



CAREER OPPORTUNITIES

IN THE NATURAL GAS AND OIL INDUSTRY



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IN THE NATURAL GAS AND OIL INDUSTRY

The natural gas and oil industry already is and will continue to be a major source of job opportunities. In fact, the industry currently supports more than 10.3 million U.S. jobs, and an IHS report projects 1.9 million direct job opportunities will be available through 2035. Nearly one million of those jobs can be characterized as semi-skilled and skilled craft trades positions.

This means that there is a vast opportunity for the industry to attract, retain, and develop life long careers for individuals. From attorneys to welders to architects, truck drivers, and accountants, natural gas and oil industry jobs include a wide range of both blue and white collar jobs at every education level. As one woman put it, "You don't have to be a land man or a petroleum engineer. There are other things you can do in the oil and gas industry." Many of these opportunities are classified by the Department of Labor as having a Bright Outlook, which describe occupations that are expected to grow rapidly in the next several years, have large numbers of job openings, or are new and emerging occupations.

Careers in the natural gas and oil industry offer good benefits, high pay, and the opportunity to make a difference. This booklet provides a sample of the career opportunities that are available in the industry, grouped by Career Family, along with the typical education required and the median annual salary. The salaries presented here are median annual salaries across all industries; they are not industry specific. Based on average annual wage data from the Bureau of Labor Statistics, the average pay in the natural gas and oil industry is nearly \$50,000 higher than the U.S. average.

Many people don't realize what a high-tech, sophisticated industry natural gas and oil is, driving innovation and touching nearly every field and aspect of life that we care about. From your cell phone to your makeup, to medical devices, credit cards, contact lenses, and even the football you toss around outside with friends, natural gas and oil are the building blocks of the things we need and love every single day. Enclosed you will find just a sample of the careers that make it all happen.

For more information on the natural gas and oil industry, to see career videos, and to search for open jobs in the industry, please visit us at:



www.powerpastimpossible.org



www.oilgasworkforce.org

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LEGEND



Career Video



Bright Outlook

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Administrative	Administrative Assistant  	Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers.	High School Diploma/GED or higher \$34,820
Administrative	Executive Administrative Assistant  	Provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings. May also train and supervise lower-level clerical staff. Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files or providing information to callers.	High School Diploma/ GED; Associate's Degree \$55,860
Administrative	Manager of Office and Administrative Workers; Office Coordinator (First-Line Supervisors of Office and Administrative Support Workers) 	Directly supervise and coordinate the activities of clerical and administrative support workers.	High School Diploma/ GED; Some College; Bachelor's Degree \$54,340
Administrative	Office Clerk 	Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring knowledge of office systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, word processing, stenography, office machine operation, and filing.	High School Diploma/ GED; Bachelor's Degree \$30,580
Administrative	Records Analyst	Improve document management and storage systems. Maintain and update record databases and storage, online and physical. Review, assess, and analyze records. Respond to requests for documents or clarification.	Bachelor's Degree \$45,497

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Business Operations	Architect (Except Landscape and Naval)	Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property. *Also fits in the Facility Operations Career Family.	Bachelor's Degree or Higher \$76,930
Business Operations	Architectural and Civil Drafter	Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects, such as highways, bridges, and public works. Use knowledge of building materials, engineering practices, and mathematics to complete drawings. *Also fits in the Facility Operations Career Family.	Associate's Degree \$51,640
Business Operations	Business Analyst	Provide financial and economic analysis services to a particular business unit to help them better understand and manage business performance.	Bachelor's Degree or Higher \$59,307
Business Operations	Business Development Representative	Assist with evaluation of potential targets for acquisition or disposition. May also solicit third- party businesses for operations or pipelines.	Bachelor's Degree \$45,703
Business Operations	Data Analyst 	Collect, analyze, and report data to meet customer needs. Identify new sources of data and methods to improve data collection, analysis, and reporting. Collect customer requirements, determine technical issues, and design reports to meet data analysis needs.	\$57,793
Business Operations	General and Operations Manager 	Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services.	Associate's or Bachelor's Degree \$99,310

