Idaho Oil and Gas Conservation Commission

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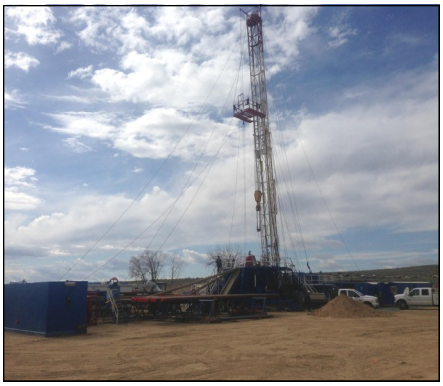
Smith 1-10 Well … A Trendwell West Project



The first modern oil well in Canyon County.

The first modern era oil well in Canyon County was drilled on March 5, 2014 when Trendwell West, Inc. spudded the conductor casing on the 40-acre, Smith 1-10 API # 11-027-20-003. Trendwell used 2D geophysical seismic data and basic geologic principles for the sighting of the pad.

Phil Southwell with Phoenix Operating led the efforts to site and drill the well. A seasoned industry veteran, it was Mr. Southwell's first time drilling in Idaho geology. With guidance from IDL's Oil and Gas Program Manager, along with Southwell's deep experience, a drill plan was developed and the project was ready to proceed when the contract drilling rig arrived.

Based on collected seismic data, the company expected to drill to a total depth (TD) of 5,200 feet before encountering the Columbia River Basalt; however, basalt was found at 4,200 feet below ground surface (bgs). Surface casing to a total depth of 4,200 feet was completed in four days and the next phase of drilling began.

A mud engineer was used to heal up the formation. Once the mud was ready for the casing and cementing of the production pipe, the crew utilized the DV Cementing Tool to allow for a two-stage cement job. Drill operations were completed at the end of March.

Seismic Update

In January, 2014, Dawson Geophysical began a 78 square mile, 3D seismic survey of Payette County. The mixture of urban areas, large farming operations, and small acreage owners requires careful planning to comply with Idaho rules for geophysical exploration.

In February, IDL responded to three complaints. Two complaints were from those under contract for exploration and pertained to the interpretation of IDAPA rules for landowner consent when conducting vibroseis within 200 feet of a structure or water well. A notice was sent to Dawson to remind them of the set back requirement. The third complaint was inconclusive, as there was a lack of evidence when the snow melted.

In March, a land owner reported to IDL that a vibroseis point conducted by Dawson was again within 200 feet of a structure. A subsequent investigation proved the vibroseis was non-compliant. AM Idaho, LLC, the company employing Dawson Geophysical, retained a quality control and compliance company to ensure seismic distance rules were met.

IDL will hold a bond for one year after the completion of seismic survey. This will be held to mitigate the cost of potential damage caused from seismic operations.

RBDMS Update

The Department of Lands is continuing work on with the Ground Water Protection Council (GWPC) to implement a customized version of the Risk Based Data Management System (RBDMS).

RBDMS is a client/server data information management system developed by the GWPC. The application will enable us to effectively manage our Oil & Gas program and integrate with existing IDL enterprise systems.

Testing of the third of six build iterations of the RBDMS software started in March, with an "Iteration 3.1" and "3.2" added to fix issues within that build. The "Iteration 4" build of the software was received in April.

After initial testing of this version, IDL plans to add a round of "User Acceptance Testing" in which non-IT team members (those likely to be using the RBDMS software) will explore and test the software under development. The User Acceptance Testers will provide feedback for developing the final product.

IDL is scheduled to complete testing and implement the core RBDMS software before the end of June 2014. Following this, two subsequent phases of RBDMS implementation that focus on Land and Lease Management, ecommerce, and Field Inspection are planned.

Rulemaking

At the Oil and Gas Conservation Commission meeting in April 2014, the Commission voted to enter negotiated rulemaking in order to improve upon and clarify existing rules.

