

Posted: _____

**U.S. Department of the Interior
Bureau of Land Management
Kremmling Field Office
P O Box 68
Kremmling, CO 80459**

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-120-2009-0057-EA

PROJECT NAME: Applications for Permits to Drill (APDs) Bush Draw Federal 18-1 and 3-2

LEGAL DESCRIPTION: T. 8 N., R. 77 W., Sec. 18
T. 8 N., R. 78 W., Sec. 3
Jackson County

KREMMLING FIELD OFFICE, KREMMLING, COLORADO

CASEFILE/PROJECT NUMBER: Bush Draw Federal #18-1/COC62570
Bush Draw Federal #3-2/COC65586

APPLICANT: Wellstar Corporation

PURPOSE AND NEED FOR THE ACTION: The BLM received APDs from Wellstar Corporation for the Bush Draw Federal #18-1 and Bush Draw Federal #3-2 wells on split estate: state and private surface/federal mineral estate and federal surface/federal mineral estate respectively, to explore for and develop oil and gas reserves in the United States. Lease development was essentially guaranteed when the leases were issued [Mineral Leasing Act of 1920, 30 USC 181 et. seq., as amended, and the Federal Land Policy and Management Act (FLPMA)]. Federal leases are issued for an initial term of 10-years and are valid indefinitely as long as capability to produce in paying quantities is maintained, either on a leasehold basis or on a unit basis (if the lease is contained in an approved oil/gas unit).

The BLM is preparing the Environmental Assessment (EA) to address potential impacts associated with approval of Wellstar Corporation's APDs. If approved, it would further BLM's objective contained in the 1991 Oil and Gas Leasing and Development EIS/ROD to: "Facilitate orderly, economic, and environmentally-sound exploration and development of oil and gas resources using balanced multiple-use management.

It is the intent of the applicant to exercise their lease rights to occupy as much of the lease surface as is reasonable for exploration and extraction of oil and gas.

Background/Introduction: The Federal mineral estate administered by the Bureau of Land Management (BLM) as part of its mineral leasing program provides minerals, including fossil

fuels, for the benefit and use of the American public and encourages development of domestic oil and gas reserves to reduce dependence on foreign energy supplies. Mineral development is supported by the Mineral Leasing Act (1920 30 USC 181 et. seq.) and the Federal Land Policy and Management Act (FLPMA).

The first onsite for the Bush Draw Federal #18-1 occurred on 10/9/08. Those in attendance included, BLM Kremmling Field Office (KFO) staff: Paula Belcher, Hydrologist; Megan McGuire, Wildlife Biologist; Bill Wyatt, Archeologist and Kelly Hodgson, Natural Resource Specialist, as well as, Ed Routon, Bar S Inc.; Moneka Worah, ERO Resources; Paul Hawkes, Tri-State Land Surveying; Lane Osborn, Colorado State Land Board; and Terry Hoffman, Rocky Mtn. Permitting, representing Wellstar. An Application for Permit to Drill (APD) Bush Draw Federal #18-1 was received on 3/11/09. According to the Gold Book, submission of an APD is to be filed within 60 days of an onsite inspection. Therefore, a second onsite was required, this occurred on 6/15/09. Those in attendance were the same as the first onsite with the exception of Ed Routon, Paula Belcher, and Moneka Worah.

