

Attachment F

Exhibits

EXHIBIT CO-34	T&E Species Consultation	F-2
EXHIBIT CO-39	Archaeology, Cultural Resources	F-3
EXHIBIT UB-01	Highly Erodible and/or Saline Soil Areas	F-4
EXHIBIT UB-03	Bald Eagle Winter Concentration Areas	F-5
EXHIBIT UB-04	Crucial Deer and Elk Winter Range	F-6
EXHIBIT UB-10	Coal Resources	F-7

Lease Notices*

EXHIBIT UFO-LN-03	OHV Areas	F-8
EXHIBIT UFO-LN-04	Raptor Nests	F-9
EXHIBIT UFO-LN-06	Scenic Byway	F-10
EXHIBIT UFO-LN-07	Noise	F-11
EXHIBIT UFO-LN-11	Steep Slopes	F-12
EXHIBIT UFO-LN-12	Wild and Scenic Rivers	F-13
EXHIBIT UFO-LN-13	Saline / Selenium Soils	F-14
EXHIBIT UFO-LN-14	Bald Eagle Winter Roost Sites	F-15
EXHIBIT UFO-LN-15	Big Game Crucial Winter Habitats	F-16
EXHIBIT UFO-LN-16	Wildlife, Aquatic	F-17
EXHIBIT UFO-LN-17	Wetlands and Riparian Zones	F-18
EXHIBIT UFO-LN-18	Ground Water: Municipal Watersheds and Public Water Supplies	F-19
EXHIBIT UFO-LN-19	Surface Water: Municipal Watersheds and Public Water Supplies	F-20
EXHIBIT UFO-LN-20	Protection of Surface Waters: Water Bodies	F-21
EXHIBIT UFO-LN-21	BLM Authorized Facilities	F-22
EXHIBIT UFO-LN-22	Air Quality Best Management Practices	F-23

***43 CFR 3101.1-2 Surface Use Rights** (p.336 2006 revision)

Stipulations attached to the lease; restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed. To the extent consistent with lease rights granted, such reasonable measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. At a minimum, measures shall be deemed consistent with lease rights granted provided that they do not: require relocation of proposed operations by more than 200 meters; require that operations be sited off the leasehold; or prohibit new surface disturbing operations for a period in excess of 60 days in any lease year.

EXHIBIT CO-34

Lease Number:

ENDANGERED SPECIES ACT SECTION 7 CONSULTATION STIPULATION

The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation.

On the lands described below:

EXHIBIT CO-39

Lease Number:

CONTROLLED SURFACE USE

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

On the lands described below:

EXHIBIT UB-01/UB-1

Lease Number:

TIMING LIMITATION STIPULATION

For the purpose of (reasons):

To protect highly erodible and/or saline soil areas.

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

March 1 - May 31

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

On the lands described below:

EXHIBIT UB-03/UB-3

Lease Number:

TIMING LIMITATION STIPULATION

For the purpose of (reasons):

To protect bald eagle winter concentration areas.

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

December 1 - April 30

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

On the lands described below:

EXHIBIT UB-04/GGNCA-4

Lease Number:

TIMING LIMITATION STIPULATION

For the purpose of (reasons):

To protect crucial deer and elk winter ranges.

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

December 1 - April 30

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

On the lands described below:

EXHIBIT UB-10

Lease Number:

COALBED METHANE/COAL MINING STIPULATION

For the purpose of (reasons):

To protect the maximum economic recovery and safety of coal mining where the overburden is 3500 feet or less

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

Within the Paonia-Somerset Known Recoverable Coal Resource Area (KRCRA), coal and oil and gas leasing and development will be managed consistent with land use plans and lease terms. More specifically, the portions of the KRCRA where the overburden above the B-Seam of the Mesa Verde coals is less than 3500 feet will be managed primarily for the exploration and development of the coal resources. Oil and gas operators anticipating exploration or development operations are encouraged to consult and coordinate their activities with the affected coal operators. In the event that the oil and gas and coal operators are unable to reach agreement on proposed oil and gas exploration or development, the BLM authorized officer will intervene and use all pertinent lease terms, regulations, and policy to determine what course of action is in the public's interest. However, under no circumstances will the BLM approve any oil and gas operations that compromise maximum economic coal recovery or the safety of underground mining operations.