Negotiated rulemaking public meetings will take place in the **Capitol Building** in **Room West Wing 02** on the following dates and times:

June 6, 2014	8:00 a.m.
June 18, 2014	8:00 a.m.
July 2, 2014	8:00 a.m.
July 22, 2014	8:00 a.m.

Oil and Gas Hearing

On Wednesday, May 28, IDL held a hearing on an application received from AM Idaho to omit federal minerals from the unit. The application was received in November 2013 and resulted from the Bureau of Land Management's inaction in leasing federal minerals within the unit. There are approximately 187 acres of federal minerals within the 640-acre unit, which was designated by the Idaho Oil and Gas Conservation Commission in April 2013. IDL's Brandon Lamb was the hearing officer.

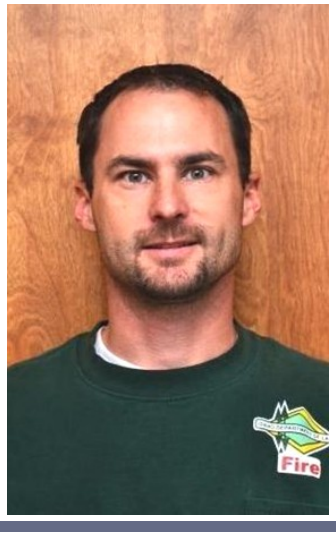
All interested parties have seven business days from receipt of the official transcript to provide closing arguments. Closing arguments likely are expected next week. After that, the hearing officer will complete a recommendation to the Commission's consideration at its July 2014 meeting.

Employee Highlight: Gary Billman

Gary Billman has worked in the Eastern Supervisory Area of the Idaho Department of Lands (Idaho Falls office) in the minerals (leasing and reclamation), navigable waters, oil and gas, and abandoned mines program area for over three years.

Prior to joining IDL, Gary worked as a geotechnical and environmental technician for Materials Testing and Inspection (MTI), Eastern Idaho Division, where he served as lead on numerous projects at the Idaho National Laboratory and assisted with soil laboratory analysis and testing. He is proficient in concrete and grout testing, nuclear densometer use and testing, foundation and pavement designs, and addressing the day-to-day geotechnical issues on job sites.

Since coming to work for IDL in 2011, Gary brought into compliance numerous trespasses, violations, and reclamation plans for the State. He has been directly involved with several large phosphate and molybdenum mines in Southeast Idaho and has closed a number of abandoned mines and an oil & gas well. He earned his B.S. in Geology from Brigham Young University, Idaho in 2006.



IDL Oil & Gas Training Day

IDL staff attended a one-day training in oil and gas drilling and exploration, focusing on drilling processes and protocols for inspecting well heads and sites. Bobby Johnson, IDL Program Manager, provided classroom and field training.

The vibroseis truck used to conduct 3d seismic exploration in Payette County is shown to the right, along with staff who attended the training.

Left to right: Bob Pietras, Dean Johnson, Bobby Johnson, Diane Green, AJ Mondor, Leslie Myer, Nancy Welbaum and Gary Billman.

AM Idaho, LLC

Early spring is not when you would expect to begin a pipeline, but the oil and gas industry are experts when it comes to operating in inclement weather.

Williams Northwest Pipeline (a midstream operator) began construction to attach the long anticipated compression and dehydration plant to the interstate pipeline. This connection includes adding pipeline and saddle taps to allow AM Idaho to transport conditioned gas for sales.

AM Idaho representatives have notified IDL that a pipeline will be in place during 2014.

AM Idaho has completed most of the permitting process and has conducted a final walk of the pipeline route to address potential engineering issues.

Drilling Terms

Every once in a while a word is hear that makes no sense to listener or sounds out of place in the context in which it is used. Living in Idaho, the first thought that comes to mind when we here the word "spud" is a delicious brown skinned baked potato!