An APD for the Bush Draw Federal #3-2 well was received on 6/23/09, with an on-site review occurring on 6/15/09. BLM Kremmling Field Office (KFO) staff at the on-site examination included: Megan McGuire, Wildlife Biologist; Bill Wyatt, Archeologist and Kelly Hodgson, Natural Resource Specialist. Terry Hoffman, Rocky Mtn. Permitting represented Wellstar. Paul Hawkes, Tri-State Land Surveying, was also present.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: Wellstar Corporation (Wellstar) proposes to drill 2 new oil wells in Jackson County during late 2009, early 2010. The Bush Draw Federal #18-1 well would be located in T. 8 N., R 77 W., Sec. 18, SW $\frac{1}{4}$ NE $\frac{1}{4}$ and would be located on split-estate lands, with a portion of the surface on private land and a portion of the surface owned and administered by the state; the mineral estate is federally owned and is administered by the BLM. The Bush Draw Federal #3-2 well would be located in T. 8 N., R 78 W., Sec. 3, SW $\frac{1}{4}$ SW $\frac{1}{4}$, where both the surface and mineral estate are administered by the BLM. The standard Conditions of Approval are incorporated as part of the Proposed Action and included as Attachment #1. The design features developed during on-site inspections are described below, and are incorporated as part of the Proposed Action. Additionally, the surface-use plans provided by Wellstar are incorporated by reference as part of the Proposed Action.

Surface disturbance expected from developing the two wells is shown in the following chart, based on pit dimensions, finished pad grade elevations, and topography. Surface disturbance for the Bush Draw Federal #18-1 well pad and access road are built on non-BLM lands, and therefore will not be analyzed under the proposed action, however the estimated surface disturbance is included in the following table as reference. The access road to the Bush Draw #3-2 well is on BLM-administered surface and is on-lease; this road would be authorized by the APD.

Well	Well pad Disturbance (Acres)	Max Vertical Cut (ft.)	Cut/Fill Slope grades	New Road disturbance (Lin. ft.)	Road Disturbance area (Acres)	Total site disturbance (Acres)
Bush Draw Federal #18-1	Non-BLM 1.5	6.4	1.5:1	Non-BLM State: 5699' Fee: 2794'	Non-BLM 3.9 1.9	Non-BLM 7.3
Bush Draw Federal #3-2	2	3.0	1.5:1	963'	0.66	2.66

Additional details of the well sites include the following:

- Well pad dimensions of the Bush Draw Federal #18-1 would be approximately 190' x 350'; well pad dimensions of the Bush Draw Federal #3-2 would be approximately 250' x 350'.
- The reserve pits would be approximately 5' deep. (Note: depth of the reserve pit would be in addition to the max vertical cut listed in the table above.)
- Reserve pits would be lined with a 12 mil, or greater polyethylene nylon re-enforced liner. Reserve pits would be used for the disposal of waste mud and drill cuttings.
- The submitted plans indicate that the well pad sites would have 1.5:1 cut and fill slopes. The 1.5:1 cut and fill slopes are expected to be stable for the short duration of the drilling operations at these sites.
- Post drilling production would include partial pad reclamation at these sites, reducing the pad area, as well as a reduction in the cut and fill slope angle of repose for long-term stability.

