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U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment

DOI-BLM-UT-G010-2014–0168–EA

QEP Energy Company's pad expansions and pipeline reroutes for the RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR

PREPARING OFFICE

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Prepared by
U.S. Department of the Interior
Bureau of Land Management

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Table of Contents

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List of Tables

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Finding of No Significant Impact

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts DOI-BLM-UT-G010-2014–0168–EA, I have determined that the proposed action will not have any significant impacts on the environment, and an environmental impact statement is not required.

Signatures:

Recommended by: 7/22/14

Kevin Sadlier [Date]
Natural Resource Specialist

Approved by: JUL 22 2014

Authorized Officer [Date]
AFM for Minerals

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Decision Record - Memorandum

Selected Action:

It is my decision to approve QEP Energy Company's proposal to expand the pads and reroute or bury the pipelines for the RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR in Sections 13, 14, 21, 23, 26, 27, , T. 7 S., R 22 E., and 25, 29, T. 7 S., R. 23 E., Uintah County, Utah. The project area is located approximately 28 miles south of Vernal, Utah. All of the locations were previously permitted. QEP Energy Company has decided to enlarge the size of the well pads to accommodate a larger drilling rig. The pipeline would become buried instead of surface and the construction width would change from 30 feet to 50 feet. 32.82 acres of disturbance are associated with this project with the construction of the well pad and the buried pipelines. Road construction for all of these projects have already been approved on the original APDs. 22,520 feet of pipeline would be buried. Additionally all of the power lines for this project were approved with the original APD. Power lines will be constructed as described in the proposed action alternative of the original NEPA documents. The original NEPA document numbers are DOI-BLM-UT-G010-2013–0185–EA, DOI-BLM-UT-G010-2013–0244–EA, and DOI-BLM-UT-G010-2014–0013–EA. This decision is subject to the below conditions of approval.

Conditions of Approval:

This decision is contingent on meeting all stipulations and monitoring requirements listed below, which were designed to minimize and/or avoid impacts.

- All internal combustion equipment will be kept in good working order.
- Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Drill rigs will be equipped with Tier II or better diesel engines.
- Low bleed pneumatics will be installed on separator dump valves and other controllers. The use of low bleed pneumatics will result in a lower emission of VOCs.
- During completion, flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- Well site telemetry will be utilized as feasible for production operations.
- If historic or archaeological materials are uncovered during construction, the Operator will immediately stop work that might further disturb such materials and contact the Authorized Officer.
- QEP will educate its contractors and employees about the relevant federal regulations intended to protect paleontological and cultural resources. All vehicular traffic, personnel movement, construction, and restoration activities will be confined to areas cleared by the site inventory and to existing roads. If any potential paleontological or cultural resources are uncovered

during construction, work will stop immediately in the area and the appropriate BLM AO will be notified.

- QEP will follow REA standards for raptor protection on all power lines.
- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.

QEP has agreed not to construct or drill during the dates in Table 1 Raptor Timing Restrictions, unless otherwise determined by the BLM authorized officer. QEP has also agreed to follow REA standards for raptor protection on all power lines.

Table 1. Raptor Timing Restrictions

Well Name	Burrowing Owl March 1 to August 1	Golden Eagle January 1 to August 31	Ferruginous Hawk March 1 to August 1	Red Tailed Hawk March 1 to August 15
RW 12–26AGR	No	No	Yes	No
RW 22–27AGR	Yes	No	No	No
RW 24–13AGR	No	Yes	No	Yes
RW 24–14AGR	Yes	Yes	No	No
RW 44–25B	No	No	Yes	No
RW 44–29BGR	No	No	Yes	No
Yes indicates that QEP would not construct, drill, or complete the wells within the dates specified above.				

Rationale:

The subject lands were leased for oil or gas development under authority of the Mineral Leasing Act of 1920, as modified by the Federal Land Policy and Management Act of 1976, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The lessee/operator has the right to explore for oil and gas on the lease as specified in 43 CFR 3103.1-2, and if a discovery is made, to produce oil and/or natural gas for economic gain.

The selected alternative meets the BLM's need to acknowledge and allow development of valid existing leases. The BLM objective to reduce impacts is met by the imposing of mitigation measures to protect other resource values.

Land Use Plan Conformance:

The selected alternative is in conformance with the Vernal Field Office Resource Management Plan and Record of Decision (BLM 2008).

The selected alternative is consistent with *Uintah County General Plan* (published in 2007) that encompasses the location of the proposed wells. In general, the plan indicates support for development proposals such as the selected alternative through the plan's emphasis of multiple-use public land management practices, responsible use and optimum utilization.

There are no comprehensive State of Utah plans for the vicinity of the selected alternative. However, the State of Utah School and Institutional Trust Lands Administration (SITLA) have leased much of the nearby state land for oil and gas production. Because the objectives of SITLA are to produce funding for the state school system, and because production on federal leases could further interest in drilling on state leases in the area, it is assumed that the selected alternative is consistent with the objectives of the State.

Public Involvement:

The proposed project was posted on the Eplanning NEPA Register. No organizations requested more information on the project.

Alternatives Considered:

The EA analyzed the proposed action and no action alternatives. Onsite visits were conducted by Vernal Field Office Personnel. The onsite inspection reports do not indicate that any other locations be proposed for analysis. The no action alternative was not selected because it would not best meet the BLM's need to acknowledge and allow development of valid existing leases.

Appeal or Protest Opportunities:

This decision is effective upon the date it is signed by the authorized officer. The decision is subject to appeal. 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.

Signature:

Authorizing Official:

JUL 22 2014

Authorized Officer — Date

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Chapter 1. Introduction

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1.1. Identifying Information:

This Environmental Assessment (EA) has been prepared to analyze the potential impacts related to proposed pad expansions for the already approved RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR in Sections 13, 14, 21, 23, 26, 27, , T. 7 S., R 22 E., and 25, 29,T. 7 S., R. 23 E., Uintah County, Utah. The project area is located approximately 28 miles south of Vernal, Utah. All of the locations were previously permitted. QEP Energy Company has decided to enlarge the size of the well pads to accommodate a larger drilling rig. The pipeline would become buried instead of surface and the construction width would change from 30 feet to 50 feet. 32.82 acres of disturbance are associated with this project with the construction of the well pad and the buried pipelines. Road construction for all of these projects have already been approved on the original APDs. 22,520 feet of pipeline would be buried. Additionally all of the power lines for this project were approved with the original APD.The original NEPA document numbers are DOI-BLM-UT-G010-2013–0185–EA, DOI-BLM-UT-G010-2013–0244–EA, and DOI-BLM-UT-G010-2014–0013–EA.

