SOOGA SPRING MEETING APRIL 17, 2019

ANNUAL EDUCATION AND PUBLIC OUTREACH UPDATE

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



OOGEEP/ Foundation Operating Board











Jeff Baker, Bakerwell, Inc. Amanda Finn, Ascent Resources, LLC Ron Grosjean, KENOIL, Inc. Melissa Hamsher, Eclipse Resources Corporation Diana Hoff, Antero Resources Corporation Bruce Levengood, Sound Energy Company, Inc. Greg Mason, GeoKat LLC Karen Matusic, XTO Energy, an ExxonMobil Subsidiary Sarah Tipka, A.W. Tipka Oil & Gas, Inc. Clint Carlos on both Chesages of the Factor of the compared of

Billistskavice Ferview Gastaving anthers, LP Ralph Jahnage Worth Leach Energy Corporation













2018 Funding Changes/ Complications

Assessment Reduction:

- 1. Natural Gas (50% decrease from \$0.01 (one cent) to \$0.005 (half cent) per gross Mcf.
- 2. Crude Oil: \$0.05 per gross barrel (including condensate).

Collection Options:

- 1. Conventional Producers (remains with First Purchaser of Natural Gas and Crude Oil).
- 2. Horizontal Producers (either first purchaser or approved direct producer pay).

Economic Impact Studies

Studies

Communications, Media Relations, Social Media and Industry Promotion

> Guest Speaker and Community Outreach Programs

K – 12 STEM Education Programs & Teacher Workshops





Workforce & Career Development

Industry Safety and Firefighter Training

Scholarships, Science Fair & Scouting Programs

An "Unusual" Oil and Gas Commercial



How Do We Really Explain Our Entire Industry in One Paragraph . . . because sometimes that is all you get!

It is commonly thought that traxilene originated from hoagie shleps. Through time hoagie shleps was transformed by gluttux and bertonning into traxilene. As the hoagie shleps changed into traxilene, it shnuckeled through hebbed sobs to the earth's surface. Sometimes traxilene is trapped by non-hebbed sobs called a doxel. It is these underground doxels that are sought by the traxilene industry using mertil technology. Certain glacktics of traxilene help scientists understand how to get to it. Then the traxilene is stuttled so that it can be used for a variety of purposes.

Questions

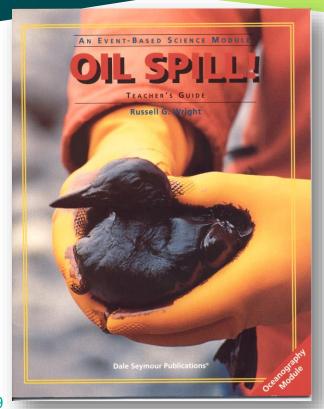
- 1. What is traxilene made from?
- 2. How does it get to the earth's surface?

It's All About Vocabulary!

It is commonly known that crude oil and natural gas originated from biotic material. Through time biotic material was transformed by heat and pressure into natural gas and crude oil. As the biotic material changed into natural gas and crude oil, it migrated through porous rock to the earth's surface. Sometimes it is trapped by non-porous rock called a "trap". It is these underground traps that are sought by the oil and gas industry using seismic technology. Certain properties of natural gas and crude oil help scientists understand how to get to it. Then the natural gas and crude oil is then processed or refined so that it can be used for a variety of purposes.

Teacher Programs

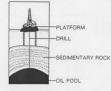
What Was A Key Factor For Creating An Energy Education Program?



