

**U.S. Department of the Interior  
Bureau of Land Management  
Colorado River Valley Field Office  
2300 River Frontage Road  
Silt, Colorado 81652**

**Statutory Categorical Exclusion, DOI-BLM-CO-N040-2010-0025-SCX**

**Project:** Proposal to Drill Eight Additional Wells into Federal Leases COC27825 and COC27826 from the Existing PH25 Pad Located on BLM land in the South Parachute area.

**Location:** Township 7 South, Range 96 West, Section 25, SE¼NE¼, 6<sup>th</sup> PM

**Proposal:** EnCana Oil & Gas (USA) Inc. (EnCana) proposes to directionally drill eight Federal oil and gas wells from the existing PH25 pad located on public land to access fluid minerals in Federal leases COC27825 and COC27826 (Table 1). The pad would be expanded from its original disturbance footprint of 2.9 acres analyzed in EA#CO140-2005-062, Environmental Assessment for Four Wells on Existing PH25 Pad (approved in May 2005) to a revised pad footprint of 4.0 acres. The expanded disturbance would accommodate a PACE rig layout, which requires a larger pad surface (Figures 1 and 2). The pad presently supports one well (Federal 25-2), which was drilled in 2005 with a spud date of August 9, 2005. The pad has been in existence since 1981 with the drilling of the H-25 well, which was abandoned in June 2005.

Resource surveys including sensitive plant and cultural resources were completed relative to the 2005 APD issuance for the lone existing well on the pad (Federal 25-2). A new raptor survey was conducted in April 2010 of the proposed project area with no findings recorded. The existing access road and buried gas pipeline would continue to serve the PH25 pad with only minor upgrades.

**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>
Federal 25-1 (PH25)	COC27825	1951 feet FNL, 600 feet FEL SE¼NE¼, Section 25, T7S R96W	490 feet FNL, 660 feet FEL NE¼NE¼, Section 25, T7S R96W
Federal 25-1BB (PH25)	COC27825	1952 feet FNL, 615 feet FEL SE¼NE¼, Section 25, T7S R96W	1150 feet FNL, 660 feet FEL NE¼NE¼, Section 25, T7S R96W
Federal 25-2BB (PH25)	COC27825	1956 feet FNL, 644 feet FEL SE¼NE¼, Section 25, T7S R96W	250 feet FNL, 1980 feet FEL NW¼NE¼, Section 25, T7S R96W
Federal 25-7 (PH25)	COC27825	1965 feet FNL, 650 feet FEL SE¼NE¼, Section 25, T7S R96W	2180 feet FNL, 1980 feet FEL SW¼NE¼, Section 25, T7S R96W
Federal 25-7BB (PH25)	COC27825	1957 feet FNL, 659 feet FEL SE¼NE¼, Section 25, T7S R96W	1520 feet FNL, 1980 feet FEL SW¼NE¼, Section 25, T7S R96W
Federal 25-8 (PH25)	COC27825	1954 feet FNL, 630 feet FEL SE¼NE¼, Section 25, T7S R96W	1810 feet FNL, 660 feet FEL SE¼NE¼, Section 25, T7S R96W
Federal 25-8BB (PH25)	COC27825	1963 feet FNL, 636 feet FEL SE¼NE¼, Section 25, T7S R96W	2470 feet FNL, 660 feet FEL SE¼NE¼, Section 25, T7S R96W
Federal 25-1 (PH25)	COC27826	1958 feet FNL, 591 feet FEL SE¼NE¼, Section 25, T7S R96W	2150 feet FSL, 660 feet FEL NE¼SE¼, Section 25, T7S R96W

An onsite for the pad expansion was conducted on December 15, 2009 and minor changes in pad layout were requested which extends the eastern edge of the pad an additional 20 feet to accommodate the planned space needed for the drill rig footprint and allow storm water ditching to be installed. The relatively steep road grade onto the pad would be reduced and the cutslopes at the road entrance onto the pad would be laid back for better traffic visibility. The meter run box located at the northeast pad corner would be removed and replaced with a valve riser to be installed into the existing pipeline approximately 50 feet east of the meter run box location. The installation of the valve riser would occur within the existing pipeline disturbance corridor. A culvert would be installed near the road entrance onto the pad to deflect road drainage away from the pad surface.