On the lands described below:

EXHIBIT UFO-LN-03

Lease Number:

LEASE NOTICE

The lessee/operator is given notice that motorized and mechanized travel is limited to existing and/or designated routes. Prior to any surface disturbing activities on the lease area, the BLM Authorized Officer must be contacted to obtain a map of the existing and/or designated routes. BLM will work with the lessee to determine the best sites for roads, pads, facilities, etc. The overall goal of this measure is to reduce impacts to soils, control erosion and to protect populations of threatened , endangered, sensitive or candidate plant species.

On the lands described below:

EXHIBIT UFO-LN-04

Lease Number:

LEASE NOTICE

The lessee is hereby notified that, raptor nests may exist on portions of the lease tract. If raptor nests are present, seasonal constraints in the location of drilling operations may be required to prevent impacts to golden eagles or other raptors protected by the Migratory Bird Treaty Act of 1918 (16 U.S. code, Sec. 703-712, as amended), or the Bald and Golden Eagle Protection Act (16 U.S. Code, Sec. 668-668d, 1940 as amended). In order to avoid violation of these statutes, the lessee should contact the BLM Authorized Officer prior to surveying or other surface activities on the lease tract.

On the lands described below:

EXHIBIT UFO-LN-06

Lease Number:

SCENIC AND NATURAL VALUES NOTICE

The lessee/operator is given notice that special design and reclamation measures may be required to minimize light and noise pollution as well as protect the outstanding scenic and natural landscape values of the following portion(s) of this lease:

For the purpose of protecting: Scenic Byways, Visual Resources, and Natural Soundscapes

Minimize noise and light pollution as well as protect the outstanding scenic and natural landscape values in areas adjacent to communities of Crawford, Hotchkiss, and Paonia and/or within ½ mile of the West Elk Byway.

Reduce noise pollution by using best available technology such as installation of multi-cylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to direct noise away from communities of Crawford, Hotchkiss, and Paonia or West Elk Byway.

Reduce light pollution by using methods such as limiting height of light poles, timing of lighting operations (meaning limiting lighting to times of darkness associated with drilling and work over or maintenance operations), limiting wattage intensity, and constructing light shields.

Protect outstanding scenic and natural landscape values with special design and reclamation measures incorporated into the Surface Use Plan of Operations of a development proposal which may include transplanting trees and shrubs, fertilization, mulching, special erosion control structures, irrigation, site re-contouring to match the original contour, buried tanks and low profile equipment, and painting to minimize visual contrasts. The proposed location of the activity may be moved up to 200 meters in sensitive areas, such as unique geologic features and rock formations, visually prominent areas, and high recreation use areas.

On the lands described below:

EXHIBIT UFO-LN-07

Lease Number:

LEASE NOTICE

Noise

The lessee is hereby notified that, the operator drilling on Federal mineral estate shall consider the impact of operations on nearby communities and residences. Operators can expect that adjustments to operating procedures to accommodate local community and residential concerns may be necessary. For example, the operator will be expected to try to work out reasonable compromises on issues such as noise, dust, and traffic. Noise pollution could be further reduced by using best available technology such as installation of multi-cylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to direct noise away from communities of Crawford, Hotchkiss, and Paonia or West Elk Byway.

And,

The lessee shall apply mitigation to reduce light pollution by using methods such as limiting height of light poles, timing of lighting operations (meaning limiting lighting to times of darkness associated with drilling and work over or maintenance operations), limiting wattage intensity, and constructing light shields.

On the lands described below:

EXHIBIT UFO-LN-11

Lease Number:

LEASE NOTICE

For the purposes of protecting: Steep Slopes

The lessee/operator is given notice that surface occupancy or use is subject to the following special operating constraints.