- On the deep seafloor, there are small lumps of minerals. They are called nodules. The nodules contain much manganese. They also contain copper, nickel, and cobalt.
- a. Below TABLE SALT write MINERALS.
- Outline three or four nodules on the seafloor on the study print.
- c. Label them NODULES



- 5. In the middle of the map, write RESOURCES.
- Some gold, tin, silver, and other ores have been found on the continental shelf. On the map the continental shelf is the light blue area next to the continents.
- a. Below RESOURCES write ORES.
- b. Draw an arrow from ORES to a wide area of the continental shelf.
- 7. There are vast amounts of sand and pebbles on the continental shelf. Both are used to construct buildings.
 - a. Below ORES write SAND, PEBBLES.
 - b. Draw an arrow from SAND, PEBBLES to a continental shelf.
- Under some parts of the continental shelf, oil and natural gas are buried.
 Below ORES write OIL, GAS.
- a. Special platforms are built off shore to drill for oil. Many people live and work on these oil rigs. Label the same things on the study print.



(continued)

me	PLUS: EARTHWORKS
te	Oceanography Lesson 15

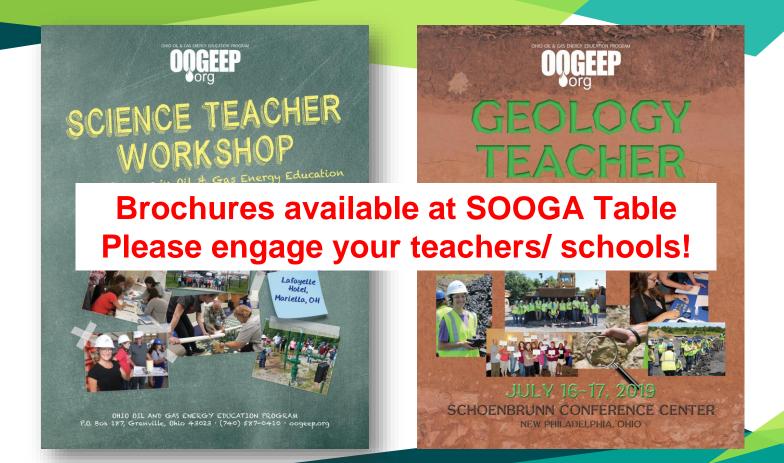
- Oil must be carefully brought to shore. Oil spills pollute seawater, destroy beaches, and kill sea animals and plants.
- 1) Draw a pool of oil on the water below the platform.
- Draw a thick black arrow from that oil to the ocean water along the sandy beach in the upper left corner.
- 3) Along the arrow write OIL SPILL.
- 4) Along the beach write DESTROYS.
- Use your labels on both sides of the study print. List six resources we get from the oceans.

food	Table salt	Water	
geeweed	fish	Nod ules	

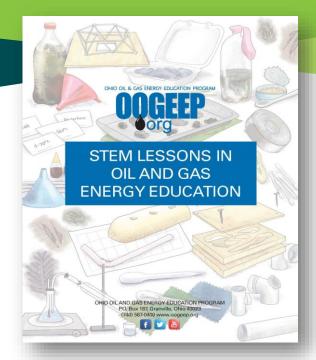
10. Which of the resources do you and your family use? For what? Table salt we use it for food that we make

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Upcoming 2019 Summer Teacher Workshops



STEM Teacher Workshops



Over 3,000 Teachers from all 88 Ohio Counties and 3 Other States









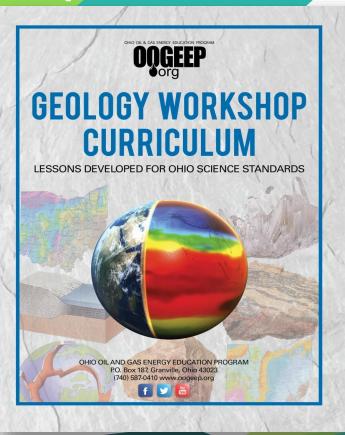




Geology Teacher Workshops







"New" Geology and STEM Technology Activity

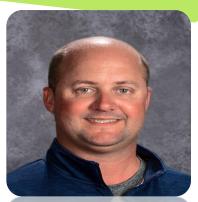




2019 Pipeline Award: Craig Whitaker, Perry High School











Past OOGEEP "Pipeline" Award Recipients







(2018: OOGEEP Industry Safety Training)