The EA is a site-specific analysis of potential impacts that could result from the implementation of the Proposed Action or alternatives to the Proposed Action. The EA assists the Bureau of Land Management (BLM) in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions. ("Significance" is defined by NEPA and is found in regulation 40 CFR 1508.27.) An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) statement. A FONSI statement is a document that briefly presents the reasons why implementation of the selected alternative would not result in "significant" environmental impacts (effects) beyond those already addressed in Vernal Field Office Resource Management Plan (BLM 2008). If the decision maker determines that this project has "significant" impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record (DR) may be signed for the EA approving the alternative selected.

1.1.1. Title, EA number, and type of project:

Title: QEP Energy Company's pad expansions and pipeline reroutes for the RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR

NEPA #: DOI-BLM-UT-G010-2014–0168–EA

Project Type: Environmental Assessment

1.1.2. Location of Proposed Action:

The proposed project area is located in Sections 13, 14, 21, 23, 26, 27, , T. 7 S., R 22 E., and 25, 29,T. 7 S., R. 23 E., Uintah County, Utah. The project area is located approximately 28 miles south of Vernal, Utah.

1.1.3. Name and Location of Preparing Office:

Vernal Field Office

170 South 500 East

Vernal, Ut. 84078

(435) 781–4400

1.1.4. Identify the subject function code, lease, serial, or case file number:

Lease Number: UTU-0558, UTU-0569, UTU-0823, UTU-02025, and UTU-63010O

1.1.5. Applicant Name:

QEP Energy Company

1.2. Purpose and Need for Action:

Private exploration and production from federal oil and gas leases is an integral part of the BLM oil and gas leasing program under authority of the Mineral Leasing Act of 1920, as amended by the Federal Land Policy and Management Act of 1976 and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The operator has a valid existing right to extract mineral resources from their RW Unit subject to the lease's terms and conditions. The BLM oil and gas leasing program encourages development of domestic oil and gas reserves and the reduction of U.S. dependence on foreign energy sources. The BLM's purpose is to allow beneficial use of the applicant's lease in an environmentally sound manner.

1.3. Scoping, Public Involvement and Issues:

The proposed project was posted on the Eplanning NEPA Register. No comments have been received.

Chapter 2. Proposed Action and Alternatives

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2.1. Description of the Proposed Action:

The proposed project would consist of pad expansions for the already approved RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR in Sections 13, 14, 21, 23, 26, 27, , T. 7 S., R 22 E., and 25, 29,T. 7 S., R. 23 E., Uintah County, Utah. QEP is proposing at these locations to enlarge the size of the well pads to accommodate a larger drilling rig. Along with the pad expansions QEP is proposing changes to pipelines. Pipeline changes would result in rerouting pipelines and burying them. Additionally, minor changes to access roads due to pad expansions would be necessary.

The proposed Pad expansions would vary between 1.86 to 5.20 acres of disturbance for each location. These expansions would result in approximately 6.94 acres of new surface disturbance.. Additionally, pipeline route and installation changes for these locations would result in 25.88 acres of new surface disturbance.

There would be 22,520 feet of buried steel pipeline installed for this project on BLM lands. The pipelines would be low pressure, up to 16" O.D. pipeline, wall thickness as required per Code, grade X42/X52 pipeline. The maximum operating pressure for the lines would be 1000 psig.

QEP is proposing a 50' construction access width and a 30' permanent access width.

Table 2.1, "Proposed New Disturbance" (p. 5)

Table 2.1. Proposed New Disturbance

Well Name	New Well Pad Disturbance (acres)	Burried Pipeline (feet)	Buried Pipeline (acres)	Access Road (feet)	Access Road (acres)	Total Acres of New Surface Disturbance (acres)
RW 12–26AGR	0.90	3,739	4.30	Approved in DOI-BLM-UT-G010-2013-0244	Approved in DOI-BLM-UT-G010-2013-0244	**5.20**
RW 22–27AGR	0.92	813	0.94	Approved in DOI-BLM-UT-G010-2014-0013	Approved in DOI-BLM-UT-G010-2014-0013	**1.86**
RW 24–13AGR	0.52	3,582	4.12	Approved in DOI-BLM-UT-G010-2013-0244	Approved in DOI-BLM-UT-G010-2013-0244	**4.64**
RW 24–14AGR	2.06	8,237	9.46	Approved in DOI-BLM-UT-G010-2013-0244	Approved in DOI-BLM-UT-G010-2013-0244	**11.52**
RW 44–25B	0.94	3,502	4.02	Approved in DOI-BLM-UT-G010-2012-0001	Approved in DOI-BLM-UT-G010-2012-0001	**4.96**
RW 44–29BGR	1.60	2,647	3.04	Approved in DOI-BLM-UT-G010-2013-0185	Approved in DOI-BLM-UT-G010-2013-0185	**4.64**
TOTAL	**6.94**	**22,520**	**25.88**	**NA**	**NA**	**32.82**

2.1.1. Access

All of the access roads for this project were approved in previous NEPA documents as listed in

2.1.2. Well Site Layout

QEP is proposing to expand well location which were approved in the original APDs. These pad expansions are to accommodate a larger drilling rig. The proposed Pad expansions would vary between 0.90 to 2.06 acres of disturbance for each location. These expansions would result in approximately 6.94 acres of new surface disturbance.

2.1.3. Surface Facilities

All production facilities would be located on the disturbed portion of the well pad and a minimum of 25 feet from the toe of the back slope or the top of the fill slope. A dike would be constructed around those production facilities that contain fluids (i.e. production tanks, produced water tanks, and/or heater-treater). The dikes would be constructed of compacted subsoil. They would be impervious, hold 110 percent of the capacity of the largest tank, and be independent of the back cut.

