

United States Department of the Interior Bureau of Land Management

Decision Record Environmental Assessment

DOI-BLM-UT-CO20-2016-0027-EA

July 2016

Glencove Federal 11-1 Well and Access Roads

Location: Sevier County, Utah

Well Location: **Bottom Hole:** 2061' FNL & 658' FWL, being in Lot 11 (SW/4 NW/4) Section 11, T24S, R2W, SLM
At Surface: 2419' FNL & 314' FWL, being in Lot 11 (SW/4 NW/4) Section 11, T24S, R2W, SLM Sevier County, Utah

Access Road Location: Primary access road is to be an improvement to an existing 2-track road that leaves Sevier County (600 South) road South and West of Glenwood beginning near the NE corner of SE4SE4 Sec 34-T23S-R2W, across private land for about ¼ mile to the lease boundary into the NE4NE4 Section 3-T24S-R2W. A right-of-way will be obtained from the private landowners prior to construction. An encroachment permit will be obtained from Sevier County Road Department for the use of the county road. The northern part (roughly half) of the on-lease well access road will be an improvement to an existing two-track road. The southern part of the on-lease well access will be an improvement to a road built by the Glenwood Irrigation Company in conjunction with the installation of an irrigation water line that runs from a headgate just southwest of the proposed well location to the Water Creek Reservoir.

Applicant/Address: **Wolverine Gas and Oil Company of Utah, LLC.**
5 West Constitution Way, Suite 1130,
Richfield, Utah 84701

Color Country District
Richfield Field Office
150 East 900 North
Richfield, Utah 84701
Phone: 435-896-1500
Fax: 435-896-1550



DECISION RECORD
for the Environmental Assessment of
DOI-BLM-UT-CO20-2016-0027-EA

Glencove Federal 11-1 Well and Access Roads

DECISION

Wolverine has proposed to directionally drill the Glencove Federal 11-1 from the proposed well pad located in the SW/4NW/4 of section 11, T. 24 S., R. 2W., SLM. They also propose to upgrade an existing 2 track dirt county road and to construct a short segment of new road to access the well pad location. The well and the access roads are located on their Federal lease UTU-91058. (See Appendix B, Project Map)

Wolverine has filed an APD for the Glencove Federal 11-1 Well with the BLM and the Utah Division of Oil, Gas and Mining (UDOGM). The APD includes a Surface Use Plan of Operations. These components of Wolverine's application are the basis for the Proposed Action in this EA. The Surface Use Plan of Operations provides specifications for construction of the well pad and access road, well pad layout, and restoration of the well pad and access road. (See Table 1 below)

Table 1. Proposed Surface Disturbance

Action	Well Pad (acres)	Road, Upgrade (acres)	Total Acres
Glencove Federal 11-1	4.22*	7.57*	11.79
Total Disturbance		11.79	

*Includes the pad, spoil piles and cut and fill slopes

The proposed start date for construction of the well pad, and upgrading and construction of the access road is summer of 2016. Construction of the well pad and new access road segment will require approximately 30 days and drilling will require approximately 2-3 weeks. Wolverine's proposed construction, drilling, completion, reclamation, and abandonment procedures for the wells are discussed further in the following sections.

Well Pad:

- **On well pad** –A temporary testing facility may be constructed on this location in the event drilling is successful, consisting of treater/separator, tanks and related components. The facility will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves will be located inside the berm surrounding the tank battery.
- **Off well pad** – It is not possible to know whether an off-well pad production facility will be necessary in the event of a discovery. The Operator will submit this information for approval at such time as production requirements are known.

Access Road:

Primary access road is to be an improvement to an existing 2-track road that leaves Sevier County (600 South) road South and West of Glenwood beginning near the NE corner of SE4SE4 Sec 34-T23S-R2W, across private land for about ¼ mile to the lease boundary into the NE4NE4 Section 3-T24S-R2W. The surface condition of portions of the dirt road will need considerable improvement to be suitable for all-weather oilfield traffic. These improvements will consist of the installation of culverts and water bars for drainage control, low-water crossings, installation of truck turnouts, widening in some places, and surfacing with gravel road base.

