Appendix A
Detailed Description of Alternatives B, C, D (E), and
Alternatives Considered but not Analyzed in Detail
Lance Oil & Gas Company, Inc.
Whiskey Drawn POD
ENVIRONMENTAL ASSESSMENT – WY-070-EA09-048

1. Alternative B - Proposed Action

Proposed Action Title/Type: Lance Oil & Gas Company, Inc.'s Whiskey Drawn POD Plan of Development (POD) for 12 coal bed natural gas well APD`s and associated infrastructure.

Chapter 2

Proposed Well Information: There are 12 wells proposed with this POD; the wells are vertical bores proposed on an 80 acre spacing pattern with 1 well per location. Each well will produce from the Big George coal seam. Proposed well house dimensions are 3.5 ft wide x 3.5 ft length x 3.5 ft height. Well house color is Covert Green, selected to blend with the surrounding vegetation. Proposed wells are located as follows:

	Well Name	Well #	Qtr/Qtr	Section	TWP	RNG	Lease #
1	Whiskey Drawn WDU	11-12	NWNW	12	47N	78W	WYW150386
2	Whiskey Drawn WDU	14-12	SWSW	12	47N	78W	WYW135630
3	Whiskey Drawn WDU	11-21	NWNW	21	47N	78W	WYW146890
4	Whiskey Drawn WDU	21-21	NENW	21	47N	78W	WYW146890
5	Whiskey Drawn WDU	32-21	SWNE	21	47N	78W	WYW146890
6	Whiskey Drawn WDU	33-21	NWSE	21	47N	78W	WYW146890
7	Whiskey Drawn WDU	41-21	NENE	21	47N	78W	WYW146890
8	Whiskey Drawn WDU	43-21	NESE	21	47N	78W	WYW146890
9	Whiskey Drawn WDU	24-33	SESW	33	48N	78W	WYW161144
10	Whiskey Drawn WDU	23-33	NESW	33	48N	78W	WYW161144
11	Whiskey Drawn WDU	34-33	SWSE	33	48N	78W	WYW161144
12	Whiskey Drawn WDU	34-21	SWSE	21	47N	78W	WYW146890

Water Management Proposal: The following impoundments were proposed for use in association with the water management strategy for the POD.

	IMPOUNDMENT Name / Number	Qtr/Qtr	Section	TWP	RNG	Capacity (Acre Feet)	Lease #
1	14-5	NWSW	5	47N	78W	0.5	WYW146881
2	Simon	NWNW	16	47N	78W	3.3	State
3	33-1	SENW	33	48N	78W	80	WYW085367
4	Iberlin	NENW	23	47N	79W	91.7	WYW145637
5	6-1	SESW	6	47N	78W	3	WYW146879
6	Fourmile Creek Facility	NENW	5	47N	78W	treatment	WYW085312

	IMPOUNDMENT Name / Number	Qtr/Qtr	Section	TWP	RNG	Capacity (Acre Feet)	Lease #
7	Fourmile Creek East Facility	SWNW	1	47N	78W	treatment	Fee

County: Johnson

Applicant: Lance Oil & Gas Company, Inc.

Surface Owners: Falxa Land Company c/o Dennis Kirven, Dewitt G. Hupp Victor W. & Don L. Hupp, and Simon J. Iberlin & Betty L. Iberlin Trusts

Project Description:

The proposed action involves the following:

Drilling of 12 total federal CBM wells in Big George coal zones to depths of approximately 1980 feet.

Drilling and construction activities are anticipated to be completed within two years, the term of an APD. Drilling and construction occurs year-round in the PRB. Weather may cause delays lasting several days but rarely do delays last multiple weeks. Timing limitations in the form of COAs and/or agreements with surface owners may impose longer temporal restrictions on portions of this POD, but rarely do these restrictions affect an entire POD.

Well metering shall be accomplished by metering fluids at the well head or nearest POD building Aggregated gas will be measured again at central facilities. Telemetry metering will by used but Lance also anticipates well visits 2-3 times a week during the summer and 4 times a week during the winter to ensure the wells are operating correctly and there are no leaks the telemetry would not pick up.