All permanent (meaning on site for six months or longer) structures would be painted Covert Green to match the surrounding landscape color unless otherwise authorized. This would include all facilities except those required to comply with Occupational Safety and Health Act (OSHA) regulations.

2.1.4. Pipelines

There would be 22,520 feet of buried steel pipeline installed for this project on BLM lands. The pipelines would be low pressure, up to 16" O.D. pipeline, wall thickness as required per Code, grade X42/X52 pipeline. The maximum operating pressure for the lines would be 1000 psig.

QEP is proposing a 50' construction access width and a 30' permanent access width.

2.1.5. Power Lines

All power lines for this project were approved with the original APDs.

2.1.6. Invasive Plants and Noxious Weeds

Invasive plants and noxious weeds were discussed and approved with the original APD's. Any conditions of approval that were put in place in the original approvals would apply to this project.

2.1.7. Water Supply and Disposal

Water supply and Disposal for this project was approved with the original APD's.

2.1.8. Waste Disposal

Waste disposal for this project was approved with the original APD's.

2.1.9. Reclamation

Reclamation for this project was approved with the original APD's.

2.1.10. Applicant Committed Environmental Protection Measures (ACEPMS)

In addition to ACEPMS in the original APD's QEP and QEPFS also agrees to implement the following measures. NEPA document numbers used to permit original APD's are DOI-BLM-UT-G010-2013–0185–EA, DOI-BLM-UT-G010-2013–0244–EA, and DOI-BLM-UT-G010-2014–0013–EA.

2.1.10.1. Cultural Resources

Archeological surveys were conducted by Montgomery Archaeology Consultants and Aros Archaeology, LLC, Copies of the reports have been submitted directly to the appropriate agencies. Table 2.2, "Archeological Specifications" (p. 7) lists the well names, and associated archeological recommendations. If historic or archaeological materials are uncovered during construction, the Operator is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

Table 2.2. Archeological Specifications

Well Name	SHPO Concurrence Date	Archeological Recommendations
RW 12–26AGR	9/17/2012	No cultural properties eligible for inclusion to the NRHP within the APE.
RW 22–27AGR	9/17/2014	No cultural properties eligible for inclusion to the NRHP within the APE.
RW 24–13AGR	7/28/2014	No cultural resources within the project area.
RW 24–14AGR	7/18/2014	No cultural resources within the project area.
RW 44–25B	7/5/2011	No cultural properties eligible for inclusion to the NRHP within the APE.
RW 44–29BGR	7/17/2014	No cultural resources within the project area.

2.1.10.2. Paleontological Resources

Paleontological surveys have been conducted by Intermountain Paleo Consulting. A copy of this report was submitted to the BLM by Stephen D. Sandau. The surveys resulted in finding of no scientifically important fossil resources. However, if vertebrate fossils are found during construction a paleontologist would be immediately notified, and QEP would provide a

Paleontological monitor if needed. Table 2.3, "Paleontological Specifications" (p. 8) lists the well names, associated project numbers, and paleontological recommendations.

Table 2.3. Paleontological Specifications

Well Name	Paleontological clearance date	Paleontological Recommendations
RW 12–26AGR	6/20/2014	No monitoring required
RW 22–27AGR	6/20/2014	No monitoring required
RW 24–13AGR	6/20/2014	No monitoring required
RW 24–14AGR	6/20/2014	No monitoring required
RW 44–25B	6/20/2014	No monitoring required
RW 44–29BGR	6/20/2014	No monitoring required

2.2. Threatened, Endangered Fish and Wildlife Species

QEP has agreed not to construct or drill during the dates in Table 1, "Raptor Timing Restrictions" (p.), unless otherwise determined by the BLM authorized officer. QEP has also agreed to follow REA standards for raptor protection on all power lines.

Table 2.4. Raptor Timing Restrictions

Well Name	Burrowing Owl March 1 to August 1	Golden Eagle January 1 to August 31	Ferruginous Hawk March 1 to August 1	Red Tailed Hawk March 1 to August 15
RW 12–26AGR	No	No	Yes	No
RW 22–27AGR	Yes	No	No	No
RW 24–13AGR	No	Yes	No	Yes
RW 24–14AGR	Yes	Yes	No	No
RW 44–25B	No	No	Yes	No
RW 44–29BGR	No	No	Yes	No
Yes indicates that QEP would not construct, drill, or complete the wells within the dates specified above.				

2.3. No Action Alternative

Under the No Action Alternative, BLM would not approve the sundry notices for the RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR in Sections 13, 14, 21, 23, 26, 27, , T. 7 S., R 22 E., and 25, 29,T. 7 S., R. 23 E., Uintah County, Utah. QEP would not be allowed to expand the pads and make changes to pipeline routes or access roads on federal land.

The BLM's authority to implement the No Action Alternative may be limited because oil and gas leases allow drilling in the lease area subject to the stipulations of the specific lease agreement. The BLM can deny the sundries if these would violate lease stipulations and applicable laws and/or regulations. The BLM can also impose conditions of approval to prevent undue or unnecessary environmental degradation. If the BLM were to deny the sundries, the applicant could attempt to reverse the BLM's decision through administrative appeals, seek to exchange its lease for leases in other locations, or seek compensation from the federal government. The outcome of these actions is beyond the scope of this EA because they cannot be projected or meaningfully analyzed at this time.

2.4. Alternatives Considered but not Analyzed in Detail

There were no other alternatives identified aside from the Proposed Action and No Action Alternatives that would meet the purpose and need of this project.

2.5. Conformance

The alternatives are in conformance with the Vernal Field Office RMP/ROD (October 31, 2008) and the terms of the lease. The RMP/ROD decision allows leasing of oil and gas while protecting or mitigating other resource values (RMP/ROD p. 97-99). The Minerals and Energy Resources Management Objectives encourage the drilling of oil and gas wells by private industry (RMP/ROD, p. 97). The RMP/ROD decision also allows for processing applications, permits, operating plans, mineral exchanges, and leases on public lands in accordance with policy and guidance and allows for management of public lands to support goals and objectives of other resources programs, respond to public requests for land use authorizations, and acquire administrative and public access where necessary (RMP/ROD p. 86). It has been determined that the proposed action and alternative(s) would not conflict with other decisions throughout the plan. .