The proposed primary access road will require the construction of a driveway ramp off the county road that will be addressed in the county road encroachment permit. The road will have a travel surface of about 12' in width. A secondary access road is planned to make a circle drive from the south end of the drill pad to connect back into the primary road. That road will also provide for emergency egress. See attached drawing sheets (Appendix B) for road location and improvements. See Typical Section sheet for road design.

Road construction, operation and maintenance will be in compliance with the terms and conditions of the Conditions of Approval, the American Association of State Highway and Transportation (AASHTO) safety standards, and will meet criteria for the Manual of Uniform Traffic Control Devices (MUTCD) manual for signs. T Energy dissipating structures and silt fences will be utilized to minimize erosion that may result from the road construction. There is small section of designated OHV route (BLM Route 3540 and BLM Route 3542) on a hillside within the proposed pad area that will need to be temporarily closed during construction and drilling activities. Due to the rocky very steep incline, the small section of designated route that is proposed for closure is currently very unsafe for travel and is not being used. Before construction activities occur, signage advertising closures for sections of BLM Route 3540 and BLM Route 3542 which go through the proposed well pad site will be placed on both routes outside of the project area. Upon completion of rehabilitation activities, the signage will be removed and the designated routes will be open and ready for full use again. This route may be relocated to an adjacent area that would provide a safer route.

All existing county roads and the upgraded lease roads will be maintained and kept in good repair during all phases of operation. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

Location and Type of Water Supply (Rivers, Creeks, Lakes, Ponds and Wells):

The Operator intends to purchase water from the City of Richfield. The volume of water required is minimal due to the closed tank circulation system. The source of water is the city wells. Water will be trucked to the reserve tank onsite from a fire hydrant on the East side of town, as directed by the City of Richfield. Should additional water sources be pursued they will be properly permitted through the State of Utah – Division of Water Rights. The BLM will be notified of any changes in water supply.

Construction Materials:

Natural earth materials used for fill on the well pad will be taken from cuts made in construction of the pad. Imported granular borrow from an approved source will be applied to the surface of

the well pad and access road where deemed necessary. No construction materials will be removed from federal lands.

Methods for Handling Waste Disposal:

The reserve tank will be used for the disposal of waste mud and drill cuttings. All borehole fluids and salts will be contained in the reserve tank. Upon completion of drilling all fluids and solids will be trucked to the Sevier County Landfill for disposal.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.

Wastewater will not be discharged on the surface at this site and the drilling of the well will not require a wastewater management plan. All rubbish and debris will be kept in containers on the well site, and will be hauled to an approved disposal site upon completion of drilling operations and as needed during such operations. There will be no chemical disposal of any type. Self-contained, portable toilets will be used for human waste, and the waste will be disposed at an approved human waste disposal facility. Sanitation will comply with local and state regulations.

Ancillary Facilities:

No ancillary facilities are anticipated at this time.

Well Site Layout:

Pad Location and Layout Drawings in the APD packet show the proposed well site layout including location of the reserve tank and access road onto the pad, turnaround areas, parking areas, living facilities, soil material stockpiles, and the orientation of the rig with respect to the pad and other facilities. Cross section sheets in said packet show cuts and fills required for construction, and their relationship to topography.

The pad and road designs will be consistent with BLM specifications. A pre-construction meeting with responsible company representative and contractors will be conducted at the project site prior to commencement of surface-disturbing activities. The pad and road will be construction-staked (centerline and exterior boundaries) prior to this meeting. All surface disturbing activities will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of approval from the BLM under the APD. All cut and fill slopes will be such that stability can be maintained for the life of the activity. The stockpiled topsoil (first 8 inches or maximum available) will be isolated in a berm by the well pad. Topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination. Water spraying may be implemented if necessary to minimize dust.

