

**United States Department of the Interior
Bureau of Land Management**

**Section 390
Categorical Exclusion for
Oil and Gas Development
for
Encana Federal 33-8 Well**

Grand Junction Field Office
2815 H Road
Grand Junction, Colorado 81506

DOI-BLM-CO-130-2012-0032-CX

December 2012



LEGAL DESCRIPTION:

Sixth PM, T. 10 S., R. 96 W., Sec. 33, Mesa County, Colorado

APPLICANT:

Encana Oil & Gas (USA)

PROJECT DESCRIPTION: Encana Oil & Gas (USA), Inc. (Encana) submitted an Application for Permit to Drill (APD) for a single vertical well and pad, access roads, improvements to existing road within the previously authorized area (right of way COC 31814), water line and replacement of a natural gas pipeline on February 28, 2012. The APD was complete on August 24, 2012. Additionally, the road right of way COC31814 needs to be renewed for another term. An application for renewal of COC31814 was received May 10, 2011 and there are no changes requested to the authorization. An onsite inspection was performed on May 9, 2012. During the onsite, Encana committed to improving the Beehive gate. A cattle guard and side metal cattle gate with bell type lock housing would be installed at the beehive gate to allow for operator traffic and livestock transport. Bell housings for the new gate and to replace the existing one will be of substantial length to prevent lock cutting. Boulders on the wings of the gate and cattle guard will be placed to prevent drive around traffic into the winter closure area. This was omitted from the operator's Surface Use Plan of Operations (SUPO) therefore it has been included as a Condition of Approval.

The well would access federal mineral estate. Figure 1 (attached) shows the location of the well pads, existing and proposed facilities, access roads and pipelines for the project area. Table 1 shows the lease stipulations associated with the lease involved. The attached Surface Use Plan of Operations (Appendix A) describes the proposed well and associated facilities in detail. Plats and maps are contained in the APD package. Several culverts would be added to the existing road to improve drainage. The proposed pipelines, one produced water to reduce truck traffic and one for natural gas to replace the old existing line, would follow entirely the old pipeline disturbance, most of which is in the road ditch.

The proposed well lies within the developed *Plateau* field which currently contains 309 completed wells of which 31 are federal wells. The proposed well is within Emphasis Area Co-2 listed in the Grand Junction Resource Management Plan for Oil and Gas emphasis. According to Information Handling Services Inc. (IHS) records, there are 856 functional wells in the Co-2 Emphasis Area of which 108 are federal wells.

The purpose of the action is to access the valid and existing rights of the leased mineral resources under the Mineral Leasing Act of 1920 (MLA) and the Federal Land Policy and Management Act (FPLMA). The action is needed to respond to Encana's request for one APD and associated road and pipeline rights-of-way and a road right of way renewal in the Beehive area of Mesa County Colorado.

Table 1 Lease Summary

Lease Number	Stipulations
COC-65770	Endangered Species Act Stipulation
COC-65770	Deer and Elk Winter Range Stipulation

Site-specific and standard conditions of approval are attached (Appendix B)
Right of way stipulations are attached (Appendix C)

PLAN CONFORMANCE REVIEW:

The Proposed Action is subject to and has been reviewed for conformance with (43 CFR 1610.5, BLM 1617.3) the following plan:

Name of Plan: GRAND JUNCTION Resource Management Plan

Date Approved: JANUARY, 1987

Decision Number/Page: Page 2-7, 2-40

Decision Language: The Grand Junction Resource Management Plan (RMP) and Record of Decision describe management decisions based on resource and geographic pieces of land called emphasis areas (USDI 1987; page 2-40). The RMP Oil and Gas Management objective is “To make federal oil and gas resources available for lease, except where prohibited by law or where administrative action is justified in the national interest; to make public land available for economically and environmentally sound exploration and development projects; to avoid health and safety hazards; to protect important, sensitive resource values from unacceptable impacts; and to minimize the impacts to lessees from sensitive resource protection and hazard avoidance.” The proposed well pads lie on private lands within emphasis area Co-1, with an emphasis on Oil and Gas. The Grand Junction Resource Management Plan and Record of Decision further states that “Within each emphasis area, the management of a particular resource will be emphasized over all other resources. That is not to say that one resource will be excluded. They will be allowed so long as they are compatible with management of the emphasized resource. Future proposals will be evaluated in the context of the management philosophy of the emphasis area to determine whether the proposal is compatible.”

REVIEW OF EXISTING NEPA DOCUMENTS:

The following NEPA document(s) satisfies the criteria of being an existing NEPA document (including that supporting a land use plan) that contains a reasonably foreseeable development scenario encompassing this action. The action analyzed in this document is located inside the same emphasis area (Co-2, Grand Junction RMP) as the proposed action.

Name of Document:

Environmental Assessment for the Nichols 31-9H Natural Gas Well, DOI-BLM-CO-130-2011-048-EA

Date Approved: September 30, 2011

COMPLIANCE WITH NEPA

The proposed action qualifies as a categorical exclusion under Section 390, based on the qualifying criterion listed below.

CATEGORICAL EXCLUSION REVIEW: The following categories of Categorical Exclusions pursuant to Section 390 of the Energy Policy Act of 2005 apply to this proposal:

Qualifying Criteria (check all that apply)	YES	NO
1. Individual surface disturbances of less than five (5) acres, so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.		X
a. The action will disturb less than 5 acres; if more than one action is proposed for a lease, each activity is counted separately and each may disturb up to five acres.		X
b. The current un-reclaimed surface disturbance readily visible on the entire leasehold is not greater than 150 acres, including the proposed action.	X	
c. This categorical exclusion includes the requirement of a site-specific NEPA document. A site specific NEPA analysis may be an EA/EIS for exploration and/or development, for a specific MDP, for a multi-well or a single well permit approval.		X
2. Drilling an oil and gas location or well pad at a site at which drilling has occurred within five (5) years prior to the date of spudding the well.		X
3. Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well.	X	
a. The proposed APD is within a developed oil or gas field. A developed field is defined as any field in which a confirmation well has been completed.	X	
b. There is an existing NEPA document (including that supporting a land	X	

CATEGORICAL EXCLUSION REVIEW: The following categories of Categorical Exclusions pursuant to Section 390 of the Energy Policy Act of 2005 apply to this proposal:

Qualifying Criteria (check all that apply)	YES	NO
use plan) that contains a reasonably foreseeable development scenario encompassing this action.		
c. The NEPA document was finalized or supplemented within five years of spudding the new well.	X	
4. Placement of a pipeline in an approved right-of-way corridor, so long as the corridor was approved within five (5) years prior to the date of placement of the pipeline.		X
a. The placement of a pipeline in an existing corridor of any type. The term “right-of-way corridor” in Section 390 is not limited to those authorized under 43 CFR 2800, but is a more generalized term that applies to any type of corridor or right-of-way (whether on or off lease) approved under any authority or vehicle of the BLM, including Sundry Notices.	X	
b. Placement of the pipeline within five years of Placement approval (or amendment) of the most recent date of a decision (NEPA or permit authorization).		X
5. Maintenance of a minor activity, other than any construction or major renovation of a building or facility.		X

INTERDISCIPLINARY REVIEW:

<u>Name</u>	<u>Title</u>	<u>Area of Responsibility</u>
Alissa Leavitt-Reynolds Natalie Fast	Archaeologist	Cultural Resources, Native American Religious Concerns
Anna Lincoln	Ecologist	Special Status Species
Heidi Plank	Wildlife Biologist	Wildlife, Fisheries, Special Status Species
Nate Dieterich	Hydrologist	Hydrology

Table 2 Potentially Impacted Resources

Resources	Not Present On Location	No Impact	Potentially Impacted (previously analyzed)	Mitigation necessary	BLM Evaluator Initial & Date	Comments
PHYSICAL RESOURCES						
Air and Climate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ND 5/1/2012	Dust control
Geological	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DSG 4/6/12	
Mineral Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DSG 4/6/12	
Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ND 5/1/2012	
Water (surface & subsurface, floodplains)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ND 5/1/2012	
BIOLOGICAL RESOURCES						
Special Status Plants	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ARL 4/5/12	
Special Status Wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HLP 5/3/12	
Migratory Birds	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HLP 5/3/12	
Other Important Wildlife Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HLP 5/3/12	
Vegetation, Forestry	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	JAM 5/2/12	
Invasive, Non-native Species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MT 4/30/12	
Wetlands/Riparian Zones	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CARS 4/18/12	
HERITAGE RESOURCES AND HUMAN ENV.						
Cultural or Historical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ALR 4/20/12	
Paleontological	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DSG 4/6/12	
Tribal & American Indian Religious Concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ALR 4/20/12	
Visual Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CPP 4/17/12	
Social/Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CE 4/16/12	
Transportation and Access	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CPP 4/17/12	
Wastes, Hazardous or Solid	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	AEK 5/16/12	
LAND RESOURCES						
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CPP 4/17/12	
Special Designations (ACEC, SMAs, WSR)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CPP 4/17/12	
Wilderness & Wilderness Characteristics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CPP 4/17/12	
Range Management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	JAM 5/2/12	
Wild Horse and Burros	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	JAM 5/2/12	
Land Tenure, ROW, Other Uses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CLV 5/3/12	