2.6. Relationships to Statutes, Regulations, or Other Plans

2.6.1. Federal Laws and Statutes

The subject lands were leased for oil or gas development under authority of the Mineral Leasing Act of 1920, as modified by the Federal Land Policy and Management Act of 1976, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The lessee/operator has the right to explore for oil and gas on the lease as specified in 43 CFR 3103.1-2, and if a discovery is made, to produce oil and/or natural gas for economic gain.

2.6.2. State and Local Laws and Statutes

There are no comprehensive State of Utah plans for the vicinity of the Proposed Action.

The proposed project is consistent with the *Uintah County General Plan,* 2011 (Plan) that encompasses the location of the proposed well. In general, the Plan indicates support for development proposals such as the Proposed Action through the Plan's emphasis on multiple-use public land management practices, responsible use and optimum utilization.

The State of Utah School and Institutional Trust Lands Administration (SITLA) have leased much of the nearby state land for oil and gas production. Because the objectives of SITLA are to produce funding for the state school system, and because production on federal leases could further interest in drilling on state leases in the area, it is assumed that the alternatives analyzed, except the No Action Alternative, are consistent with the objectives of the state.

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Chapter 3. Affected Environment:

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3.1. Invasive Plants/Noxious Weeds, Soils, and Vegetation

3.1.1. Invasive Plants/Noxious Weeds

The invasive species, cheat grass *(Bromus tectorum)*, russian thistle *(Salsola iberica)*, and halogeton *(Halogeton glomeratus)* are present at these locations.

3.1.2. Soils

The soils range from clay loam to sandy clay loam, with a number of rocky outcrops in some locations. Soils in the Project Area tend to be shallow and well drained.

3.1.3. Vegetation

The vegetation in the Project Area consists of fairly short shrubs, grasses and some forbs. Species include Indian ricegrass *(Achnatherum hymenoides)*, Wyoming big sagebrush *(Artemisia tridenta ssp. wyomingensis)*, shadscale (*Atriplex confertifolia*),, Gardner saltbush *(Atriplex gardneri)*, rubber rabbitbrush (*Chrysothamnus nauseosus*), squirreltail *(Elymus elymoides)*, needle and thread grass *(Hesperostipa comata)*, prickly pear cactus sp. (*Opuntia sp.*), galleta grass *(Pleuraphis jamesii)*, black greasewood *(Sarcobatus vermiculatus)*, and scarlet globemallow (*Sphaeralcea coccinea*).

3.2. Livestock Grazing & Rangeland Health Standards

3.2.1. Livestock Grazing

The proposed project is within the Antelope Draw and Split Mountain grazing allotments. Split Mountain Allotment is a winter cattle and sheep allotment permitted for 1942 Animal Unit Months (AUMs) from October 1 to May 15. Antelope Draw is a winter sheep allotment permitted for 3679 AUMs from 10/01 – 05/10. The three permitted operator's livestock numbers, in recent years, have been reduced by the BLM due to drought and decrease in available forage. Under the proposed action, 32.82 acres would be taken out of forage production. This would result in a loss of 1.8 AUMs . This may seem a small portion but the Antelope Draw and Split Mountain allotment is being heavily impacted by oil and gas production as a whole.

Construction and rerouting of existing roads, oil pad expansions, pipelines and new road construction to the proposed sites both reduces and affects livestock grazing and distribution of animals on these allotments. The removal of topsoil for the proposed well pad expansions, pipelines and road right-of-way may decrease native forage production over an extended period of time, and may increase noxious weeds and invasive forage species production. The Antelope Draw and Split Mountain Allotments have been impacted by extensive energy developments and dry conditions. Large amounts of fragmentation, disturbance and forage loss throughout the allotment has led to multiple years of moderate to minimal use by the current grazing permittee.

3.2.2. Rangeland Health

Both allotments Rangeland Health sites were established and surveys have recently been conducted in Antelope Draw and Split Mountain Allotments. All of the sites all had some level of departure from the ecological site description due to increases in cheat grass *Bromus tectorum* and rabbit brush species *Chrysothamnus spp.* Decreases in desired native plants fourwing saltbush *Atriplex canescens* and Indian rice grass *Oryzopsis hymenoides a* perennial grass is also noted. Reclamation success has been marginal in the area and the time it takes for recovery will affect overall rangeland health in the area. The proposed action may cause additional decreases in meeting future Rangeland Health Standards due to an increase in undesirable species.

Throughout the last few years energy development has continued to boom in the area through the implementation of the Final Environmental Impact Statement for the Greater Deadman Bench Oil and Gas Producing Region (FEIS). There has been a large increase in the level of disturbance as a result of this oil and gas development.

3.3. Plants: BLM Sensitive

Potential habitat for the Utah BLM sensitive species horseshoe milkvetch (*Astragalus equisolensis*) occurs in the Project Area, and individuals and populations of this species have been previously documented in the Project Area per BLM Vernal Field Office GIS data.

Horseshoe milkvetch is a perennial herb that grows on river terraces overlying the Duchesne River Formation, in cracks in crevices forming in the Duchesne River regolith, or in soils derived directly from the Duchesne River formation. The species prefers soils that are sandy-gravelly or sandy-silty, with cobbles sometimes present on the soil surface. It has been shown to occur in desert shrub and sagebrush communities. The species has a very limited range, known mainly to occur in a 9000-acre region immediately east of the Horseshoe Bend of the Green River (USFWS 2014).

Chapter 4. Environmental Effects:

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4.1. Direct and Indirect Impacts

The potential direct, indirect, and cumulative impacts from Alternative A (the Proposed Action) and Alternative B (the No Action Alternative) are discussed in the following sections of Chapter 4. Direct impacts to soils and vegetation in the following analyses are described as short-term and long-term impacts. In areas where interim reclamation is implemented, ground cover by herbaceous and woody species could be re-established to approximately 75 percent of initial basal cover within five years following seeding of native plant species and diligent weed control efforts. These reclaimed areas are categorized as short-term disturbance.