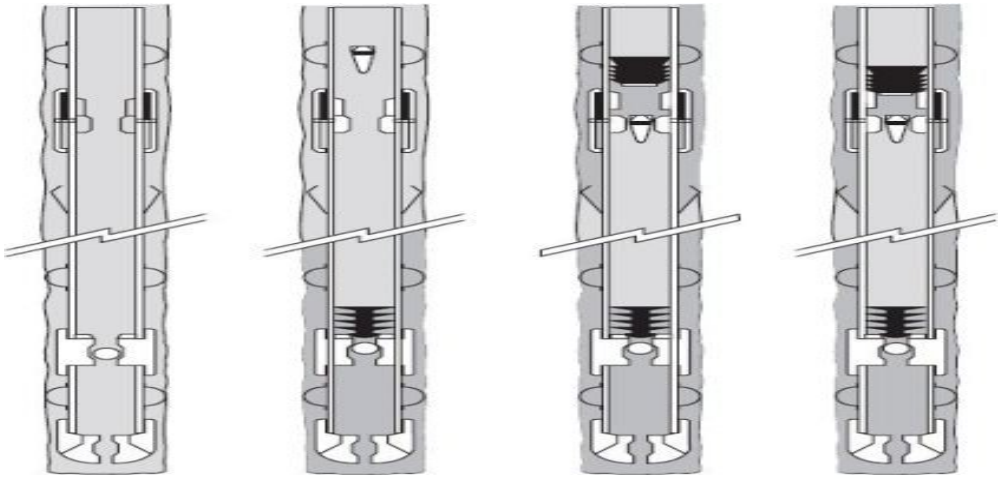
Merriam Webster Dictionary references the term spud to an Middle English term, spudde, meaning a short knife or an instrument used for digging.

In oil and gas drilling operations, the terms "spud", "spudding", or "spudded" refers to the date the driller starts the bore hole, and the *spud date* marks the date on which a well is started. This date is used as measurement for investors, operators, and regulators as a starting point from which you measure how long it takes to drill a well. Investors and operators use information based on the *spud date* to figure cost and investment returns.

Regulators use the information for a time stamp for submittal of vital paperwork related to the well.

If you hear someone from the oil patch report, "We just spudded," you will know that they have just begun drilling.

Tools may be as simple as a hammer or as complex as inflatable packer units. As technologies emerge, tools and techniques may change or improve. Beginning with this issue, we will feature a section dedicated to specialized tools to the oil and gas industry.



Feature: The DV Tool

One of the most important aspects of exploration is the cementing of the annular space between the casing and formation. The cemented annulus protects fresh water zones and segregates certain geologic zones which may be undesirable for exploration.

Depending on the total depth of the well and the weight of the engineered cement, some geologic formation will consume the cement. When cement is consumed, it is likely that a good annular seal with returns to surface will not be achieved. Depending on where the top of cement (toc) is detected, costly remediation may be necessary to comply with Idaho rules. This issue can be addressed through the use of a DV Cementing Tool.

The DV Cementing Tool is designed to work as a staged tool for cementing formation. When starting the permanent casing into the bore hole, a DV Tool is placed along the bottom of the casing string. Then based upon geology and the engineer's design, a DV Tool is placed in the middle of the casing string and deployed by sending a ball down the center of the casing to activate the tool. This causes brass bearings to open and displace cement out of side orifices.

A medium, such as drilling mud, is used to pump the plug to the bottom. When the plug is on the bottom and outside packers between the casing and formation have inflated, the plug deactivates the DV Tool.

A bomb is then dropped into the cradle of the second DV Tool, located vertically in the middle of the casing string. The second DV Tool activates brass bearings to displace the cement. The cement is then placed in the casing and pumped to the bottom with a plug. This plug deactivates the DV Tool, and with proper calculations, cement is at surface.

IDAHO DEPARTMENT OF LANDS

OIL AND GAS PROGRAM

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