Avoid surface occupancy on slopes of or greater than 40 percent, including slumps, landslides, and highly erosive soils (susceptible to wind and water erosion).

Apply the following protective measures on slopes of 30 to 39 percent, including slumps, landslides, and highly erosive soils (susceptible to wind and water erosion). Prior to surface disturbance on slopes of 30 to 39 percent, approval of a reclamation plan may be required by the BLM Authorized Officer.

Such plans would apply protective measures to demonstrate how the following will be accomplished:

- Restoration of Site productivity.
- Adequate Control of surface runoff .
- Protection of off-site areas from accelerated erosion such as rilling, gulying, piping, and mass wasting.
- During extended wet periods, surface-disturbing activities may not be conducted.

On the lands described below:

EXHIBIT UFO-LN-12

Lease Number:

LEASE NOTICE

For the purposes of protecting: Wild and Scenic Rivers

The lessee/operator is given notice that if the lease were to be developed, all development and related activities should take place $\frac{1}{4}$ mile from the river segment. Measures must be taken to ensure that the free-flow of the stream and its water quality are not negatively affected. Measures must also be taken to ensure that the fish Outstandingly Remarkable Value is protected.

The segment has a tentative classification of “scenic” due to the relatively natural and undeveloped nature of the study area corridor. The study area may not be altered to the point where it is no longer natural and undeveloped, necessitating reclassification to “recreational.”

On the lands described below:

EXHIBIT UFO-LN-13

Lease Number:

LEASE NOTICE

For the purposes of protecting: Saline / Selenium Soils

The lessee/operator is given notice that development proposals within soils of this type may:

1) Need to conduct site-specific soil sampling and analysis prior to approval of the surface use plan to minimize disturbance on those soil types defined by the Natural Resources Conservation Service with the highest selenium concentrations. This may require relocation to soils with lower selenium concentrations.

2) Evaluate the proximity to water features to minimize the potential of selenium transport.

3) May require approval of a surface use plan by the Authorized Officer. Protective measures may include how the following will be accomplished:

- Adequate control of surface runoff.
- Protection of off-site areas from accelerated erosion such as rilling, gullyng, piping, and mass wasting.
- During extended wet periods, surface-disturbing activities may not be conducted.

4) Storm Water Management Plans required by the state should include additional protective measures to limit runoff or mobilization on saline/selenium soils.

5) Be required to prevent the deep percolation of groundwater within saline/selenium soils. Engineered leak prevention of drilling system pits containing fluids such as flowback and stimulation fluids, produced water, and cuttings. Surface discharge of produced water and mechanical evaporation may be prohibited.

On the lands described below:

EXHIBIT UFO-LN-14

Lease Number:

LEASE NOTICE

For the purposes of protecting: Bald Eagle Winter Roost Sites

The lessee is hereby notified that, a bald eagle winter roost site exists on a portion of the lease tract. Development activities may be modified to prevent impacts to bald eagles protected by the Migratory Bird Treaty Act of 1918 (16 U.S. code, Sec. 703-712, as amended), and the Bald and Golden Eagle Protection Act (16 U.S. Code, Sec. 668-668d, 1940 as amended). In order to avoid violation of these statutes, the lessee should contact the BLM Authorized Officer prior to surveying or other surface activities on the lease tract.

On the lands described below:

EXHIBIT UFO-LN-15

Lease Number:

LEASE NOTICE

For the purposes of protecting: Big Game Crucial Winter Habitats

The lessee/operator is given notice that where mineral development requires surface facility densities exceeding one well pad per square mile in big game crucial winter ranges compensatory mitigation (improving adjacent habitats to the extent necessary to maintain existing big game populations) may be required.