4.2. Proposed Action

4.2.1. Invasive Plants/Noxious Weeds, Soils, and Vegetation

4.2.1.1. Invasive Plants/Noxious Weeds

The Proposed Action would disturb approximately 32.82 acre of soils and vegetation. The portions of the disturbed area that would not be utilized for production and product transportation would be subject to interim reclamation. If interim reclamation is successful, direct long-term impacts to vegetation would not occur. If interim reclamation is not successful, the entire area could remain disturbed for the long term. Long-term impacts to vegetation are expected for the life of the well (an average of 25 years or until reclamation is successful).

Impacts to soils and vegetation would be partially mitigated by reclamation of disturbed areas with native vegetation and control of noxious and invasive weeds by mechanical and chemical treatment (section 2.1.6). Under the Proposed Action, reclamation would occur on approximately 25 percent of the well pad upon completion of drilling. The remaining 75 percent of the well pad would be revegetated after abandonment of the well (approximately 25 years).

4.2.1.1.1. Mitigation

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.

4.2.1.2. Soils

Environmental effects related to the soils for this project were discussed in the original APD's.

Direct impacts to soils include mixing of soil horizons, soil compaction, short-term loss of topsoil and site productivity, and loss of soil/topsoil through wind and water erosion. Loss of soil/topsoil in disturbed areas would reduce the revegetation success of seeded native species due to increased competition by annual weed species. Annual weed species are adapted to disturbed conditions, and have less stringent moisture and soil nutrient requirements than do perennial native species.

4.2.1.3. Vegetation

Additional direct impacts to vegetation are primarily associated with clearing of vegetation during construction. Indirect impacts to vegetation resources include the invasion and establishment of introduced, undesired plant species. The severity of these invasions would depend on the success of reclamation and revegetation, and the degree and success of noxious weed control efforts.

The area's poor soil reclamation potential, has made successful reclamation efforts challenging. BLM field inspections indicate that short-term impacts may be more accurately portrayed as long-term impacts. However, most of these issues should be addressed in the BLM approved Questar Exploration and Production Company Uinta Basin Division Reclamation Plan. A copy of this plan is on file at the BLM Vernal Field Office.

4.2.2. Livestock Grazing & Rangeland Health Standards

4.2.2.1. Livestock Grazing

Livestock grazing under the proposed action of approximately 32.82 acres of new surface disturbance would occur. The allotment may continue to be used below authorized levels. The increase in disturbance and development causes an increase in fragmentation of the landscape, which continues to hinder livestock operations. Possible increase in livestock mortality could occur due to an increase in vehicle traffic.There has been a large increase in the level of disturbance as a result of oil and gas development in the area. Impacts from large amounts of disturbance and fragmentation contribute to factors (weeds, bare ground, shifts in ecological community structure, erosion, etc.) that may lead to areas not meeting rangeland health.

4.2.2.2. Rangeland Health Standards

Under the Proposed Action approximately 32.82 acres of new surface disturbance would occur. This would contribute to soil loss, weed invasion, and continued fragmentation of grazing allotments, affecting livestock movement patterns and forage availability.

Although, much of the disturbed landscape is slated for reclamation; those efforts have not proven to be highly successful within this semi-arid shrub steppe environment area for rangeland forage. Therefore, it is assumed that ecological impacts are continuing to occur and have the potential to directly and indirectly affect the areas ability to meet Rangeland Health Standards.

4.2.3. Plants: BLM Sensitive

The Proposed Action occurs within the potential habitat polygon for horseshoe milkvetch, and individual plants and populations have been documented throughout the Project Area. Surveys conducted in November 2013 by Outlaw Engineering Inc. did not locate any individuals or populations of horseshoe milkvetch within a 300-foot buffer around the proposed surface disturbance in the Project Area. However, known populations of the plant occur with 0.5 mile of some of the proposed surface disturbance, and suitable habitat is present. Due to the presence of horseshoe milkvetch in the Project Area, there is a potential for direct physical damage to occur to individual plants as a result of the Proposed Action.

Possible dispersed direct and indirect negative impacts which may result from implementation of the Proposed Action include: loss of suitable habitat, habitat modification by invasive weed species which may compete with individuals, accidental spray or drift of herbicides used during invasive plant control, and deposition of fugitive dust from construction activities and vehicle traffic on unpaved roads.

4.2.3.1. Mitigation

The following mitigation measures will be applied as either part of the Proposed Action or a Condition of Approval (COA):

- Only water (no chemicals, reclaimed production water or oil field brine) will be used for dust abatement measures within all horseshoe milkvetch habitat in the Project Area.
- Dust abatement will be employed in suitable horseshoe milkvetch habitat over the life of the project during the time of the year when horseshoe milkvetch are most vulnerable to dust-related impacts (March through August) within all suitable habitat in the Project Area.
- The seed mix will exclude non-native and introduced species for reclamation seeding (interim and final) on this project.
- Erosion control measures (i.e. silt fencing) will be implemented to minimize sedimentation to horseshoe milkvetch. plants and populations located downslope of proposed surface disturbance activities in suitable habitat.

4.3. No Action Alternative

4.3.1. Invasive Plants/Noxious Weeds, Soils, and Vegetation

Under the No Action Alternative, there would be no direct disturbance or indirect effects to soils and vegetation from surface-disturbing activities associated these wells. Current land use trends in the area would continue, including increased industrial development, increased traffic, and increased recreation use for hunting, bird watching, and sightseeing.

4.3.2. Livestock Grazing & Rangeland Health Standards

Under the No Action Alternative no additional contribution to existing surface disturbance and fragmentation would occur. Therefore no increase in impacts to the grazing allotment, livestock AUMs, or the allotment's compliance with Rangeland Health Standards may occur due to the current oil and gas operations and continued development in the area.

4.3.3. Plants: BLM Sensitive

Under the No Action Alternative, there would be no direct disturbance or indirect effects to horseshoe milkvetch or its associated habitat from surface-disturbing activities associated with the proposed project. Current land use trends in the area would continue, including increased industrial development, increased off-highway vehicles (OHV) traffic, and increased recreation use.