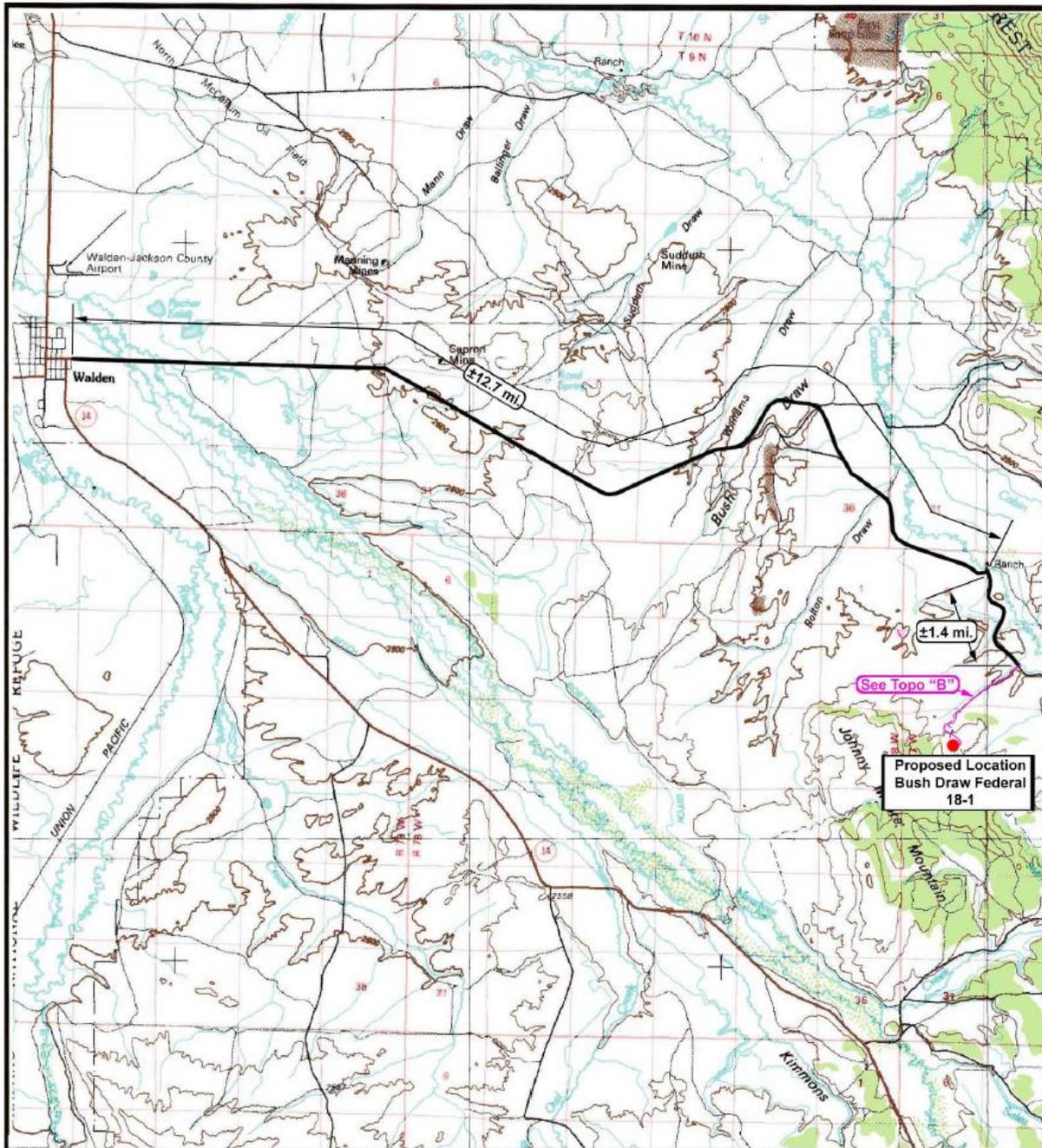
Design Features of the Proposed Action: After the 6/15/09 on-sites, the following design features were agreed upon and incorporated as part of the Proposed Action:

- On-site production facilities would be applied for via sundry notice if the well(s) is a producer.
- New access roads would be built to a 14' wide travel surface with minimum standards incorporated. If the associated well is a producer, then within six months of completion of drilling operations, the access road would be upgraded and constructed to include turnouts and would be surfaced with crushed rock or gravel for all-weather access. The new roads would be maintained as necessary and would remain until the well(s) are abandoned, at which time they would be obliterated and the road and pad areas reclaimed.
- In the event of a dry hole, the drill site and roadways would be restored to their original condition (as near possible) within 180 days after the well is plugged, or until conditions allow.
- Any long-term topsoil piles stored longer than six months would be seeded. Wellstar indicated during on-sites that once the pads were partially reclaimed, topsoil piles would be spread. Topsoil must be of an adequate volume to spread to a 2-3-inch depth at final reclamation.

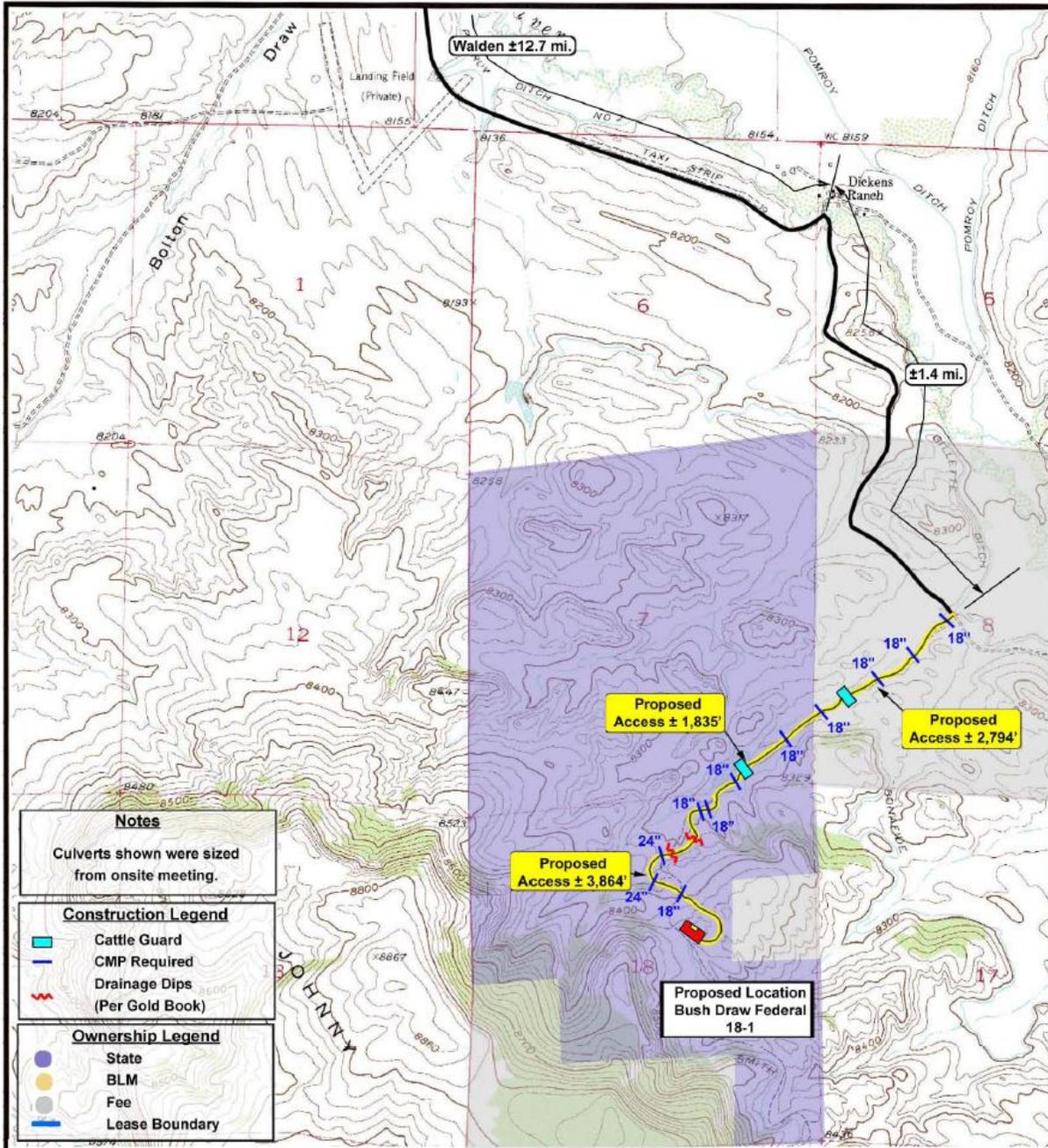
- Wellstar must obtain a storm-water permit from the state prior to drilling.
- The operator is required to immediately contact BLM KFO, remove all free oil, and coordinate with the BLM in cleanup and bioremediation operations.
- Long-term facilities and tanks would be painted Covert Green in order to meet Visual Resource Management (VRM) conditions of approval.