On the lands described below:

EXHIBIT UFO-LN-16

Lease Number:

LEASE NOTICE

For the purposes of protecting: Wildlife, Aquatic

The lessee/operator is given notice that the location of proposed development may require moving surface-disturbing oil and gas exploration and development activities up to 200 meters of the ordinary high water mark or wetland. These activities may require special engineering design, construction and implementation measures to protect water resources of the aquatic habitat.

On the lands described below:

EXHIBIT UFO-LN-17

Lease Number:

LEASE NOTICE

For the purposes of protecting: Wetlands and Riparian Zones

The lessee/operator is given notice that activities in or near riparian areas may require special engineering design, construction and implementation measures, including relocation of up to 200 meters away from the ordinary high water mark or riparian/wetland area.

On the lands described below:

EXHIBIT UFO-LN-18

Lease Number:

LEASE NOTICE

For the purposes of protecting: Ground Water: Municipal Watersheds and Public Water Supplies

The lessee/operator may be required ensure protection of Municipal Watersheds and Public Water Supplies in the following manner:

- Avoid surface occupancy within a 1,000-foot horizontal buffer of all Public Water Supplies using a groundwater well or spring or a designated watershed with a protection plan providing domestic water.
- Apply the following protective measures within a distance greater than 1,000 horizontal feet but less than 2,640 horizontal feet of a classified Public Water Supply using a groundwater well or spring:
 - i. Pitless drilling systems.
 - ii. Flowback and stimulation fluids contained within tanks that are placed on a well pad or in an area with down-gradient berming.
 - iii. Use of green completions.
 - iv. Notification of potentially impacted Public Water Systems 15 miles downstream.
 - v. The use of evaporation ponds for means of disposing of produced water shall not be permitted on BLM administered lands or split estate within the municipal watershed.
 - vi. Collection of baseline water quality data (surface and/or groundwater) consisting of a pre-drilling sample collected beginning within a 100 feet of well pad, or where sufficient water exists to collect a sample per USGS collection methods. Additional sampling must be conducted during drilling operations and immediately following well completion. Each sample should analyze at a minimum: pH, alkalinity, specific conductance, major cations, major anions, total dissolved solids, BTEX/GRO/DRO, TPH, PAH's (including benzo[a] pyrene and metals [arsenic, barium, calcium, iron, magnesium, manganese, lead, and selenium]). For designated watersheds, a coordinated water resources monitoring plan may need to be developed with the BLM and Public Water Supplier. The sampling sites, intensity, and need for groundwater sampling, depending on site specific geology and risk, will be determined at the time of development.
 - vii. Sufficient surface casing should be extended through all fresh water domestic aquifer zones and should be drilled with fresh water mud. Cementing should comply with all Federal and State requirements to ensure aquifer integrity.
 - viii. Hydrologic studies may be required to ensure municipal and domestic springs are not degraded in volume or quality.

On the lands described below:

EXHIBIT UFO-LN-19

Lease Number:

LEASE NOTICE

For the purposes of protecting: Surface Water: Municipal Watersheds and Public Water Supplies

The lessee/operator may be required ensure protection of Municipal Watersheds and Public Water Supplies in the following manner:

- Avoid surface occupancy within 1,000 horizontal feet of either side of a classified surface water supply stream segment (as measured from the average high-water mark of a water body) for a distance of 5 miles upstream of a public water supply intake with the classification “Water Supply” by the State of Colorado; or a designated watershed with a protection plan providing domestic water.
- Apply the following protective measures within a distance greater than 1,000 horizontal feet but less than 2,640 horizontal feet of a classified surface water supply stream segment (as measured from the average high water mark of a water body) for a distance of 5 miles upstream of a public water supply intake with the classification “Water Supply” by the State of Colorado:
 - i. Pitless drilling systems.
 - ii. Flowback and stimulation fluids contained within tanks that are placed on a well pad or in an area with down-gradient berming.
 - iii. Use of green completions.
 - iv. Notification of potentially impacted Public Water Systems 15 miles downstream.
 - v. The use of evaporation ponds for means of disposing of produced water shall not be permitted on BLM administered lands or split estate within the municipal watershed.
 - vi. Collection of baseline water quality data (surface and/or groundwater) consisting of a pre-drilling sample collected beginning within a 100 feet of well pad, or where sufficient water exists to collect a sample per USGS collection methods. Additional sampling must be conducted during drilling operations and immediately following well completion. Each sample should analyze at a minimum: pH, alkalinity, specific conductance, major cations, major anions, total dissolved solids, BTEX/GRO/DRO, TPH, PAH’s (including benzo[a] pyrene and metals [arsenic, barium, calcium, iron, magnesium, manganese, lead, and selenium]). For designated watersheds, a coordinated water resources monitoring plan must be developed with the BLM and Public Water Supplier. The sampling sites, intensity, and need for groundwater sampling, depending on site specific geology and risk, will be determined at the time of development.