4.4. Reasonably Foreseeable Development and Cumulative Impacts Analysis

4.4.1. Cumulative Impacts

4.4.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation

The CIAA for soils and vegetation is the boundary of the Final Environmental Impact Statement (FEIS) for the Greater Deadman Bench Oil and Gas Producing Region . The Greater Deadman Bench Oil and Gas Producing Region project area is located 20 miles south of Vernal, Utah.

The project area encompasses approximately 32.82 acres of land within Uintah County. The project area is located inSections 13, 14, 21, 23, 26, 27, , T. 7 S., R 22 E., and 25, 29,T. 7 S., R. 23 E., Uintah County, Utah. The town of Vernal is approximately 25 miles north of the project boundary. The foreseeable activity for the QEP FEIS is the drilling of up to 1,239 new wells. Future total area of disturbance due to oil and gas activity for the FEIS project area is approximately 98,785 acres.

Soil erosion would be increased due to the disturbance associated with oil and gas activities in the area. Each acre of disturbance adds to a cumulative effect by increasing erosion and destroying native vegetation, and through the invasion of undesired plant species. In general, soils in the Uinta Basin are very thin, slow to develop, and difficult to reclaim because of the arid climate and lack of organic material.

Direct surface disturbances to vegetation indicated by past, present, and reasonably foreseeable developments are primarily attributable to oil and gas development and vegetation management by various federal agencies. Oil and gas development, however, would continue to degrade local habitat by direct disturbance and slow reclamation of disturbed areas. Surface disturbance within the CIAA would be approximately 98,785 acres. The Proposed Action would add approximately 32.82 acre of surface disturbance. The No Action alternative would not result in an accumulation of impacts.

4.4.3. Livestock Grazing & Rangeland Health Standards

4.4.3.1. Livestock Grazing

Cumulative effects would result in an increase in oil and gas production in the area which may decrease the availability of usable forage for livestock grazing. AUMs for this allotment may also decrease due to the loss of acreage caused by the increase in oil and gas pad development and declining rangeland health conditions. A socio-economic impact may be felt by the grazing allotment permittee due to the continued downsizing of livestock numbers to match the decrease in usable AUMs on the allotment. Compensation for loss of forage to the permitted livestock owners may need to occur.

4.4.3.2. Rangeland Health

Cumulative effects on Rangeland Health may continue to show a declining trend in native plant communities, with an increasing production of noxious weeds and annual species. Until reclamation of the disturbed sites can reach some acceptable level Ecological Site Descriptions (similar to pre-construction condition) and be fully implemented, this negative trend may continue. The No Action alternative would not result in an increase in disturbed lands but declining rangeland health may continue with the amount of forage production and increased invasive plant species.

4.4.4. Plants: BLM Sensitive

The CIAA for horseshoe milkvetch is the 72,827.5 acre BLM GIS polygon designated as potential habitat for horseshoe milkvetch. Due to inclusions of areas of unsuitable habitat within the potential habitat area, the total acreage of suitable habitat is less than 72,827.5 acres. However, a complete survey of suitable habitat has not been performed and thus the amount of suitable habitat has not been quantified. Impacts to the species from past, current, and reasonably foreseeable actions may be greater or smaller than those described for the total area depending upon the exact distribution of actions relative to suitable habitat.

This area encompasses BLM, state of Utah, and privately held lands. Horseshoe milkvetch is designated as UT BLM Sensitive, and protective measures would only apply on BLM lands. Within the CIAA, there are hundreds of miles of roads, oil and gas wells, and associated infrastructure. Past, present and reasonably foreseeable disturbance from oil and gas will affect approximately 4,500 acres (6.18% of the CIAA). Cumulative impacts include dust impacts to plants, and plant and pollinator habitat destruction. Surface disturbance is a good indicator of the extent of these cumulative impacts. The Proposed Action would add 32.82 acres of new surface disturbance. The No Action Alternative would not result in an accumulation of impacts.

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Chapter 5. Tribes, Individuals, Organizations, or Agencies Consulted:

Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
USFWS	Information on Consultation, under Section 7 of the Endangered Species Act (16 USC 1531).	Two sources, Wonsits Valley water right # 49–251 (which was filed on May 7, 1964), and Red Wash water right 49-2153 (which was filed on March 25, 1960) are considered to be historic depletions are proposed. Historic sources were consulted on during preparation of the Recovery Implementation and Recovery Action Plan. Water Depletion was also consulted on in the Final Greater Deadman Bench Oil and Gas Producers Region EIS, 2008.
State Historic Preservation Office (SHPO)	Historic Preservation Act.	BLM recommended a No Effect determination based on Class III surveys and asked for concurrence on all of the wells listed in this EA. Concurrence was received, documentation of this can be found in the individual well/APD files.
Ute Mountain Ute Tribe, Hopi Tribe, Goshute Indian Tribe, Zia Pueblo Tribe, White Mesa Ute Tribe, Navajo Nation, Northwest Band of Shoshone Tribe, Southern Ute Tribe, Eastern Shoshone Tribe, Ute Indian Tribe, Santa Clara Pueblo Tribe, and Pueblo of Laguna Tribe.	Consultation with Native American Tribes.	Tribal consultation for this area was done during preparation of the Greater Deadman Bench EIS (2004). No concerns were raised at that time.

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Chapter 6. List of Preparers

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Table 6.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Kevin Sadlier	Natural Resource Specialist/ Environmental Scientist	Chapters 1 & 2 Chapters 3 & 4: Soils and vegetation
Dixie Sadlier	Wildlife Biologist	Chapters 3 & 4: Wildlife
Craig Newman	Range Conservationist	Rangeland Health and Livestock Grazing.
Christine Cimiluca	Natural Resource Specialist/ Environmental Scientist	Chapters 3 & 4: Plants

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Chapter 7. References Cited

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BLM. 2008. Vernal Field Office Resource Management Plan, U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

BLM 1997. Standards for Rangeland Health and Guidelines for Grazing Management on BLM Lands in Utah. U.S. Department of the Interior, Bureau of Land Management. Washington. D.C. May 20.)

BLM. 2008. Final Environmental Impact Statement for the Greater Deadman Bench Oil and Gas Producing Region Project, U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

BLM. 2009. Green River District Reclamation Guidelines, U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

Uintah County. 2011. Uintah County General Plan. Amended Number 02-27. i – xiv + 302 pp.