REMARKS:

CULTURAL RESOURCES

A records search of the general project area, and a Class III inventory of the Area of Potential Effect (APE), as defined in the National Historic Preservation Act (NHPA), was completed by various Colorado BLM permitted cultural resource contracting firms (GJFO CRIR 18511-01, 15410-01, 2681-01, 5412-02). Conditions of the existing cultural environment are incorporated by these references but the following briefly summarizes cultural resources in the APE. The 2012 inventory resulted in the identification of eight cultural resources, including two prehistoric lithic scatters (5ME18586, 5ME18587) and six prehistoric isolated finds (5ME18580-5ME18585). Three previously recorded sites were relocated and updated during the 2012 inventory (5ME3808, 5ME3810 and 5ME3824). The project inventory and evaluation is in compliance with the

NHPA, the Colorado State Protocol Agreement, and other federal law, regulation, policy, and guidelines regarding cultural resources. An eligible site (5ME3824) is located in a portion of the proposed pipeline corridor. A monitor will be required on site during pipeline construction in that location. The attached standard conditions of approval should protect any cultural resources unknown to the agency.

Initials/date: ALR/NRF 11/27/12

NATIVE AMERICAN RELIGIOUS CONCERNS

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and ARPA, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation. General annual project consultation has been conducted with tribes who traditionally used the GJFO area, the Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and Ute Indian Tribe of the Uintah & Ouray Reservation. Concerns identified included eradication of sage, impacts to medicinal plants, and general modern intervention in the natural processes. The Ute have a generalized concept of spiritual significance that is not easily transferred to Western models or definitions. As such the BLM recognizes that they have identified sites that are of concern because of their association with Ute occupation of the area as part of their traditional lands. No traditional cultural properties, natural resources, or properties of a type previously identified as being of interest to local tribes, were found during the cultural resources inventories of the project area or identified by consultation. There is no other known evidence that suggests that the project area holds special significance for Native Americans. No additional consultation was completed for this project.

Initials/date: ALR/NRF 11/27/12

SPECIAL STATUS SPECIES:

Compliance with ESA:

T&E Plants:

Biological surveys completed in 2010 and 2012 recorded the BLM Sensitive plant species DeBeque milkvetch along the access road (over 2,500 individual plants were recorded). No rare plants have been recorded or are known to exist on the proposed well pad site. Since the Wasatch formation is not present in the surface geology of the well pad location, the well pad is not considered suitable habitat for the DeBeque milkvetch. Marginal habitat for the federally listed DeBeque phacelia was mapped east of the access road. The phacelia has not historically occupied the project area, and is not known to occur in the project area.

Special design features will be necessary in section 27 to avoid or reduce direct impacts to the DeBeque milkvetch. The proposed pipeline and road maintenance will not affect the mapped DeBeque phacelia habitat. In sensitive areas the pipeline may need to alternate sides of the road, and/or stay within areas of pre-disturbance. DeBeque milkvetch has been recorded on both sides of the access road near the northern end of the proposed pipeline. Approximately 750 continuous feet of pipeline will need to be confined to the pre-disturbed road area. Additionally, temporary fencing and a biological monitor should be utilized to reduce potential impacts to the milkvetch. Construction implementation occurring in section 27 would need to be coordinated with the BLM Ecologist. To further reduce impacts to the astragalus pipeline construction should occur outside of the blooming season (Late April-May).

Initials/date: ARL 8/23/12

T&E Animals/Critical habitat:

Area is within critical and severe winter range and behind a locked winter closure gate to protect winter habitat. Construction, drilling and other intensive activities will need to occur outside of the winter timing limitations (December 1 to May 1 annually), as additional mitigation Encana has agreed to replace the winter closure gate and a small portion of adjoining fence to minimize impacts to wintering deer and elk from unauthorized vehicle use of the area. Vegetation removal should occur outside the primary migratory bird breeding season (May15- July 15). A Raptor survey was conducted in this area in 2012, one northern goshawk nest was found within ¼ mile of the proposed road improvements, near the bend where the pipeline and the road deviate. To avoid impacting nesting northern goshawk construction activities should not occur within a quarter mile of this nest location from April 15 to August 15 annually or until the next can be confirmed to be inactive. Activities occurring in 2014 or later will require additional raptor surveys.

Initials/date: HLP 8/30/12

OTHER RESOURCES:

Water/Soil Resources: Surface disturbance greater than 1 acre in size would require Stormwater Permitting from the State of Colorado. Maintenance and/or improvement to the existing access road must comply with Gold Book standards. The project area is situated on thick colluvial/landslide deposits that act as important groundwater aquifers used for domestic, municipal, irrigation, and stock uses. Design features should be built into the proposed action to protect groundwater resources. The proponent should disclose the source, water right (if applicable) and anticipated volume of fresh water to be utilized for the proposed action.

Initials/date: N. Dieterich 8/23/12

DECISION:

I have reviewed this document and have decided to implement the Federal 33-8 Well project as described above in the proposed action. This project is categorically excluded from documentation in an EA or EIS under Section 390 of the Energy Policy Act of 2005. The right of way which needs to be renewed for another term also is categorically excluded from documentation in an EA or EIS under BLM Categorical Exclusions for Realty: "Renewals and assignments of leases, permits, or rights-of-way where no additional rights are conveyed beyond those granted by the original authorizations".

RATIONALE:

This action is listed in the Instruction Memorandum Number 2005-247 as an action that may be categorically excluded under Section 390 of the Energy Policy Act of 2005. I have evaluated the action relative to the five qualifying criteria listed above and have determined that it is therefore categorically excluded from further environmental analysis. The action meets the qualifying criteria for 390 CX number three.

The APD is within the developed oil or gas field known as Plateau and is also within the current Resource Management Plan Emphasis Area Co-2, for oil and gas. There is an existing NEPA document (including that supporting a land use plan) that contains a reasonably foreseeable development scenario encompassing this action. The Environmental Assessment for the Nichols 31-9H Natural Gas Well (DOI-BLM-CO-130-2011-048-EA) was completed and signed September 1, 2011 and included additional oil and gas in the reasonable and foreseeable development scenario.

This project will continue to support economically and environmentally sound explorations and development in the field, in a manner designed to protect sensitive natural resources and avoid known health and safety hazards.



12/7/12
Date

Field Manager
Grand Junction Field Office

Administrative Review or Appeal Opportunities

This decision is effective upon the date the decision or approval by the authorized officer. Under regulations addressed in 43 CFR Subpart 3165, any party adversely affected has the right to appeal this decision. An informal review of the technical or procedural aspects of the decision may be requested of this office before initiating a formal review request. You have the right to

CE 12/7/12

request a State Director review of this decision. You must request a State Director review prior to filing an appeal to the Interior Board of Land Appeals (IBLA) (43CFR 3165.4).

If you elect to request a State Director Review, the request must be received by the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215, no later than 20 business days after the date the decision was received or considered to have been received. The request must include all supporting documentation unless a request is made for an extension of the filing of supporting documentation. For good cause, such extensions may be granted. You also have the right to appeal the decision issued by the State Director to the IBLA.

Contact Person

For additional information concerning this decision, contact Catherine Ventling, Natural Resource Specialist, Grand Junction Field Office, 2815 H Road, Grand Junction, CO 81504; Phone 970-244-3009.

ATTACHMENTS:

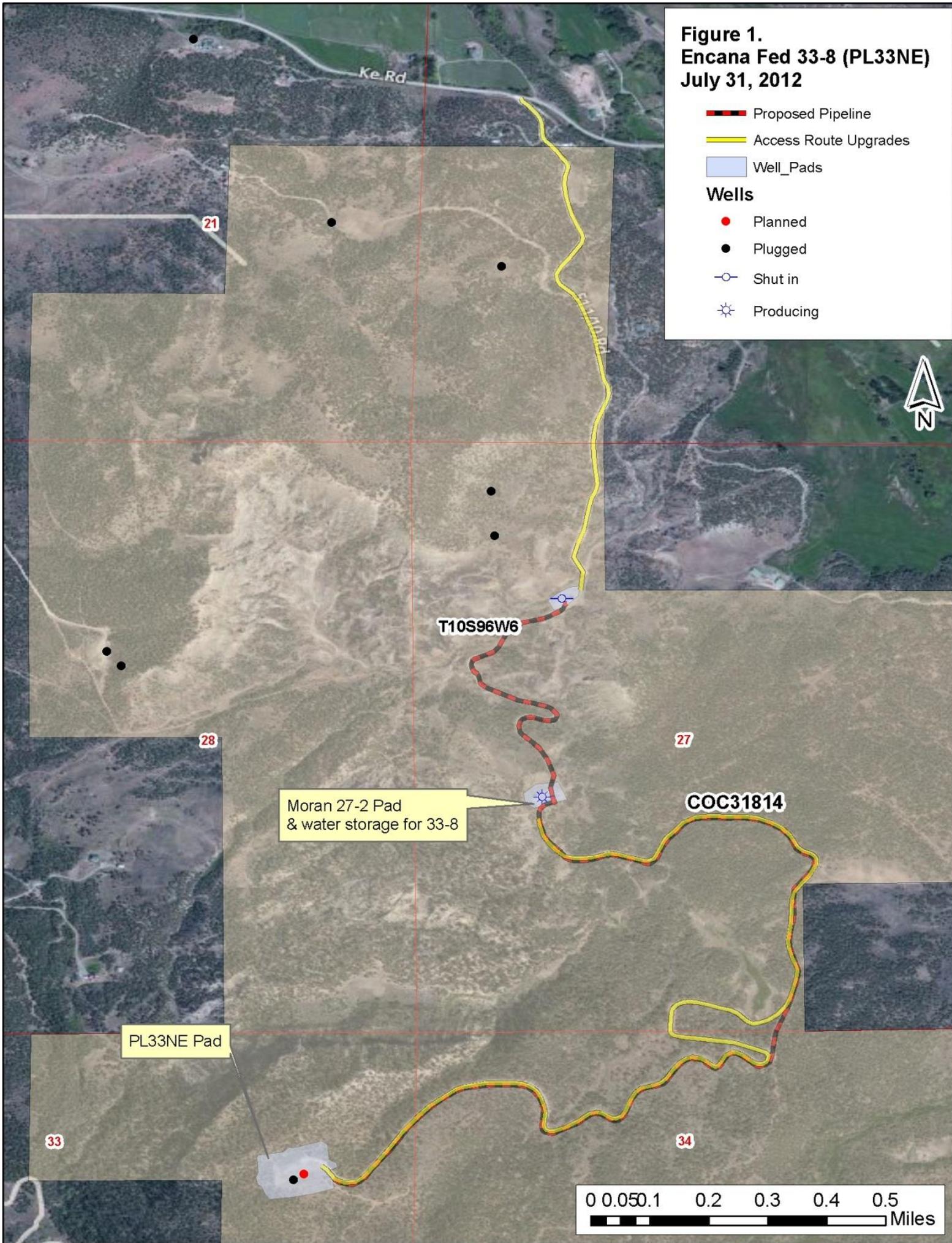
- Figure 1 Map
- Appendix A: Surface Use Plan of Development
- Appendix B: Conditions of Approval
- Appendix C: Right of Way Stipulations

Figure 1.
Encana Fed 33-8 (PL33NE)
July 31, 2012

-  Proposed Pipeline
-  Access Route Upgrades
-  Well_Pads

Wells

-  Planned
-  Plugged
-  Shut in
-  Producing



Appendix A

ONSHORE OIL & GAS ORDER NO. 1

Twelve Point Surface Use Plan of Operations

The proposed well will be an exploratory vertical well drilled from an old well pad located on federal surface and minerals. The original well on this pad is the Plugged & Abandoned Federal 2-33 well, API #05-077-08469. Encana plans to have this well drilled in the Fall of 2012.

1. EXISTING ROADS

- a. The proposed well site is located approximately 2.25 miles southeast of the town of Mesa, in Mesa County, Colorado. Directions from Mesa are as follows:

From Mesa, Colorado travel easterly on KE Road for approximately 2.8 miles. Turn right onto County Road 51.1 and travel southerly approximately 0.8 miles to the beginning of the exiting improved access road approximately 2.5 miles to the old Federal 2-33 well pad and to the newly proposed Federal 33-8 (PL33NE) well location.

- b. For access roads, see Topo Maps A and B.
- c. All existing roads within a 1-mile radius are shown on Maps A and B.
- d. Some improvements to the existing access road will be necessary which may include repairing ruts, erosion, potholes and adding gravel where needed to accommodate year-round traffic.
- e. The existing roads will be maintained in the same or better condition as existed prior to our operations and said maintenance will continue until final abandonment and reclamation of the well location.

2. ACCESS ROAD AND WELL PAD CONSTRUCTION

- a. The BLM, Grand Junction Field Office authorized officer will be contacted forty-eight (48) hours prior to commencement of construction activities for information on field conditions. Construction under adverse conditions may require additional stipulations.
- b. There will be no new access road to be constructed.
- c. Newly constructed or reconstructed roads, on surface under the jurisdiction of the Bureau of Land Management, will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well constructed and safe road.
- d. We will windrow all brush, limbs, and other woody material separately from the topsoil along the roadway, or near the well pad. The upper six inches of topsoil will be stockpiled near the well pad for future reclamation. The soil stockpile will be seeded after construction operations are completed to ensure topsoil integrity and prevent erosion.
- e. Encana will not allow any construction activities during periods when the soil is too wet to adequately support construction equipment. Construction activities will not commence until soil conditions improve. The roads shall be maintained reasonably smooth, and free of ruts in excess of 4-6 inches in depth, for a length of ten feet, soft spots, chuckholes, rocks, slides and washboards. The BLM, Grand Junction Field Office road specifications and "Gold Book" shall be followed for specifications on road design and culvert installation. All weather surfacing will be required if the well becomes a producer. A regular maintenance program shall include blading, ditching, sign replacement, surfacing, and culvert maintenance.
- f. One existing fence, located on the west side of the exiting pad, will need to be moved approximately 60' further west around the proposed pad and disturbance. No cattle guards will be

necessary.

- g. Surface disturbance will be limited to the approved location and approved pipeline and access road routes. Any additional area needed on BLM surface will be approved in advance.
- h. Dust control measures will be implemented during dry weather when necessary. These may include mag chloride or other palliative.
- i. Vehicle travel will be restricted to the well pad and access roads only. No pullouts or off-road parking will be allowed unless specifically authorized. Shortcutting by vehicles operated by Encana or its contractors, on roads not identified as access routes in the APD, will not be allowed.
- j. Encana requests that this APD serve as our request for a road and pipeline right-of-way for the lands outside of lease COC-65770. The road and pipeline right-of-way will be required from the BLM to expand the existing road to 18' to 22' of travel width and add an additional 8" and 3" pipeline to the existing 2" pipeline right-of-way that lies outside of section 34 and travels north to the tie-in point for the pipeline and to the exiting county road both of which are located near the existing Moran 27-1 well pad. The 3" pipeline will only be needed until reaching the existing Moran 27-2 well pad. See the attached Topo Maps B & D for reference.
- k. The road right-of-way width needed for upgrading the road is 50' with a permanent width of 30' and the pipeline width needed for construction will be 65' with a permanent width of 30' needed. Construction work on the road will take approximately 2 weeks and construction of the pipeline will take approximately 6 weeks.

3. LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION.

- a. Water Wells - 5
- b. Injection or Disposal Wells - 0
- c. Producing Wells - 1
- d. Drilling Wells – 0
- e. Shut-in Wells - 0
- f. Plugged and Abandoned Wells - 4
- g. Temporarily Abandoned Wells - 0

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

- a. If the well is productive, the proposed facilities located on the well pad will include a separator, meter building (with tube and meter) and a line heater and production pack. The remaining production facilities will be located on the existing Moran 27-2 pad and will include a knock out vessel and two 500 gallon tanks and if needed one 500 gallon tank and methanol pump and deh'y equipment and compression facilities as needed.
- b. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the BLM – Grand Junction Field Office.
- c. The oil and gas measurement facilities will be installed on the well location. An oil and gas meter will be calibrated in place prior to any deliveries. The Field Office Petroleum Engineer will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the BLM – Grand Junction Field Office. All meter measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.
- d. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 3162.7-5 (b.4.).