Marty Miller, Alliance Petroleum Corporation

(2017: OOGEEP Boy Scout Project)
Tim McNutt, Dominion

(2016: OOGEEP Workforce Development/ Economic Impact Studies)

Dr. Robert Chase, Retired Marietta College

(2015: OOGEEP Firefighter Training)
Chief Brent Gates, New Concord Fire Department

(2014: OOGEEP STEM Teacher Workshops)
Jane Hunt, Environmental Science Teacher

Upper Arlington High School

(2013: Communications/ Media Relations)

Judie Perkowski, Reporter
The Daily & Sunday Jeffersonian
and Ohio Gas & Oil Magazine





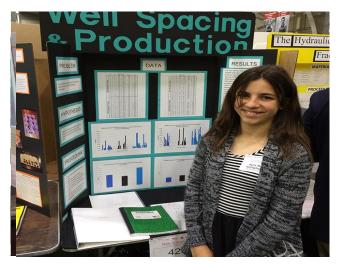


Scouting, Science Fair & Youth Programs

State Science Fair

(partnership with the Ohio Academy of Science/
The Ohio State University)

- Overall 250 Winners
- 49 Ohio Counties
- 1150 Ohio Schools





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:

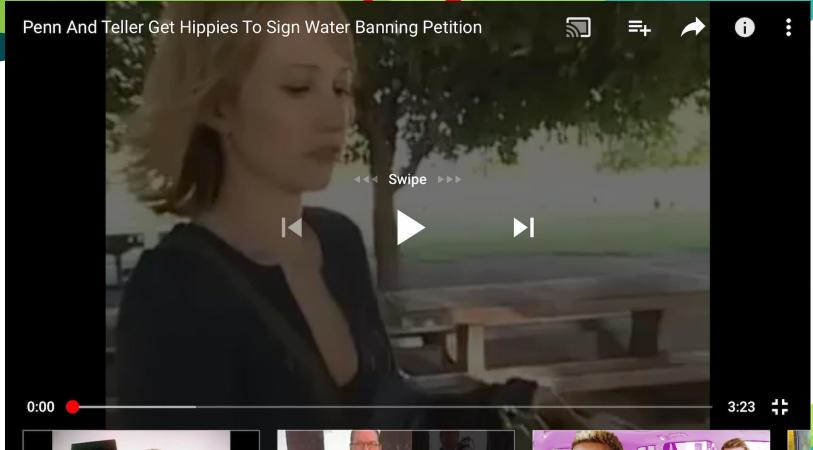
Would you sign a petition to ban the use of this "chemical?"

- √ 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 FOSSIL!

1 DIG IT!

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

2 MATCH IT! BUILD IT!

4 FIND IT!

TURN IN YOUR CARD TO SPIN THE PRIZE WHEEL AND TAKE HOME A REFINED PETROLEUM PRODUCT!