**Lease Stipulations:** Federal leases COC27825 and COC27826 have a January 1 through May 31 winter timing limitation, which was modified to January 1 through March 1 period in the South Parachute Geographic Area Plan (GAP).

**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 #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.* The well pad expansion would amount to 1.2 acres of additional surface disturbance. The total surface disturbance within Lease COC27825 is only attributable to the PH25 pad and would amount to 4.0 acres based on the survey plats for the PH25 pad expansion. The PH25 pad was identified as an existing well pad with expected future well drilling to occur in the South Parachute GAP (EA #CO140-2006-050 approved on August 22, 2007) and is subject to the Standard Conditions of Approval identified in that plan. Furthermore, EA #CO140-2005-062 (approved 5/16/05) identified and analyzed the 2005 PH25 well pad development including the drilling of the existing oil and gas well.

*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.* The PH25 pad was identified as an existing well pad with expected future well drilling to occur in the South Parachute GAP (EA #CO140-2006-050 approved on August 22, 2007) and is subject to the Standard Conditions of Approval identified in that plan.

**Extraordinary Circumstances Review for Statutory Categorical Exclusions:** Before any Energy Act Statutory Categorical Exclusion (SCX) is used, a sufficient review to determine if any of the following extraordinary circumstances apply must be conducted (516 DM 2, Appendix 2). If any of the extraordinary circumstances are applicable to the action being considered, either an EA or EIS must be prepared for the action. Part 516 of the Departmental Manual (516 DM 2, Appendix 2) states that extraordinary circumstances exist for individual actions within SCXs which may:

- 2.1 Have significant impacts on public health or safety.
- 2.2 Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.
- 2.3 Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].
- 2.4 Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.
- 2.5 Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.
- 2.6 Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.
- 2.7 Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.
- 2.8 Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.
- 2.9 Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.
- 2.10 Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).
- 2.11 Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).
- 2.12 Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).

**Prepared by:** Jim Byers, Natural Resource Specialist 5/21/10

**Contact Person**

For additional information concerning this SCX review, contact Jim Byers, Natural Resource Specialist, Colorado River Valley Field Office, 2300 River Frontage Road, Silt, CO 81652 (phone: 970.876.9056).

**Approval:** It is my decision to approve the proposed action with the above referenced terms and Conditions of Approval that will mitigate the expected impacts related to this project.

This statutory categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 516 DM 2 apply.



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

5/24/10  
Date

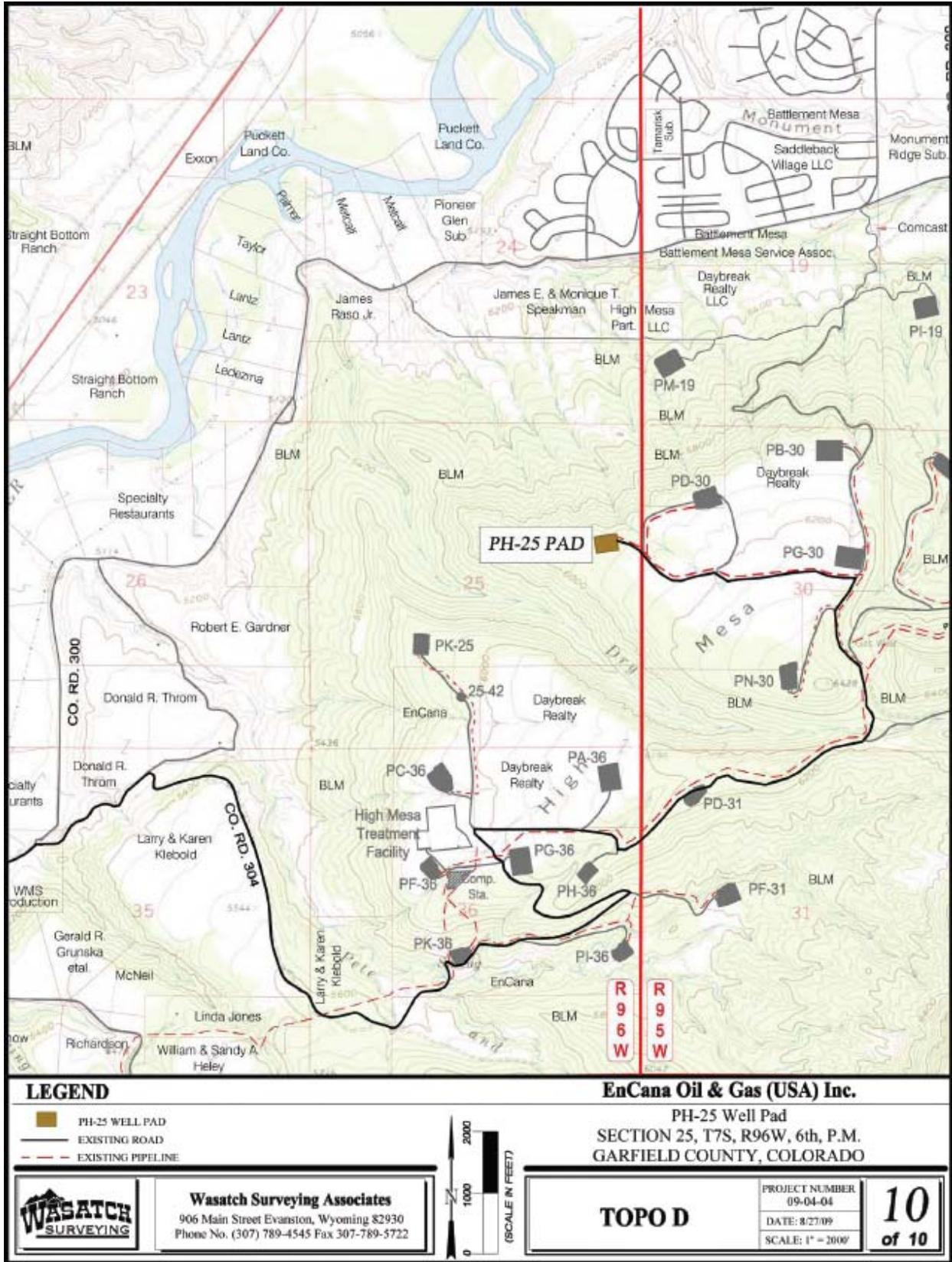


Figure 1. Project Location Map

EnCana Oil & Gas (USA) Inc.