- e. Any venting or flaring of gas will be done in accordance with Notice of Lessees (NTL) 4A and may need prior approval from the Field Office Petroleum Engineer.
- f. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in Notice to Lessees (NTL-3A) will be reported to the BLM – Grand Junction Field Office. Major events will be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production (Form 3160-6, formerly 9-329).
- g. The proposed gas gathering line will be buried from the well head to the separator. After the separator a 3" dump line will carry water to the production tanks located on the existing Moran 27-2 pad and the 8" gas gathering line will carry gas to the existing pipeline near the Moran 27-1. Both lines will lie in the same trench. A pipeline right-of-way will be required for the sales and dump line leaving the location and off lease, to the tie-in point located near the existing Moran 27-1. The pipeline will parallel the access road and the exiting 2" pipeline line route from the pad all the way to the tie-in near the Moran 27-1 well pad as shown on Topo Map "D".
- h. No production pits are planned for this location. This well will be drilled using a closed loop drilling system.
- i. All permanent structures (onsite for six months or longer) constructed or installed, including pumping units, will be painted a flat, non-reflective earth tone color to match one of the standard environmental colors and determined by the five State Rocky Mountain Interagency committee, which will be Shale Green (5Y 4/2) or the prescribed color outlined in the approved permit to drill. All Production facilities will be painted within six months of installation. Facilities that are required to comply with Occupation Health and Safety Act Rule and Regulations will be excluded from this painting requirement.
- j. If the well is productive, that portion of the drill site to be utilized for the production facilities will be surfaced with gravel after all the production equipment is installed. The Authorized Officer, upon request, may grant an extension of this time period due to inclement weather.
- k. All access roads will be upgraded and maintained as necessary to prevent erosion and accommodate year-round traffic.
- l. All production facilities will comply with Colorado Oil & Gas Conservation Commission Rules regarding noise. Regardless of whether the operation is at the construction, drilling, or production phase, adequate muffling techniques, if necessary, will be applied.
- m. Encana will contract with a State Certified applicator licensed to work on public lands, and treat all State and Mesa County identified noxious weed species at least annually, on all facilities associated with this well. If this level of control does not prove adequate more frequent treatments may be required. If annual control measures are no longer needed Encana will apply for approval to spray less frequently. Approval shall be documented in writing by the BLM Authorized Officer (AO). The applicator must operate under an approved Pesticide Use Proposal (PUP) application from the BLM. Use of pesticides and herbicides will comply with the applicable Federal and State laws. Pesticides and herbicides will be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the contracted applicator shall obtain from the AO written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides shall be approved in writing by the AO prior to use.
- n. All Heavy equipment will be pressure washed at an offsite location prior to entering the site. This is a preventive measure for reducing noxious weed infestation at the drilling sites. If equipment is moved directly from site to site while on this project, then pressure washing between sites is not required. However, if equipment is removed from a site, used elsewhere, then brought back to the project area, pressure washing is required before the equipment can be used in the project area. This pertains to heavy equipment such as bulldozers, backhoes, etc. Pickup trucks and passenger vehicles will not be pressure washed prior to entering the well sites.

5. LOCATION AND TYPE OF WATER SUPPLY

- a. The source of water will be drawn from Plateau Creek at an existing diversion ditch near County Road V on private surface. Encana will use best management practices, including sterilizing and screening water lines used to pump water to protect aquatic species. Encana holds the rights to the water we will use.
- b. Water will be hauled to the location by truck over the existing access roads as described in item #1 above.
- c. No water well is planned for this location.
- d. All water used in connection with drilling and completion operations, which will be approximately 150,000 bbls, will be stored in tanks in an effort to conserve and re-use the water. The water used and stored will be removed from the property upon completion of all operations.

6. CONSTRUCTION MATERIALS

- a. All materials needed for construction will be procured from a commercial source, Parkerson Construction located in Mesa, Colorado, except those materials that will be generated during the construction of this well (excess fill, stormwater BMPs, etc.).
- b. No gravel or other related minerals from new or existing pits on Federal land will be used in the construction of roads, well pads, etc., without prior approval from the BLM.

7. METHODS FOR HANDLING WASTE DISPOSAL

- a. Cuttings will be deposited in a steel cuttings bin (~45' x 10' x 12') and cuttings pile. Cuttings Management: cuttings deposited in the steel pit will be solidified with sawdust. Cuttings will be moved from the steel pit to the cutting pile. Once drilling is finished the cuttings will be buried on location and reclaimed.
- b. The steel cuttings bin and unlined flare ditch will be constructed on the existing location and will not be located in natural drainages where a flood hazard exists or surface runoff will destroy or damage the pit walls. These will be constructed so as not to leak, break, or allow the discharge of liquids there from. They will be constructed, operated and maintained in accordance with the applicable BLM/COGCC rules and regulations.
- c. Drilling fluids including salts and chemicals will be contained. Upon termination of drilling and completion operations, the mud will be transferred to another drilling location for use, dewatered and recycled, or removed and disposed of at an approved waste disposal facility within ninety (90) day after termination of drilling and completion activities.
- d. In the event that adverse weather conditions prevent removal of the fluids from the mud system within this time period, an extension may be granted by the Authorized Officer upon receipt of a written request from Encana Oil & Gas (USA) Inc.
- e. Produced fluids – liquid hydrocarbons produced during production operations will be confined to flow back tanks for a period not to exceed ninety (90) days. It may also be recycled and used for drilling, completion or frac'ing for another well or location. Excess water will be trucked to Encana's High Mesa Water Treatment Facility located in the E2NW of Section 36, T7S, R96W in Garfield County.
- f. Sewage- self-contained, chemical toilets will be provided for human waste disposal. Upon completion of operations, or as needed, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved, sewage disposal facility.
- g. Garbage and other waste material – garbage, trash and other waste materials will be collected in a portable, self-contained and fully – enclosed trash cage during drilling and completion operations. Upon completion of operations (or as needed) the accumulated trash will be

disposed of at an authorized sanitary landfill. No trash will be burned on location or placed in the reserve pit.

- h. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the well location. No adverse materials will be left on the location. Any open pits will be maintained until such time as the pits are backfilled.
- i. Any spills of oil, gas, salt water or other potentially hazardous substances will be reported immediately to the BLM, and other responsible parties, and will be mitigated immediately, as appropriate, through clean up or removal to an approved disposal site.

8. ANCILLARY FACILITIES

Standard drilling operation equipment to be on location will include: Drilling rig with associated equipment; living facilities (self-contained travel type trailers may be used onsite during drilling operations) for company representative, tool pusher, mud logger, directional driller; toilet facilities and trash containers.

9. WELLSITE LAYOUT

- a. The survey plats are attached.
- b. The attached plat and addendum specify the drill site layout as staked, the existing well pad layout, cross section, rig layout and production schematic with the location of the existing access road and pipeline onto the well pad.
- c. A cross section of the well pad showing the cut and fill diagram is attached. The cross sections have been drafted to visualize the planned cuts and fills across the location.
- d. Topsoil conservation practices include stockpiling and/or windrowing available topsoil. The stockpiles are to be tracked walked perpendicular to contour with a convex top and concave bottom then seeded and mulched. Depth and width will vary with availability and stormwater requirements. The estimated depth of the windrowed/stockpiled topsoil may vary between 6 inches to 10 feet.
- e. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6.
- f. The flare ditch will be constructed as an unlined ditch.
- g. Compaction and construction of the berms surrounding the tank or tank batteries will be designed to prevent lateral movement of fluids through the utilized materials, prior to storage of fluids. The berms must be constructed to contain at a minimum 120 percent of the storage capacity of the largest tank within the berm. All load lines and valves shall be placed inside the berm.
- h. There shall be a sign or marker on location with the name of the operator, lease serial number, well number, and legal location of the well.
- i. For more detailed information about how well pads, roads, pipelines, topsoil and subsoil segregation are handled during: Preconstruction/Construction/Interim/Final Reclamation refer to the Plateau Creek Stormwater Management Plan – COR-03B651. This plan is on file at the operator's field office. This plan is available for review and inspection upon request.

10. PLANS FOR RECLAMATION OF THE SURFACE

The following surface reclamation will be done upon completion of the operations.

- a. Immediately upon well completion, the well location and surrounding area(s) will be cleared of all debris, materials, trash and junk not required for production. Drill cuttings will be spread, buried and reclaimed on location.
- b. During final reclamation of the site, the operator will push fill material into the cuts and up over the back slope to blend as nearly as possible with the original topography. All areas compacted and

devoid of vegetation should be ripped along contour to a minimum depth of 6 inches. Stockpiled topsoil should then be spread over the ripped and contoured areas and seeded. The stockpiled vegetation material would then be spread over the seeded areas (Note: stockpiled vegetation would NOT be spread over the access road ROW and pipeline route areas).

- c. The Surface Managing Agency will be notified forty-eight (48) hours prior to seeding. All disturbed areas are to be seeded with a seed mixture approved by the surface owner.
- d. Reseeding is to be done by drilling with a drill equipped with a depth regulator to insure even depths of planting not to exceed .5 inches and to ensure planting is being done at appropriate depths based on the type of species and soil types. Seeding is to be done during the months of September or October following construction completion. The seed mixture used shall be certified weed free. There shall be NO primary or secondary noxious weeds in the seed mixture. Seed labels from each bag shall be available for inspection while seeding is being accomplished. The seeding contractor will forward all seeding records (with bag labels) to the Authorized Officer at the BLM – Grand Junction Field Office. In the event grasses and native vegetation is not established after the first seeding application, subsequent applications will be performed until grasses and/or native vegetation is established.
- e. If the seed is broadcast or hydroseeded, application rates will be doubled and some means such as a rake or harrow will be used to incorporate the seed into the soil. Certified weed free mulch may be required on locations with an adequate supply of removed vegetation. Encana will apply mulch, if notified by the BLM that this is appropriate.
- f. Vegetation or soil disturbance by the operator will be held to the minimum consistent with practical construction operations and the operator will smooth all disturbed areas to conform as nearly as practical to the adjacent terrain.
- g. Following receipt of "Notice of Intent to Abandon", final BLM recommendations will be specified.
- h. Reclamation will be considered successful when the desired vegetative species are established, erosion is controlled, weeds are considered a minimal threat, and it is likely that ground cover will return to a desirable condition. Encana will continue revegetation efforts until this standard is met. The surface owner shall be responsible for determining when reclamation efforts are successful.
- i. A fence shall be installed around the perimeter of the area undergoing reclamation. The fence shall be maintained in a manner to prevent cattle from entering the area, and shall be constructed as follows: Posts to be no more than 16' apart; fence wire: four wires of at least 12.5 gauge, double strand twisted; two stays between posts; wire stretched taut between brace panels, wire spacing from the ground up: 14", 22", 30", 42". The fence shall be maintained in place for a minimum of 3 years or when it is determined that reclamation efforts are successful.

11. SURFACE OWNERSHIP

Well site - BLM – Grand Junction Field Office, 2815 H Road, Grand Junction, CO 81506. Phone No. (970) 244-3000.

Roads - All access roads within the leased area are either maintained by the County Road Department or on private lands or land owned by the BLM.

12. OTHER INFORMATION

1. A Class III archeological survey has been conducted by Metcalf Archaeological Consultants, Inc. and sent under separate cover.
2. If any archaeological or historical materials are discovered during construction, the operator must immediately halt surface disturbing activities and notify the Area manager. The Area manager will then assign a BLM archaeologist(s) to visit the location and gather sufficient information to consult with the Colorado State historic Preservation Officer (SHPO) concerning the NRHP significance of the discovered materials, and to recommend appropriate measures to manage those resources and/or to mitigate any adverse effects than may have occurred to them. The

costs of mitigation beyond determination of NRHP eligibility will be the responsibility of the fluid minerals lessee. The determination of appropriate management actions, including possibly avoidance or mitigation actions will be made by the Area Manager in consultation with the SHPO and the Advisory Council on Historic Preservation, as appropriate pursuant to Federal Regulation 36 CFR 800. The developer will also be invited to consult with the Area manager regarding his management decisions.

3. If subsurface cultural resources are unearthed during operations, activity in the vicinity of the cultural resource will cease and a BLM representative notified immediately. Pursuant to 43 CFR 10.4 Encana must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, Encana shall stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.
4. Encana will inform all persons associated with this project that they will be subject to prosecution for knowingly disturbing Native American Indian shrines, historic and prehistoric archaeology sites, or for collecting artifacts of any kind, including historic items and/or arrowheads and pottery fragments from Federal lands.
5. "Sundry Notice and Report of Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 32 CFR 3164.

LESSEE'S OR OPERATOR'S REPRESENTATIVE

Permit Matters

Encana Oil & Gas (USA) Inc.

370 17TH Street, Suite 1700

Denver, CO 80202

Jevin Croteau

Office: (720)876-5339

Cell: (720)273-6427

Drilling & Completion Matters

Encana Oil & Gas (USA) Inc.

370 17th Street, Suite 1700

Denver, CO 80202

Scott Reynolds – Drilling Engineer

Office: (720)876-5255

Cell: (720)369-0748

Construction Matters

Encana Oil & Gas (USA) Inc.

2717 County Road 215, Suite 100

Parachute, CO 81635

David Grisso

Office: (970)285-2601

Cell: (970)250-9660

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements made in this plan APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application.

These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this ____ day of _____, 2012.

Jevin Croteau
Regulatory Analyst
370 – 17th Street, Suite 1700
Denver, CO 80202
(720) 876-5339
jevin.croteau@encana.com

Appendix B

Encana Federal 33-8 (PL33NE) well NE NE Section 33, T10S, R96W CONDITIONS OF APPROVAL

Drilling Conditions of Approval

NOTIFICATION REQUIREMENTS

Location Construction-		at least forty-eight (48) hours prior to construction of location and access roads.
Spud Notice	-	at least twenty-four (24) hours prior to spudding the well.
Casing String and Cementing	-	at least twenty-four (24) hours prior to running casing and cementing all casing strings.
BOP and Related Equipment Tests	-	at least twenty-four (24) hours prior to initiating pressure tests.
First Production Notice-		within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.
Reclamation		At least (24) hours prior to reshaping the well pad.

REGULATORY REMINDERS

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease, which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors.

A copy of the approved application for permit to drill (APD), including the conditions of approval and accompanying surface use plan will be furnished to the field representative by the operator to insure compliance and will be available to authorized personnel at the drill site whenever active construction or drilling operations are underway.

Fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

All operations, unless otherwise specifically approved in the APD, must be conducted in accordance with Onshore Oil and Gas Order No. 2.

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Any usable water zones encountered below the surface casing shall be isolated and or protected by cementing across the zone. The minimum requirement is to cement from 50 feet above to 50 feet below each usable water zone encountered.

If gas is found to be present in the Wasatch formation, then the zone will need to be isolated either by the primary cement job or remedial cementing.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 5M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

3. Casing Program and Auxiliary Equipment

The surface casing **shall** be cemented back to surface either during the primary cement job or by remedial cementing. Leak-off tests of all casing shoes will be performed and recorded for all wells.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vapor proof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to **TOC** and shall be utilized to determine the bond quality for the production casing.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. In accordance with 43-CFR 3162.4(b) submit a complete set of electrical/mechanical logs in .LAS format with standard Form 3160-4, Well Completion or Recompletion Report and Log.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Should the well be completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9. d.), and shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b. 4).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the AO.

All open-vent exhaust stacks associated with heater-treater, separator, and dehydrator units must be constructed to prevent birds and bats from entering them and to the extent practical to discourage perching and nesting.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted following initial installation and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter-improving schedules. A copy of the meter calibration reports will be submitted to the Grand Junction Field Office. All meter measurement facilities will conform to Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

In the event after-hours approval or notification is necessary, please contact one of the following:

Grand Junction Field Office

Bob Hartman
Petroleum Engineer

W: 970-244-3041
C: 970.250-7002

Ed Fancher
Inspector

W: 970.244-3039

Surface Site-Specific Conditions of Approval

1. APD Expiration. If the well has not been spudded by September 1, 2016, this APD will expire and the operator is to cease all operations related to preparing to drill the well. In that event, the operator will be required to submit a new application.
2. Big Game Winter Range Timing Limitation. As winter range areas identified by BLM are protected by lease stipulation, an annual Timing Limitation (TL) period shall apply from December 1 to May 1 to minimize impacts to wintering big game and habitat. All construction, drilling, completion, work-overs, road and pipeline construction and other intensive activities are excluded during this period.
3. Cultural Monitor. A portion of the proposed pipeline involves an eligible cultural property which will require construction monitoring. Vegetation stripping and all heavy equipment construction associated with disturbance and movement of soil in this area must be monitored by a Colorado BLM permitted cultural resource contracting firm. Each piece of equipment working must have one archaeologist dedicated to monitoring the activity of that equipment. Contact the BLM archaeologist prior to project implementation to ensure proper required procedures and reporting standards, Alissa Leavitt-Reynolds, 970-244-3035.
4. Biological Monitor. A portion of the proposed access road and pipeline involves a BLM Sensitive Plant species which will require construction monitoring. Due to the plants present, a BLM approved Biological Monitor will be required during construction and maintenance activities in the affected areas. Contact the BLM Ecologist prior to project implementation to ensure proper required procedures and reporting standards, Anna Lincoln, 970-244-3019.
5. Sensitive Plants. Special design features for road/pipeline construction will be necessary in section 27 to avoid or reduce direct impacts to the DeBeque milkvetch. The proposed pipeline and road maintenance will not affect the mapped DeBeque phacelia habitat. In addition, in sensitive areas the pipeline may need to alternate sides of the road, and/or stay within areas of pre-disturbance. DeBeque milkvetch has been recorded on both sides of the access road near the northern end of the proposed pipeline. Approximately 750 continuous feet of pipeline will need to be confined to the pre-disturbed road area. Additionally, temporary fencing and a biological monitor must be utilized to reduce potential impacts to the milkvetch. Construction implementation occurring in section 27 will need to be coordinated with the BLM Ecologist, Anna Lincoln 970-244-3019. To further reduce impacts to the milkvetch, pipeline construction within section 27 must occur outside of the blooming season (Late April-May).
6. Dust Abatement. The operator shall prevent and abate fugitive dust when it occurs. The BLM may direct the operator to change the level and type of treatment if dust abatement is insufficient. BLM approval is required before application of surfactants, binding agents, or other dust-suppression chemicals on roadways within public lands. Speed control measures on all project-related unpaved roads shall also be required. A lignin sulfonate solution shall be used to suppress dust along the road as needed.

