

**USDA Forest Service
FINAL DECISION NOTICE AND
FINDING OF NO SIGNIFICANT IMPACT
for the
Stephens Production Company Gas Well 1-15H
ARES# 54692**

Ozark-St. Francis National Forest
Mt. Magazine Ranger District
Logan County, Arkansas

INTRODUCTION

An Environmental Assessment (EA) evaluating a no action alternative and an action alternative for the construction of Stephens Production Company 1-15H Gas Well has been completed by the U.S. Forest Service in cooperation with the Bureau of Land Management. The purpose of this action is to respond to an APD on the federal mineral estate lease submitted by Stephens Production Company. The APD proposes construction of a gas well, drill pad, reserve pit, access road, and gathering lines. In addition, Stephens Production Company seeks to operate and maintain these facilities if the well is productive.

The proposed activities are located in Section 15 of T6N, R25W of the Mt. Magazine Ranger District. This site is located approximately 2.0 miles west along Green Bench Road from State Highway 309 in Logan County, Arkansas.

DECISION

Based on the analysis discussed in the EA, I have selected Alternative 1 (the proposed action). Alternative 1 is the proposal submitted by Stephens Production Company in their APD for USA-1-15H Gas Well.

Stephens Production Company is proposing to construct a gas well on National Forest land on an existing federal lease known as ARES# 54692. Preparation for this drilling activity would include roadwork to access the well, construction of drill pad, and construction of a reserve pit. If the well produces, production facilities would be installed on that drill pad and a gathering line would be installed from the production facilities to Green Bench Road. Production equipment to be installed on the drill pad would consist of, but not be limited to, a wellhead, a separator unit, a meter shed, a produced water tank, and if needed, a compressor and/or dehydrator.

Maintenance of the location (including the access road, well pad, and gathering lines) would be required during the life of the well; mechanical (mowing), glyphosate herbicide, or both may be used to achieve this. Glyphosate herbicide would be applied using ground-based methods such

as hand application using gloves, or spray using a backpack containing the herbicide attached to a flexible sprayer, wand or other hand application device that directs the chemical onto the target Non Native Invasive Species (NNIS), weed, or unwanted woody vegetation. Any portion of the drill pad not used for the production site and defensible space would be reclaimed for use by the Forest Service. Upon depletion of reserves or abandonment of the well, the production facilities would be removed from the site and the entire area reclaimed as specified by the Forest Service.

If drilling results in a dry hole, the well casing would be plugged with cement below the ground surface in a manner approved by the Arkansas Oil and Gas Commission and the BLM and a location marker installed. The cleared area and the reserve pit would then be reclaimed as specified by the Forest Service.

Proposals for the well are as follows:

Activity	Amount
<i>Drill Pad and Reserve Pit Construction</i> <i>(includes clearing limits)</i>	Approximately 3.88 acres
<i>Temporary Water Line Installation</i>	Approximately 1.56 miles of 3-inch plastic water line would be placed on the surface in the right of way along Green Bench Road.
<i>Gathering Line Construction*</i> <i>(20-foot right-of-way along Green Bench Road)</i>	Approximately 3,483 feet (1.60 acres)
<i>Road Construction</i> <i>(30-foot right-of-way)</i>	Approximately 647 feet (0.45 acre)
<i>Road Maintenance/Improvements</i> <i>(Green Bench Road)</i>	Cutting and pouring new cement at one creek crossing on the east side of Section 15 T6N, R25W.

**Gathering line would be buried approximately 20 feet from the centerline of the road on the back slope of the ditch in the road right-of-way.*

Drill Pad and Reserve Pit Construction

Approximately 3.88 acres would be cleared in the construction of a drill pad and a reserve pit. This includes an approximate 25-foot clearing limit around the pad and pit. Existing trees would

be marked and sold to Stephens Production Company. Stephens Production Company would remove the merchantable timber from the Forest.

Whether a producing well or a non-producing well, upon completion of the drilling activities, samples of the cuttings and fluids remaining in the reserve pit would be analyzed by a licensed laboratory for its chemical and metal content. Based upon test results, mitigation may be required prior to closing. Mitigation may include, but not be limited to hauling the remaining fluids and cuttings to authorized disposal facilities.