A Water Management Plan (WMP) that involves a combination of the following infrastructure and strategy: 5 existing on channel impoundments and discharge points, the Fourmile Creek and Fourmile Creek East treatment facilities (which discharge into Fourmile Creek and the Upper Powder River respectively), and transferring water via existing pipelines to the County Line Pump Station or Red Draw Pump Station. This water will be pressurized and delivered to the Salt Creek Pipeline and re-injected into the Madison aquifer in Midwest, WY.

An unimproved and improved road network.

No overhead power lines will be constructed for the Whiskey Drawn POD.

A storage tank of 500 gallon capacity shall be located with each diesel generator. Generators are projected to be in operation for 24 months if the power line network is not completed before the wells are in production. Fuel deliveries are anticipated to be 3 times per week. Noise level is expected to be 100.5 decibels at 3 feet distance.

A buried gas, water and power line network.
For a detailed description of design features, construction practices and water management strategies associated with the proposed action, refer to the Master Surface Use Plan (MSUP), Drilling Plan and WMP in the POD and individual APDs. Also see the subject POD for maps showing the proposed well

locations and associated facilities described above. More information on CBNG well drilling, production and standard practices is also available in the PRB FEIS, Volume 1, pages 2-9 through 2-40 (January 2003).

Implementation of committed mitigation measures contained in the MSUP, Drilling Program and WMP, in addition to the Standard COAs contained in the PRB FEIS Record of Decision Appendix A, are incorporated and analyzed in this alternative.

Additionally, the Operator, in their POD, has committed to:

Comply with all applicable Federal, State and Local laws and regulations.
Obtain the necessary permits for the drilling, completion and production of these wells including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.

Offer water well agreements to the owners of record for permitted water wells within ½ mile of a federal CBNG producing well in the POD

Provide water analysis from a designated reference well in each coal zone.

The Operator has certified that a Surface Use Agreement has been reached with the Landowners.

2. Alternative C – Environmentally Preferred
Changes as a result of the on-sites

1. Whiskey Drawn WDU 11-12 proposed engineered pad – the east side was pulled in to minimize disturbance. The pad was reduced in size from 0.90 acres of disturbance to 0.71 acres of disturbance.

2. Whiskey Drawn WDU 21-21 slot design was dropped due to the location's flat topography.

3. Whiskey Drawn WDU 32-21 has a section on the access road west of the well that has an 18% slope. This section will be graded to a 16% slope and graveled. The route will head straight in an easterly direction instead of curving around to the north.

4. Whiskey Drawn WDU 41-21 Pad Northeast corner has been rounded off to avoid the nearby drainage. Pad reduced in size from 0.64 acres of disturbance to 0.63 acres of disturbance.

5. Whiskey Drawn WDU 41-21 utility pipeline corridor crossing a large drainage and connecting to the 43-21 well has been removed. The new utility pipeline corridor will connect to the 32-21 well and head northwest along the proposed access road and utility pipeline corridor.

6. Whiskey Drawn WDU 24-33 (originally the 14-33) well location moved approximately 300 feet to the East placing the well location out of the direct line of sight of a red-tailed hawk's nest. New well location will be a pad with a disturbance of .50 acres.

7. Whiskey Drawn WDU 23-33 access road changed to come from the 24-33 well and enter the Whiskey Drawn WDU 23-33 well location from the South-Southeast. This is the best location for the road due moving the Whiskey Drawn WDU 24-33 to the East. Moving the access road to enter the Whiskey Drawn WDU 23-33 from the south-southeast places the access road out of the direct line of sight of a red-tailed hawk's nest.

8. Whiskey Drawn WDU 34-33 Northeast and East corners of the pad will be pulled back and rounded in order to stay away from the drainage to the Northeast.

9. Whiskey Drawn WDU 34-33 access road will be widened at the entrance of the pad to allow for parking. The access road will move west avoiding a slight hill to the east.

10. Whiskey Drawn WDU34-21 was dropped due to close proximity to a sage-grouse lek and degradation of suitable sage-grouse habitat that would occur due to development.

11. 34-1 – Reservoir constructed and bonded by Bill Barrett Corp. Need to remove from the water management plan.

12. 31-11 – Reservoir constructed and bonded by Bill Barrett Corp. Need to remove from the water management plan.

Programmatic and Site specific mitigation measures, Alt. C

Programmatic mitigation measures identified in the PRB FEIS ROD

Programmatic mitigation measures are those, determined through analysis, which may be appropriate to apply at the time of APD approval if site specific conditions warrant. These mitigation measures can be applied by BLM, as determined necessary at the site-specific NEPA APD stage, as COAs and will be in addition to stipulations applied at the time of lease issuance and any standard COA.