7. Drill Cuttings. Drill cuttings will require testing, compliance and documentation with COGCC Table 910-1 standards before any cuttings can be spread or buried on location.
8. Water quality. Prior to drilling, baseline water quality sampling from all water wells within 1 mile of the proposed action should be conducted and samples analyzed for the following parameters: TPH (total petroleum hydrocarbons), PAH (polycyclic aromatic hydrocarbons), VOCs, BTEX, as well as dissolved metals and the following anions: bromide, chloride, fluoride, nitrate, nitrite, and sulfate. Sampling and analysis should occur periodically through the live of the well(s) given proximity to domestic water supply wells. The operator shall provide all test results to BLM.

The operators cement plan will include a gas blocker additive to further isolate any freshwater zones encountered during drilling.

9. Culverts. Increase culvert size to a minimum of 24 inches in diameter on access road, intersecting spring flow from Beehive Spring #1 located in section 27 or approximately STA 76+00. Minimize surface disturbance on the cut slope of the road in this location to avoid impacts to the spring source and riparian habitats dependent on spring flow below the road.
10. Road upgrades. The road plans indicate water relief structures do not meet the BLM Goldbook standards for spacing. Additional culverts or water (drainage) dips must be installed to meet the minimum standards as shown on p. 33, Figure 6 of the Goldbook for moderately erosive soils which correspond to the percent grade of the road.

A cattle guard and side metal cattle gate with bell type lock housing will be installed at the beehive gate to allow for operator traffic and livestock transport. Bell housings for the new gate and to replace the existing gate's security lock, will be of substantial length to prevent lock cutting. Boulders on the wings of these gates and cattle guard will be placed to prevent drive around traffic into the winter closure area.

Road widening will only occur to increase turning radii or for inter-visible turnout placement.

11. As Built Details. The operator shall submit to the Authorized Officer within 30 days of setting production facilities, a digital as-built file of the following: the perimeter of the pad collected at the base of fill slopes and at the head of cut slopes including all associated soil locations, the wellhead(s), and the centerline of the access road. The digital depiction shall be in a format that is GIS compatible (shapefiles) in NAD83, UTM coordinate system.
12. Goshawk Nest. To avoid impacts to the goshawk nesting area no construction or vegetation disturbance activities should occur between April 15 and August 15 within a quarter mile of the nest location, this buffer can be obtained from the BLM office.

Surface Standard Conditions of Approval

13. Existing Uses. The operator shall obtain agreements allowing construction and maintenance with all existing right-of-way holders, authorized users, and pipeline operators prior to surface disturbance or construction of the location or access across or adjacent to any existing or approved rights-of-way or pipelines. In the case of privately owned surface, the operator shall certify to BLM that a Surface Use Agreement has been reached with the private surface owners prior to commencing construction and that the owner has been provided a copy of the Surface Use Plan of Operations (SUPO) required for permitting a federal APD. If an Agreement cannot be reached, the operator shall comply with provisions of the law or regulations governing the Federal right of re-entry to the surface (43 CFR 3814).
14. Other Permits. This authorization is contingent upon receipt of and compliance with all applicable federal, state, county, municipal and local permits, including all necessary environmental clearances and permits (Colorado Oil and Gas Conservation Commission, U.S. Army Corps of Engineers, U.S. Fish & Wildlife, U.S. Forest Service, Colorado Department of Transportation, Colorado Department of Health & Environment, County Health and Road Departments, municipalities, etc.).
15. As Built Details. The operator shall submit to the Authorized Officer within 30 days of setting production facilities, a digital as-built file of the following: the perimeter of the pad collected at the base of fill slopes and at the head of cut slopes including all associated soil locations, the wellhead(s), and the centerline of the access road. The digital depiction shall be in a format that is GIS compatible (shapefiles) in NAD83, UTM coordinate system.
16. Fire Management: Operator or contractor personnel will call BLM Grand Junction Dispatch to report any wildfires, (970)251-4800 or (970)244-3000.
17. Migratory Bird Treaty Act. New surface disturbance, especially vegetation removal, shall not be allowed between May 15 and July 15, to prevent potential taking of migratory birds and/or eggs, unless otherwise approved in writing by the Grand Junction Field Office Manager.
18. Jurisdictional Waters of the U.S. The operator shall obtain appropriate permits from the U.S. Army Corps of Engineers (USACE) prior to discharging fill material into waters of the U.S. in accordance with Section 404 of the Clean Water Act. Waters of the U.S. are defined in 33 CFR Section 328.3 and may include wetlands as well as perennial, intermittent, and ephemeral streams. Permanent impacts to waters of the U.S. may require mitigation. Contact the USACE Colorado West Regulatory Branch at 970-243-1199. Copies of any printed or emailed approved USACE permits or verification letters shall be forwarded to the BLM.
19. Drainage Crossings and Culverts. Construction activities at perennial, intermittent, and ephemeral drainage crossings (e.g. burying pipelines, installing culverts) shall be timed to avoid high flow conditions. Culverts at drainage crossings shall be designed and installed to

pass a 25-year or greater storm event, without development of a static head at the pipe inlet. On perennial and intermittent streams, culverts shall be designed to allow for passage of aquatic biota. The minimum culvert diameter in any installation for a drainage crossing or road drainage shall be 24 inches. Crossings of drainages deemed to be jurisdictional waters of the U.S. pursuant to Section 404 of the Clean Water Act may require additional culvert design capacity. Due to the flashy nature of area drainages and anticipated culvert maintenance, the U.S. Army Corps of Engineers (USACE) recommends designing drainage crossings for the 100-year event. Contact the USACE Colorado West Regulatory Branch at 970-243-1199.

20. Heritage Resources - Cultural and Paleontological. All persons in the area who are associated with this authorization shall be informed that any person who, without a permit, injures, destroys, excavates, appropriates or removes any vertebrate fossil, historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361). Any heritage resource discovered requires that work in the area must stop and the BLM Authorized Officer notified. Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the proponent and all of their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh).

Inadvertent Discovery:

- a. The National Historic Preservation Act (NHPA) [16 USC 470s., 36 CFR §800.13], as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during the Proposed Action implementation, work in that area must stop and the BLM Authorized Officer (AO) must be notified immediately. Within five working days the AO will determine the actions that will likely have to be completed before the site can be used, assuming in place preservation is not necessary §800.13(b)(3).
- b. The Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001 et seq., 43 CFR 10.4] requires that if inadvertent discovery of Native American Human Remains or Objects of Cultural Patrimony occurs, any activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice be made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA §3(d)).
- c. The Paleontological Resources Preservation Act (PRPA) [16 U.S.C. 470aaa] requires the proponent to immediately suspend activities in the vicinity, protect the discovery from damage and notify the BLM Authorized Officer of any paleontological resources discovered as a result of operations under this authorization. The Authorized Officer will evaluate, or will have evaluated, such discoveries as soon as possible, but not later than 10 working days after being notified. Appropriate measures to mitigate adverse effects to significant paleontological resources will be determined by the Authorized Officer after consulting with the operator. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (1)

following the Authorized Officer's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (2) following the Authorized Officer's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.

- d. If human remains are discovered on private or state land associated with this authorization, the BLM will notify the State of Colorado Archaeologist immediately, who will comply with Colorado Revised Statutes (Appendix) regarding the discovery of human remains (24-80-1302).
 - e. In the case of a new discovery, the operator may relocate activities to avoid the expense or mitigation and delays associated with this process, as long as the new area has been appropriately inventoried and has no resource concerns, and the exposed materials are recorded and stabilized. Otherwise, the operator shall be responsible for mitigation costs. The BLM authorized officer will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM authorized officer that the required mitigation has been completed, the operator will be allowed to resume construction.
18. Soils. Cuts and fills shall be minimized when working on erosive soils and slopes in excess of 30 percent. Cut-and-fill slopes shall be stabilized through revegetation practices with an approved seed mix shortly following construction activities to minimize the potential for slope failures and excessive erosion. Fill slopes adjacent to drainages shall be protected with well-anchored straw wattles, or other acceptable BMPs designed to minimize the potential for sediment transport. On slopes greater than 50 percent, BLM personnel may request a professional geotechnical analysis prior to construction.
 19. Pipelines installed beneath stream crossings shall be buried at a minimum depth of 4 feet below the channel substrate to avoid exposure by channel scour and degradation. Following burial, the channel grade and substrate composition shall be returned to pre-construction conditions.
 20. Low-water crossings shall conform to the natural channel shape and slope and be designed to minimize bank failures, channel incision and scour, and aggradation at the crossing. Crossings shall be constructed at-grade and consist of an armored channel bottom and banks using local rock material, appropriately sized rock material, or rock gabions. Additionally, design specifications shall be produced by a qualified and certified engineer and these specifications shall be available to the BLM upon request prior to commencement of construction activities
 21. Range Management. Damage to range improvements (fences, gates, reservoirs, pipelines, etc.) shall be avoided during development of oil and gas resources. If range improvements are damaged during exploration and development, the operator shall repair or replace the damaged range improvements. If a new or improved access road bisects an existing livestock fence, a steel frame gate or a cattleguard with bypass gate shall be installed across the roadway to control grazing livestock.