Temporary Water Line Installation

The source of water required for drilling the proposed well would be obtained from an off-site private pond. Water used for the drilling operation would be piped through temporary water lines placed on the south side of Green Bench Road. The pipe would be a three-inch plastic water line on top of the surface. Daily water usage would be from an 8,400 gallon minimum to a 16,800 gallon maximum. Portions of the temporary waterline that are off the lease would be covered under a special use permit.

Gas Pipeline Gathering Line Construction

Approximately 3,483 feet of gathering line would be constructed. This gathering line would be installed with machinery such as a track hoe in the road right-of-way approximately 20 feet from the centerline of the road on the upslope side of the ditch. The gas pipeline would be buried to a minimum depth of 36 inches unless in solid rock, in which case the cover would be 18 inches with 6 inches of bedding under the pipe. The size of the pipe would be determined after the well is drilled and the production volumes have been analyzed.

Access Road Construction

Approximately 647 feet of access road would be constructed for Stephens Production Company USA #1-15H. This road would not be added to the Forest Service road inventory. This access road would be gated approximately 100 feet from the junction with Green Bench Road to allow for safe entry and exit of the access road.

Road Maintenance/Improvements

Improvements to Green Bench Road would be done by cutting and pouring new cement at the creek crossing on the east side of Section 15 T6N, R25W. Safety signs would be required along roads and trails as directed by the Forest Service.

PROJECT DESIGN CRITERIA

For this alternative, all applicable design criteria or standards in the Revised Ozark-St. Francis Land and Resources Management Plan would be applied to reduce potential effects.

Below are specific criteria for this project.

- 1) Machinery noise that has the potential to disturb wildlife, livestock, and private landowners or neighbors would be controlled to reduce sound levels. Suitable mufflers would be installed on all internal combustion engines and certain compressor components. Engineered sound barriers or sound-insulated buildings may be required to meet Federal Energy Regulatory Commission (FERC) standards for sound levels.
- 2) The current specified environmental paint color “shale green” that allows facilities to blend in with the natural landscape background would be required for permanent and semi-permanent equipment. This would enable the facilities to blend in as seen from a viewing distance and locations typically used by the public. The paint color and specifications are listed on the Bureau of Land Management (BLM) Standard Environmental Colors Chart CC-001: June 2008.
- 3) Individual or combinations of erosion control features including straw bales, silt fences, rock filters, and sediment basins would be placed at the ends of all drainage ditches constructed around the project area and at the toe of fill slopes to filter any sediment that might be contained in the runoff.
- 4) A minimum depth of six inches of loose depth gravel would be spread on the access road. All of the driving surface will be armored and anything not armored will be vegetated.
- 5) Three culverts would be placed on the access road as directed by a Forest Representative. One culvert would be placed on Green Bench Road with the intersection of the access road.
- 6) Stephens Production Company would be required to follow the road maintenance agreement or obtain appropriate road permits for use of Forest Service roads.
- 7) Clearing and soil disturbance would be held to the minimum area needed. All fill material, boulders, and debris would be retained in the flagged drill site boundary and would be placed as directed by a Forest Representative. Topsoil would be stockpiled at points designated by the Forest Representative.
- 8) Drill pads would be constructed in successive lifts no greater than eight-inch layers each compacted uniformly until visual displacement ceases, including the fill slope. The fill slope would not exceed a ratio of 3:1.

- 9) During site preparation and drilling preparations; trash, garbage, paper, cans or other debris would be contained at all times in an approved receptacle and disposed as needed at an approved sanitary landfill.
- 10) During all construction and drilling operations, a restroom facility would be located on site.
- 11) Site rehabilitation of the drill pad sites would begin as soon as drilling operations are complete and the weather permits. The operator would be required to rip compacted sites to a minimum depth of 12" and spread the stockpiled topsoil uniformly over the site. The Forest Service would specify the species of grasses, shrubs and/or trees to be planted. Restoration would be considered satisfactory when a summer survival of desired grasses provide at least an average 80% cover evenly distributed over the site outside the areas used for production equipment and roadway. Tree and shrub planting would be considered successful when there is at least 80% survival, evenly distributed over the area, one year after planting.
- 12) When Stephens Production Company no longer needs the drill sites, revegetation work would be repeated until the sites are satisfactorily revegetated and approved in writing by a Forest Service Representative.
- 13) There would be only one reserve pit per well site.
- 14) The walls of the reserve pits would be less than ten feet in height above the natural surface, measured from the outside of the pit. There would be at least a 3:1 slope on the interior wall and a 2:1 slope on the exterior wall. The wall material would be placed and compacted in approximately 6-8" lifts. The pits would be built so that no surface runoff from outside the wall of the pit enters the pit.
- 15) The Forest Service would require the interior of the reserve pits to be lined with a material that meets a hydraulic conductivity standard of 10^{-7} .
- 16) Water would not be allowed to fill the reserve pits any higher than within two vertical feet of the lowest point of the wall.
- 17) Drill cuttings and/or drilling fluids in the reserve pits would be hauled to an approved disposal site off National Forest land.
- 18) Stephens Production Company would be responsible for monitoring the water quality in the reserve pits. Stephens Production Company would insure that water and sediment samples are both collected and analyzed by a laboratory approved by the Forest Service. A letter

from the Ozark-St. Francis National Forest Supervisor (July 10, 2008) to the District Rangers and Staff outlines the pit sampling requirements for gas well activities.

- 19) Merchantable timber would be purchased and disposed of off Forest.
- 20) Except for those areas needed for access and/or production, areas where soil has been disturbed would be reseeded. The seeding includes cut-and-fill slopes, ditches (wing, lead-off, etc.), shoulders, and any other exposed areas created by the project. Seeding specifications would be provided by the Forest Service.
- 21) Stephens Production Company would post signs along Green Bench Road (FDR 1605) to notify road users of activity in the area. Particular attention would be paid to posting signs where the Mt. Magazine Hiking Trail crosses Green Bench Road. Specifications, placement, and spacing of the signs would conform to the Manual on Uniform Traffic Control Devices for Streets and Highways (2009 Edition including Revision 1 dated May 2012 and Revision 2 dated May 2012, U.S. Department of Transportation Federal Highway Administration).
- 22) Under Section 404 of the Clean Water Act, anyone who proposes an activity that would discharge dredged or fill material into waters of the United States is required to apply for a permit from the U.S. Corps of Engineers. It would be Stephens Production Company's responsibility to obtain this permit from the U.S. Corps of Engineers.
- 23) Heritage resource sites that are determined eligible for the National Register of Historic Places and sites that have undetermined eligibility would be protected from any ground-disturbing activities associated with this project. If additional heritage resource sites are found during implementation of this project, they would be examined and necessary mitigation measures prescribed by the Forest Archaeologist would be implemented.
- 24) A review of listings and locations of all known occurrences of proposed, endangered, threatened, or sensitive species (PETS) has been conducted. In addition, field surveys have been made on all stands to be impacted by each of the action alternatives. No critical or essential habitat for any PETS species was identified in the project area. If any additional PETS species are discovered prior to or during implementation, the project would be halted and a new biological evaluation would be made to determine the effects on the species and its habitat.

REASONS FOR THE DECISION

I have chosen Alternative 1, the proposed action, because it can be implemented in a safe and environmentally sound manner. Alternative 1 adequately provides for the protection of visual, cultural, soil, water, and other resources while implementing the project requested by the proponent.

Additionally, the United States of America owns the mineral rights to this area. These minerals are under an Oil and Gas Lease, Serial Number ARES-54692, issued to Chesapeake Exploration of Oklahoma City, Oklahoma with an effective date of lease of June 1, 2007. On September 2, 2011, Chesapeake Limited Exploration assigned 100% of this lease, ARES-54692 to Stephens Production Company.

This proposed action is needed because the lease grants Stephens Production Company the right to drill for, extract and sell the federal minerals located within the lease area. The Forest Service is the surface management agency responsible for approval of surface disturbing activities on National Forest Lands. The Bureau of Land Management works cooperatively with the Forest Service and is responsible for approving the drilling plan or “downhole” operations for federal minerals.

This action would help the nation’s oil and gas industry meet the U.S. annual demand of 22 trillion cubic feet per year of natural gas (Energy Information Administration 2006) and would comply with the Energy Policy Act. Estimated demand is 27 trillion cubic feet per year by the year 2030.