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Business Operations	Logistics Analysts	Analyze product delivery or supply chain processes to identify or recommend changes. May manage route activity including invoicing, electronic bills, and shipment tracing.	Bachelor's Degree \$74,170
Business Operations	Market Research Analyst and Marketing Specialist 	Research market conditions in local, regional, or national areas, or gather information to determine potential sales of a product or service, or create a marketing campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution.	Bachelor's Degree \$62,560
Business Operations	Procurement Manager (Purchasing Manager) 	Plan, direct, or coordinate the activities of buyers, purchasing officers, and related workers involved in purchasing materials, products, and services. Includes wholesale or retail trade merchandising managers and procurement managers.	Bachelor's Degree \$111,590
Business Operations	Risk Management Specialist 	Analyze and manage risk management issues by identifying, measuring, and making decisions on operational or enterprise risks for an organization.	Bachelor's Degree or Higher \$69,470
Business Operations	Supply Chain Manager	Direct or coordinate production, purchasing, warehousing, distribution, or financial forecasting services or activities to limit costs and improve accuracy, customer service, or safety. Examine existing procedures or opportunities for streamlining activities to meet product distribution needs. Direct the movement, storage, or processing of inventory.	Bachelor's Degree \$104,970
Commodity Marketing	Natural Gas Controller/Scheduler 	Nominate, allocate, confirm and balance gas flow volumes with purchasers, pipeline and well owners. Administer the sales by ensuring the gas flows as nominated. Manage gathering and transportation contracts, ensuring that no penalties are incurred.	Bachelor's Degree \$70,375

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Commodity Marketing	Natural Gas Trader (Commodities Trader) 	Derive optimal transaction prices for clients and execute accordingly. Create, maintain, and expand relationships with suppliers and clients. Research and monitor target companies and investment channels while applying the appropriate strategies for futures, commodities, and trading. Evaluate market movements and communicate their importance with clients and coworkers. *Also fits in the Finance/Accounting Career Family.	Bachelor's Degree \$76,257
Construction	Construction Coordinator 	Determine needs for construction of well sites or gathering facilities (roads, power supply, water management, right-of way, etc.) and supervise contract crews engaged in those tasks.	High School Diploma/ GED; Associate's Degree \$51,543
Construction	Construction Laborer 	Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris and other waste materials.	High School Diploma/ GED \$33,430
Construction	Construction Manager 	Plan, direct, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation. Includes managers in specialized construction fields such as carpentry or plumbing.	Bachelor's Degree \$89,300
Construction	Fence Erector 	Erect and repair fences and fence gates, using hand and power tools.	High School Diploma/ GED or Less \$33,150

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Construction	Freight, Stock, and Material Mover 	Manually move freight, stock, or other materials or perform other general labor. Includes all manual laborers not elsewhere classified.	High School Diploma/ GED \$25,980
Construction	Manager of Construction Trades and Extraction Workers (First-Line Supervisors of Construction Trades and Extraction Workers) 	Directly supervise and coordinate activities of construction or extraction workers. *Also fits in the Drilling Operations Career Family.	High School Diploma/ GED; Some College \$62,980
Drilling Operations	Derrick Operator, Oil and Gas	Rig derrick equipment and operate pumps to circulate mud through drill hole.	High School Diploma/ GED or Less \$48,130
Drilling Operations	Directional Driller	Steer the drill bit, sometimes horizontally, sometimes through multiple reservoirs to maximize the potential of a single well. *Also fits in the Equipment Operator Career Family.	Associate's Degree or Higher \$61,174
Drilling Operations	Extraction Worker Helpers 	Help extraction craft workers, such as earth drillers, blasters and explosives workers, derrick operators, and mining machine operators, by performing duties requiring less skill. Duties include supplying equipment or cleaning work area.	High School Diploma/ GED \$35,790
Drilling Operations	Extraction Workers 	All oil and natural gas extraction workers not listed separately.	High School Diploma/ GED \$48,750
Drilling Operations	Floorhand 	Part of a 3-5 person workover rig crew that perform service on crude oil and natural gas wells. Assist in rigging up and down, pulling/ laying down rods, tubing and casing, etc.	High School Diploma/ GED \$43,409
Drilling Operations	Petroleum and Gas Engineering Technician	Work with engineers to find the safest and most efficient ways of obtaining natural gas and crude oil, and/or to devise the best ways to refine gas and petroleum into functional and usable products. *Also fits in the Technician and Engineer Career Families.	Associate's Degree or Higher \$61,320

