8th Annual
Marcellus & Manufacturing
Development Conference
April 9, 2019

Rhonda Reda
Executive Director
Ohio Oil and Gas Energy Education Program



An "Unusual" Oil and Gas Commercial



About the Ohio Oil and Gas Energy Education Program

- ✓ The Ohio Oil and Gas Energy Education Program
 (OOGEEP) is a non-profit education program funded by
 Ohio's oil and gas producers through an assessment on
 the production of all natural gas and crude oil produced in
 Ohio.
- ✓ No Taxpayer Dollars!
- ✓ We do not own, drill, operate or have a working interest in any natural gas or oil wells.

Economic Impact Studies

K – 12 STEM Education Programs & Teacher Workshops

Workforce & Career Development

Communications, Media Relations, Social Media and Industry Promotion

Industry Safety and Firefighter Training

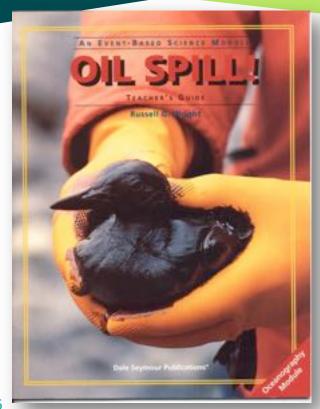
Guest Speaker and Community Outreach Programs



Scholarships, Science Fair & Scouting Programs

Teacher Programs

What Was A Key Factor For Creating An Energy Education Program?

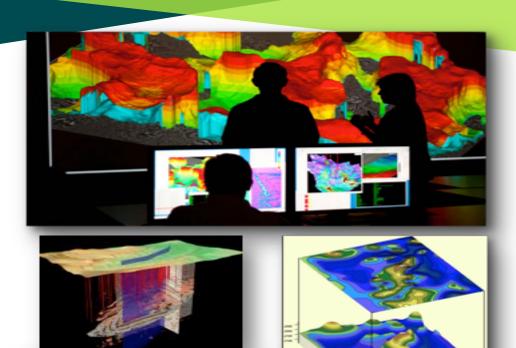


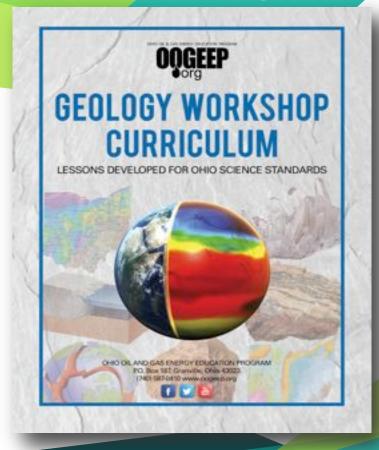
PLUB KARTHWOODS Oceanography Leura 15 4. On the drep staffour, there are small lumps of reinershi. They are called wollsks. The sodules comin much manganese. They also comin copper, nickel, and collaba. Below TABLE SALT write MINERALS. b. Outline three or four notales or the sephon on the study print. s. Label them NODULES. Farts to side It of the study print, Continue these activities on side II. E. In the middle of the map, write BESOURCES. 8. Some gold, tin, silver, and other one bave been found on the condiscusal shelf. On the map the consormal shelf is the light blue area next to the a. Srice RESCURCES were CRES. In Draw an arrow from OPES in a vide area of the constraints shell. There are van amounts of tand and pebbles on the constnantal stuff. Both are used to construct buildings. a. Selow ORES were SANO, PERSUES. A. Draw ast arrow from SAND, PERRIES to a continental shalf. 8. Under some purp of the consinerest shelf, oil and record yea are harted. Below ORES were OS. GAS. a. Special planforms are built silf shore to drill for all. Many people live and work on these oil rigs. Label the same things on the oudy print. TPLKTFORM -behavior way work

downstrue/E

PEUS EARTHWORKS Oceangraphs Lenne 15 is. Oil most be carefully brought to share. Oil spills pulser sepreptr. destroy beaches, and full sex arimals and places. i) Draw a pool of ail on the water below the placform. 2) Draw a thick black arrow from that sill to the ocean water along the sandy beach in she apper left corner. T) Along the arrow write OE, SPELL 4) Along the beach write DESTROYS. it. Use your labels on both sides of the study print. List six resources we get. from the oceans. food Table 3914 ge elweed 10. Which of the resources do you and your family until for what? Table salt we use it for food that we make If the entitles access a serious so