This action responds to the USDA Forest Service Strategic Plan for Fiscal Years 2007-2012 of helping meet energy resource needs (Land and Resource Management Plan, p. 1-6). It also helps to achieve:

- (1) the Land and Resource Management Plan (LRMP) desired condition of administering minerals and energy developments to facilitate production of mineral and energy resources as well as to minimize adverse impacts to surface and groundwater resources and protect or enhance ecosystem health (LRMP, 1-48), and
- (2) the LRMP priority of encouraging and facilitating the orderly exploration, development, and production of mineral and energy resources in order to promote self-sufficiency in those mineral and energy resources necessary for economic growth and national defense (LRMP, 2-29).

OTHER ALTERNATIVES CONSIDERED

One other alternative was analyzed and considered in detail; Alternative 2-The **No Action** Alternative. Under the no action alternative, the Surface Use and Operations Plan for Stephens Production Company USA # 1-15H would be denied for specific reasons. Stephens Production Company would not be allowed to construct this well and access to the area would be denied. The lessee would be denied the right to access the mineral rights they legally hold under the lease. This alternative was not selected because it does not satisfy the primary purpose and need for the proposed action.

SCOPING AND PUBLIC INVOLVEMENT

Scoping for this project began with the mailing of the proposed action to adjacent landowners and interested citizens on April 12, 2013. This list included letters to eight Native American Tribes and the Arkansas Game and Fish Commission. The scoping package contained a description of the proposed action, a map depicting the proposed action, and a comment form. Thirty-four letters were mailed.

A legal notice requesting comments during the legal comment period was published on April 15, 2013 in the Times Record, a newspaper of daily circulation out of Fort Smith, Arkansas.

A copy of the proposed action letter was posted that same week on the Ozark-St. Francis National Forests website at <http://www.fs.usda.gov/Internet/FSEDocuments/stelprdb5416382.pdf>. Three timely public responses were received from this scoping effort and are shown in Appendix A of the EA.

An interdisciplinary (ID) team of Forest Service individuals whose knowledge and expertise is critical to the management of this area (refer to Chapter IV.) also received this scoping.

On November 20, 2013, a legal notice declaring the availability of the draft environmental assessment for 30 day notice and comment was published in the Times Record. The draft EA was published to the Forest's public website, and notification letters with copies of the draft EA were mailed to interested parties who had commented previously during the scoping period. Three responses were received and addressed in the Final EA in Appendix F which is part of the project record.

This project was subject to the pre-decisional objection process pursuant to 36 CFR 218 Subparts A and B. A Final EA and draft decision notice and Finding of No Significant Impact (FONSI) were prepared and a legal notice announcing the 45-day objection period was published in the Times Record on February 3, 2014. Copies of the Final EA, draft DN and FONSI, were mailed to 3 people who commented during the 30-day notice and comment period.

One objection was received March 11, 2014, from Mr. Ross Noland, on behalf of the Ozark Society. An administrative review of the project was conducted under 36 CFR 218.11 Subpart B in which the objector provided a narrative description of the project, specific issues related to the project, and suggested remedies that would resolve the objection (36 CFR 218.8(d)(5)). An offer to attend an Objection Resolution Meeting was extended to the objector on Monday April 14, 2014. On the same telephone call, the offer was declined by Mr. Noland. This offer followed 36 CFR 218.11 Subpart A.

All objection points submitted were evaluated by the Acting Forest Supervisor, Jeffrey Vail. It was found that several points were already under litigation in the consolidated *Ouachita Watch League v. Judith L. Henry* (Case No. 4:11-cv-00425 KGB) and *Ozark Society v. The United States Forest Service* (Case No. 4:11-cv-00782 KGB). These questions have already been elevated to the judicial level and cannot be resolved at the objection level. Other objections were evaluated and were not found to be valid.

The Acting Forest Supervisor concluded that the Deputy District Ranger may make the decision (36 CFR 218.12 (a) and (b)) and implement the project immediately following the decision.