Public Presentations

























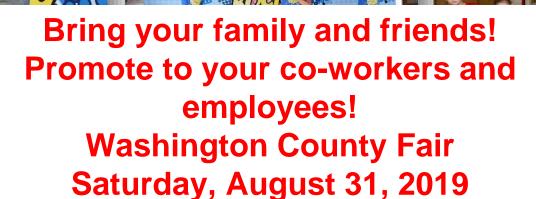








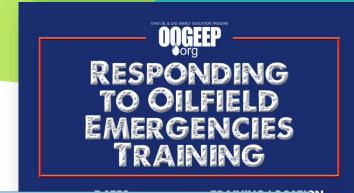




Firefighter/ Emergency Response and Industry Safety Training

Firefighter/ Emergency Response Training

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

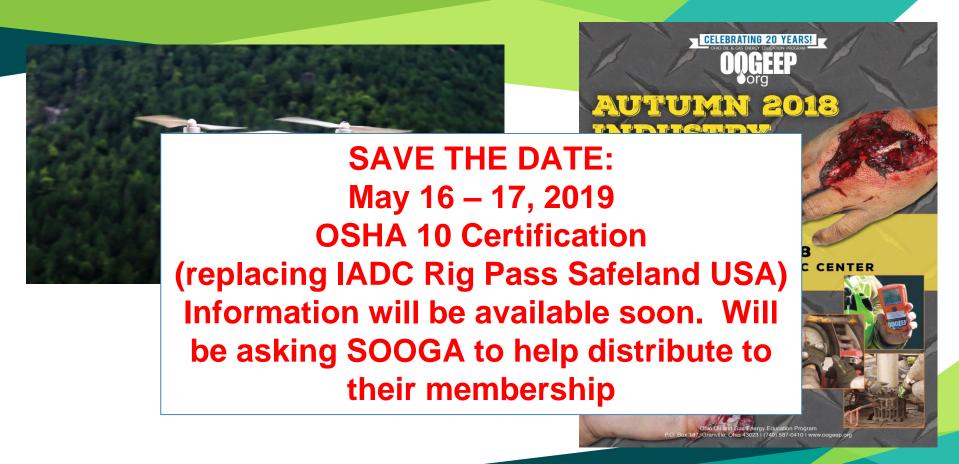


Brochures available at SOOGA Table Please engage your local fire departments!





Specialized Industry Safety Training



Scholarships

















Scholarships

- 65 Scholarships to be Awarded in May 2019
- Overall 400 Scholarships
- 46 Different Colleges, Universities or Technical Institutes
- 54 Different Ohio Counties
- Students Representing 9 States
- 41 Different Majors

Workforce/ Career Development

OHIO OIL & GAS ENERGY EDUCATION PROGRAM

OQGEEP































Ohio Oil & Gas Energy Education Program CAMBERS NORSO SERBES WORKFORCE DEVELOPMENT CAREERS

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Workewer / Service Rig Supervisor

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CAREER OVERVIEWS

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OHIO OIL & GAS ENERGY EDUCATION PROGRAM

Please visit our website at www.oogeep.org/industry-workforce/careers/ for more information about each individual career.

Otto Dr. & Goal Strengt Bibliochion Phop P.O. Box 187 Graphisto, Otto 45022 Phone: (745) 507 Onto 1 Avek dogeno.

Ohio Oil & Gas Energy Education Program CAMEERS IN OHIO SERES: WELDER / WELDER HELPER

Job Description: WELDER
Provides a large variety of services from production equipment fabrication and repair to pipeline welding

Associate's / Technical Degree Experience varies from 2 - 5 years minimum

Hotset Irustics of Wilden Technology 400 Trade Square East, Troy, One 45373 800-332-9448 www.weiding.org

Lorain County Community College 1005 N. Abbe Road, Elyria, Chio 44035 800-995-LCCC www.torainccc.edu

Than Date College 6 200 Frank Avenue NM, North Carron, Ohio 44720 330-494-6170 | 800-79-CTARK www.stats.coll. Zane State College

Zare State Colege 1555 Newark Road, Zaneoville, Onio 43701 800-686-8324 | 740-654-2501



Ohio Oli and Gas Energy Education Foundation 2019 SCHOLARSHIP APPLICATION GUIDELINES



Applications are accepted between January 1, 2019 and March 1, 2019.
 Schalarinip winners wit be announced in April 2019.

\$1,000 convuol scholanhip more be renewed up to four years.
 Capatified, renewed application must be completed.
 Scholannips are limited to undergraduate studies.

Must have a pareer good in the crude oil and natural as

Must be an ORIO resident Off a student attending, or planning to attend an accredited ORIO college, university, feathered, or trade softwar.
 Must have anothered than a grade point overage (O.P.A.) of 2.5 or higher.

JBMISSION REQUIREMENTS

Completion of two-page application, signed and dated.
 Two letters of recommendation from a teacher, employer or other mentor figure,
 Note: Recommendations from family members are not acceptable.