STEM and Geology Curriculum/ Workshops





"New" Geology and STEM Technology Activity



Teacher Workshops/ Field Trips

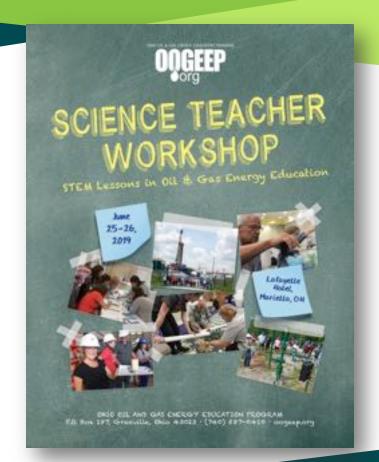


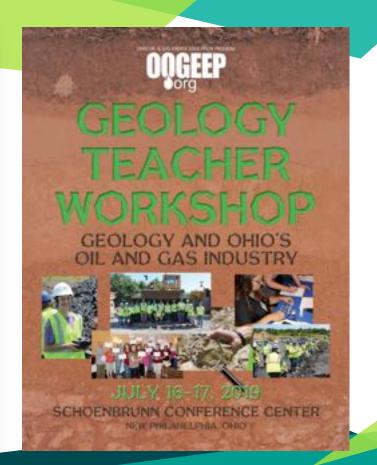






Upcoming 2019 Summer Teacher Workshops





Media Outreach - Teachers



Scouting, Science Fair & Youth Programs

"Rock'n in Ohio"

















Scouting Engineering Merit Badge











Science/ STEM Fair



Actual Science Fair Project: How Gullible Are We? Would You Sign a Petition to Ban the Chemical "Dihydrogen Monoxide"

- 1. Can cause excessive sweating and vomiting
- 2. Is a major component in acid rain
- 3. Can cause severe burns in its gaseous state
- 4. Accidental inhalation can kill you
- 5. It contributes to erosion
- 6. It decreases effectiveness of automobile brakes
- It has been found in tumors of terminal cancer patients

Science Fair Project Results:

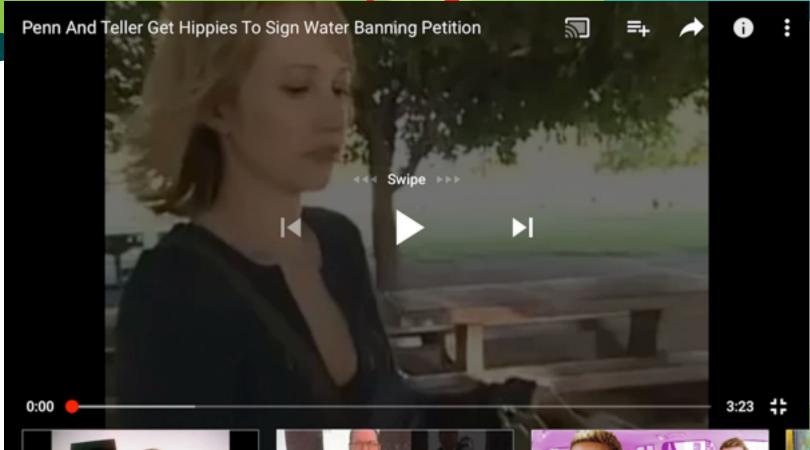
Would you sign a petition to ban the use of this "chemical?"

- √ 143 people said yes.
- ✓ 6 were undecided.
- ✓ Only one knew that the chemical was . . .

WATER!!!



Penn & Teller: "Dihydrogen Monoxide"



Community Events/ Trade Shows/ Public Presentations

Trade Shows & Special Community Events



























ENERGY PASSPORT

COMPLETE DIG IT TO WIN A FOSSILI

pig im

COMPLETE AT LEAST 2 OF THE FOLLOWING STATIONS TO SPIN THE PRIZE WHEEL)