PH-25 Well Pad

SE1/4 NE1/4, SECTION 25, T 7 S, R 96 W, 6th P.M.  
WELL PAD LAYOUT

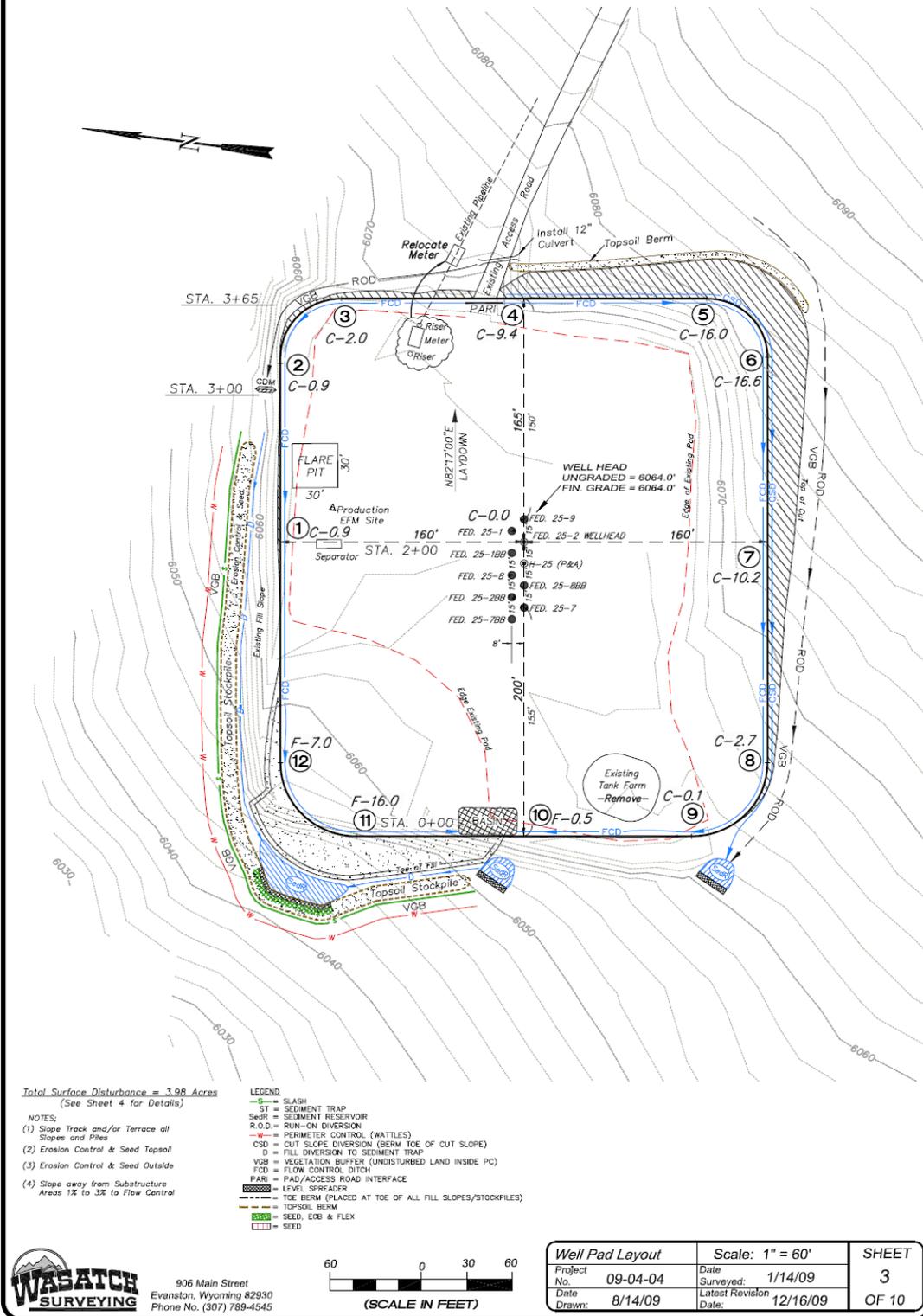


Figure 2. Pad Layout with Expanded Disturbance Area



**DOWNHOLE CONDITIONS OF APPROVAL**  
**Applications for Permit to Drill**

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

**Surface Location:** SENE, Section 25, Township 7 South, Range 96 West, 6<sup>th</sup> P.M.

<u>Well Name</u>	<u>Well No.(Pad)</u>	<u>Bottomhole Location</u>	<u>Lease</u>
Federal	25-1 (PH25)	NENE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-1BB (PH25)	NENE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-2BB (PH25)	NWNE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-7 (PH25)	SWNE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-7BB (PH25)	SWNE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-8 (PH25)	SENE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-8BB (PH25)	SENE Sec. 25, T. 7S, R. 96W.	COC27825
Federal	25-9 (PH25)	NESE Sec. 25, T. 7S, R. 96W.	COC27826