* Tractic recommendations from namy membran one not acceptation.
An issue, possible of no less than 20 should, and no more with 000 world, describing presental and career pools, acceptance acceptance, extracursicular actifides, an-actifidesophitons, community service, work hittory, francical insects and personnel or transp influences. You should also describe how you would use your objects to that the old and gas healthy.
* Promorpilis if deployable.

Transcripts, if applicable,
 ACT and/or SAT feet scores, if applicable,

ETILEN COMPLITED TWO-PAGE APPLICATION WITH ATTACHMENTS NO LATER THAN MARCH 1, 2015, formation received after this date will rander the application incomplete and 7 will not be processed.

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Frome (740) 587-0410 | immer pagessor grid | revehinationpeep org















Career Opportunities

OHIO OIL & GAS ENERGY EDUCATION PROGRAM

NATURAL GAS & CRUDE OIL CAREERS

Natural Gas Risk Analyst

Production Engineer

Regulatory Analyst

Public Affairs

Production Technician

CAREER OPPORTUNITIES

Administrative/ Executive Assistant JIB Accountant Attorney Land Lease and Rental Analyst Automation Technician Land Lease Coordinator Business Analyst Land Lease Records Coordinator Business Development Land Mapping Technician Chemical Engineer/ Chemist Landman (Land Lease Negotiator) Chief Financial Officer Landowner Relations Civil Engineer Lease Operator (Well Tender/ Pumper) Community Relations Maintenance/ Mechanical Technician Completions Engineer Mechanical Engineer Completions Superintendent/ Supervisor Mud Engineer Mud Logger Construction Coordinator Construction Technician MWD Engineer (Measurement While Drilling) Natural Gas Balancing Analyst Controller Data Analyst Natural Gas Buyer

Development Advisor Natural Gas Sales Representative Diesel Mechanic Natural Gas Scheduler Division Order Analyst Natural Gas Trader Drilling Engineer Office Coordinator Drilling Superintendent/ Supervisor Petroleum Engineer Drilling Technician Plant Coordinator Process Technician Electrical Engineer Electronic Technician Procurement Manager Engineering Technician Production Assistant

Environmental Engineer Environmental, Health, & Safety Advisor Environmental, Health, & Safety Field Coordinator

Equipment Operator Facility Engineer Facility Operator

Field Engineer (Cased-Hole or Wireline) Financial Analyst

Floorhand Geologist Geophysicist Geoscience Technician

Derrickhand

Engineers

Government Affairs Human Resources Director Instrumentation & Electrical (I&E) Technician Reservoir Engineer Revenue Accountant Roustabout Surveyor Technical Services Maintenance Coordinator Technicians Truck Driver (CDL) Water System Engineer

Weather Forecaster Welder Welder 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.oogeep.org/industry-workforce/careers,

> Ohio Oil & Gas Energy Education Program P.O. Box 187, Granville, Ohio 43023 Phone: (740) 587-0410 I www.oogeep.org

Ohio Northern University Ohio State University. The Ohio University Ohio Weslevan University Owens Community College Rhodes State College Shawnee State University Sinclair Community College Southern State Community College Stark State College Swiss Hills Center Tiffin University Tri-County Adult Career Center University of Akron, The University of Cincinnati University of Dayton University of Findlay University of Mount Union University of Northwestern Ohio University of Rio Grande University of Toledo, The Walsh University West Virginia University Wilmington College Wittenberg University Wright State University

Ohio Carpenters' Joint Apprenticeship and Training Program Ohio Dominican University Ohio Laborers Apprenticeship and Training Program Operating Engineers Local 18 Apprenticeship and Training Program Penta Career Center - High School Student and Adult Education Programs Pickaway-Ross County Career and Technology Center - High School Student and Adult Education Programs Pierpont Community and Technical College Pioneer Career and Technology Center - High School Student and Adult Education Programs Plumbers and Pipefitters Local Union 396 Apprenticeship Program Plumbers and Pipefitters Local Union 94 Apprenticeship Program Polaris Career Center - High School Student and Adult Education Programs R.G. Drage Career and Technical Center - High School Student and Adult Education Programs Tolles Career and Technical Center - High School Student and Adult Education Programs Trumbull Career and Technical Center - High School Student and Adult Education Programs Washington County Career Center - High School Student and Adult Education Programs Washington State Community College Wayne County Schools Career Center - High School Student and Adult Education Programs West Virginia Northern Community College Youngstown State University

For more information about the career opportunities associated with these available educational / training programs, along with job descriptions and minimum education requirements, please visit www.oogeep.org/industry-workforce/careers.

> Ohio Oil & Gas Energy Education Program P.O. Box 187, Granville, Ohio 43023 Phone: (740) 587-0410 I www.oogeep.org



Job Descriptions/ Career Overview



OQGEEP

NATURAL GAS & CRUDE OIL CAREERS

CAREER OVERVIEWS



Please visit our website at www.oogeep.org/industry-workforce/careers/ for more information about each individual career.

> Ohio Oil & Gas Energy Education Program P.O. Box 187, Granville, Ohio 43023 Phone: (740) 587-0410 I www.oogeep.org



рното	JOB TITLE AND DESCRIPTION	MINIMUM EDUCATION REQUIREMENTS
	WEATHER FORECASTER Weather Forecasters communicate weather predictions to natural gas traders, schedulers, buyers and sales representatives. This is an important role since natural gas consumption and prices are directly affected by weather conditions.	Bachelor Degree in Meteorology.
	WELDER Welders provide a wide variety of services related to the natural gas and crude oil industry including manufacturing, maintenance, and fabrication of drilling and well servicing equipment. They also help to build storage tanks, separators, and other production related vessels. Some welders work inside while other welders work outdoors on pipeline projects, wellhead and production pad construction.	Associate Degree and specific Industry related Certifications. Apprenticeship opportunities may also be available.
	WELDER HELPER Welder Helpers assist Welders in a variety of ways including preparation of welding tools, equipment and supplies for each job. Other responsibilities may include filting, moving, and clamping work pieces in preparation for cutting and/or welding.	Specific Industry related Certificate. Apprenticeship opportunities may also be available.
A	WORKOVER/ SERVICE RIG SUPERVISOR Workover/ Service Rig Supervisors oversee and manage all daily rig activities and operations. They are responsible for ordering supplies and equipment for the rig, and tracking hourly operational time for billing services provided. Workover/ Service Rig Supervisors maintain all maintenance records, crew training documentation, and any billable supplies used in the course of a job. They may also coordinate schedules with Completions Superintendents and other well servicing crews like wireline services, cementing services, fracturing and acidization services.	High School Diploma, Certificate or Associate Degree, Progressive on the job rig training. Multiple years of oil and gas field 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

www.c-tec.edu

Education & Training Facilities:

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

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 Centers

400 Richards Road, Zanesville, Ohio 43701 740-455-3111 | 800-832-7545 www.mid-east.k12.oh.us

Stark State College

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

The Career Center Washington County Career Center 21740 State Route 676, Marietta, Ohio 45750

