BLM Direct Hire Authority for Resource Assistant Program

Petroleum Engineering - Occupational Series 881

GSA Project ID: 2017646

Project Title: Petroleum Engineering Resource Assistant Location: BLM Carlsbad Field Office, New Mexico

Related Degree: Engineering or Geology

Project Mentor: Chris Walls

cwalls@blm.gov

Project Description

A suitable intern candidate is needed to help with the daily workload within the Carlsbad Field Office as a petroleum engineer/geologist. The Carlsbad Field Office is currently one of the busiest BLM offices in the Nation for processing oil and gas permits. The Individual would work alongside experienced petroleum engineers within the BLM as well as reviewing projects submitted by the oil and gas industry. The Individual will gain knowledge of BLM databases as well as other software such as Powertools, Petra and ArcMap. This project will also assist in reviewing and approving new unit proposals, monitoring annual unit activity through Plans of Development, generating 1st and last production memos, analyzing commercial well determination requests, analyzing geological data, and terminating Unit Agreements. A portion of this project would include assisting the Carlsbad Field Office with reviewing 20 percent of Operators Bonds per year. As operators acquire new properties, drill more wells or become noncompliant, the bond(s) must be evaluated and potentially modified. The intern will receive training to assist in job goals as well as familiarize them with the overall BLM mission. This project would assist this office by developing efficient methods for reviewing bonds, drainage cases, Unit proposals, plans of development, 1st production memos, and commercial well determinations. These goals would further benefit and refine the reservoir management program by aiding in drainage analysis for federal production on leases and units and in managing leases and Unit Agreements.

Project Expectations

- Work with Petroleum Engineer to understand duties, learn bonding process and local database entry.
- Field visit to a drilling rig with Petroleum Engineer Technician.
- Work with Petroleum Engineer to understand duties, gain experience in Unit Agreement process and local database entry.
- Field visit to a production site with Petroleum Engineer Technician.
- Determine area of interest and gathering at least 30 wells for future drainage determinations with the assistance of a petroleum engineer.
- Develop production declination curves on first 10 wells in area of interest with the assistance of a petroleum engineer.
- Produce graphs for cost analysis/determinations for first 10 wells in area of interest with the assistance of a petroleum engineer.
- Prepare and present a power point presentation and report to management.

BLM Direct Hire Authority for Resource Assistant Program

Petroleum Engineering - Occupational Series 881

GSA Project ID: 2017669

Project Title: Petroleum Engineering Resource Assistant Location: BLM Fluid Minerals Program, Washington Office

Related Degree: BE, Petroleum or Mechanical or Chemical Engineering

Project Mentor: Subijoy Dutta & Steven Wells

sdutta@blm.gov

Project Description

The project will expand the Fluid Minerals Division program due diligence and oversight capacity with the analysis in two areas of field operations – the idle wells inventory of 25+ year-old idle wells in the BLM nationwide program and the nationwide oil and gas bond adequacy review program. The latest statuses and actions pertaining to the Idle Well/Bond Adequacy program reviews will provide a great opportunity for the prospective intern. The project will provide an 11-week training program for one interns based out of Washington DC that will focus on performing the duties of an entry level Petroleum Engineer and work with the operational reports completed in the Automated Fluid Minerals Support System (AFMSS) database of 100,000 onshore wellbores across 46,000 leases. The interns will analyze the reports on idle well reviews and bond adequacy reviews from the field and to ensure that reports comply with guidelines and procedures outlined in the respective information memorandum for these reviews. The Idle Well/Bond Adequacy review includes analysis of the progress from the field. The intern(s) will work with the Fluid Minerals Division Petroleum Engineers as well as the Fluid Minerals Deputy and Division Chief to establish an annual strategy for data integrity and oversight, in addition to closing out the Fiscal Year reports. The intern(s) will complete assigned duties designed to expose them to all aspects of Fluid Mineral Division duties, the operational database system, analysis and critical thinking of the reports, and provide recommendations to senior staff. The intern(s) will work with the field office staff to validate the data, look for trends, concerns, program vulnerability, and identify best practices. The intern(s) may travel to the field for up to two weeks to enhance their understanding of field operations, assist the field staff, and validate the report results from AFMSS. The Washington Office will evaluate the intern(s) success on their qualitative and quantitative ability to perform the duties of an entry level Petroleum Engineer.

Project Expectations

- Identify the broad scope and activity of the BLM's Fluid Minerals Division
- Provide names and locations of the BLM's major oil and gas state and field offices
- Assist with Draft guidance development including research and taking notes during discussions.
- Coordinate concerns and issues with the field offices.
- Assist with compilation of mid-year bond reports received from the state offices.
- Assist with preparing detail list and status of idle wells
- Analyze idle well data for their status and characteristics.
- Isolate Idle well > 25+ years from the list and pursue plugging and abandonment.
- Assist with 3170 3175 implementation guidance pertaining to comments received from the field and in finalization.
- Review/Analyze National Bond Reports from states for trends and validation.
- Assist in selecting 20% NWBs for FY2018 review by the state offices to fluid minerals program.

BLM Direct Hire Authority for Resource Assistant Program

Petroleum Engineering - Occupational Series 881

GSA Project ID: 2017687

Project Title: Petroleum Engineering Resource Assistant

Location: BLM Casper Field Office Related Degree: Engineering

Project Mentor: Amelia Pennington & Frank Sanders

apennington@blm.gov

Project Description

The Casper Field Office is in need of a Petroleum Engineer (PE) student to review the Casper Field Office's backlog of idle wells. Idle well reviews would occur on wells located within the Casper Field Offices. There are about 250 wells that fit these criteria. This task would be completed on a field-by-field basis. There is a need to correct this issue quickly to help facilitate resource protection and so that operators do not abandon wells.

Project Expectations

- Develop an accurate and updated idle well list;
- Update Automated Fluid Mineral Support System (AFMSS) database;
- Assist with idle well inspections;
- Ensure full-field development and utility of idle wells;
- Ensure resource protection through reduced liability;
- Complete well bore integrity reviews;
- Work with operators to verify status;
- Work with managers and PE to determine the actions to take;
- Present findings/recommendations to BLM management on the actions to take;
- Send letters to operators requiring actions;
- Follow-up with operators to check progress; and
- Close out in database.