2 MATCHITT BUILD ITT

FIND ITS

TURN IN YOUR CARD TO SPIN THE PRIZE WHEELAND TAKE HOME A REPRIZE PETROLEUM PRODUCTI





Public Presentations























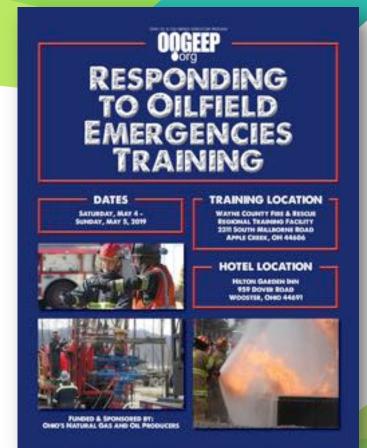


Firefighter/ Emergency Response Training

Firefighter/ Emergency Response Training

- 1,500 Firefighters
- 325 Fire Departments
- 51 Ohio Counties
- 7 Other States





Media Outreach - Firefighters



Scholarships

















Scholarships

- 62 Scholarships Awarded in May 2018
- Overall 400 Scholarships
- 46 Different Colleges, Universities or Technical Institutes
- 54 Different Ohio Counties
- Students Representing 9 States
- 41 Different Majors

Media Outreach - Scholarships



Workforce/ Career Development

OHIO OIL & GAS ENERGY EDUCATION PROGRAM

































800























Career Opportunities

OHIO OIL & GAS ENERGY EDUCATION PROGRAM

OQGEEP

NATURAL GAS & CRUDE OIL CAREERS

CAREER OPPORTUNITIES

Administrative/Executive Assistant Attorney

Automation Technicism Dusiness Analyst Business Development

Cherical Engineer Cherist Cher Financial Officer Child Engineer

Community Relations Completions Engineer

Completions Superintendenti Supervisori Construction-Coordinator

Construction Techniques Controller

Data Analyst Demokhand Desembland

Dieser Machanic Division Order Analyst Delling Engineer

Onling Superintendent/ Supervisor

Orling Technician Electrical Engineer Electronic Technician Engineering Technician

Engineers Environmental Engineer

Environmental, Health, & Safety Advance Environmental, Health, & Safety Field Coordinator

Equipment Operator Facility Engineer

Pacifity Engineer Pacifity Operator

Field Engineer (Cased Hote or Wireline)

Financial Analysis Floorhand Geologist Geogrysmet

Geoscience Technician Guvennment Affairs Human Resources Cirector

Putrumentation & Electrical (ME) Technician

JED Accounts

Land Lease and Rental Analyst. Land Lease Coordinator

Land Lease Records Coordinator Land Mapping Technician Landman (Land Lease Negotiator)

Landowner Relations. Lease Operator (Well Tendert Pumper)

Maintenancel Mechanical Technician Mechanical Engineer

Mud Engineer Mud Lagger

SIVIC Engineer (Measurement White Onling) Historic Gas Balancing Analysi Natural Gas Buser

Natural Gas Rick Analysi Natural Gas Sales Representative

Platural Gas Scheduler Hatural Gas Trader Office Coordinator

Petrolaum Engineer Mant Coordinator Process Technician Procurement Hanager

Production Assistant Production Engineer Production Technicien Public Affairs

Regulatory Analysi Reservor Engineer Reserve Accountant Roughstout

Surveyor Technical Services Maintenance Coordinator

Technicians Truck Driver (COL) Water System Engineer Weather Forecaster

Wester Wester Helper Workover' Service Rig Supervisor

For more information about each career, including their description, minimum education requirements, and lists of education and training opportunities, please visit www.oogeg.org/industry-workforce/careers.

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Fig. Star 187, Granula, One 60005
Phone (190, 607-6110) was appearing



Page 3

Otto Carpenters' Jurit Appentionally and Training Program

Otto Commission University
Otto Laborers Apprenticeship and Training Program-

Ohio Northern University

Otto State University: The

Oteo Creverely

Otto Welleyan University

Operating Engineers Local 18 Apprenticeship and Treining Program

Dwere Community College Pern State

Perits Career Center - High School Student and Adult School on Programs

Pickeway-Ross County Conser and Technology Center - Righ School Student and Adult Siducation Programs Pleasant Community and Sectional College

Proneer Career and Technology Center - High School Student and Adult Education Programs

Plumbers and Pipelitiers Local Union 306 Appreciacetry: Program. Plumbers and Pipelitiers Local Union 94 Appreciacetry: Program.

Polarie Career Center - High fichool fitudent and Adult Education Programs

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Rhodes State College.

Bluerner State University.