On the lands described below:

EXHIBIT UFO-LN-20

Lease Number:

LEASE NOTICE

For the purposes of protecting: Surface Water Bodies

The lessee/operator may be required modify or adjust development plans if the proposal is located in the proximity of any of the following:

Major River Corridors:

- Avoid surface occupancy within 200 meters of bank-full stage or within 100 meters (328 feet) of the 100-year floodplain.

Perennial Streams:

- Avoid surface occupancy within 300 feet from the edge of the ordinary high-water mark (bank-full stage) of perennial streams.
- Review site locations for more suitable locations from 300 to 500 feet from the edge of the ordinary high-water mark (bank-full stage) of perennial streams.

Irrigation Ditches, Intermittent/Ephemeral Channels, and other water bodies:

- Review site locations including pads, roads, and pipelines for possible relocation of up to 200 meters to a new location to reduce potential impacts to these water features.

Additional Mitigation Measures: Site specific conditions analyzed at the time of development related to surface water features including irrigation ditches, may warrant the following additional protective measures:

- Pitless drilling systems.
- Flowback and stimulation fluids contained within tanks that are placed on a well pad or in an area with down-gradient berming.
- Use of green completions.
- Collection of baseline water quality data (surface and/or groundwater) consisting of a pre-drilling sample collected beginning within a 100 feet of well pad, or where sufficient water exists to collect a sample per EPA or USGS collection methods. Additional sampling must be conducted during drilling operations and immediately following well completion. Each sample should analyze at a minimum: pH, alkalinity, specific conductance, major cations, major anions, total dissolved solids, BTEX/GRO/DRO, TPH, PAH's (including benzo[a]pyrene and metals [arsenic, barium, calcium, iron, magnesium, manganese, lead, and selenium]). The sampling sites, intensity, and need for groundwater sampling, depending on site specific geology and risk, will be determined at the time of development.

On the lands described below:

EXHIBIT UFO-LN-21

Lease Number:

LEASE NOTICE

For the purposes of protecting: BLM Authorized Facilities

The lessee/operator is given notice that BLM authorized facilities are likely to be present on the proposed lease parcels on Federal surface. The lessee shall avoid existing authorized facilities to the extent possible. If they cannot be avoided, caution will be taken to ensure no damage to the facility or disruption of use occurs and site specific Conditions of Approval may be applied by BLM to the development proposal. If necessary, authorization holders will be contacted to coordinate activities that may influence their facilities.

On the lands described below:

EXHIBIT UFO-LN-22

Lease Number:

LEASE NOTICE

For the purposes of protecting: Air Quality Best Management Practices

To mitigate any potential impact that oil and gas development emissions may have on regional air quality, Best Management Practice (BMPs) may be required through for any development project. Examples of BMPs include the following:

- Tier II or better drilling engines
- Stationary internal combustion engine standard of 2g NOx/bhp-hr for engines <300HP and 1 g NOx/bhp-hr for engines >300HP
- Low bleed or no bleed pneumatic pump valves
- Dehydrator VOC emission controls to +95% efficiency
- Tank VOC emission controls to +95% efficiency
- Conduct pre and/or post project air monitoring

On the lands described below: