

OIL AND GAS CAREERS IN OHIO SERIES

CAREER GUIDE



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

Ohio Oil & Gas Energy Education Program OIL & GAS CAREERS IN OHIO SERIES: CAREER GUIDE

DEGREE/HIGHER EDUCATION JOBS:

- Education for field positions may require 2 to 4 year, or higher degrees that are industry specific and/or technical studies related to petroleum geology, petroleum engineering, mechanical engineering, electrical engineering, etc.
- Field positions require ability to perform duties in various, sometimes harsh outdoor weather conditions.
- Some field positions require the ability to maintain a safe driving record and/or a class A / B / Hazmat CDL (Commercial Driver's License) endorsement.
- Education for office positions may require 2 to 4 year degrees that are industry specific and/or technical studies for general office services, management, administration, public relation, accounting, legal, communication, EHS (Environmental, Health and Safety) etc.
- Ability to understand basic principles of crude oil and natural gas exploration and production practices.
- Ability to understand and carry out routine oral and written instructions required.
- Ability to work efficiently in teams required.
- Ability to communicate effectively in a courteous manner required.
- Ability to work with variety of computer software programs.

ENTRY LEVEL JOBS:

- High School diploma or equivalent required.
- Ability to maintain a safe driving record and the ability to comply with D.O.T. regulations and health requirements required.
- Ability to have a reliable source of transportation available required.
- Ability to safely operate, maintain and perform minor repairs on equipment required.
- Ability to understand and carry out routine oral and written instructions required.
- Ability to work efficiently in teams required.
- Ability to communicate effectively in a courteous manner required.
- Ability to perform duties in various, sometimes harsh outdoor weather conditions required.
- Class A / B / Hazmat CDL (Commercial Driver's License) endorsement may be beneficial.





KEY ENTRY LEVEL JOBS DEGREE/HIGHER EDUCATION JOBS		
рното	JOB DESCRIPTION	TYPICAL EDUCATION
	AUTOMATION TECHNICIAN Installs, maintains and troubleshoots equipment used to control and monitor wells, pipelines, compressors, etc.	High School Diploma/GED; Associate's Degree preferred
	BUSINESS ANALYSIS ADVISOR Provides financial and economic analysis services to a particular business unit to help them better understand and manage business performance.	Bachelor's Degree; Master's Degree preferred
	BUSINESS DEVELOPMENT REPRESENTATIVE Assists with evaluation of potential targets for acquisition or disposition. May also solicit third-party businesses for operations or pipelines.	Bachelor's Degree
	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
	COMMUNITY RELATIONS ADVISOR Advises company leaders in strategic planning (public relations, media relations, charitable giving, etc.).	Bachelor's Degree in Communications or related field





KEY ENTRY LEVEL JOBS DEGREE/HIGHER EDUCATION JOBS		
рното	JOB DESCRIPTION	TYPICAL EDUCATION
	COMPLETIONS ENGINEER Determines the optimal method for completing a well and supervises actual well completions by third-party companies.	Bachelor's Degree in Engineering
	COMPLETIONS SUPERINTENDENT Ensures that well completions are done according to plan and notifies engineers or other field leaders of problems, recommended changes, etc. Manages contract crews in well completions.	Bachelor's Degree (Petroleum, Mechanical or related Engineering degree)
	CONSTRUCTION COORDINATOR OR TECHNICIAN Determines needs for construction of well sites or gathering facilities (roads, power supply, water management, right-of-way, pipelines, permits, etc.) and supervises contract crews engaged in those tasks.	High School Diploma/GED; Associate's Degree preferred
	CONTROLLER Overall leader of the finance and accounting function. Responsible for all accounting operations, internal and external reporting, general ledger activities, etc.	Bachelor's Degree in Finance and/or Accounting; Master's in Business preferred
	DERRICKHAND Derrickhands are part of a 3-5 person drilling and/or well servicing rig crew that performs drilling or well servicing activities on crude oil and natural gas wells. Performs all well servicing tasks from an elevated position 30'-40' off the ground on the rig. Responsible for all elevated work associated with rigging.	High School Diploma/GED





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рното	JOB DESCRIPTION	TYPICAL EDUCATION
	DEVELOPMENT ADVISOR Provides guidance and coordination for development efforts (training, career, guidance, recruiting, etc.) for a particular discipline.	Bachelor's Degree
	DIESEL MECHANIC Performs maintenance and repairs on diesel powered equipment.	Associate's Degree
	DIVISION ORDER ANALYST Analyzes lease ownership and prepares division orders dictating how royalty payments are to be disbursed based on ownership. Requests disbursements based on production reports, well expenses and contracts. May work directly with royalty owners to resolve issues.	High School Diploma/GED with experience in land or oil & gas administration; Bachelor's Degree in Business Administration preferred
	DIVISION ORDER COORDINATOR Assists Division Order Analyst with set-up and maintenance of well divisions of interests and well information. Handles owner relations issues.	High School Diploma/GED; Bachelor's Degree preferred
	DRILLING ENGINEER Determines the optimal method for drilling a well and supervises actual drilling of wells by third-party companies.	Bachelor's Degree in Engineering





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рното	JOB DESCRIPTION	TYPICAL EDUCATION
	DRILLING SUPERINTENDENT Ensures that wells are drilled according to plan and notifies engineers or other field leaders of problems, recommended changed, etc. Produces drilling reports. May supervise movement of drilling equipment. Manages contract crews engaged in drilling of crude oil and natural gas wells.	High School Diploma/ GED with experience; Associate's or Bachelor's Degree preferred
	DRILLING TECHNICIAN Assists drilling engineers with technical tasks and data management.	High School Diploma/GED; Associate's Degree preferred
	ELECTRICAL & INSTRUMENTAL TECHNICIAN Installs, maintains and troubleshoots electrical/electronic equipment used in oil and gas production processing and/or transportation.	Associate's Degree
	ELECTRONICS TECHNICIAN Performs testing, troubleshooting, maintenance and repairs on the electronic and electromechanical equipment used to monitor and control mixing, metering, and pumping equipment typically focused on data acquisition and equipment automation functions.	Associate's Degree
	ENGINEERING TECHNICIAN Assists various types of engineers with technical tasks/data management.	Associate's Degree; Bachelor's Degree preferred (Math, Science or related field)





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рното	JOB DESCRIPTION	TYPICAL EDUCATION
	ENVIRONMENTAL, HEALTH, & SAFETY (EHS) ADVISOR Manages an EHS group within a business unit. Develops EHS strategies and programs and advises business unit leadership on EHS issues such as accident prevention, process design, management of hazardous materials, regulatory compliance, etc.	Bachelor's Degree in Safety of Engineering
	ENVIRONMENTAL, HEALTH, & SAFETY (EHS) FIELD COORDINATOR Coordinates EHS activities at the field level, including safety training, inspections, accident prevention, emergency response, contractor safety management, etc.	Bachelor's Degree in Safety or Engineering
	EQUIPMENT OPERATOR: CEMENTING Drives and assembles mobile pumping equipment so that crude oil and natural gas bearing zones can be isolated from other zones for later production. 3-6 person crews, 24-hour call and 40+ hours a week depending on customer need.	High School Diploma/GED and CDL; Company typically provides specific job training
	EQUIPMENT OPERATOR: COILED TUBING Couples with the other services to provide down-hole solutions on problem or high profile wells that require the use of a coiled tubing unit. 5-15 person crews, 24-hour call and 40+ hours a week depending on customer need.	High School Diploma/GED and CDL; Company typically provides specific job training
	EQUIPMENT OPERATOR: FRACTURING AND ACIDIZATION Drives and assembles mobile pumping equipment so that crude oil and natural gas bearing zones can be isolated from other zones for later production. 3-6 person crews, 24-hour call and 40+ hours a week depending on customer need.	High School Diploma/GED and CDL; Company typically provides specific job training





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	EQUIPMENT OPERATOR: LOGGING SERVICES (Both Open and Cased Hole Logging) Provides down-hole data acquisition service to gain as much knowledge for the customer about the well to determine how to best cement, fracture or perforate. Utilizes crane suspended electromechanical devices downhole.	High School Diploma/GED and CDL; Associate's or Bachelor's Degree preferred
	EQUIPMENT OPERATOR: SERVICE TOOLS Provides down-hole services using mechanical devices in conjunction with other service groups; most commonly the pumping service groups. 2-4 person crews, 24-hour call and 40+ hours a week depending on customer need.	High School Diploma/GED and CDL; Company typically provides specific job training
	FACILITIES ENGINEER Designs pipelines, compression and/or gas processing facilities, and supervises contractors engaged in the same type of work.	Bachelor's Degree in Engineering
	FACILITIES OPERATOR Operates natural gas plant or pipeline systems.	High School Diploma/GED; Associate's Degree preferred, and 1 to 3 years related experience of training
	FIELD ENGINEER (Cased Hole) Cased-hole engineers help plan and prepare for well site operations. Responsibilities include applying appropriate procedures for the operation of wireline equipment, tools and techniques related to production logging, perforating and explosive handling.	Associate's Degree





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	FIELD OPERATIONS LEADER Manages an operational segment for a particular field area (production, gathering, pipeline, etc.).	Bachelor's Degree preferred
	FINANCIAL ANALYST Provides financial analysis services such as preparing financial statements, management reports, budgets, analysis, ensuring compliance with internal controls, etc.	Bachelor's Degree in Finance/Accounting
	FLOORHAND Floorhands are part of a 3-5 person workover rig crew that performs services on crude oil and natural gas wells. Assists in rigging up and down, pulling/laying down rods, tubing and casing, etc.	High School Diploma/GED
	FUNDAMENTALS ANALYST Evaluates supply and demand fundamentals and provides recommendations to management regarding short and long-term opportunities that arise out of that analysis.	Bachelor's Degree
	GEOLOGIST Identifies drillable prospects through analysis of geological data (well logs, porosity/permeability studies, core studies, etc.) and evaluates economic viability. May work on entirely new prospects (exploration) or established plays (development).	Bachelor's Degree in Geology; Master's Degree in Geology may be preferred





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	GEOPHYSICIST Evaluates geophysical data (seismic, gravity, magnetic, etc.) in order to identify exploration prospects, or assist with the development of existing plays.	Bachelor's Degree in Geophysics; Master's Degree in Geophysics may be preferred
	GEOSCIENCE TECHNICIAN Assist Geologists, Geophysicists, etc. with various technical tasks, including data loading/database management, mapping, etc.	Associate's Degree
	GOVERNMENT AFFAIRS ANALYST Monitors regulatory developments and advises business on compliance, new developments, etc.	Bachelor's Degree
	HUMAN RESOURCES ADVISOR Provides human resources support (recruiting, staffing, employee development, compensation, etc.) to a particular business unit. Serves as first point of contact for human resources issues for employees within the organizational segment.	Bachelor's Degree
	JIB ACCOUNTANT Performs accounting services relating to joint-interest billing (JIB). Ensures that expenditures are recorded accurately, maintains joint-interest of division interests, allocations and overhead contracts, and verifies that joint-interest owners are properly billed.	Bachelor's Degree in Finance, Accounting, or Business; Master's degree in Finance of Accounting, or Business preferred





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	LAND COORDINATOR Assists Land Negotiators with negotiations and administrative tasks, such as title work, correspondence with landowners, agencies, etc.	Associate's Degree; Bachelor's Degree preferred
	LAND MAPPING TECHNICIAN Produces land maps as needed by Land Negotiators or others. Maintains land databases.	Associate's Degree
	LAND NEGOTIATOR Negotiates with private owners, governmental authorities and/or other companies to obtain oil and gas leases or contracts. Works with landowners on surface issues such as access, construction, etc. Clears title for drilling.	Bachelor's Degree in Business Administration; Law Degree preferred
	LAND SURVEYOR Provides detailed survey of leased land for the development of oil and gas drilling and production sites, creates Plat maps, survey(s) required by governmental agencies, Plot plans, Topo maps, and pipeline and utility surveys.	Four-year ABET-accredited or Board-approved Surveying Degree, or Civil Engineering Degree with Board-approved surveying coursework
	LANDOWNER RELATIONS COORDINATOR Works with local landowners, community or citizen's groups, etc. on issues relating to drilling and production operations.	Bachelor's Degree





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	LEASE ANALYST Sets up new leases upon direction from Land Negotiators. Establishes lease payment schedules and ensures that rental payments are made in a timely manner. Maintains records of well location, contracts, lease expiration dates and operation conditions.	Bachelor's Degree
	LEASE OPERATOR (Well Tender / Pumper) Operates wells and associated production facilities.	High School Diploma/GED
	LEASE RECORDS COORDINATOR Assists Lease Analysts with set-up and maintenance of lease records.	High School Diploma/ GED; Associate's Degree preferred
	LEGAL (ATTORNEY) Provides legal services to the organization on a variety of topics (contract law, mineral law, environmental and disposition, employment, etc.)	Law Degree
	MAINTENANCE OR MECHANICAL TECHNICIAN Installs, maintains and troubleshoots mechanical equipment.	Associate's Degree





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	MUD ENGINEER Mud engineers supply crude oil and natural gas companies and their drillers with carefully 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.	Bachelor's Degree in Engineering
	MWD FIELD ENGINEER (Measurement While Drilling) MWD Engineers and Directional Drillers steer the drill bits, sometimes horizontally, sometimes through multiple reservoirs to maximize the potential of a single well.	Associate's or Bachelor's Degree in Engineering or Applied Science
	NATURAL GAS BALANCING ANALYST Prepares monthly natural gas balancing statements for operated and non-operated wells and distributes statements to working interest owners.	Bachelor's Degree
	NATURAL GAS CONTROLLER / SCHEDULER Nominates, allocates, confirms, and balances gas flow volumes with purchasers, pipeline and well owners. Administers the sales by ensuring the gas flows as nominated. Manages gathering and transportation contracts, ensuring that no penalties are incurred.	Bachelor's Degree in Accounting; CPA may be required
	NATURAL GAS MARKETING REPRESENTATIVE Markets natural gas production through term sales and spot sales to merchants, wholesalers, distribution companies, industrial consumers, co-generators, etc. Identifies and contacts viable purchasers; initiates customer contact and follows up after sales service.	Bachelor's Degree





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	OFFICE SERVICES COORDINATOR Supervises various office functions including mail service, cellular phone service, furniture, space design, pool vehicles, etc.	Associate's Degree
	PETROLEUM ENGINEER Focuses on the exploration for and extraction of hydrocarbons (crude oil and natural gas). Works closely with Geologists to determine where accessible reservoirs of hydrocarbons are located, as well as the best method for safe removal.	Associate's or Bachelor's Degree
	PLANT COORDINATOR First-line supervisor of natural gas plant.	Bachelor's Degree
	PROCUREMENT COORDINATOR Selects and negotiates with vendors to procure (buy) supplies needed for large-scale operations (drilling, production, etc.).	Bachelor's Degree
	PRODUCTION COORDINATOR First-line supervisor of production operations (lease operations).	Associate's Degree





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	PRODUCTION SERVICES REPRESENTATIVE Serves as main point of contact for marketing issues within an assigned business unit. Facilitates communication between marketing, gathering services, and E&P personnel to ensure that natural gas can be marketed as soon as wells come on production and that the value of the natural gas is maximized.	Bachelor's Degree	
	PRODUCTION TECHNICIAN Provides administrative support to a field operation, such as daily production reporting, filing, invoice coding, mail distribution, etc.	High School Diploma/GED; Associate's Degree preferred	
	RECORDS COORDINATOR Assists with maintenance of lease records in a central file room.	High School Diploma/GED	
	REGULATORY ANALYST Obtains federal, state, and local permits needed for drilling, completion, and production processes. Maintains records and reports required to be maintained by various governmental agencies. May advise management of new or existing regulatory issues that effect crude oil and natural gas operations.	Bachelor's Degree	
	RENTAL ANALYST Sets up schedules of lease payment due dates and ensures that all rental payments and obligations are made in a timely manner.	Bachelor's Degree	





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	RESERVOIR ENGINEER Analyzes characteristics of reservoirs to identify and optimize exploration techniques. Develops reservoir estimates and future production schedules.	Bachelor's Degree in Engineering	
	REVENUE ACCOUNTANT Performs accounting services relating to revenue (income) resulting from E&P (Exploration and Production) or gathering business. Ensures 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	
	ROUSTABOUT Performs a variety of relatively unskilled tasks relating to E&P (Exploration and Production) activities, including grounds maintenance, painting, clearing vegetation, etc.	High School Diploma/GED	
	SUPERVISOR - WORKOVER RIGS (Tool Pusher) Supervisors are the lead person of a 3-5 person workover rig crew that performs services on crude oil and natural gas wells. Plans and coordinates job procedures with customers, vendors and other contractors.	High School Diploma/GED; Progressive on-the-job training. Preferred: 2-3 years experience with other rig positions	
	TECHNICAL SERVICES MAINTENANCE COORDINATOR Supervises a group of field technicians.	High School Diploma/GED; Associate's Degree preferred	





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	TRANSACTION ANALYST Ensures that all purchases and sales transactions are entered into the natural gas management and risk management systems accurately and in a timely manner. Manages the confirmation process and trader sign-off sheets.	Bachelor's Degree	
CVFRSIZE LOAD	TRUCK DRIVERS Truck Drivers provide a wide range of services from moving heavy equipment, drilling rigs, service rigs, support equipment, and supplies. Truck types can include straight, tractor trailers, tanker, and vacuum trucks.	High School Diploma/GED and Class "A" CDL (Some jobs will require additional driver endorsements)	
	WATER SYSTEMS ENGINEER Determines optimal strategies and designs for facilities for management of wastewater associated with drilling and E&P (Exploration and Production) operations.	Bachelor's Degree	
	WELDER Provides a large variety of services, from production equipment fabrication and repair to pipeline welding and construction.	Associate's/Technical Degree/Apprenticeship Program; Experience varies from 2-5 years minimum	
	WELDER HELPER Assists welder with a large variety of services from production equipment fabrication and repair to pipeline welding and construction.	Certificate Program/ Apprenticeship Program	