Sincair Community College Southern State Community College

Stark State College Swiss Hills Center Tillin University

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Tri-Courty Adult Career Center

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University of Cincornali University of Dayton

University of Finday University of Mount Union

University of Northwestern Otso. University of No Grande

University of No Grande University of Toledo, Tine

Water University

Washington County Career Center - High School Student and Art. Estudation Programs
Washington State Community College

Wayne County Schools Career Center - High School Student and Artalt Education Programs

West Virginia Northern Community College

Ware Veginia University Wernigton College Witerberg University

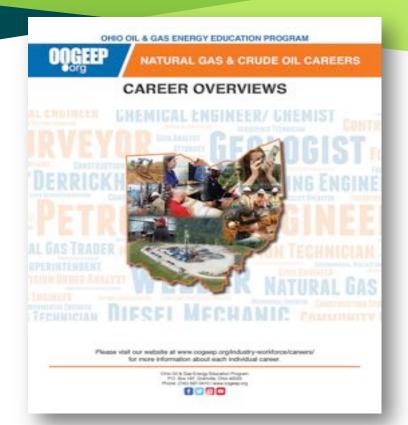
Wright State University Voungetown State University

For more information about the cerear opportunities associated with these available educational i training programs, along with job obsertations and instrument education requirements, please visit even coppes, projectually each force-tizers.

Chin Chill Stee Streety Education Programs Fro. Sex 187, Granutta, Onc 40003 Phone (199) 187-0410 Laws Joges Avy



Job Descriptions/ Career Overview



РНОТО	JOB TITLE AND DESCRIPTION	MINIMUM EDUCATION REQUIREMENTS
	WILATHER FORCCASTER Slikelither Forecasters communicate residiver productions to resharel gas tradiers, orbitalistics, despire, and sales temperantiatives. This is an important rule amon restural gas communitative and prices are desitly affected by weather conditions.	Bachelor Degree in Metacrology
	WITI, DETR WITI,	Associate Degree and opecific industry related Certifications. Apprentications have a substitute year also be available.
nil.	WILDER HELPER Blocker Holpers assess Welders in a nariety of ways including proposation of welding tools, opegament and supplies for each job. Other responsibilities may include Block, moving, and dismong works precess in preparation for cutting and/or welding.	Specific industry related Certificate. Approximately opportunities may also be available.
1	WORK OVERV SERVICE ING SUPERVISOR. Without Sovieties Rig Supervisors investors and reasons at the state of the service and state of the service and control of the service and control of the service and service provides the state of the service and service and service and service the service for the service and servi	High School Digitoms. Certificate or Associate Degree Programmin on the job ny tenney. Multiple years of oil and gas held experience will be required.

Oil and Gas Careers in Ohio

Ohio Oil & Gas Energy Education Program



CAREERS IN OHIO SERIES:

MAINTENANCE OR MECHANICAL **TECHNICIAN**

Job Description:

Installs, maintains and troubleshoots mechanical

Typical Education:

Associate's Degree

Education & Training Facilities:

C-TEC Career and Technical Education Centers 150 Price Road, Newark, Ohio 43055 740-364-2333 | 800-945-2832 www.c-tec.edu

Cuyahoga Valley Career Center

8001 Brecksville Road, Brecksville, Ohio 44141 440-526-5200

www.cvccworks.edu

Kent State University at Trumbull

4314 Mahoning Avenue NW, Warren, Ohio 44483 330-847-0571 www.kent.edu

Mid-East Career and Technology Center

400 Richards Road, Zaneoville, Ohio 43701 740-455-3111 | 800-832-7545 www.mid-east.k12.ohuis

Stark State College

6200 Frank Avenue NW, North Canton, Ohio 44720 330-494-6170 | 800-79-STAPK www.stark.edu

The Career Center Washington County Career Center 21740 State Route 676, Marietta, Ohio 45750 740-373-2766