Water Management

Groundwater

In order to address the potential impacts from infiltration on shallow ground water, the Wyoming DEQ has developed a guidance document, "Compliance Monitoring and Siting Requirements for Unlined Coalbed Methane Produced Water Impoundments" which was approved September, 2006. For WYPDES permits received by DEQ after the August 1st effective date, the BLM requires that operators comply with the current approved DEQ compliance monitoring guidance document prior to discharge of federally-produced water into newly constructed or upgraded impoundments.

Surface Water

Channel crossings by road and pipelines will be constructed perpendicular to flow. Culverts will be installed at appropriate locations for streams and channels crossed by roads as specified in the BLM Manual 9112-Bridges and Major Culverts and Manual 9113-Roads. Streams will be crossed perpendicular to flow, where possible, and all stream crossing structures will be designed to carry the 25-year discharge event or other capacities as directed by the BLM.

Channel crossings by pipelines will be constructed so that the pipe is buried at least four feet below the channel bottom.

Low water crossings will be constructed at original streambed elevation in a manner that will prevent any blockage or restriction of the existing channel. Material removed will be stockpiled for use in reclamation of the crossings.

The operator will supply a copy of the complete approved SW-4, SW-3, or SW-CBNG permits to BLM as they are issued by WSEO for impoundments.

Soils

The Companies, on a case by case basis depending upon water and soil characteristics, will test sediments deposited in impoundments before reclaiming the impoundments. Tests will include the standard suite of cations, ions, and nutrients that will be monitored in surface water testing and any trace metals found in the CBNG discharges at concentrations exceeding detectable limits.

Wildlife

1. All stock tanks shall include a ramp to enable trapped small birds and mammals to escape. See Idaho BLM Technical Bulletin 89-4 *Wildlife Watering and Escape Ramps on Livestock Water Developments: Suggestions and Recommendations.*

Threatened, Endangered, or Sensitive Species

Bald Eagle

1. Special habitats for raptors, including wintering bald eagles, will be identified and considered during the review of Sundry Notices.

Greater Sage-Grouse

1. For any surface-disturbing activities proposed in sagebrush shrublands, the Companies will conduct clearance surveys for sage-grouse breeding activity during the sage-grouse's breeding season before initiating the activities. The surveys must encompass all sagebrush shrublands within 0.5 mile of the proposed activities.

Mountain Plover

1. A disturbance-free buffer zone of 0.25 mile will be established around all occupied mountain plover nesting habitat between March 15 and July 31.

2. Work schedules and shift changes will be set to avoid the periods from 30 minutes before to 30 minutes after sunrise and sunset during June and July, when mountain plovers and other wildlife are most active.

Visual Resources

The Companies will mount lights at compressor stations and other facilities on a pole or building and direct them downward to illuminate key areas within the facility while minimizing the amount of light projected outside the facility.

Air Quality

During construction, emissions of particulate matter from well pad and resource road construction will be minimized by application of water, or other dust suppressants, with at least 50 percent control efficiency. Roads and well locations constructed on soils susceptible to wind erosion could be appropriately surfaced or otherwise stabilized to reduce the amount of fugitive dust generated by traffic or other activities, and dust inhibitors (surfacing materials, non-saline dust suppressants, and water) could be used as necessary on unpaved collector, local and resource roads that present a fugitive dust problem. The use of chemical dust suppressants on BLM surface will require prior approval from the BLM authorized officer.

Site Specific Conditions of Approval

General

1. All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a

color which simulates "Standard Environmental Colors." The color selected for the Whiskey Drawn POD is Covert Green.

2. The operator will drill seed on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses. To maintain quality and purity, the current years tested, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used. On BLM surface or in lieu of a different specific mix desired by the surface owner, use the following:

10-14" Precipitation Zone
Loamy Ecological Site
Seed Mix

Species - *Cultivar*	**% in Mix**	**Lbs PLS***
Western Wheatgrass *(Pascopyrum smithii)*	40	4.8
Bluebunch Wheatgrass *(Pseudoroegneria spicata ssp. Spicata)*	10	1.2
Green needlegrass *(Nassella viridula)*	25	3.0
Thickspike Wheatgrass *(Elymus lanceolatus ssp. lanceolatus)*	10	1.2
Prairie coneflower *(Ratibida columnifera)*	5	0.6
White or purple prairie clover *(Dalea candidum, purpureum)*	5	0.6
Rocky Mountain beeplant *(Cleome serrulata)* /or **American vetch***(Vicia americana)*	5	0.6
Totals	**100%**	**12 lbs/acre**

*PLS = pure live seed (this seeding rate has not been doubled).

