

U.S. Department of the Interior
 Bureau of Land Management
 Glenwood Springs Energy Office
 2425 S. Grand Avenue, Suite 101
 Glenwood Springs, CO 81601

Statutory Categorical Exclusion, DOI-BLM-CO-N040-2009-0077-SCX

Project: Proposal to Drill Six Federal Wells into Federal Leases COC50128 and COC55604 from the Existing N9W Pad Located on Private Land on Grass Mesa.

Location: Township 7 South, Range 93 West, Section 9, SE $\frac{1}{4}$ SW $\frac{1}{4}$, 6th PM

Proposal: EnCana Oil & Gas (USA) Inc.(EnCana) proposes to directionally drill six Federal wells from the existing N9W pad located on private land owned by EnCana to access fluid minerals in Federal leases COC50128 and COC55604 (Table 1). The pad would not be expanded; the proposed surface disturbance would remain within the existing 5.2 acre pad footprint (Figures 1 and 2). The pad lies within the Grass Mesa year-round drilling area approved by BLM through winter 2009-2010 which allows construction, drilling, and completion activity to occur during winter months. The N9W pad was not specifically analyzed in the Grass Mesa GAP, although the 2005 EA #CO140-2005-056 did analyze the impacts related to the initial well drilling and N9W pad development.

The existing access road and pipeline would continue to serve the N9W pad in its present condition.

Table 1. Surface and Bottomhole Locations of Proposed Federal Wells			
<i>Proposed Wells</i>	<i>Federal Lease</i>	<i>Surface Locations</i>	<i>Bottomhole Locations</i>
HMU 9-13B	COC50128	209 feet FSL, 1743 feet FWL SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W	1220 feet FSL, 660 feet FWL SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 9, T7S R93W
HMU 9-13C2	COC50128	200 feet FSL, 1752 feet FWL SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W	225 feet FSL, 660 feet FWL SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W
HMU 16-4	COC55604	189 feet FSL, 1744 feet FWL SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W	665 feet FNL, 660 feet FWL NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 16, T7S R93W
HMU 16-4C	COC55604	169 feet FSL, 1746 feet FWL SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W	1315 feet FNL, 660 feet FWL SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 16, T7S R93W
HMU 16-6A	COC55604	180 feet FSL, 1753 feet FWL SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W	1375 feet FNL, 1970 feet FWL SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 16, T7S R93W
HMU 16-13A	COC55604	220 feet FSL, 1750 feet FWL SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T7S R93W	225 feet FNL, 2573 feet FEL NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 16, T7S R93W

Lease Stipulations: Since the pad is located on private land, the Lease Stipulations listed on the Federal leases are not applicable.

BLM Conditions of Approval: Conditions of Approval (COAs) that would be included on the Applications for Permit to Drill (APDs) are attached.

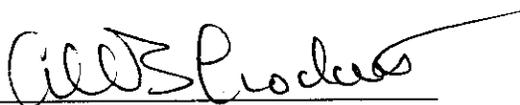
NEPA Compliance: The following category of Categorical Exclusions pursuant to Section 390 of the Energy Policy Act (Act of 2005) applies to this proposal:

Category #2: *"Drilling an oil and gas location or well pad at a site which drilling has occurred within five (5) years prior to the date of spudding the well."* The last well (HMU 9-13) on the N9W pad was spudded on May 1, 2005.

Category #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 drilling as 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.* EA #CO140-2005-056 identified and analyzed the N9W development for the existing two wells on the pad (approved April, 2005).

Prepared by: Jim Byers, Natural Resource Specialist 4/20/09

Approval: It is my decision to approve the proposed action with the above referenced terms and conditions:



Allen B. Crockett, Ph.D., J.D.
Supervisory Natural Resource Specialist

4-21-09
Date

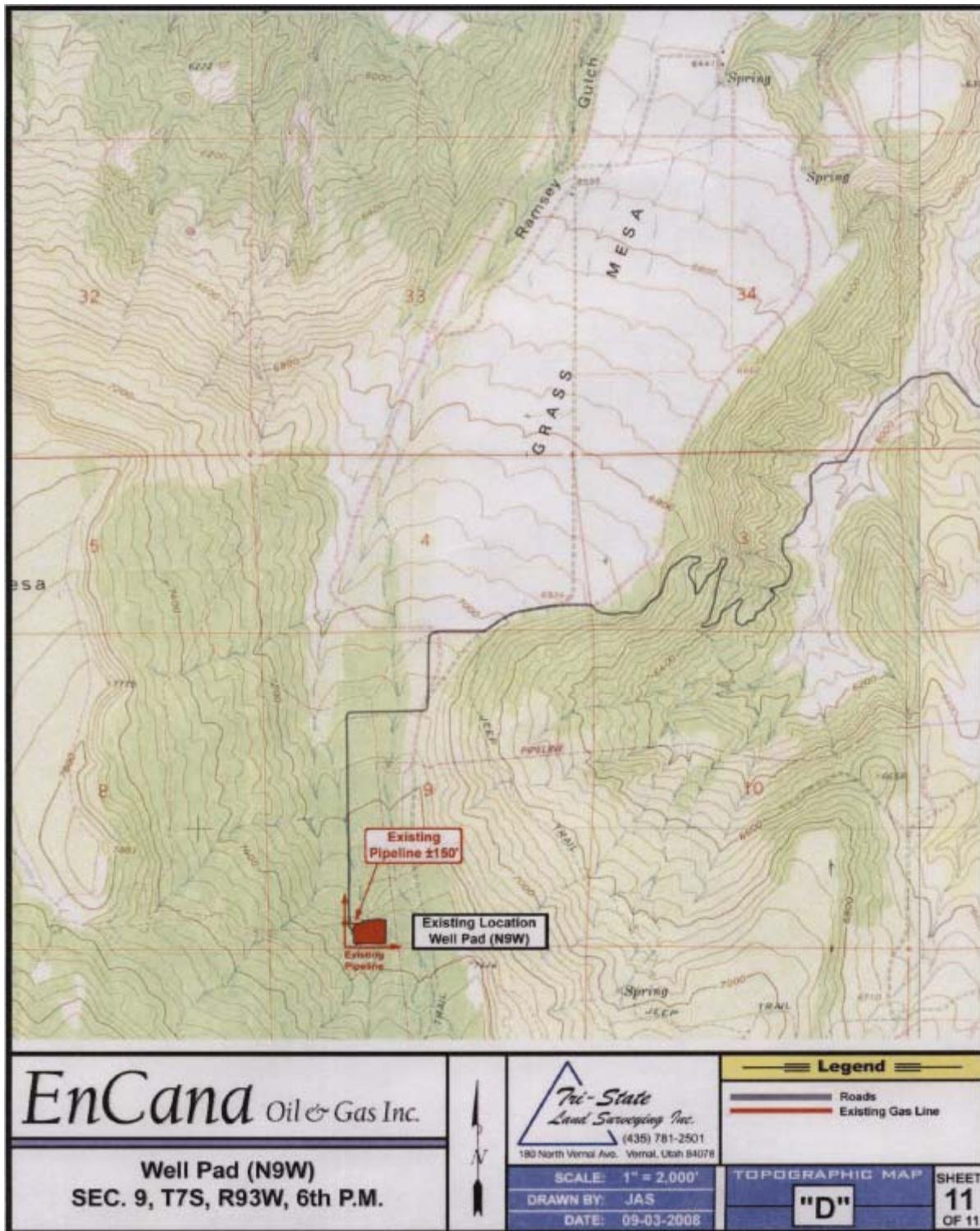
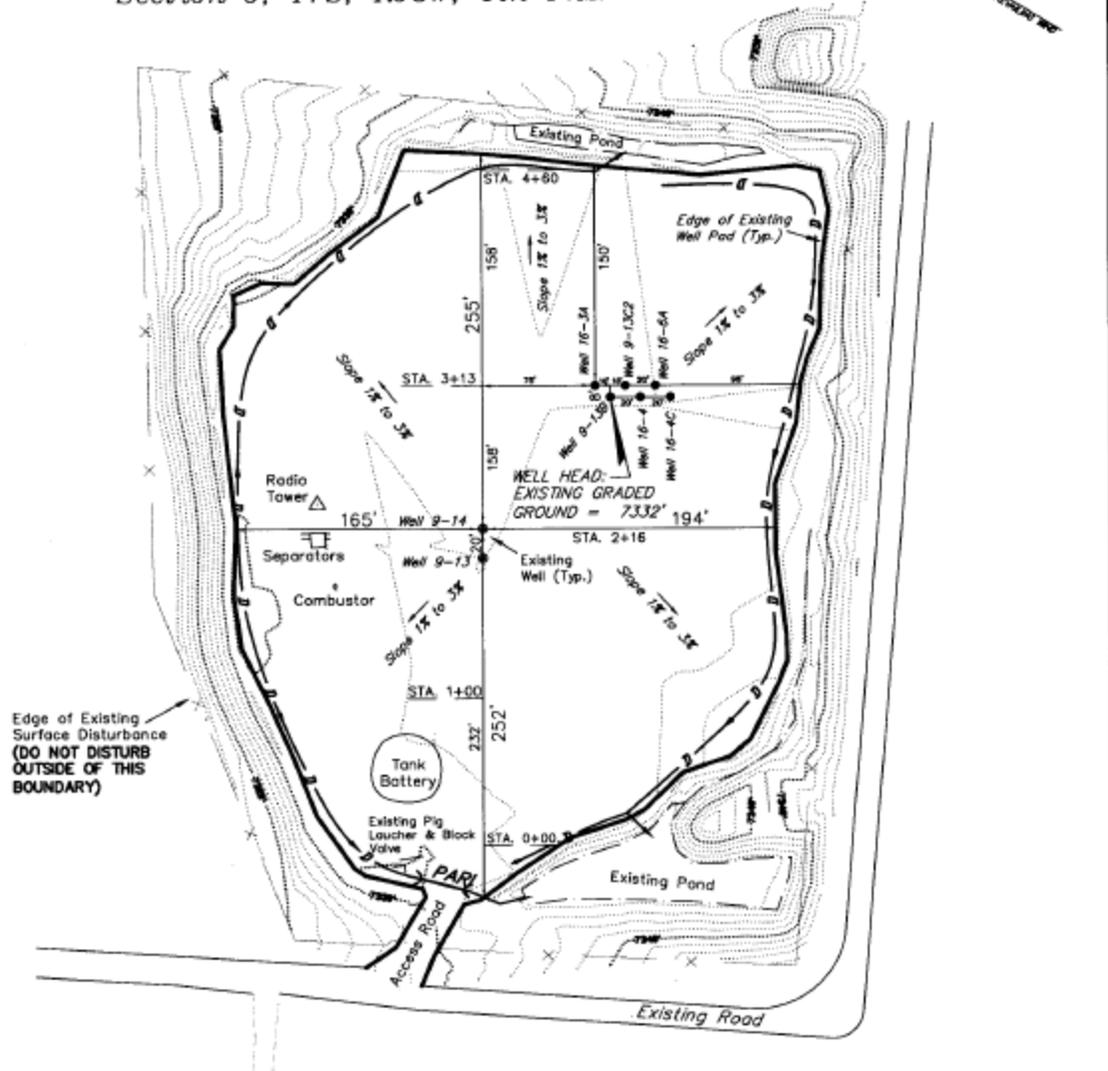
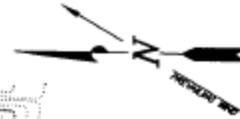