www.thecareercenternet

Wayne County Schools Career Center

518 West Prospect Street, Smithville, Ohio 44677 330-669-7070

www.wayne-jvs.k12.oh.us

Zane State College

1555 Newark Road, Zanesville, Ohio 43701 740-454-2501 | 800-686-8324 www.zanestate.edu



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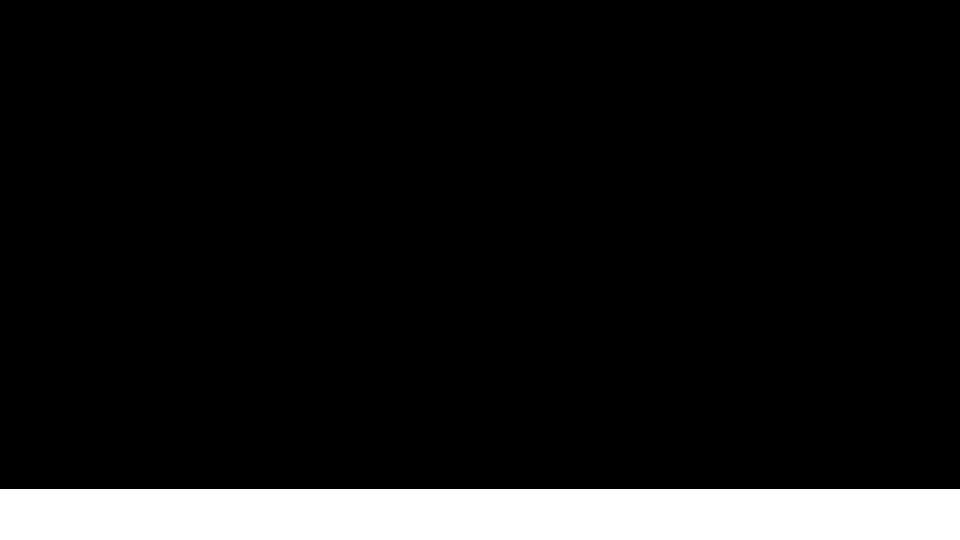


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Careor Center 45750

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15036



Does Education Always Work . . . NO!



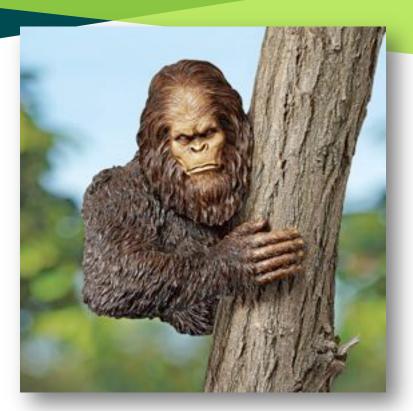
Actual Email

----Original Message----

Subject: RE: High pollution levels found near Ohio gas wells

You know part of the noxious fume problem at well sites are gasses put off by a nervous Bigfoot. It's true... Researchers have determined as well sites multiply it pushes the communities of Bigfoot into tighter and tighter groups. These communal groups, generally no more than four to six, become more nervous and tense at being discovered and begin to emit a higher level of noxious fumes, much like a skunk, which typically repel humans from investigating and thus discovering them.

Good News . . . We Found Big Foot!





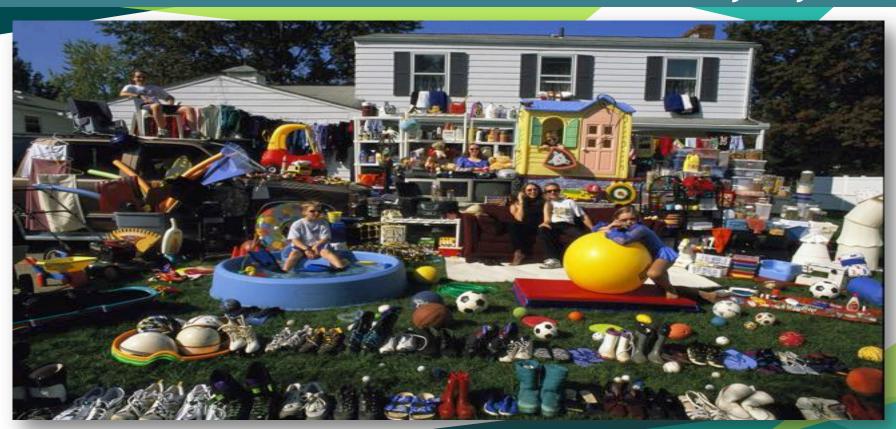
Sometimes there are just no words to say





Back to Reality

The Average American Uses 3 Gallons of These Refined Petroleum and Manufactured Products Every Day!



7 out of Every Ten Homes Uses Natural Gas As Its Primary Heating and Cooking Source!