22. Reclamation. Prior to interim reclamation, the operator shall meet with BLM to inspect the disturbed area, review the existing reclamation plan, and agree upon any revisions to the plan. The objectives of interim reclamation are to return the disturbed area to productive use and meet the objectives of the land and the resource management plan. Interim reclamation will be considered successful when disturbed areas not needed for long-term production operations or vehicle travel have been recontoured and stabilized; revegetated with a self-sustaining, vigorous, diverse, native (or otherwise approved) plant community that minimizes visual impacts, provides forage and stabilizes soils. Seeded species will be considered firmly established when at least 50 percent of the new perennial plants are producing seed.

a. Deadline for interim reclamation earthwork and seeding. Interim reclamation to reduce a well pad to the maximum size needed for production, including earthwork and seeding of the interim reclaimed areas, shall be completed within 6 months following completion of the last well planned on that pad. Deadline is subject to extension on a case-by-case basis upon approval of the BLM, based on season, timing limitations, or other constraints. If an extension is needed, a request shall be submitted writing to the BLM. If an extension is granted, temporary surface stabilization (hydro-mulch, erosion matting, etc) may be required.

b. Seedbed preparation. For cut-and-fill slopes, initial seedbed preparation shall consist of backfilling and recontouring to achieve the configuration specified in the reclamation plan. For compacted areas, initial seedbed preparation shall include ripping to a minimum depth of 18 inches with a maximum furrow spacing of 2 feet. Where practicable, ripping shall be conducted in two passes at perpendicular directions. Following final contouring, the backfilled or ripped surfaces shall be covered evenly with topsoil. The BLM may require also require soil amendments if topsoil is inadequate. Final seedbed preparation shall consist of scarifying (raking or harrowing) or roughening the spread topsoil prior to seeding.

c. Seed Mixes. All disturbed areas shall be seeded with a seed mixture approved by the BLM and be consistent with BLM standards in terms of species and seeding rate for the specific habitat type within the project area. The seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed tags or other official documentation shall be submitted to BLM at least 14 days before the date of proposed seeding for acceptance. Seed that does not meet the above criteria shall not be applied to public lands.

d. Seeding procedures. Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation. If interim revegetation is unsuccessful, the operator shall implement subsequent reseedings until interim reclamation standards are met.

e. Site Protection. The pad shall be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species are firmly established, whichever comes later. The seeded species will be considered firmly established when at least 50 percent of the new plants are producing seed. The BLM will approve the type of fencing.

g. *Erosion Control*. Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other measures approved by the BLM. Cut-and-fill slopes along drainages or in areas with high erosion potential shall also be protected from erosion using hydromulch designed specifically for erosion control or biodegradable blankets/matting, bales, or wattles of weed-free straw or weed-free native grass hay. A well-anchored fabric silt fence shall also be placed at the toe of cut-and-fill slopes along drainages or to protect other sensitive areas from deposition of soils eroded off the slopes. Additional BMPs shall be employed as necessary to reduce soil erosion and offsite transport of sediments.

h. *Monitoring*. The operator shall conduct annual monitoring surveys of all sites categorized as “operator reclamation in progress” and shall submit an annual monitoring report of these sites to the BLM by December 31 of each year. The annual report shall document whether attainment of reclamation objectives appears likely. If one or more objectives appear unlikely to be achieved, the report shall identify appropriate corrective actions.

23. *Weed Control*. The operator shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the joint BLM/ Forest Service *Noxious and Invasive Weed Management Plan for Oil and Gas Operators*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports shall be submitted to the authorized officer by December 1.
24. *Visual Resources*. Production facilities shall be placed to avoid or minimize visibility from travel corridors, residential areas, and other sensitive observation points—unless directed otherwise by the BLM due to other resource concerns. Facilities shall be placed as indicated on the plats attached to the APD, unless an alternative placement is approved by the BLM. All permanent structures installed on the location will be painted a flat non-reflective **Shale Green**, of the standard environmental color chart.

Appendix C

STANDARD RIGHT-OF-WAY STIPULATIONS:

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the proposal approved, amended and made part of the grant. Any relocation, additional construction, or use not in accord with the grant shall not occur without the prior written approval of the BLM.
2. Holder shall make a copy of the complete amended right-of-way grant, including all stipulations and approved proposals, available on the right-of-way area at all times of construction, operation, and termination.
3. The holder shall obtain and comply with all legal Federal, State and County resolutions and regulations and permit requirements.
4. All requirements and stipulations of the grant shall remain in effect and the holder shall construct, operate, maintain and reclaim the pipeline in strict conformity with the submitted application for the right-of-way, drawings and attachments, to grant stipulations and to industry standards.
5. The holder shall obtain agreements allowing construction with all existing rights-of-way holders and pipeline operators, approved in writing, prior to any surface disturbance or construction of the pipeline across or adjacent to any existing rights-of-way or approved pipelines. It is the grant holder's responsibility to coordinate with all other rights-of-way holders and adjacent landowners and resolve any conflicts involved with this project.
6. Contact the Grand Junction Field Office Manager at least 48 hours prior to construction start date. Contact person is Cathy Ventling 970-244-3009.
7. The holder is responsible for obtaining all necessary environmental clearances and permits from all agencies (U.S. Army Corps of Engineers, Colorado Division of Wildlife, U.S. Fish & Wildlife, U.S. Forest Service, Colorado Department of Transportation, Colorado Department of Health & Environment, County Health Department, etc.) before commencing any work under this permit. Without all clearances and permits, this permit shall not be in effect. Holder shall assume all responsibility and liability related to potential environmental hazards encountered in connection with work under this permit.
8. When saturated soil conditions exist on or along the road/pipeline route, construction shall be halted until soil material dries out or is frozen sufficiently for construction to proceed without undue damage and erosion to soils.
9. All construction equipment and vehicles shall be clean and free of weeds and weed seeds prior to moving equipment onto public lands and start of construction.
10. The holder shall be responsible for inventory, control, and monitoring of all noxious weeds, and weed species of local concern, on any and all disturbed areas within the limits of the

right-of-way. A yearly weed control program shall be incorporated into the reclamation program until native vegetation is well established. Holder shall submit a proposal for the weed control program to the BLM Weed Coordinator within one year of construction completion or document previously filed plan that will be utilized. Control methods shall be in accordance with guidelines established by the EPA, BLM, state and local authorities. Prior to the use of pesticides, holder shall obtain written approval from the BLM Weed Coordinator or Authorized Officer.

11. All existing roads shall be maintained in good condition and shall be returned to a condition as good as or better than before project commencement.
12. Trash shall be confined in a covered container while the project is in progress. Upon completion, all trash, flagging, laths, etc. shall be removed and hauled to an authorized disposal site. No burning or burial of trash, trees, brush or any other material shall be allowed. Human waste shall be properly contained and shall be disposed of at an approved sanitary landfill.
13. The Grand Junction Field Office Manager shall be notified at least 48 hours prior to commencing reclamation work. Contact person is Cathy Ventling 970-244-3009.
14. Prior to reclamation, an inspection of the disturbed area shall be held to review the existing reclamation plan or agree to an updated plan. Contact the Grand Junction Field Office at least 7 days prior to start date to schedule pre-reclamation inspection of the site.
15. Reclamation will be mandatory and completed as required by the BLM, using the seed mix and techniques specified. Prior to commencement of surface reclamation, the authorized officer may modify the seed mix and/or reclamation procedures should it be determined that such modification was expected to result in significant reclamation success.
16. At the time of buried pipeline installation, surface disturbance shall be limited to the minimum necessary to complete pipeline construction. All construction activities and surface disturbance shall take place within the disturbed width of the permitted construction right-of-way corridor. The exterior limits of the construction shall be flagged on the ground as necessary to prevent disturbance outside of the right-of-way.
17. All topsoil/growth medium and vegetation shall be removed from right-of-way, windrowed and stockpiled separately from spoil material. Topsoil shall only be used for reclamation and shall not be used to bed or pad the pipe during backfilling.
18. All construction and open trenching shall be maintained in a safe and workman-like condition. The pipeline shall be constructed to minimize safety concerns from vehicle use of the roads, as well as any other safety concerns.
19. Pipeline warning signs shall be installed within five days of construction completion and before use of the pipeline for transportation of product. Pipeline warning signs shall be maintained throughout the life of the pipeline. Signs shall be visible from sign to sign along the ROW. Additionally, pipeline warning signs are required at all road crossings. For safety

purposes each sign shall be permanently marked with the operator's name and shall clearly identify the owner (emergency contact) and purpose (product) of the pipeline.