FINDING OF NO SIGNIFICANT IMPACT

It is my determination that the actions associated with the proposed action under Alternative 1 of the Stephens Production Company 1-15H Gas Well Project EA are not major federal actions, individually or cumulatively, and will not significantly affect the quality of the human environment. Therefore, an Environmental Impact Statement is not needed. This finding includes consideration of the following factors concerning the context and intensity of the expected impacts of the alternative.

CONTEXT

The physical and biological effects of this action vary according to the resource analyzed. These impacts are primarily limited to the immediate areas impacted by the gas well construction activities planned on the Mt. Magazine Ranger District. Both beneficial and adverse impacts of this project have been considered and these activities will not cause a significant effect to the quality of the human environment (EA, pp. 13-42).

INTENSITY AND SEVERITY

- 1) Both beneficial and adverse impacts of this project have been considered and these activities will not cause a significant effect on the quality of the human environment, because design criteria and mitigating measures identified in the EA (pp. 11-13) will be implemented to avoid and/or minimize environmental effects. The physical and biological effects are limited to the immediate project area and access road. Based on the discussions in the EA, there are no known significant irreversible resource commitments or irretrievable loss of timber

production, diversity, wildlife habitat, soil production, water quality, aquatic habitat, old growth habitat, or recreational opportunities (EA, pp. 13-42).

- 2) There would be no major effect on public health or safety. Risks to human health and safety include the physical risks associated with general construction practices, heavy equipment, or other associated hazards. Implementation of Project Design Criteria #10 and #11 would insure sanitary conditions are being met at the drill sites (EA, pp 11-13).
- 3) No unique characteristics of the geographic area (historic or cultural resources, wetlands, floodplains, and ecologically critical areas, etc.) will be significantly affected. No perennial or intermittent riparian protection zones will be impacted on National Forest lands. The construction areas have been surveyed for cultural resources and the closest known archaeological site is ¼ mile away from the project area and should not be disturbed by construction activities (EA, pp. 32-33).
- 4) The effects on the quality of the human environment are not likely to be highly controversial. Disclosure of environmental impacts is based upon widely accepted principles resulting from sound scientific research (EA, pp. 13-42).
- 5) The project does not involve highly uncertain, unique, or unknown environmental risks. The construction methods and herbicides to be used have a known history; subsequent results are predictable (EA, pp. 13-42).
- 6) The proposed action would not establish a precedent influencing approval of future actions with significant effects nor does it represent a decision in principle about a future consideration. The scope of this decision is limited to the area of construction resulting in approximately 5.93 acres of initial ground disturbance on National Forest lands (EA, pp. 5-10).
- 7) There would be no cumulatively significant impacts on the environment. The cumulative effects of the proposed action have been analyzed with consideration of other similar activities on adjacent lands, in past actions, and in foreseeably future actions (EA, pp. 13-42).
- 8) The actions would not affect any sites listed, or eligible for listing in the National Register of Historic Places nor will they cause loss or destruction of significant scientific, cultural, or historic resources (EA, pp. 32-33).
- 9) The proposed action would not adversely affect any endangered or threatened species or its critical habitat. A Biological Evaluation (BE) has been completed for this action (EA, pp. 37-38, BE).

10) The proposed action does not threaten a violation of any Federal, State, or local laws or requirements imposed for the protection of the environment (EA, pp. 13-42).

FINDINGS REQUIRED BY OTHER LAWS

Forest Plan Consistency

The actions of the project are consistent with the Ozark-St. Francis National Forests LRMP goals and objectives (Revised-2005). All of the actions associated with this project occur in the General Forest Area (Management Area 3.C-Mixed Forest lands). All of the planned actions associated with this project are consistent with the management prescriptions and management practices for this Management Area. The actions are also consistent with the LRMP because mitigation measures for impacts shall be fully applied in implementation. The project is feasible and reasonable and protects the environment while producing goods and services.

PRE-DECISIONAL ADMINISTRATIVE REVIEW

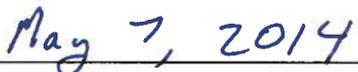
This project was subject to the Project-Level Pre-decisional Administrative Review Process (“**Objection**” Process) pursuant to 36 CFR 218 Subparts A and B. The objection period closed March 20, 2014.

PROJECT IMPLEMENTATION

This decision may be implemented immediately.



ROB KOPACK
Deputy District Ranger



Date