This seed mix is based on the native plant species listed in the NRCS Ecological Site descriptions, U.W. College of Ag. and seed market availability.

- Slopes too steep for machinery may be hand broadcast and raked with twice the specified amount of seed. Complete fall seeding after September 15 and prior to prolonged ground frost. To be effective, complete spring seeding after the frost has left the ground and prior to May 15.

3. Due to the potential for wet conditions and difficult access, the low water crossings will be constructed prior to drilling the Whiskey Drawn WDU 11-12 well.

4. Whiskey Drawn WDU 11-12 access road will be installed prior to drilling.

5. Whiskey Drawn WDU 11-12 area is to be stabilized (stabilization efforts may include mulching, matting, soil amendments, etc.) in a manner which eliminates accelerated erosion until a self-perpetuating native plant community has stabilized the site in accordance with the Wyoming Reclamation Policy. Stabilization efforts shall be finished within 30 days of the initiation of construction activities.

6. The operator will follow the guidance provided in the Wyoming Policy on Reclamation (IM WY-90-231) specifically the following:

   Reclamation Standards:

   C. 3. The reclaimed area shall be stable and exhibit none of the following characteristics:
      a. Large rills or gullies.
      b. Perceptible soil movement or head cutting in drainages.
      c. Slope instability on, or adjacent to, the reclaimed area in question.

   C.4. The soil surface must be stable and have adequate surface roughness to reduce runoff and capture rainfall and snow melt. Additional short-term measures, such as the application of mulch, shall be used to reduce surface soil movement.

   C.5. Vegetation canopy cover (on unforested sites), production and species diversity (including shrubs) shall approximate the surrounding undisturbed area. The vegetation shall stabilize the site and support the planned post disturbance land use, provide for natural plant community succession and development, and be capable of renewing itself. This shall be demonstrated by:
      a. Successful onsite establishment of species included in the planting mixture or other desirable species.
      b. Evidence of vegetation reproduction, either spreading by rhizomatous species or seed production.

   C.6. The reclaimed landscape shall have characteristics that approximate the visual quality of the adjacent area with regard to location, scale, shape, color and orientation of major landscape features and meet the needs of the planned post disturbance land use.

7. Provide 4” of aggregate where grades exceed 8%. Surfacing material must meet requirements set forth in Wyoming Supplement to BLM Road Manual 9113.

8. Whiskey Drawn WDU 11-21 pits will be lined.

9. The operator needs to keep a 20’ vegetative buffer between all headcuts near the Whiskey Drawn WDU 34-33, Whiskey Drawn WDU 14-12 locations and access roads.

10. Whiskey Drawn WDU33-21 will not exceed a 75’ mowing radius.

Water Management

1. The 14-5 impoundment is existing and needs to be upgraded to meet SEO requirements prior discharge of produced water.

2. The 6-1 impoundment is existing and needs to be upgraded to meet SEO requirements prior discharge of produced water.

3. 33-1 – Water leaking below outlet pipe of the 33-1 impoundment. The embankment is beginning to fail. An engineered design for embankment repair must be submitted and approved prior discharge of

produced water.

4. Fourmile Creek EMITs – Water has eroded around sheet pile constructed downstream of the outfall. Need to submit an engineer design for sheet pile repair prior construction.

5. Scotch thistle and Salt Cedar below the discharge of the Fourmile Creek East treatment facility needs to be eradicated.

Wildlife

Bald Eagles

1. No project related actions shall occur within one mile of Fourmile Creek and the Powder River from November 1 through April 1, annually, prior to a winter roost survey, or from February 1 through August 15, annually, prior to a nesting survey. All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities. This timing limitation will be in effect unless surveys determine the nest/roost to be inactive. This affects the following wells and infrastructure:

Township/Range	Section	Wells and Infrastructure
T48N R78W	S33	Three wells (23-33, 24-33, 34-33). All infrastructure in this section.
T47N R78W	S04	Template road and utility corridor in N and NWSE
	S12	Two wells (11-12, 14-12). All infrastructure in this section.

