natural Gas Extraction in Beaver and Butler Counties, Pennsylvania, 2004-2010 |

## Title Index - For NTRL Users - continued

| NTIS Number | Category | Title |
|---|---|---|
| PB2014107263 | 68 | Landscape Consequences of Natural Gas Extraction in Bedford, Blair, Cambria, Centre, Clearfield, Clinton, Columbia, Huntingdon, and Luzerne Counties, Pennsylvania, 2004-2010. |
| PB2013108487 | 97 | Landscape Consequences of Natural Gas Extraction in Fayette and Lycoming Counties, Pennsylvania, 2004-2010. |
| PB2013102087 | 97 | Landscape Consequences of Natural Gas Extraction in Greene and Tioga Counties, Pennsylvania, 2004-2010. |
| PB2013110884 | 97 | Landscape Consequences of Natural Gas Extraction in Lackawanna and Wayne Counties, Pennsylvania, 2004-2010. |
| PB2013108633 | 97 | Landscape Consequences of Natural Gas Extraction in Somerset and Westmoreland Counties, Pennsylvania, 2004-2010. |
| PB2014102006 | 97 | Landscape Consequences of Natural Gas Extraction in Sullivan and Wyoming Counties, Pennsylvania, 2004-2010. |
| DE90007543 | 48 | Microseismic monitoring of the Chaveroo oil field, New Mexico. |
| DE141127306 | 48 | Modifications of Carbonate Fracture Hydrodynamic Properties by CO(sup2)-Acidified Brine Flow. |
| DE87007489 | 48 | New Method for Determining Fluid Flow Paths During Hydraulic Fracturing. |
| PB2012104141 | 48 | Oklahoma Hydraulic Fracturing State Review. |
| PB2011103667 | 68 | Our Drinking Water at Risk. What EPA and the Oil and Gas Industry Don't Want Us to Know About Hydraulic Fracturing. |
| PB2014106927 | 48 | Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels: Response to Summary Comments. |
| PB2012102876 | 68 | Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources. |
| DE85008615 | 48 | Preliminary Sensitivity Analysis of the Devonian Shale in Ohio. |
| PB97124549 | 48 | Pressure (Pp), Overburden (Sv), and Minimum Horizontal Stress (Shmin) in Eugene Island Block 330, Offshore Gulf of Mexico. Topical |
| PB2013107923 | 46 | Proceedings of the Technical Workshops for the Hydraulic Fracturing Study: Water Resources Management. |
| PB2005102496 | 48 | Public Comment and Response Summary for the Study on the Potential Impacts of Hydraulic Fracturing of Coalbed Methane Wells on Underground Sources of Drinking Water. |
| PB94196284 | 48 | R and D Wells for Technology Transfer. Annual Report, October 1992-October 1993. |
| PB87190963 | 48 | Seismic Measurements during Hydrofracturing (Seismiska Maetningar vid Hydraulisk Bergspraeckning). |
| PB88181946 | 48 | Spalling and the Development of a Hydraulic Fracturing Strategy for Coal. Semiannual Report February-July 1987. |
| ADA594674 | 92 | Strategic Importance of Shale Gas (Issue Paper, Volume 16-11, September 2011). |
| PB2014107744 | 68 | Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources. Progress Report. |
| DE20131060014 | 48 | Subtask 1.8: Investigation of Improved Conductivity and Proppant Applications in the Bakken Formation. Final Report for the Period of May 1, 2011 through July 31, 2012. |
| PB2011114763 | 48 | Supplemental Generic Environmental Impact Statement On The Oil, Gas and Solution Mining Regulatory Program: Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs. (Revised Draft). |
| PB2011109830 | 97 | World Shale Gas Resources: An Initial Assessment of 14 Regions Outside the United States. |
| DE20131054519 | 68 | Zero Discharge Water Management for Horizontal Shale Gas Well Development, (Final Report). |