Bush Draw Federal #18-1

- Wellstar would reach an agreement with all affected land owners regarding surface use. Leasing of the surface, right of way applications and bonding amounts would be agreed upon by Wellstar and the prospective surface owner. Adherence to the Surface Use Plan, including any specifications and/or regulations, enforcement, monitoring of construction, maintenance and reclamation would be the responsibility of Wellstar and the surface owner to which they have an agreement.



<p>Wellstar Corporation</p>		<p>Tri-State Land Surveying Inc. (435) 781-2501 180 North Vernal Ave. Vernal, Utah 84078</p>	<p>Legend</p>
<p>Bush Draw Federal 18-1 SEC. 18, T8N, R77W, 6th P.M.</p>		<p>SCALE: 1 : 100,000 DRAWN BY: JAS DATE: 08-21-2008</p>	<p>Existing Road Proposed Access</p> <p>TOPOGRAPHIC MAP "A"</p> <p>SHEET 5 OF 7</p>



Notes
Culverts shown were sized from onsite meeting.

Construction Legend
 Cattle Guard
 CMP Required
 Drainage Dips (Per Gold Book)

Ownership Legend
 State
 BLM
 Fee
 Lease Boundary

Wellstar Corporation

**Bush Draw Federal 18-1
SEC. 18, T8N, R77W, 6th P.M.**



Tri-State Land Surveying Inc.
 (435) 781-2501
 180 North Vernal Ave. Vernal, Utah 84078

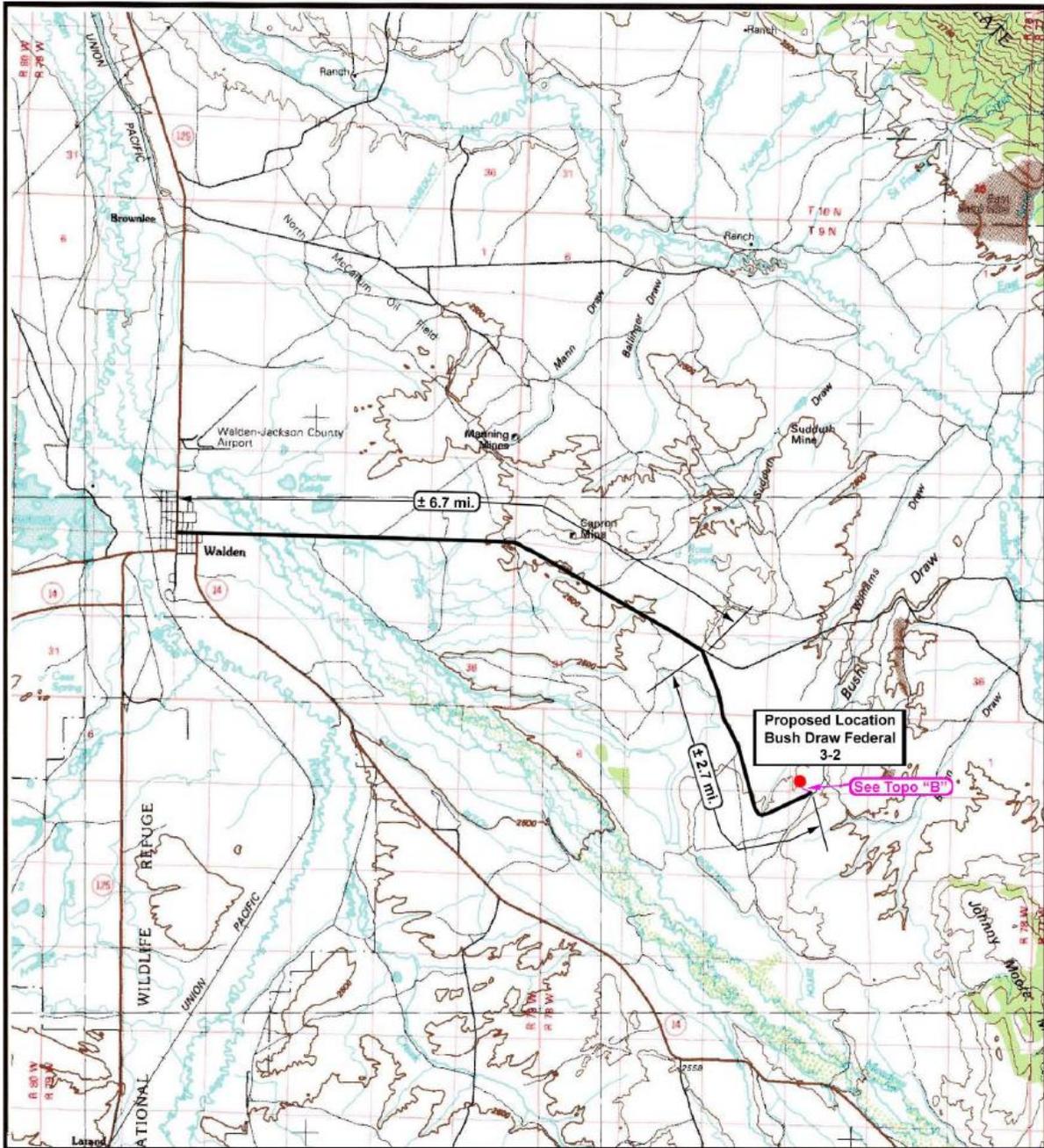
SCALE: 1" = 2,000'
(1 : 24,000)