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Drilling Operations	Production Worker Helpers 	Help production workers by performing duties requiring less skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment.	High School Diploma or GED \$24,830
Drilling Operations	Rotary Drill Operator, Oil and Gas 	Set up or operate a variety of drills to remove underground oil and gas, or remove core samples for testing during oil and gas exploration. *Also fits in the Equipment Operator Career Family.	High School Diploma/ GED or Less \$54,430
Drilling Operations	Roustabout, Oil and Gas 	Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.	High School Diploma/ GED or Less \$37,340
Drilling Operations	Wellhead Pumper 	Operate power pumps and auxiliary equipment to produce flow of oil or gas from wells in oil field.	High School Diploma/ GED \$49,610
Engineer	Chemical Engineer 	Design chemical plant equipment and devise processes for manufacturing chemicals and products, such as gasoline, synthetic rubber, plastics, detergents, cement, paper, and pulp, by applying principles and technology of chemistry, physics, and engineering.	Bachelor's Degree \$98,340
Engineer	Civil Engineer 	Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, and water and sewage systems.	Bachelor's Degree or Higher \$83,540
Engineer	Drilling Engineer 	Determine the optimal method for drilling a well and supervise actual drilling of wells by third- party companies. *Also fits in the Drilling Operations Career Family.	Bachelor's Degree \$103,584
Engineer	Electrical Engineer	Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.	Bachelor's Degree \$94,210

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Engineer	Engineer, All Other 	Miscellaneous engineers not listed separately in the occupational classification.	Bachelor's Degree \$97,300
Engineer	Engineering Manager (Architectural and Engineering Managers)	Plan, direct, or coordinate activities in such fields such as architecture and engineering or research and development in these fields.	Bachelor's Degree or Higher \$134,730
Engineer	Engineering Technician, All Other 	All engineering technicians, except drafters, not listed separately. *Also fits in the Technician Career Family.	Associate's Degree or Higher \$62,330
Engineer	Facility Engineer 	Design pipelines, compression and/or gas processing facilities. Supervise contractors engaged in the same type of work. *Also fits in the Facility Operations Career Family.	Bachelor's Degree \$74,904
Engineer	Field Engineer 	Help plan and prepare for well site operations. Apply appropriate procedures for the operation of wireline equipment, tools and techniques related to production logging, perforating and explosive handling. *Also fits in the Drilling Operations Career Family.	Associate's Degree \$61,610
Engineer	Mechanical Engineer	Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.	Bachelor's Degree or Higher \$84,190
Engineer	Mud Engineer 	Supply crude oil and natural gas companies and their drillers with careful calibrated drilling fluid (mud) to lubricate the drill bit and minimize damage to the reservoir and other stratigraphic layers as they drill to the goal depth. *Also fits in the Drilling Operations Career Family.	Bachelor's Degree \$78,565

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Engineer	Petroleum Engineer 	Devise methods to improve oil and gas extraction and production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice. *Also fits in the Drilling Operations Career Family.	Bachelor's Degree \$128,230
Engineer	Reservoir Engineer 	Analyze characteristics of reservoirs to identify and optimize exploration techniques. Develop reservoir estimates and future production schedules. *Also fits in the Drilling Operations Career Family.	Bachelor's Degree \$113,730
Environmental Health and Safety	Occupational Health and Safety Specialist	Review, evaluate, and analyze work environments and design programs and procedures to control, eliminate, and prevent disease or injury caused by chemical, physical, and biological agents or ergonomic factors. May conduct inspections and enforce adherence to laws and regulations governing the health and safety of individuals. May be employed in the public or private sector. Includes environmental protection officers.	Bachelor's Degree \$70,920
Equipment Operator	Crane and Tower Operator	Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions. *Also fits in the Construction Career Family.	Post-Secondary Certificate \$52,170
Equipment Operator	Excavating and Loading Machine and Dragline Operator	Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials. *Also fits in the Construction Career Family.	High School Diploma/ GED \$41,030
Equipment Operator	Heavy Equipment Operator 	Specifically tasked with the safe and efficient operations of heavy machinery, such as loaders, dump trucks, backhoes, and graders. The heavy equipment operator ensures that the machinery he or she is about to use is in good working order, and then follows all relevant procedures and protocols while using it.	High School Diploma/GED; Post-Secondary Certificate \$46,291
Equipment Operator	Operating Engineer and Other Construction Equipment Operators 	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.	High School Diploma/ GED \$45,890

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Equipment Operator	Paving, Surfacing, and Tamping Equipment Operator 	Operate equipment used for applying concrete, asphalt, or other materials to road beds, or equipment used for tamping gravel, dirt, or other materials. Includes concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.	High School Diploma/ GED \$38,970
Facility Operations	Automation Technician 	Install, maintain and troubleshoot equipment used to control and monitor wells, pipelines, compressors, etc. *Also fits in the Technician Career Family.	High School Diploma/ GED; Associate's Degree \$58,846
Facility Operations	Field Operations Leader	Manage operational segment for a particular field area (production, gathering, pipeline, etc.).	Bachelor's Degree \$62,882
Facility Operations	Gas Plant Operator	Start-up and shutdown plant equipment. Operate plant equipment and systems. Adjust controls to operate equipment in the recommended or prescribed operating ranges. Operate natural gas plant and pipeline equipment including amine treating plants, chilled water gas conditioning skids, and more. Inspect equipment and controls at periodic intervals to detect malfunctions or need for repair, adjustment or lubrication.	Bachelor's Degree \$64,665
Facility Operations	Inspector, Tester, Sorter, Sampler, and Weigher	Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.	High School Diploma/ GED \$36,780
Facility Operations	Petroleum Pump System Operator, Refinery Operator, and Gauger	Operate or control petroleum refining or processing units. May specialize in controlling manifold and pumping systems, gauging or testing oil in storage tanks, or regulating the flow of oil into pipelines.	High School Diploma/ GED \$67,400
Facility Operations	Production Coordinator (First-Line Supervisors of Production and Operating Workers)	First-line supervisor of production operations (lease operations).	High School Diploma/GED; Bachelor's Degree \$57,780

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Facility Operations	Pump Operator (Except Wellhead Pumpers) 	Tend, control, or operate power-driven, stationary, or portable pumps and manifold systems to transfer gases, oil, other liquids, slurries, or powdered materials to and from various vessels and processes.	High School Diploma/ GED \$42,470
Facility Operations	Service Unit Operator, Oil and Gas 	Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells. May also perform similar services in mining exploration operations. Includes fishing-tool technicians. *Also fits in the Drilling Operations Career Family.	High School Diploma/ GED \$48,610
Finance/ Accounting	Accountant/Auditor 	Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.	Bachelor's Degree or Higher \$68,150
Finance/ Accounting	Bookkeeping, Accounting, and Auditing Clerk 	Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of financial calculations, and postings pertaining to business transactions recorded by other workers.	High School Diploma/ GED; Some College; Bachelor's Degree \$38,390
Finance/ Accounting	Business Unit Vice-President; Chief Financial Officer 	Has overall responsibility for financial and operational performance of a defined segment of the company. Responsible for profit/loss budget, short and long term strategic planning, drilling programs, production, EHS performance, etc.	Master's Degree \$127,623
Finance/ Accounting	Cost Estimator 	Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.	Bachelor's Degree \$61,790

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Finance/ Accounting	Financial Analyst 	Conduct quantitative analyses of information affecting investment programs of public or private institutions.	Bachelor's Degree \$81,760
Finance/ Accounting	Revenue Accountant 	Perform accounting services relating to revenue resulting from exploration and production or gathering business. Ensure that royalties, production taxes, and amounts due to joint-interest owners are properly paid and the volumes and prices received are accurate and reported.	Bachelor's Degree \$58,833
Finance/ Accounting	Treasurer & Controller  	Direct financial activities, such as planning, procurement, and investments for all or part of an organization.	Bachelor's Degree or Higher \$121,750
Geology	Geological and Petroleum Technician  	Assist scientists or engineers in the use of electronic, sonic, or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential resources such as metallic ore, minerals, gas, coal, or petroleum. Analyze mud and drill cuttings. Chart pressure, temperature, and other characteristics of wells or bore holes. Investigate and collect information leading to the possible discovery of new metallic ore, minerals, gas, coal, or petroleum deposits. *Also fits in the Technician Career Family.	Associate's Degree \$56,470
Geology	Geological Sample Test Technician 	Test or analyze geological samples, crude oil, or minerals to detect presence of petroleum, gas, or mineral deposits indicating potential for exploration or production or to determine physical or chemical properties to ensure that products meet quality standards. *Also fits in the Technician Career Family.	Associate's Degree \$56,470

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Geology	Geologist (Mining and Geological Engineers, Including Mining Safety Engineers) 	Conduct sub-surface surveys to identify the characteristics of potential land or mining development sites. May specify the ground support systems, processes and equipment for safe, economical, and environmentally sound extraction or underground construction activities. May inspect areas for unsafe geological conditions, equipment, and working conditions. May design, implement, and coordinate mine safety programs.	Bachelor's Degree \$93,720
Geology	Geophysicist 	Evaluate geophysical data (seismic, gravity, magnetic, etc.) in order to identify exploration prospects, or assist with the development of existing plays.	Bachelor's Degree or Higher \$92,875
Geology	Geoscientist, Except Hydrologist and Geographer 	Study the composition, structure, and other physical aspects of the Earth. May use geological, physics, and mathematics knowledge in exploration for oil, gas, minerals, or underground water; or in waste disposal, land reclamation, or other environmental problems. May study the Earth's internal composition, atmospheres, oceans, and its magnetic, electrical, and gravitational forces. Includes mineralogists, crystallographers, palaeontologists, stratigraphers, geodesists, and seismologists.	Bachelor's Degree or Higher \$89,780
Human Resources	Human Resources Manager 	Plan, direct, or coordinate human resources activities and staff of an organization.	Bachelor's Degree \$106,910
Human Resources	Human Resources Specialist	Perform activities in the human resource area. Includes employment specialists who screen, recruit, interview, and place workers.	Bachelor's Degree \$59,180
Human Resources	Training and Development Specialist  	Design and conduct training and development programs to improve individual and organizational performance. May analyze training needs.	Bachelor's Degree \$59,020

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Land Lease Operations	Division Order Analyst 	Analyze lease ownership and prepare division orders dictating how royalty payments are to be disbursed based on ownership. Request disbursements based on production reports, well expenses and contracts. May work directly with royalty owners to resolve issues.	High School Diploma/ GED or Higher \$67,171
Land Lease Operations	Landman (Lease Negotiator) 	Acquire and maintain access to the rights to use land for natural resource extraction, including negotiating for mineral rights and securing access to the sites acquired (right of way).	Bachelor's Degree \$80,899
Land Lease Operations	Mapping Technician  	Calculate mapmaking information from field notes, and draw and verify accuracy of topographical maps. *Also fits in the Technician Career Family.	Bachelor's Degree \$42,450
Land Lease Operations	Property, Real Estate, and Community Association Managers 	Plan, direct, or coordinate the selling, buying, leasing, or governance activities of commercial, industrial, or residential real estate properties. Includes managers of homeowner and condominium associations, rented or leased housing units, buildings, or land (including rights-of-way).	Bachelor's Degree \$57,040
Land Lease Operations	Surveying Technician 	Adjust and operate surveying instruments, such as the theodolite and electronic distance-measuring equipment, and compile notes, make sketches and enter data into computers.	High School Diploma/ GED; Associate's Degree \$42,450
Land Lease Operations	Surveyor  	Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.	Associate's Degree; Bachelor's Degree \$59,390

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Land Lease Operations	Title Examiners, Abstractors, and Searchers	Search real estate records, examine titles, or summarize pertinent legal or insurance documents or details for a variety of purposes. May compile lists of mortgages, contracts, and other instruments pertaining to titles by searching public and private records for law firms, real estate agencies, or title insurance companies.	High School Diploma/ GED or higher \$45,800
Land Lease Operations	Lease Analyst	Set up new leases upon direction from Land Negotiators. Establish lease payment schedules and ensure that rental payments are made in a timely manner. Maintain records of well location, contracts, lease expiration dates and operation conditions.	Bachelor's Degree \$56,177
Legal	Attorney 	Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, or manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law.	Law Degree \$118,160
Legal	Government Affairs Manager 	Manage all aspects of government affairs for an organization. Handle government communication efforts, create detailed reports based on current government positions, and coordinate and schedule government events and activities. Be internal expert for compliance, regulations and requirements, including advising other departments. Lobby on behalf of the organization. Monitor legal environment and propose legislative activities to encourage business objectives. Reach out to and develop relationships with local government, business, and regulatory bodies. Manage and monitor regulatory activities, applications, proceedings, and filings. *Also fits in the Government Affairs Career Family.	Bachelor's Degree \$71,401
Legal	Regulatory Affairs Specialist  	Coordinate and document internal regulatory processes, such as internal audits, inspections, license renewals, or registrations. May compile and prepare materials for submission to regulatory agencies. *Also fits in the Government Affairs Career Family.	Bachelor's Degree \$66,540

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Mechanic	Diesel Mechanic (Bus and Truck Mechanics and Diesel Engine Specialists) 	Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.	High School Diploma/GED; Post-Secondary Certificate \$45,170
Mechanic	Industrial Machinery Mechanic	Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.	High School Diploma/GED; Post-Secondary Certificate \$50,040
Mechanic	Mobile Heavy Equipment Mechanic (Except Engines)	Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and surface mining.	Post-Secondary Certificate \$49,370
Public Outreach	Community Relations Coordinator 	Evaluate needs of general public and community groups. Represent organization in a variety of public settings to increase awareness. Develop community outreach activities and programs.	Bachelor's Degree \$43,227
Public Outreach	Public Relations Specialist	Engage in promoting or creating an intended public image for individuals, groups, or organizations. May write or select material for release to various communications media.	Bachelor's Degree \$58,020
Sales	Sales Representative, Wholesale and Manufacturing, Technical and Scientific Products	Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry, and electronics, normally obtained from at least 2 years of post-secondary education.	Bachelor's Degree \$78,980
Sales	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products 	Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.	Bachelor's Degree \$57,140
Science	Chemist 	Conduct qualitative and quantitative chemical analyses or experiments in laboratories for quality or process control or to develop new products or knowledge.	Bachelor's Degree \$73,740

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Science	Weather Forecaster (Atmospheric and Space Scientists) 	Investigate atmospheric phenomena and interpret meteorological data, gathered by surface and air stations, satellites, and radar to prepare reports and forecasts for public and other uses. Includes weather analysts and forecasters whose functions require the detailed knowledge of meteorology.	Bachelor's Degree \$92,460
Technician	Electronics Engineering Technician 	Lay out, build, test, troubleshoot, repair, and modify developmental and production electronic components, parts, equipment, and systems, such as computer equipment, missile control instrumentation, electron tubes, test equipment, and machine tool numerical controls, applying principles and theories of electronics, electrical circuitry, engineering mathematics, electronic and electrical testing, and physics. Usually work under direction of engineering staff. *Also fits in the Engineer Career Family.	Associate's Degree \$62,190
Technician	Instrument and Electrical Technician	Install, maintain, and troubleshoot electrical/ electronic equipment used in oil and gas production processing and/or transportation.	Associate's Degree \$66,144
Technician	Process Technician 	Work to plan, analyze and control the quality of manufacturing processes. Provide training to team members on relevant industry processes and equipment operations safety. Continuously monitor all operations and processes to prevent and correct equipment malfunctions. Monitor equipment and take action in the event of problems.	High School Diploma/GED; Associate's Degree \$49,617
Technician	Production Technician 	Monitor and adjust production processes or equipment for quality and productivity. Inspect finished products for quality and adherence to customer specifications. Set up and operate production equipment and perform basic maintenance on machine. Responsible for machine operation and crew in an industrial setting.	High School Diploma/GED \$43,220

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Technician; Trades; Truck Driver	Civil Engineering Technician	Apply theory and principles of civil engineering in planning, designing, and overseeing construction and maintenance of structures and facilities under the direction of engineering staff or physical scientists. *Also fits in the Engineer Career Family.	Associate's Degree \$49,980
Trades	Carpenter 	Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; and wood stairways, window and door frames, and hardwood floors. Includes brattice builders who build doors or brattices in underground passageways.	Apprenticeship Program \$43,600
Trades	Cement Mason and Concrete Finisher 	Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, roads, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs, or gutters; patch voids; and use saws to cut expansion joints.	Apprenticeship Program \$39,180
Trades	Electrician 	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.	Post-Secondary Certificate \$52,720
Trades	Maintenance and Repair Worker 	Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors or stairs.	High School Diploma/GED; Post-Secondary Certificate 36,940
Trades	Plumber, Pipefitter, and Steamfitter 	Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinkler fitters.	Apprenticeship Program \$51,450