Drilling and Completion:

Once the access road and well pad construction are completed, a drill rig will be mobilized to the site and set-up for drilling. Wolverine's drilling program for the well provides specifications on anticipated formations, mud system, potential water and hydrocarbon intervals, casing,

cementing and other standards. Surface and other casings will be set with cement to prevent migration of borehole fluids and contamination of any fresh water aquifers penetrated by the borehole and to isolate potentially productive hydrocarbon zones. The well will be directionally drilled with a combination of various drilling fluids to maintain borehole pressures, and the mud weight will be monitored to ensure proper weighting of the drilling fluid for anticipated borehole pressures. The borehole fluids will contain bentonitic clays, chemical additives, and a weighting material (usually barite), which in essence is a heavy, fluid suspension, that is called a drilling mud. The mud controls borehole fluid migration either from the borehole into the bedrock or from the bedrock into the borehole, and the mud provides a lubricant for drilling. This heavy suspension builds mudcake (or filtrate) on the borehole, and minor quantities of this filtrate may penetrate a minimal distance into the bedrock, depending on the porosity and permeability of the strata. The result of this co-mingling of drilling fluids and groundwater, if present, is unavoidable but does not contaminate the natural water quality in aquifers. Fresh-water, weighted mud, salt-saturated and oil based drilling fluids could be used. The proposed depth of the well is 6,249 feet. Drip pans and all other contingencies and equipment will be in place to handle the mud based drilling fluids. All fluids from the borehole will be run through the closed tank circulation system. Water used for drilling operations will be purchased from Richfield City.

Wolverine's drilling program for the well has been reviewed by the BLM and Utah Division of Oil Gas and Mining (UDOGM) for adequacy of the plan and for conformance with state regulations and statutes. Conditions of Approval (COAs) will be added to the drilling permit as necessary to ensure that the Drilling Program has provisions for protecting water zones, mineral zones, and hydrogen sulfide zones. Diesel fuel will be stored on the well pad for drilling operations. The tank will be surrounded by an earthen berm to contain potential leaks.

Once the well has been drilled to its total depth, evaluation of potential reservoirs will be accomplished through well testing. If the well is determined to be capable of production, completion operations will begin, which could require approximately 30 days. Typically, the drill rig is demobilized, and a smaller work-over rig is used for completion. Testing of a gas reservoir will be accomplished by venting or flaring the produced gas to the flare pit, and testing of oil will require holding produced fluids in tanks on the well pad. In addition, temporary production facilities will include the well head and a dehydrator/separator unit.

All equipment and vehicles will be confined to the access roads and well pad. Fire suppression equipment will be available to suppress any wildfires caused by construction or related activities. In the event of a wildfire, the BLM RFO (435) 896-1500 and the Richfield Interagency Fire Center ((RIFC) will be notified (435) 896-8404.

Production:

If the well is productive, the Operator will submit this information for approval at such time as production requirements are known.

Maintenance Operations:

No maintenance operations are anticipated at this time.

Plans for Reclamation of the Surface:

Edges of the access road and stockpiled topsoil will be seeded the first fall.

Interim Reclamation:

In the event production is achieved the Operator will perform interim reclamation of the site. Interim reclamation will consist of reclamation of that portion of the well pad not needed for ongoing operations or potential additional wells that could be located on this pad. All portions of the pad no longer necessary for well workover, testing or treating will be contoured to match the surrounding terrain to the best extent practicable. Stockpiled topsoil will be evenly distributed thereon, scarified and seeded as per BLM conditions of approval.

Final Reclamation:

In the event the well is a dry hole, or at such time that all production ceases and the well has been plugged and abandoned, the Operator will perform final reclamation of the site. Final reclamation will consist of reclamation of the entire well pad and the new-construction portion of the lease road as it crosses BLM land.

Any accumulation of hydrocarbons in the reserve tanks will be removed and recovered for sale unless it is determined by the authorized officer to be waste oil. All waste oil will be disposed of properly at approved facilities. Road base material used in the construction of the lease road and pad will be removed from the site and disposed in a proper manner. The new construction portion of the access road will be contoured using an excavator or similar equipment, rather than simply ripping the surface.

Subsoil from the portions of the well pad that are fill will be moved onto the cut areas in order to reestablish the original slope to the best extent possible. Topsoil from the stockpile will then be evenly distributed over the entire impacted area, including the new-construction portion of the access road. The entire impacted area will be scarified and seeded in late fall, using the seed mix and methods described in BLM conditions of approval. Final reclamation will take place within 180 days after plugging date of the last well on site, depending on weather, season and other extenuating circumstances.