Figure 1. Project Location Map

ENCANA OIL & GAS (USA) INC

WELL PAD (N9W)
Section 9, T7S, R93W, 6th P.M.



- NOTES:**
- (1) Slope Track and/or Terrace All Slopes and Piles
 - (2) Erosion Control & Seed Topsoil Stockpile
 - (3) Erosion Control & Seed Outside Slopes of Stockpiles
 - (4) Slope away from Substructure Areas 1X to 3X to Flow Control Ditch on Entire Pad
 - (5) When Possible the Cut and Fill Slopes Directly Behind the Proposed Production Equipment Should be Reclaimed with 3:1 Slopes and Topsoil Spread During Pad Construction.
 - (6) BMP Selection and Position may Change Depending on Actual Conditions Encountered During the Construction Process.
 - (7) All CMP's Shall have Inlet and Outlet Protection.

LEGEND:
PARI = PAD/ACCESS ROAD INTERFACE
D = FLOW CONTROL DITCH

SURVEYED BY: C.D.S.	DATE SURVEYED: 07-09-08	<p>Tri State Land Surveying, Inc. 180 NORTH VERNAL AVE. VERNAL, UTAH 84078</p>	(435) 781-2501 SHEET 4 OF 11
DRAWN BY: F.T.M.	DATE DRAWN: 08-29-08		
SCALE: 1" = 60'	REVISED: F.T.M. 02-20-09		

Figure 2. Pad Layout

DOWNHOLE CONDITIONS OF APPROVAL
Applications for Permit to Drill

Company/Operator: EnCana Oil & Gas (USA) Inc.

Surface Location: SESW, Section 9, Township 7 South, Range 93 West, 6th P.M.

<u>Well Name</u>	<u>Well No.</u>	<u>Bottomhole Location</u>	<u>Lease</u>
HMU(N9W)	9-13B	SESW Sec. 9, T. 7S, R. 93W.	COC-50128
HMU(N9W)	9-13C2	SESW Sec. 9, T. 7S, R. 93W.	COC-50128
HMU(N9W)	16-3A	SESW Sec. 9, T. 7S, R. 93W.	COC-55604
HMU(N9W)	16-4	SESW Sec. 9, T. 7S, R. 93W.	COC-55604
HMU(N9W)	16-4C	SESW Sec. 9, T. 7S, R. 93W.	COC-55604
HMU(N9W)	16-6A	SESW Sec. 9, T. 7S, R. 93W.	COC-55604

1. EnCana Oil & Gas, Inc. shall test all domestic water wells within a ¼ mile radius of a Federal well bore prior to spudding the gas well (baseline test of water well) and within 3 days after the last completion operation for the pad or 30 days from the most recent completion stage if there is an extended break in the completion process (whichever occurs sooner). Water samples shall be tested by a qualified third-party entity for hydrocarbons and other compounds utilized in the drilling or completion operations. Results of water sampling shall be reported to the appropriate domestic well owner within 30 days of testing. If contamination is found in the post-completion water sample when compared to the baseline sample, BLM and landowner shall be notified within 24 hours from the time the data is analyzed.
2. Twenty-four hours *prior* to (a) spudding, (b) conducting BOPE tests, (c) running casing strings, and (d) within twenty-four hours *after* spudding, the GSEO shall be notified. One of the following GSEO's inspectors shall be notified by phone: Steve Ficklin at 970-947-5213, Julie King shall at 970-947-5239, and Todd Sieber at 970-947-5220.
3. A GSEO petroleum engineer shall be contacted for a verbal approval prior to commencing remedial work, plugging operations on newly drilled boreholes, changes within the drilling plan, changes or variances to the BOPE, deviating from conditions of approval, and conducting other operations not specified within the APD. Please contact, Will Howell at 970-947-5221 (office) or 970-319-5837 for verbal approvals. As a secondary contact, Dane Geyer at 970-947-5229 (office) or 970-589-6887 (cell) for verbal approvals.
4. If a well control issue arises (e.g. kick, blowout, or water flow), casing failure occurs, or an increase in bradenhead pressure occurs during fracturing operations, Will Howell shall be notified within 24 hours from the time of the event.
5. The BOPE shall be tested and conform to Onshore Order #2 for a 3M system.
6. A casinghead rated to 3,000 psi or greater shall be utilized.
7. An electrical/mechanical mud monitoring equipment shall be functional prior to drilling out the next shoe. As a minimum, this shall include a trip tank, pit volume totalizer, stroke counter, and flow sensor.
8. Gas detecting equipment shall be installed in the mud return system, prior to drilling out the

- next shoe, and hydrocarbon gas shall be monitored for pore pressure changes.
9. A gas buster shall be functional and all flare lines effectively anchored in place, prior to drilling out the next shoe. The discharge of the flare lines shall be a minimum of 100' from the well head and targeted at bends. The panic line shall be a separate line (not open inside the buffer tank) and effectively anchored. All lines shall be downwind of the prevailing wind direction and directed into a flare pit, which cannot be the reserve pit. The flare system shall use an automatic ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and maintain a continuous flare.
 10. Prior to commencing fracturing operations, the production casing shall be tested to the maximum anticipated surface fracture pressure and held for 15 minutes. If leak-off is found, Will Howell shall be notified within 24 hours of the failed test, but prior to proceeding with fracturing operations. The test shall be charted and set to a time increment as to take up no less than a quarter of the chart per test. The chart shall be submitted with the well completion report.
 11. EnCana Oil & Gas, Inc. shall run open hole logs in the surface hole section in at least one well per pad. This COA is included for the determination of shallow gas.