1. Twenty-four hours *prior* to (a) spudding, (b) conducting BOPE tests, (c) running casing strings, and (d) within twenty-four hours *after* spudding, the CRVFO shall be notified. One of the following CRVFO inspectors shall be notified by phone: Steve Ficklin at 970-319-4768, Dave Giboo shall at 970-319-2211, and Todd Sieber at 970-319-7887.
2. A CRVFO 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 970-876-9049 (office) or 970-319-5837 for verbal approvals. As a secondary contact, Dane Geyer at 970-876-9048 (office) or 970-589-6887 (cell) for verbal approvals.
3. 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.
4. The BOPE shall be tested and conform to Onshore Order #2 for a **3M** system.
5. A casinghead rated to 3,000 psi or greater shall be utilized.
6. 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.
7. 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.
8. 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 feet 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.

9. 1100 feet of Surface Casing shall be installed on this well to protect a potential water source/aquifer. Cement will be circulated to surface. If the TOC is lower than required or the cement sheath of poor quality, a CBL shall be run and remedial cementing performed to ensure zone isolation/wellbore integrity. Contact Will Howell 970-876-9049 or 970-319-5837.
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. 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 CRVFO within 24 hours after running. These logs shall be submitted digitally in LAS. format. If EnCana can find the open hole log from this pad well, it will be accepted in lieu of running an open hole on subsequent wells planned for this pad. Please contact Karen Conrath at 970-876-9053 or karen\_conrath@blm.gov for clarification.
12. As a minimum, cement shall be brought to 200 feet above the Mesaverde. Prior to commencing fracturing operations, a CBL shall be run (from TD to 200 feet above the TOC) and an electronic and/or hard copy submitted to the CRVFO. 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 CRVFO 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](mailto:william_howell@blm.gov)) on the first well drilled on the pad.

## **SURFACE USE CONDITIONS OF APPROVAL DOI-BLM-CO-N040-2010-0025-SCX**

1. Startup Notification. The operator shall notify the BLM representative at least at 48 hours prior to initiation of construction.
2. Application of GAP COAs. Standard Conditions of Approval outlined in Appendix E of the South Parachute Geographic Area Plan will apply and remain in full force and effect.
3. Production Facility Placement and Paint Color. The final location of separators and storage tanks will be determined after the pad has been constructed. The paint color to be used on all surface facilities including the metal containment rings surrounding the tank battery and pipeline risers shall be Shadow Gray.
4. Dust Abatement. The operator shall implement dust abatement measures as needed to prevent fugitive dust from vehicular traffic, equipment operations, or wind events. The authorized officer may direct the operator to change the level and type of treatment (watering or application of various dust agents, surfactants, and road surfacing material) if dust abatement measures are observed to be insufficient to prevent fugitive dust.
5. Reclamation. The goals, objectives, timelines, measures, and monitoring methods for final reclamation of oil and gas disturbances are described in Appendix I (Surface Reclamation) of the 1998 Draft Supplemental EIS (DSEIS). Specific measures to follow during interim and temporary (pre-interim) reclamation are described below.
  - a. Reclamation Plans. In areas that have low reclamation potential or are especially challenging to restore, reclamation plans will be required prior to APD approval. The plan shall contain the following components: detailed reclamation plans, which include contours and indicate irregular rather than smooth contours as appropriate for visual and ecological benefit; timeline for drilling completion, interim reclamation earthwork, and seeding; soil test results and/or a soil profile description; amendments to be used; soil treatment techniques such as roughening, pocking, and terracing; erosion control techniques such as hydromulch, blankets/matting, and wattles; and visual mitigations if in a sensitive VRM area.
  - b. 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 for the pad. Reclamation, including seeding, of temporarily disturbed areas along roads, pipelines, and topsoil piles and berms, shall be completed within 30 days following completion of construction.