20. A General Construction Permit from the Colorado Department of Public Health and Environment (CDPHE) is required when one acre or more is to be disturbed. Compliance with the permit requires the preparation and implementation of a Stormwater Management Plan for erosion prevention, systematic monitoring of the site, establishment of positive, directed run-off management and implementation and maintenance of site-specific adaptive Best Management Practices (BMPs).
21. New surface disturbance shall not be allowed between May 15 and July 15, to prevent potential taking of migratory birds and/or eggs unless otherwise approved by the Grand Junction Field Office Manager. If vegetation removal can be planned and accomplished prior to May 15, then exception to this condition can be granted to allow work on the project during the closure period.
22. In the event any fencing or cattleguards are damaged they shall immediately be replaced or repaired.

SITE SPECIFIC STIPULATIONS:

COC 75705 & COC 75705-01 Natural Gas Pipeline and Temporary Construction Space:

23. Goshawk Nest. To avoid impacts to the goshawk nesting area no construction or vegetation disturbance activities should occur between April 15 and August 15 within a quarter mile of the nest location, this buffer can be obtained from the BLM office.
24. Cultural Monitor. A portion of the proposed pipeline involves an eligible cultural property which will require construction monitoring. Vegetation stripping and all heavy equipment construction associated with disturbance and movement of soil in this area must be monitored by a Colorado BLM permitted cultural resource contracting firm. Each piece of equipment working must have one archaeologist dedicated to monitoring the activity of that equipment. Contact the BLM archaeologist prior to project implementation to ensure proper required procedures and reporting standards, Alissa Leavitt-Reynolds, 970-244-3035.
25. Biological Monitor. A portion of the proposed access road and pipeline involves a BLM Sensitive Plant species which will require construction monitoring. Due to the plants present, a BLM approved Biological Monitor will be required during construction and maintenance activities in the affected areas. Contact the BLM Ecologist prior to project implementation to ensure proper required procedures and reporting standards, Anna Lincoln, 970-244-3019.
26. Sensitive Plants. Special design features for road/pipeline construction will be necessary in section 27 to avoid or reduce direct impacts to the DeBeque milkvetch. The proposed pipeline and road maintenance will not affect the mapped DeBeque phacelia habitat. In addition, in sensitive areas the pipeline may need to alternate sides of the road, and/or stay within areas of pre-disturbance. DeBeque milkvetch has been recorded on both sides of the access road near the northern end of the proposed pipeline. Approximately 750 continuous feet of pipeline will need to be confined to the pre-disturbed road area. Additionally,

temporary fencing and a biological monitor must be utilized to reduce potential impacts to the milkvetch. Construction implementation occurring in section 27 will need to be coordinated with the BLM Ecologist, Anna Lincoln 970-244-3019. To further reduce impacts to the milkvetch, pipeline construction within section 27 must occur outside of the blooming season (Late April-May).

27. Big Game Winter Range Timing Limitation. As winter range areas identified by BLM are protected by lease stipulation, an annual Timing Limitation (TL) period shall apply from December 1 to May 1 to minimize impacts to wintering big game and habitat. All construction, drilling, completion, work-overs, road and pipeline construction and other intensive activities are excluded during this period.

SITE SPECIFIC STIPULATIONS:
COC 75703 Produced Water Pipeline:

23. Goshawk Nest. To avoid impacts to the goshawk nesting area no construction or vegetation disturbance activities should occur between April 15 and August 15 within a quarter mile of the nest location, this buffer can be obtained from the BLM office.
24. Cultural Monitor. A portion of the proposed pipeline involves an eligible cultural property which will require construction monitoring. Vegetation stripping and all heavy equipment construction associated with disturbance and movement of soil in this area must be monitored by a Colorado BLM permitted cultural resource contracting firm. Each piece of equipment working must have one archaeologist dedicated to monitoring the activity of that equipment. Contact the BLM archaeologist prior to project implementation to ensure proper required procedures and reporting standards, Alissa Leavitt-Reynolds, 970-244-3035.
25. Biological Monitor. A portion of the proposed access road and pipeline involves a BLM Sensitive Plant species which will require construction monitoring. Due to the plants present, a BLM approved Biological Monitor will be required during construction and maintenance activities in the affected areas. Contact the BLM Ecologist prior to project implementation to ensure proper required procedures and reporting standards, Anna Lincoln, 970-244-3019.
26. Sensitive Plants. Special design features for road/pipeline construction will be necessary in section 27 to avoid or reduce direct impacts to the DeBeque milkvetch. The proposed pipeline and road maintenance will not affect the mapped DeBeque phacelia habitat. In addition, in sensitive areas the pipeline may need to alternate sides of the road, and/or stay within areas of pre-disturbance. DeBeque milkvetch has been recorded on both sides of the access road near the northern end of the proposed pipeline. Approximately 750 continuous feet of pipeline will need to be confined to the pre-disturbed road area. Additionally, temporary fencing and a biological monitor must be utilized to reduce potential impacts to the milkvetch. Construction implementation occurring in section 27 will need to be coordinated with the BLM Ecologist, Anna Lincoln 970-244-3019. To further reduce impacts to the milkvetch, pipeline construction within section 27 must occur outside of the blooming season (Late April-May).

27. Big Game Winter Range Timing Limitation. As winter range areas identified by BLM are protected by lease stipulation, an annual Timing Limitation (TL) period shall apply from December 1 to May 1 to minimize impacts to wintering big game and habitat. All construction, drilling, completion, work-overs, road and pipeline construction and other intensive activities are excluded during this period.

SITE SPECIFIC STIPULATIONS:
COC 31814 Access Road Renewal:

23. Big Game Winter Range Timing Limitation. As winter range areas identified by BLM are protected by lease stipulation, an annual Timing Limitation (TL) period shall apply from December 1 to May 1 to minimize impacts to wintering big game and habitat. All construction, drilling, completion, work-overs, road and pipeline construction and other intensive activities are excluded during this period.
24. Cultural Monitor. A portion of the proposed pipeline involves an eligible cultural property which will require construction monitoring. Vegetation stripping and all heavy equipment construction associated with disturbance and movement of soil in this area must be monitored by a Colorado BLM permitted cultural resource contracting firm. Each piece of equipment working must have one archaeologist dedicated to monitoring the activity of that equipment. Contact the BLM archaeologist prior to project implementation to ensure proper required procedures and reporting standards, Alissa Leavitt-Reynolds, 970-244-3035.
25. Biological Monitor. A portion of the proposed access road and pipeline involves a BLM Sensitive Plant species which will require construction monitoring. Due to the plants present, a BLM approved Biological Monitor will be required during construction and maintenance activities in the affected areas. Contact the BLM Ecologist prior to project implementation to ensure proper required procedures and reporting standards, Anna Lincoln, 970-244-3019.
26. Sensitive Plants. Special design features for road/pipeline construction will be necessary in section 27 to avoid or reduce direct impacts to the DeBeque milkvetch. The proposed pipeline and road maintenance will not affect the mapped DeBeque phacelia habitat. In addition, in sensitive areas the pipeline may need to alternate sides of the road, and/or stay within areas of pre-disturbance. DeBeque milkvetch has been recorded on both sides of the access road near the northern end of the proposed pipeline. Approximately 750 continuous feet of pipeline will need to be confined to the pre-disturbed road area. Additionally, temporary fencing and a biological monitor must be utilized to reduce potential impacts to the milkvetch. Construction implementation occurring in section 27 will need to be coordinated with the BLM Ecologist, Anna Lincoln 970-244-3019. To further reduce impacts to the milkvetch, pipeline construction within section 27 must occur outside of the blooming season (Late April-May).
27. Dust Abatement. The operator shall prevent and abate fugitive dust when it occurs. The BLM may direct the operator to change the level and type of treatment if dust abatement is insufficient. BLM approval is required before application of surfactants, binding agents, or

other dust-suppression chemicals on roadways within public lands. Speed control measures on all project-related unpaved roads shall also be required. A lignin sulfonate solution shall be used to suppress dust along the road as needed.

28. Culverts. Increase culvert size to a minimum of 24 inches in diameter on access road, intersecting spring flow from Beehive Spring #1 located in section 27 or approximately STA 76+00. Minimize surface disturbance on the cut slope of the road in this location to avoid impacts to the spring source and riparian habitats dependent on spring flow below the road.
29. Road upgrades. The road plans indicate water relief structures do not meet the BLM Goldbook standards for spacing. Additional culverts or water (drainage) dips must be installed to meet the minimum standards as shown on p. 33, Figure 6 of the Goldbook for moderately erosive soils which correspond to the percent grade of the road.

A cattle guard and side metal cattle gate with bell type lock housing will be installed at the beehive gate to allow for operator traffic and livestock transport. Bell housings for the new gate and to replace the existing gate's security lock, will be of substantial length to prevent lock cutting. Boulders on the wings of these gates and cattle guard will be placed to prevent drive around traffic into the winter closure area.

Road widening will only occur to increase turning radii or for inter-visible turnout placement.

30. Goshawk Nest. To avoid impacts to the goshawk nesting area no construction or vegetation disturbance activities should occur between April 15 and August 15 within a quarter mile of the nest location, this buffer can be obtained from the BLM office.