Refined Petroleum/ Manufactured Products Keep Communities Safe!







Refined Petroleum/ Manufactured Products Make People Feel Better!









The Ohio Oil and Gas Energy Education Program is

OOGEEP touts benefits of modern energy Oct 5, 2017 at 12:01 AM

The Columbus Dispatch

Letter: Earth is source of helpful products Updated Apr 20, 2017 at 6:58 AM Every spring. Earth Day allows as to focus attention on the visual wender and

natural beauty of our planet. Whether it's deep blue occass and sowering icecopped mountains half-way across the world or the green fields and rolling hills of

Ohio, our planet's natural resources are visit, sweet and The Earth's resources combined w great accomplishments. We have I

technology and improved the over

ober's National Energy Awareness Month by highlighting the of petroleum-based products to the quality of life enjoyed ricans.

planet, Crude oil and natural gas his accomplishments. Nearly every fact Letter to the Editor: Gas, oil industry helps developed from redning these petry provide vital products for our lives supirin, shampoo, shoes, cleaning pt Pessed Oct 16, 2017 at 9:20 AM just a few examples of petroleum-ba

October is National Energy Awareness Month. Here in Ohio, this has special significance due to enormous impact of our state's oil and natural gas industry.

For more than 150 years, this industry has been a reliable economic engine moving our state forward. Even today, discussion of the industry has focused on its promising contributions to Ohio's overall prosperity. Announcements of record natural gas production, technology advances, new processing facilities —

and the job opportunities they bring — are vital to our state's economic future. Also important, and often overlooked, is the positive impact the industry has on the modern quality of life we all enjoy.

Letter: Enjoying the necessities of modern life

Herald-Star

October is National Energy Awareness Month. Here in Ohio, this has special significance due to the enormous impact of our state's oil

been a reliable economic engine moving our state forward. Even today, discussion of the industry has focused on its promising contributions to Obio's overall prosperity. Announcements of record

natural gas production, technology advances, new processing facilities — and the job opportunities they bring — are vital to our

and natural gas industry. For more than 150 years, this industry has

Energy industry has many

Posted Oct 11, 2017 at 11:16 AM

state's economic future.

positives

October is National Energy Awareness Month. Here in Ohio, this has special significance due to enormous impact of our state's oil and natural gas industry. For over 150 years, this industry has been a reliable economic engine moving our state forward. Even today, discussion of the industry has focused on its promising contributions to Ohio's overall prosperity. Announcements of record natural gas production, technology advances, new processing facilities - and the job opportunities they bring - are vital to our state's economic future.

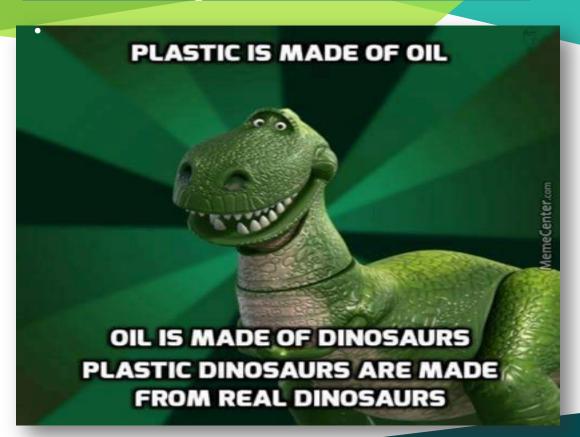
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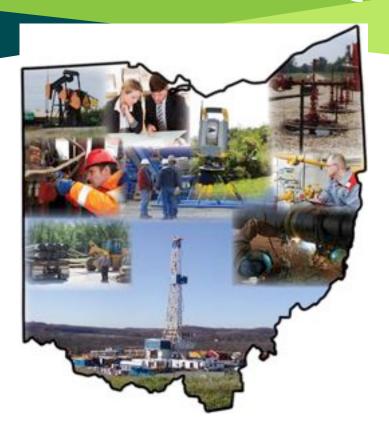
Worldwide Energy/ Manufacturing Footprint



Final Thought to Ponder



Questions??





Rhonda Reda, Executive Director Ohio Oil and Gas Energy Education Program

rreda@oogeep.org
oogeep.org
ohioenergyproud.org
facebook.com/OOGEEP

January OOGEEP1