U.S. Fish & Wildlife Service (USFWS). 1987. Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin. Final. US Department of the Interior, Fish and Wildlife Service, Denver, Colorado. September 29, 1987.

U.S. Fish & Wildlife Service (USFWS). 1994. Final Rule: Determination of Critical Habitat for the Colorado River Endangered Fishes: Razorback sucker, Colorado squawfish, Humpback chub, and Bonytail chub. Federal Register 59: 13375-13400.

U.S. Fish and Wildlife Service (USFWS) 2014. Horseshoe Milkvetch Fact Sheet.

http://www.fws.gov/utahfieldoffice/Documents/Plants/Handouts/Horseshoe%20Milkvetch%20Fact%20Sheet.pdf . Accessed July 16, 2014.

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Appendix A. Interdisciplinary Team Checklist

Project Title: QEP Energy Company's pad expansions and pipeline reroutes for the RW 12-26AGR, RW 22-27AGR, RW 24-13AGR, RW 24-14AGR, RW 44–25B, and the RW 44-29BGR.

NEPA Log Number: DOI-BLM-UT-G010-2014–0168–EA

File/Serial Number: UTU-0558, UTU-0569, UTU-0823, UTU-02025, and UTU-63010O

Project Leader: Kevin Sadlier

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Table A.1.