2. If a roost is identified and construction has not been completed, a year-round disturbance-free buffer zone of 0.5 mile will be established for all bald eagle winter roost sites. A seasonal minimum disturbance buffer zone of 1 mile will be established for all bald eagle roost sites (November 1 - April 1). Additional measures such as remote monitoring and restricting maintenance visitation to between 9:00 AM and 3:00 PM may be necessary to prevent disturbance.

3. If a nest is identified and construction has not been completed, a disturbance-free buffer zone of 0.5 mile will be established for all bald eagle nests. A seasonal minimum disturbance buffer zone of 1 mile will be established for all bald eagle nest sites (February 1 - August 15).

4. Additional mitigation measures may be necessary if the site-specific project is determined by a BLM biologist to have an adverse affect to bald eagles or their habitat.

Greater Sage-Grouse

1. All wells and access roads within 0.6 miles of sage-grouse nesting habitat will have timing limitation stipulations of no surface disturbing activities (to include maintenance, unless in an emergency) from 1 March to 15 June for the life of the project. Because all infrastructure associated with the Whiskey Drawn POD is within 0.6 miles of sage-grouse nesting habitat, this condition applies to the entire project.

2. A sage-grouse lek survey will be conducted for all known leks within 2 miles of the POD by a biologist following the most current WGFD protocol. All survey results shall be submitted annually, in writing, to a Buffalo BLM biologist by 31 July. Currently, this applies to the Red Draw lek but will include any new leks discovered over the life of the project.

3. If an active lek is identified within 0.25 miles of any project-related activities, no surface disturbing activities will be allowed within 0.25 miles of the lek between 1 March and 15 June.

4. Maximum design speed on all operator-constructed and maintained roads (except county roads) will not exceed 25 miles per hour except travel along roads within 0.5 miles of any known leks. Currently, this applies to the Red Draw lek but will include any new leks discovered over the life of the project.

Mountain Plover

1. No surface disturbing activity shall occur within mountain plover habitat from 15 March to 31 July, annually, prior to a mountain plover nesting survey. Surveys shall be conducted by a biologist following the most current USFWS Mountain Plover Survey Guidelines. All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities. A 0.25 mile timing restriction will be applied if occupied mountain plover habitat is identified. This timing limitation will affect the following:

Township/Range	Section	Wells and Infrastructure
T48N R78W	S33	Three wells (23-33, 24-33, 34-33). Template road and utility corridor in SW.
T47N R78W	S12	Well 14-12.

2. No dogs will be permitted at work sites to reduce the potential for harassment of mountain plovers.

Raptors

1. No surface disturbing activity shall occur within 0.5 mile of all identified raptor nests from 1 February through 31 July, annually, prior to a raptor nest occupancy survey. Surveys shall be conducted by a biologist following the most current BLM protocol. All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities. A 0.5 mile timing restriction will be applied if a nest is identified as active. This timing limitation will affect the following:

Township/Range	Section	Wells and Infrastructure
T48N R78W	S33	Three wells (23-33, 24-33, 34-33). All infrastructure in this section.
T47N R78W	S04	Template road and utility in NW and in SE.
	S12	Well 11-12. Template road and utility in NW.

2. Surveys for new raptor nests shall be conducted, annually, within 0.5 miles of the POD boundary on or after 15 April, and prior to or during the first nest occupancy check.

3. Nest occupancy and productivity checks shall be completed for all raptor nests identified within a 0.5 mile of the POD boundary for as long as the POD is under construction. Once construction of the POD has ceased, nest occupancy and productivity checks shall continue for the first five years on all identified nests within a 0.5 mile of the POD boundary. Productivity checks shall be completed only on those nests that were verified to be occupied during the initial occupancy check of that year. The productivity checks shall be conducted no earlier than 1 June or later than 30 June, and any evidence of nesting success or production shall be recorded. Survey results will be submitted to a Buffalo BLM biologist in writing no later than 31 July of each survey year.

4. If an undocumented raptor nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

5. Well metering, maintenance and other site visits within 0.5 miles of raptor nests should be minimized as much as possible during the breeding season (February 1 – July 31).