On the first well drilled on this pad, a triple combo (open hole logs) shall be run from the base of the surface borehole to surface, and another run from TD to the surface casing shoe. Each open hole log shall be submitted to the GSEO within 24 hours after running. These logs shall be submitted digitally in LAS. format.

Since there are already two producing wells on this pad, the HMU #9-13, and the GMR #9-14, if there is an open-hole log that was run in either of these two wells, then have EnCana submit a copy to me ASAP. If you have a more updated revision of the Grass Mesa water well COA, then by all means substitute for the above.

Please contact Karen Conrath at 970-947-5235 or karen_conrath@blm.gov for clarification.
 12. As a minimum, cement shall be brought to 200' above the Mesaverde. Prior to commencing fracturing operations, a CBL shall be run (from TD to 200' above the TOC) and an electronic copy submitted to the GSEO. If the TOC is lower than required or the cement sheath of poor quality, then, within 48 hours from running the CBL and prior to commencing fracturing operations, a GSEO petroleum engineer shall be notified for further instruction.
 13. Submit the (a) mud/drilling log (e.g. Pason disc), (b) driller's event log/operations summary report, (c) production test volumes, (d) directional survey, and (e) Formation Integrity Test results with the well completion report. Please contact Will Howell for clarification.
 14. After the surface casing is cemented, a leak-off test will be performed on the first well drilled in accordance with OOGO No. 2; Sec. III, B.1. i. in order to make sure the surface casing is set in a competent formation. Submit the results from the test via email (william_howell@blm.gov) on the first well drilled on the pad.

**SURFACE USE CONDITIONS OF APPROVAL
DOI-BLM-CO-N040-2009-0077-SCX**

1. Startup Notification. The operator shall notify the BLM representative at least at 48 hours prior to initiation of construction.
2. Production Facility Placement and Paint Color. The paint color to be used on all surface facilities including the metal containment rings surrounding the tank battery, pipeline risers, and gate installations is Shale Green (5Y 4/2). To allow for maximum reclaimable area during earthwork phase of interim reclamation, the existing and planned storage tanks shall be relocated to the southwest area of pad near road entrance. The production pack (separators) shall be moved to the location identified on Sheet 7 of survey plats.
3. Storm Water Control. Appropriate storm water control measures shall be installed along outside edges of fill slopes and inside edges of cutslopes to control erosion and soil loss, as described in the BLM Gold Book and shown on the pad's layout schematic (Sheet 4).
4. Noise Abatement. To help mitigate noise impacts from drilling to nearby residence(s), operator will use noise-reducing drill rig that is powered by electricity generated from diesel engine(s). A shallow hydraulic drill rig will also be allowed to drill the surface casing holes in advance of the primary drill rig referenced above. Sound barriers will be installed along north side of pad to provide additional noise relief to nearby residences.
5. Drilling Period Considerations. To avoid extending visual and hydrocarbon odor impacts from pits and soil loss from wind erosion related to excess material piles, operator is encouraged to drill, complete and conduct interim reclamation on all planned wells as portrayed on GAP Map in one drilling season. If operator chooses to drill wells on pad beyond one drilling season, then all pits will be closed and interim pad reclamation will be completed prior to December 1 of each year.
6. Reclamation. BLM Glenwood Springs Energy Office (GSEO) Reclamation Policy, including the Letter outlining Revisions to GSEO Revegetation Requirements (dated May 1, 2008) shall be referenced and implemented for reclamation procedures related to interim and final reclamation measures related to this pad.
7. Adherence to Grass Mesa GAP COAs. Standard Conditions of Approval outlined in Appendix C of the Grass Mesa GAP will apply and remain in full force and effect. Furthermore, as addressed on page 1 of Grass Mesa GAP EA, surface disturbance for new road construction and/or pipeline installations will not exceed 38 feet unless approved by the Authorized Officer.