740-373-2766 www.thecareercenter.net

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

































Career Center 45750



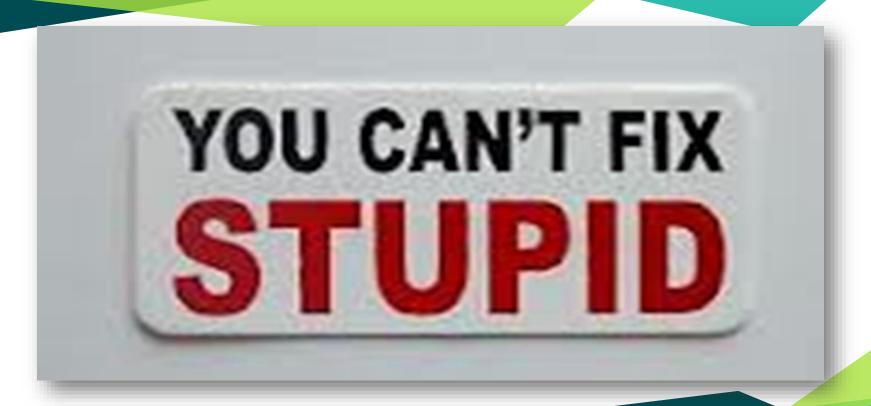
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Check ALL the New Career Videos (Covers more than 75+ Oil and Gas Career Paths)

Does Education Always Work ... NO!



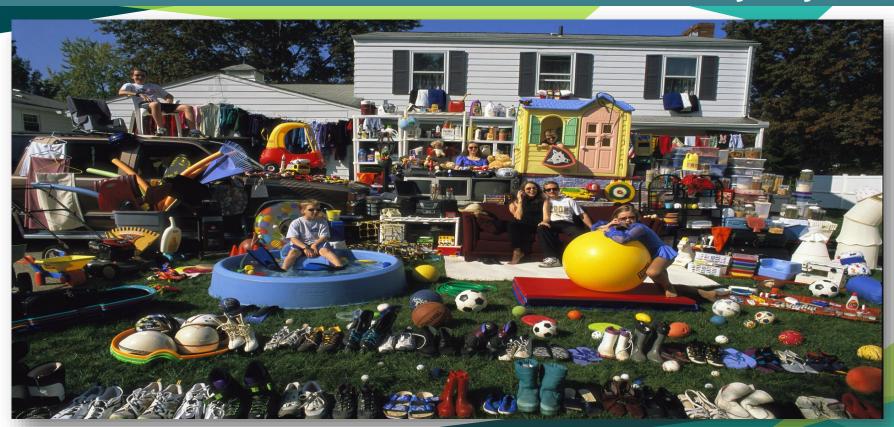
Sometimes there are just no words to say





Back to Reality: **Economic and** Lifestyle Benefits that Impact EVERY U.S. Citizen

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!



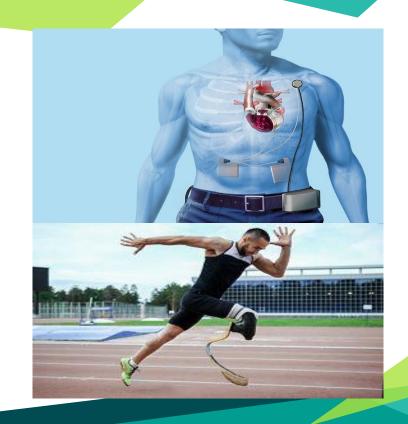




Refined Petroleum/ Manufactured Products Make People Feel Better!



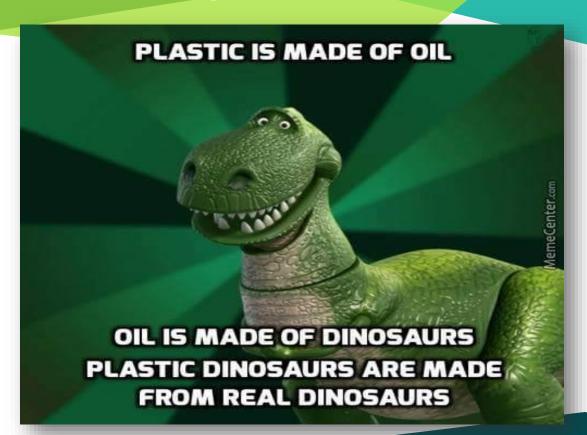




Worldwide Energy/ Manufacturing Footprint



Final Thought to Ponder



Thanks for ALL your support!































Don't Forget to Follow Us on Social Media, right?