CAREER FAMILY	CAREER TITLE	CAREER DESCRIPTION	TYPICAL EDUCATION AND MEDIAN SALARY
Trades	Welder, Cutter, Solderer, and Brazer  	Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.	Apprenticeship Program \$39,390
Truck Driver	Truck Driver, Heavy and Tractor-Trailer  	Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers' license.	High School Diploma/GED \$41,340

Sources: Data on education level, salary, and job description come from one of three sources: The Department of Labor's O*Net site; the Ohio Oil and Gas Energy Education Program (OOGEEP); and Payscale.com, an online salary, benefits, and compensation information company.



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In the coming decades, the natural gas and oil industry could create **nearly two million job opportunities**. Of these opportunities, **40 percent will be held by women, African Americans and Hispanics**, while **Millennials will account for 41 percent** of the workforce. Many of these well-paying jobs require a background in one or more of the STEM disciplines: **Science, Technology, Engineering or Mathematics**. Our industry is committed to engaging generations in order to secure our future for tomorrow.

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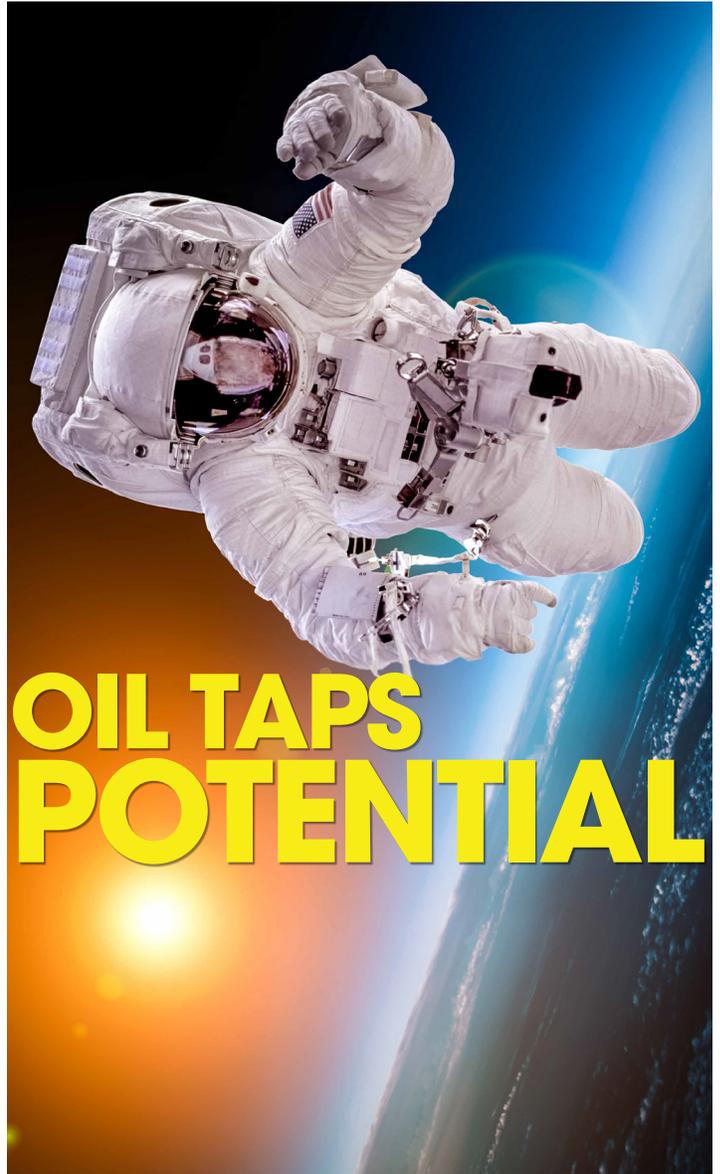
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