If requested by the project lead NRS for a specific pad or group of pads, the operator shall contact the NRS by telephone or email approximately 72 hours before reclamation and reseeding begin. This will allow the NRS to schedule a pre-reclamation field visit if needed to ensure that all parties are in agreement and provide time for adjustments to the plan before work is initiated.

The deadlines for seeding described above are subject to extension upon approval of the BLM based on season, timing limitations, or other constraints on a case-by-case basis. If the BLM

approves an extension for seeding, the operator may be required to stabilize the reclaimed surfaces using hydromulch, erosion matting, or other method until seeding is implemented.

- c. Topsoil Stripping, Storage, and Replacement. All topsoil shall be stripped following removal of vegetation during construction of well pads, pipelines, roads, or other surface facilities. In areas of thin soil, a minimum of the upper 6 inches of surficial material shall be stripped. The BLM may specify a stripping depth during the onsite visit or based on subsequent information regarding soil thickness and suitability. The stripped topsoil shall be stored separately from subsoil or other excavated material and replaced prior to final seedbed preparation. The BLM best management practice (BMP) for the Windrowing of Topsoil (COA #14) shall be implemented for well pad construction whenever topography allows.
- d. 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.

Final seedbed preparation shall consist of scarifying (raking or harrowing) the spread topsoil prior to seeding. If more than one season has elapsed between final seedbed preparation and seeding, and if the area is to be broadcast-seeded or hydroseeded, this step shall be repeated no more than 1 day prior to seeding to break up any crust that has formed.

Seedbed preparation is not required for topsoil storage piles or other areas of temporary seeding.

Requests for use of soil amendments, including basic product information, shall be submitted to the BLM for approval.

- e. Seed Mixes. A seed mix consistent with BLM standards in terms of species and seeding rate for the specific habitat type shall be used on all BLM lands affected by the project (see Attachments 1 and 2 of the letter provided to operators dated May 1, 2008). Note that temporary seeding no longer allows the use of sterile hybrid non-native species.

For private surfaces, the menu-based seed mixes are recommended, but the surface landowner has ultimate authority over the seed mix to be used in reclamation. 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 may contain up to 2.0 percent of "other crop" seed by weight, including the seed of other agronomic crops and native plants; however, a lower percentage of other crop seed is recommended. 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.

- f. Seeding Procedures. Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation.

Where practicable, seed shall be installed by drill-seeding to a depth of 0.25 to 0.5 inch. Where drill-seeding is impracticable, seed may be installed by broadcast-seeding at twice the drill-seeding rate, followed by raking or harrowing to provide 0.25 to 0.5 inch of soil cover or by

hydroseeding and hydromulching. Hydroseeding and hydromulching shall be conducted in two separate applications to ensure adequate contact of seeds with the soil.

If interim revegetation is unsuccessful, the operator shall implement subsequent reseeding until interim reclamation standards are met.

- g. Mulch. Mulch shall be applied within 24 hours following completion of seeding. Mulch may consist of either hydromulch or of certified weed-free straw or certified weed-free native grass hay crimped into the soil.

NOTE: Mulch is not required in areas where erosion potential mandates use of a biodegradable erosion-control blanket (straw matting).

- h. 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.
  - i. 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.
  - j. 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 monitoring program shall use the four Reclamation Categories defined in Appendix I of the 1998 DSEIS to assess progress toward reclamation objectives. 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. Upon review and approval of the report by the BLM, the operator shall be responsible for implementing the corrective actions or other measures specified by the BLM.
6. Weed Control. The operator shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the Glenwood Springs Energy Office *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 by **December 31**.
7. Migratory Birds. It shall be the responsibility of the operator to comply with the Migratory Bird Treaty Act (MBTA) with respect to “take” of migratory bird species. Under the MBTA, “take” means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The operator shall prevent use by migratory birds of any pit containing fluids associated with oil or gas operations—including but not limited to reserve pits, produced water pits, frac-water pits, cuttings trenches (if covered by water/fluid), and evaporation pits. Fluids in these pits may pose a risk to migratory birds (e.g., waterfowl, shorebirds, wading birds, songbirds, and raptors) as a result