During the life of the project and until the site is released from liability for reclamation, the project will be inspected at least annually for noxious weeds. If invasive noxious weeds are found, the weeds will be treated to eliminate further reproduction, and treatment shall continue until the weeds have been eradicated. If noxious weeds are found, the BLM will be notified of their occurrence.

My decision is to approve Wolverine's Application for Permit to Drill for the Glencove Federal 11-1 exploration well and access road. The Conditions of Approval (Appendix C of the EA) are also considered part of this decision.

Authorities: The authorization to provide access necessary to accommodate the proposed Glencove Federal 11-1 Well and to directional drill within Federal lease UTU-91058 on public land will be consistent with Bureau policy, and other Federal, state and local laws, regulations and plans. These authorities are identified in the EA section 1.6.

Compliance and Monitoring: Extensive compliance and monitoring will be completed in accordance with applicable regulations during the construction, drilling, maintenance, and reclamation activities for the APD. Extensive Conditions of Approval were developed for these particular project phases (See Appendix C of the EA).

Terms / Conditions / Stipulations: The APD has specific terms, conditions, and stipulations that will be signed subject to this decision. Additionally, extensive Conditions of Approval were developed for the project phases (See Appendix C of the EA).

PLAN CONFORMANCE AND CONSISTENCY:

This action is subject to the Richfield Field Office (RFO) Resource Management Plan (RMP), approved on October 31, 2008, and does not conflict with any of the existing land use goals, objectives or decisions in the RMP, or significantly change or alter the way the affected public lands are presently managed, or will be managed by the BLM in the future. The proposal, although not specifically addressed, clearly is consistent with the RMP Decisions and Goals and Objectives (see section 1.5 of the EA). Therefore, this action is in conformance with the RFO RMP approved in October 2008.

Alternatives Considered:

The Environmental Assessment considered two alternatives, the proposed action, and a no action alternative. Approving the proposed action will authorize drilling the exploratory oil well and access road.

Under the No Action Alternative the BLM would deny the APD. Thus, under the No Action alternative, any impacts identified under the proposed action would not occur within the described public land. The no action alternative would not meet the need for the proposed actions and would deny Wolverine the right to explore for fluid mineral where they currently hold a federal lease.

Rationale for the Decision

The decision to approve the Proposed Action is made because no significant issues are identified in the EA. Most of the potential environmental impacts have been avoided or mitigated with measures outlined in the EA and as described in Appendix C.

Approval of the Proposed Action will allow the lessee to execute the rights granted with the federal oil and gas lease, which includes the right to explore and develop the leasehold to produce commercial quantities of oil and gas. This decision does not modify any lease terms or stipulations attached to the subject Federal lease UTU-91058.

The Proposed Action was posted on the BLM Eplanning website on May 3, 2016. No comments were received by the BLM. The Finding of No Significant Impact (FONSI) has been issued, and the project will not require an Environmental Impact Statement.

The action is consistent with the National Environmental Policy Act of 1969 which requires Federal agencies to initiate and use ecological information to analyze actions on public lands. The action is also consistent with Bureau policies and other Federal, State, and local laws, regulations, and plans. The Proposed Action is in conformance with the RFO RMP, approved in October 2008.

Protest/Appeal Language:

This decision is effective upon the date it is signed by the authorized officer. Under BLM regulation, this decision is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, Utah State Office, P.O. Box 45155, Salt Lake City, Utah, 84145-0155, within 20 business days of the date this Decision is received or considered to have been received.

If you wish to file a petition for stay, the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

1. the relative harm to the parties if the stay is granted or denied,
2. the likelihood of the appellant's success on the merits,
3. the likelihood of irreparable harm to the appellant or resources if the stay is not granted, and
4. whether the public interest favors granting the stay.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals as provided in 43 CFR 3165.4 and 43 CFR part 4.



Wayne A. Wetzel
Field Office Manager
Richfield Field Office



Date