Western Burrowing Owls

1. No surface disturbing activity shall occur within 0.25 miles of all identified prairie dog colonies from 15 April to 31 August, annually, prior to a burrowing owl nest occupancy survey. Surveys shall be conducted by a biologist following the most current BLM protocol. All survey results must be submitted in writing to the BFO and approved prior to initiation of surface disturbing activities. A 0.25 mile timing restriction will be applied if an active burrowing owl nest is identified. This timing limitation will affect the following:

Township/Range	Section	Wells and Infrastructure
T48N R78W	S33	Three wells (23-33, 24-33, 34-33). Template road and utility corridor in SW.
T47N R78W	S12	Well 14-12.

Please contact Meleah Corey Natural Resource Specialist, at (307) 684-1070, Bureau of Land Management, Buffalo, if there are any questions concerning these surface use COAs.

3. Alternative D-Sage-Grouse Emphasis

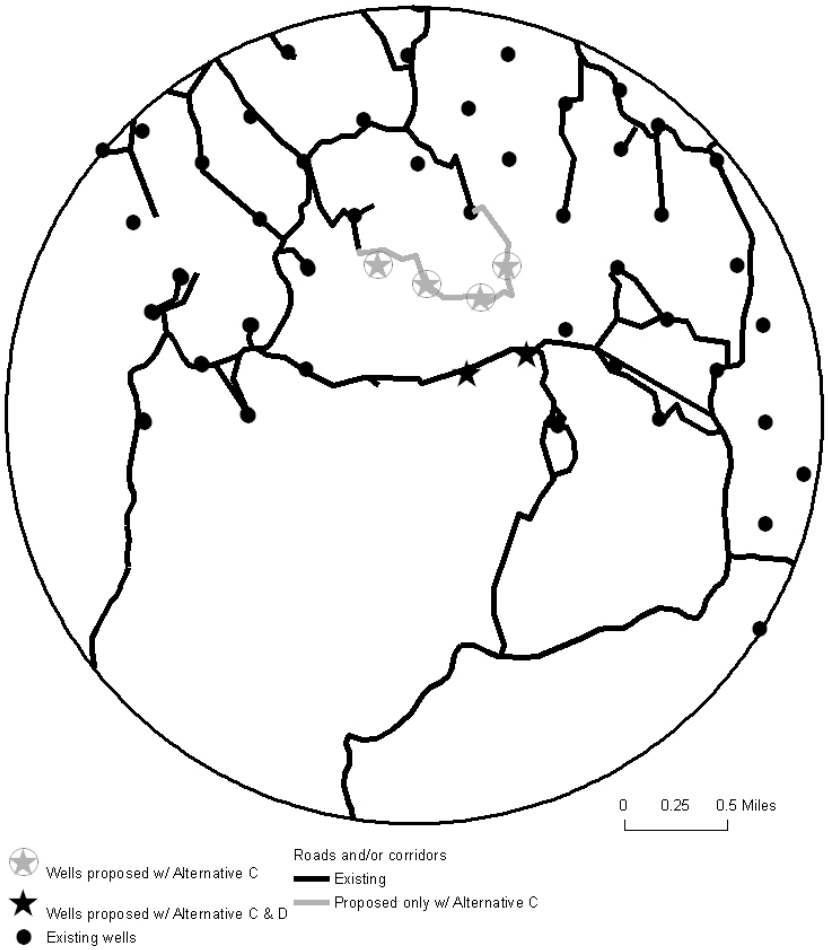
The project-level modifications identified for the Whiskey Drawn POD, Alternative D, are listed below:

1. Bury all existing overhead power that will service only the proposed action.
2. Consolidate all linear infrastructure with access roads.
3. Limit production visits to once per month.
4. Implement reclamation activities, including seeding, in the fall.
5. If project construction continues for more than 1 year, phase project to leave undisturbed habitat available to nesting sage-grouse during the season following the first year of construction.

The site-specific level modifications identified for the Whiskey Drawn POD, Alternative D, are listed below:

1. Defer the 11-21, 21-21, 32-21 and 41-21 wells from the project plan. This would eliminate the disturbance associated with four well locations (one constructed pad, two slots, and one native location), approximately 7,139 feet of template road and utility corridor, 460 feet of engineered road and utility corridor, 1,680 feet of utility corridor, 2,070 feet of template road (for a total of 11,349 feet (2.1 miles) of linear disturbance), two low water crossings, and a culvert, all of which are located in or adjacent to suitable sage-grouse nesting and wintering habitat less than one mile away from a sage-grouse lek.