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Air Quality/ Greenhouse Gas Emissions	Dust and vehicle emissions would be generated during the project. However, impacts from emissions are expected to be short term (during construction only) and indistinguishable from background emissions as measured by monitors or predicted by models. Greenhouse gas emissions: No greenhouse gas standards have been established by EPA or other regulatory authorities. The assessment of greenhouse gas emissions and climate change is in its earliest stage. Global greenhouse gas models can be inconsistent, and localized models are lacking. Consequently, it is not technically feasible to quantify the net impacts to climate based on local greenhouse gas emissions. It is anticipated that greenhouse gas emissions associated with this action and its alternative(s) would be negligible.	Kevin Sadlier	7/9/ 2014
NP	BLM Natural Areas	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NP	Cultural: Archaeological Resources	Pursuant to 36 CFR 800.16(y) this project is considered to be an undertaking. The area of potential effect (APE) is defined as the polygon presented in the right-of-way application. Aros Archaeology conducted various Class I reports and a 100% pedestrian inventory over portions the project area. No cultural material was identified within the project area. A consultation letter was sent to the State Historic Preservation Officer (SHPO) on July 17, 2014 recommending a "no historic properties effected" determination. We received their concurrence to our determination on July 18, 2014.	Erin Goslin	7/18/ 2014
NP	Cultural: Native American/ Religious Concerns	Tribal consultation was conducted under the Greater Deadman Bench EIS in 2008. No Traditional Cultural Properties (TCPs) are identified within the APEs. The proposed projects will not hinder access to or use of Native American religious sites.	Erin Goslin	7/18/ 2014
NP	Designated Areas: Areas of Critical Environmental Concern	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014
NP	Designated Areas: Wild and Scenic Rivers	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014
NP	Designated Areas: Wilderness Study Areas	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014
NI	Environmental Justice	No minority or economically disadvantaged communities or populations would be disproportionately adversely affected by the proposed action or alternatives.	Kevin Sadlier	7/9/ 2014
NP	Farmlands (prime/unique)	No prime or unique farmlands, as identified by the NRCS, based on soil survey data for the county are located in the project area; therefore, this resource will not be carried forward for analysis.	Kevin Sadlier	7/9/ 2014
NI	Fuels/Fire Management	No fuel management activities planned for the project area. The proposed project would not conflict with fire management activities following GIS/field office review.	Kevin Sadlier	7/9/ 2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Geology/Minerals/ Energy Production	No known gilsonite veins are in the area, however, encounters with gilsonite during any surface or drilling operation must be reported to the BLM Vernal Field Office. Please provide location and depth encountered. Natural gas, oil, gilsonite, oil shale, and tar sand are the only mineral resources that could be impacted by the project. Production of natural gas or oil would deplete reserves, but the proposed project allows for the recovery of natural gas and oil per 43 CFR 3162.1(a), under the existing Federal lease. Compliance with "Onshore Oil and Gas Order No. 2, Drilling Operations" will assure that the project will not adversely affect gilsonite, oil shale, or tar sand deposits. Due to the state-of-the-art drilling and well completion techniques, the possibility of adverse degradation of tar sand or oil shale deposits by the proposed action will be negligible. Well completion must be accomplished in compliance with "Onshore Oil and Gas Order No. 2, Drilling Operations". These guidelines specify the following: ... *proposed casing and cementing programs shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use*	Betty Gamber	7/14/ 2014
IP/NW: PI Soils: PI Veg: PI	Invasive Plants/ Noxious Weeds, Soils & Vegetation	IP/NW: Proposed disturbance would provide suitable habitat for the establishment and spread of non-native plant species. Operator would control invasive species in all disturbed areas as discussed in Chapter 2 and QEP approved reclamation plan. Soils: 32.82 acres of soil disturbance would occur during construction until reclamation is successful. Soils would be recontoured and reseeded during reclamation. The locations would be reclaimed and monitored in accordance with the Questar Exploration and Production Company Uintah Basin Division Reclamation Plan on file with the Vernal Field Office of the BLM. Locations would be seeded with the seed mix approved by the BLM Authorized Officer. Veg: 32.82 acres of initial vegetation disturbance/removal. Upon construction completion, the disturbed area would be reseeded and re-contoured to the approximate natural contours. This would reduce the effects of the disturbance when the seeding becomes established. The locations would be reclaimed and monitored in accordance with the Questar Exploration and Production Company Uintah Basin Division Reclamation Plan on file with the Vernal Field Office of the BLM. Locations would be seeded with the seed mix approved by the BLM Authorized Officer.	Kevin Sadlier	7/9/ 2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Lands/Access	The proposed project area is located within the Vernal Field Office Resource Management Plan area which allows for oil and gas development with associated road and pipeline right-of-ways. The proposed project is within QEP's Red Wash Unit. The Sundrys would be authorized under beneficial use of their lease; therefore, this project does not require a ROW.	Kevin Sadlier	7/9/ 2014
NP	Lands with Wilderness Characteristics (LWC)	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014
PI	Livestock Grazing & Rangeland Health Standards	The proposed project may create additional ground disturbance and fragmentation of the allotment, which may impact livestock operations as well as the fundamentals of rangeland health.	Craig Newman	7/18/ 2014
NP	Paleontology	No scientifically important fossils were found (IPC reports: #12–102, #12–95, #12–95, #11–23, #12–16)	Betty Gamber	7/14/ 2014
PI	Plants: BLM Sensitive	The following UT BLM Sensitive plant species have been identified in or near the Project Area: Horseshoe milkvetch (*Astragalus equisolensis*): Suitable habitat for this species is present throughout the Project Area and individuals and populations of this species have been documented in the Project Area, per BLM GIS review. There is a potential impact to this species as a result of the Proposed Action. Suitable habitat for the following UT BLM Sensitive plant species has been identified in or near the Project Area: Graham's catseye (*Cryptantha grahamii*): Suitable habitat for this species is on Green River shales in mixed desert shrub, sagebrush or mountain shrub vegetation elevations from 5,000 -7,400 feet. This habitat (Green River shale) is present in the Project Area, and no populations or individuals have been documented. This species is not anticipated to be impacted directly or indirectly as a result of the Proposed Action.	Christine Cimiluca	7/16/ 2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Plants: Threatened, Endangered, Proposed, or Candidate	No known populations of threatened, endangered, or candidate plant species have been documented in or near the Project Area, as per BLM GIS review. No threatened, endangered, or candidate plant species were observed during the onsite investigation. Potential habitat for the following Federally threatened, endangered, candidate or proposed plant species has been documented near the Project Area (per BLM GIS review): Potential habitat for threatened species Pariette cactus (*Sclerocactus brevispinus*) and Uinta Basin hookless cactus (*Sclerocactus wetlandicus*) has been documented within 0.5 mile of the Project Area (USFWS/BLM 2013 Cactus polygon, per BLM GIS review). However, suitable habitat is not present in the Project Area, no plants were observed during the onsite investigation, and the nearest known documented plant is located approximately 6.0 miles from the Project Area, per BLM GIS review. The two cactus species are unlikely to be impacted by the Proposed Action.	Christine Cimiluca	7/16/ 2014
NP	Plants: Wetland/Riparian	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014
NI	Recreation	Proposed project is in a developed area with numerous infrastructures currently in place. Recreation access will not be restricted by the proposed project.	Keivn Sadlier	7/9/ 2014
NI	Socioeconomics	No impact to the social or economic status of the county or nearby communities would occur from this project due to its small size in relation to ongoing development throughout the Basin.	Kevin Sadlier	7/9/ 2014
NI	Visual Resources	The proposed project is in a VRM Class IV area, per the Vernal Field Office GIS Data Base & RMP/ROD. A contrast rating worksheet was not completed as the area has not been identified within class III sensitive areas which are the current standard for site visits with VRM evaluations taking place. Class IV objective states: The objective of this class is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements. The proposal will follow existing form, line and texture in the landscape, but will contrast in color temporarily with the landscape. The contrast in color, form, line and texture is within the class IV objectives.	Kevin Sadlier	7/9/ 2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Wastes (hazardous/solid)	Hazardous Waste: No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the project. Solid Wastes: Trash would be confined in a covered container and hauled to an approved landfill. Burning of waste or oil would not be done. Human waste would be contained and be disposed of at an approved sewage treatment facility.	Kevin Sadlier	7/9/ 2014
NP	Water: Floodplains	None are present in the project area per the Vernal Field Office RMP and GIS review.	Kevin Sadlier	7/9/ 2014
NI	Water: Groundwater Quality	: Compliance with "Onshore Oil and Gas Order No. 1, will assure that the project will not adversely affect groundwater quality. Due to the state-of-the-art drilling and wells completion techniques, the possibility of adverse degradation of groundwater quality or prospectively valuable mineral deposits by the proposed action will be negligible	Betty Gamber	7/14/ 2014
NP	Water: Hydrologic Conditions (stormwater)	The proposed construction of the well pads, and roads, would alter the topography of the area to a small degree. It is not expected that surface water or stormwater would be created to the level of concern for Clean Water Act Section 402 (stormwater) review. In addition federal law has exempted energy development from stormwater requirements.	Kevin Sadlier	7/9/ 2014
NI	Water: Surface Water Quality	Surface Waters: The only potential for the proposed project to negatively impact water quality would be increased potential for chemical spills or increased disturbance to surface soils which could cause soil erosion. This would not be expected to occur in a way that would be a relevant impact to surface waters. The site is in an upland area and more than 3 miles from perennial waters.	Kevin Sadlier	7/9/ 2014
NP	Water: Waters of the U.S.	Waters of the U.S. are not present per USGS topographic map and GIS data review. The proposed project would not impact any drainage where a high water mark can be distinguished, drainages which regularly run water, or wetlands/riparian areas, per onsite.	Kevin Sadlier	7/9/ 2014
NP	Wild Horses	No herd areas or herd management areas are present in the project area per BLM GIS database.	Kevin Sadlier	7/9/ 2014
NI	Wildlife: Migratory Birds (including raptors)	Original NEPA is adequate for the proposed wells,, along with the applicant committed measures in Chapter 2.	Dixie Sadlier	
NI	Wildlife: Non-USFWS Designated	Original NEPA is adequate for the proposed wells, along with the applicant committed measures in Chapter 2.	Dixie Sadlier	
NI	Wildlife: Threatened, Endangered, Proposed or Candidate	Original NEPA is adequate for the proposed wells, along with the applicant committed measures in Chapter 2.	Dixie Sadlier	
NP	Woodlands/Forestry	No herd areas or herd management areas are present in the project area per BLM GIS database.	Kevin Sadlier	7/9/ 2014

Table A.2.

FINAL REVIEW:			
Reviewer Title	**Signature**	**Date**	**Comments**
Environmental Coordinator	Kelly Buchner	07-22-2014	
Authorized Officer		7-22-2014	