of ingestion, absorption through the skin, or interference with buoyancy and temperature regulation. Several established methods to prevent bird access are known to be effective, such as netting or bird-balls. However, the USFWS has determined that the use of flagging is ineffective in deterring birds from using ponds or pits and provides no assurance of compliance with the MBTA. Regardless of the method used, it should be employed as soon as practicable after the pit has begun receiving liquids. At a minimum, the method shall be in place within 24 hours following the placement of fluids into a pit. Because of high toxicity to birds, oil slicks and oil sheens should immediately be skimmed off the surface of any pit that is not netted. The most effective way to eliminate risk to migratory birds is prompt drainage, closure, and reclamation of pits, which is strongly encouraged. All mortality or injury to species protected by the MBTA shall be reported immediately to the BLM project lead and to the U.S. Fish and Wildlife Service. For further assistance, contact the USFWS Biologist assigned to the Glenwood Springs Energy Office at 970-947-5219 and visit <http://www.fws.gov/mountain-prairie/contaminants/oilpits.htm>.

8. Paleontological Resources. All persons associated with operations under this authorization shall be informed that any objects or sites of paleontological or scientific value, such as vertebrate or scientifically important invertebrate fossils, shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with operations under this authorization any of the above resources are encountered the operator shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until notified to proceed by the BLM authorized officer.

Where feasible, the operator shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM authorized officer of any finds. The BLM authorized officer will, as soon as feasible, have a BLM-permitted paleontologist check out the find and record and collect it if warranted. If ground-disturbing activities cannot be immediately suspended, the operator shall work around or set the discovery aside in a safe place to be accessed by the BLM-permitted paleontologist.

9. Cultural Education/Discovery. All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Pursuant to 43 CFR 10.4(g), the BLM authorized officer shall be notified by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), activities shall stop in the vicinity of the discovery, and the discovery shall be protected for 30 days or until notified by the BLM authorized officer to proceed.

If in connection with operations under this contract, the operator, its contractors, their subcontractors, or the employees of any of them discovers, encounters, or becomes aware of any objects or sites of cultural value or scientific interest such as historic ruins or prehistoric ruins, graves or grave markers, fossils, or artifacts, the operator shall immediately suspend all operations in the vicinity of the cultural resource and shall notify the BLM authorized officer of the findings (16 USC 470h-3, 36 CFR 800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the BLM authorized officer. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM authorized officer from a Federal agency insofar as practicable. When not practicable, the operator shall bear the cost of the services of a non-Federal professional.

Within five working days, the BLM authorized officer will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder will likely have to undertake before the site can be used (assuming that *in-situ* preservation is not necessary)
- the timeframe for the BLM authorized officer to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the SHPO State Historic Preservation Officer that the findings of the BLM authorized officer are correct and that mitigation is appropriate

The operator may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately cleared of resources 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.

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the proposed action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator's cost, including the cost of consultation with Native American groups.

Any person who, without a permit, injures, destroys, excavates, appropriates or removes any 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).