Figure 1 Depiction of Infrastructure Associated with Alternatives C and D



Alternatives to the different aspects of the proposed action are always considered and applied as pre-approval changes, site specific mitigation and/or Conditions of Approval (COAs), if they will alleviate or minimize environmental effects of the operator's proposal.

Programmatic and Site specific mitigation measures

All programmatic and site specific measures from Alternative C apply, with the exception of the following:

Sage Grouse
The following conditions will alleviate impacts to sage-grouse:
Well metering, maintenance and other site visits will be restricted to one visit per month during the breeding and nesting season (March 1– June 15).
All existing overhead power that services the project will be buried.

4. Alternatives considered but not analyzed in detail
The following water management strategies were considered for use in this POD.

Land Application
Land application would involve applying the water to cropland at agronomic rates through an irrigation system. Land application is at best a seasonal approach and would require the construction of several reservoirs to store produced water during the non-irrigation season. Land application of water produced from the Whiskey Drawn POD was considered, but due to the high construction and operating costs, land application was ruled out.

Treatment of Produced Water
Treatment of produced water from the Whiskey Drawn POD was extensively researched to examine the full range of possibilities. Ion exchange was the principle technology considered, but costs were considered to be cost prohibitive for this project. In particular, the waste stream produced would require disposal through commercial injection or evaporation on site, thus adding substantial costs and detracted from the viability of this project. As well, the discharge of treated water into stream channels was not desirable.

Artificial Wetlands
Artificial wetlands do not effectively reduce the level of dissolved solids in the discharge water or meet the volume requirements of this project, and the landowners and lessees did not desire the creation of large wetland areas.

5. Summary of Alternatives
A summary of the infrastructure currently existing within the POD area (Alternative A), the infrastructure originally proposed by the operator (Alternative B), and the infrastructure within the BLM/operator modified proposal (Alternative C) are presented in Table ##?.

Facility	Alternative A (No Action) Existing Number, Acres or Miles	Alternative B (Original Proposal) Proposed Number or Miles	Alternative C (Environmental Alt.) Revised Number or Miles	Alternative D (Environmental Alt.2) Revised Number or Miles
Total CBNG Wells	11 wells/5.5 acres	12	11	7
Well Locations				
Nonconstructed				
Constructed		0 wells	4wells/2.34acres	3wells/1.73acres
Slotted		2wells/1.32acres	4wells/2.26acres	3wells/1.66acres
		10wells/9.18acres	3wells/1.76acres	1well/0.6acres
Gather/Metering	8	0	0	0

Facility	Alternative A (No Action) Existing Number, Acres or Miles	Alternative B (Original Proposal) Proposed Number or Miles	Alternative C (Environmental Alt.) Revised Number or Miles	Alternative D (Environmental Alt.2) Revised Number or Miles
Facilities				
Ancillary (Staging/Storage Areas)	6.75 acres	0	0	0
Template/Spot Upgrade Roads No Corridor With Corridor	 0 11.28 acres	 0 21.73 acres	 1.72 acres 16.87 acres	 0 10.57 acres
Engineered Roads No Corridor With Corridor	 0 0	 0 0.46 acres	 0 0.46 acres	 0 0
Primitive Roads No Corridor With Corridor	 6.05 acres 7.44 acres	 0 0	 1.73 acres 0	1.73 acres
Buried Utilities No Corridor With Corridor	 3.68 acres 0	 1.50 acres 0	 0 1.37 acres	 0 0
Overhead Powerlines	11.15 acres	0	0	0
Communication Sites	0	0	0	0
Treatment Facilities	1 facility/ 4 acres	0	0	0
Impoundments On-channel Off-channel Lined Unlined	7 impoundments/35 acres	0	0	0
Water Discharge Points	28 points/0.58 acres	0	0	0
Channel Disturbance Headcut Mitigation Channel Modification	 1.03 acres 0 acres	0	0	0
TOTAL ACRES DISTURBANCE	**92.46 acres**	**34.19 acres**	**28.51 acres**	**16.29 acres**