10. Raptor Nesting. Raptor nest surveys conducted for this pad on April 30, 2010 did not result in location of raptor nest structures within 0.25 mile of a well pad or 0.125 mile of an access road, pipeline, or other surface facility. Therefore, a Raptor Nesting Timing Limitation COA is not attached to this APD. Although BLM considers surveys conducted for a NEPA Environmental Assessment to be valid for 5 years, new nests may be built and occupied between the initial surveys and project implementation. To ensure compliance with the Migratory Bird Treaty Act, the operator should schedule construction or drilling activities to begin outside the raptor nesting season (February 1 to August 15) if practicable. If initiation of construction, drilling, or completion activities during these dates cannot be avoided, the operator is responsible for complying with the Migratory Bird Treaty Act, which prohibits the "take" of birds or active nests (those containing eggs or young), including nest failure caused by noise and human activity.
11. Road Maintenance. Roads shall be crowned, ditched, surfaced, drained with culverts and/or water dips, and constructed to BLM Gold Book standards. Initial gravel application shall be a minimum of 6 inches. The operator shall provide timely year-round road maintenance and cleanup on the access roads. A regular schedule for maintenance shall include, but not be limited to, blading, ditch and culvert cleaning, road surface replacement, and dust abatement. When rutting within the traveled way becomes greater than 6 inches, blading and/or gravelling shall be conducted as approved by the authorized officer.
12. Big Game Winter Range Timing Limitation. To minimize impacts to wintering big game, no construction, drilling or completion activities shall occur during a Timing Limitation (TL) period from **January 1 to March 1** per South Parachute GAP EA (p.59). To further reduce impacts to wintering big game, remote sensing should be used for production monitoring, and unavoidable

monitoring or maintenance activities should be conducted between 9 a.m. and 3 p.m., to the extent practicable. These additional recommendations apply to the period from December 1 to April 30.

13. Birds of Conservation Concern. Pursuant to BLM Instruction Memorandum 2008-050, all surface-disturbing activities are prohibited from May 15 to July 15 to reduce impacts to Birds of Conservation Concern (BCC). An exception to this COA will be granted if nesting surveys conducted no more than one week prior to surface-disturbing activities indicate that no BCC species are nesting or otherwise present within 10 meters of the area to be disturbed. Nesting surveys shall include an aural survey for diagnostic vocalizations in conjunction with a visual survey for adults and nests. Surveys shall be conducted by a qualified breeding bird surveyor between sunrise and 10:00 AM under favorable conditions for detecting and identifying a BCC species. This provision does not apply to ongoing construction, drilling, or completion activities that are initiated prior to May 15 and continue into the 60-day period at the same location.
14. Windrowing of Topsoil. Topsoil shall be windrowed around the pad perimeter to create a berm that limits and redirects stormwater runoff and to extend the viability of the topsoil per BLM Topsoil Best Management Practices (BLM 2009 PowerPoint presentation available upon request from Glenwood Springs Field Office). Topsoil shall also be windrowed, segregated and stored along pipelines and roads for later spreading across the disturbed corridor during final reclamation. Topsoil berms shall be promptly seeded to maintain soil microbe health, reduce erosion, and prevent weed establishment.
15. Road Improvement. The access road shall be regraded east of the pad for approximately 200 feet to lower the road grade as it enters on to the pad. Any excess material from this road work shall be incorporated into the pad construction. The road entrance onto the pad shall be improved for traffic safety by laying back the cutslopes and increasing the vehicle turning radius onto the pad which would require the removal of trees located along the existing edge of the pad cutslope.
16. New Culvert Installation. The 12-inch diameter culvert proposed for installation in the existing access road as shown in Sheet 3 of 10 (dated 12/16/09) shall be upgraded to a minimum 18-inch diameter culvert.
17. Pipeline Valve Riser Relocation. The meter run box located at the northeast pad corner would be removed and replaced with a valve riser to be installed into the existing pipeline approximately 50 feet east of the meter run box location as shown on Sheet 3 (dated 12/16/09). The installation of the valve riser would occur within the existing pipeline disturbance corridor.
18. Bald and Golden Eagles. It shall be the responsibility of the operator to comply with the Bald and Golden Eagle Protection Act (Eagle Act) with respect to “take” of either eagle species. Under the Eagle Act, “take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest and disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Avoidance of eagle nest sites, particularly during the nesting season, is the primary and preferred method to avoid a take. Any oil or gas construction, drilling, or completion activities planned within 0.5 mile of a bald or golden eagle nest, or other associated activities greater than 0.5 miles from a nest that may disturb eagles, should be coordinated with the BLM project lead and BLM wildlife biologist and the USFWS representative in the BLM Field Office (970-876-9051).