DRAWN BY: JAS
 DATE: 03-04-2009

Legend

 Existing Road
 Proposed Access

TOPOGRAPHIC MAP SHEET
"B" **6**
 OF 7



Wellstar Corporation

**Bush Draw Federal 3-2
SEC. 3, T8N, R78W, 6th P.M.**

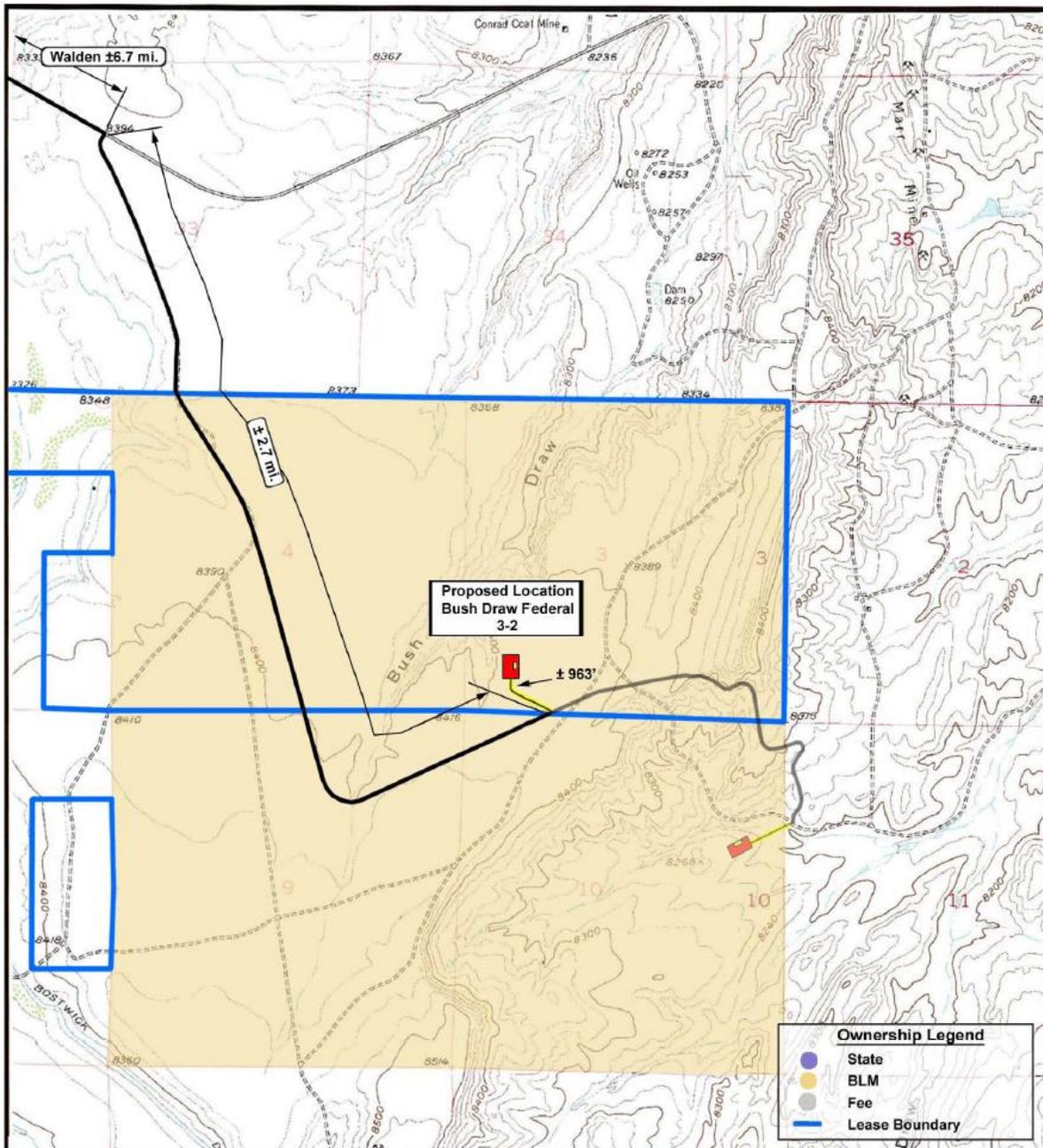


Tri-State
Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 : 100,000
DRAWN BY: JAS
DATE: 04-28-2009

Legend	
	Existing Road
	Proposed Access

TOPOGRAPHIC MAP
"A"
SHEET **5**
OF 7



Ownership Legend

- State
- BLM
- Fee
- Lease Boundary

Wellstar Corporation

**Bush Draw Federal 3-2
SEC. 3, T8N, R78W, 6th P.M.**



**Tri-State
Land Surveying Inc.**
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
(1 : 24,000)

DRAWN BY: JAS

DATE: 05-12-2009

Legend

- Existing Road
- Proposed Access

TOPOGRAPHIC MAP

"B"

SHEET **6**
OF 7

No Action Alternative: The No Action Alternative would deny Wellstar the proposed well-site developments and the associated access roads. Although the APDs could be denied, the associated leases grant the right of development. Thus, APDs for other locations on the leases could be submitted in place of the Bush Draw Federal #18-1 and Bush Draw Federal #3-2 APDs, if they were denied.

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

Name of Plan: Kremmling Resource Management Plan, Record of Decision (ROD)

Date Approved: December 19, 1984 (Updated June 1999), and as amended by Record of Decision on December 5, 1991 as described in the Colorado Oil and Gas Leasing and Development Final Environmental Impact Statement (O&G EIS).

Decision Number/Page: ROD (map 3, p. 14)

Decision Language: To facilitate orderly, economic and environmentally sound exploration and development of oil and gas resources using balanced multiple-use management (ROD, p.11). Important wildlife habitat will be protected with the use of no surface occupancy, timing limitations or controlled surface use stipulations and /or lease notices on oil and gas leases, and conditions of approval (COA) on permits (ROD, p. 3).

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

AIR QUALITY

Affected Environment: Air quality in the North Park area is generally good, with some winter inversions in the center of the area around Walden. The North Park area is surrounded by several Class I Air Quality Areas (i.e. areas requiring the most stringent air pollution controls). Prevailing winds in the area are from the west-southwest, with the Rawah Class 1 area approximately 8.5 miles to the northeast of the well. Wellstar currently has one drilled well (10-2) to the southeast of Federal 3-2, that is located approximately 150 feet lower than the bench where well 3-2 is proposed to be located. Wellstar submitted an APD for well 9-1 in 2008 that is also within 1 mile of the proposed well 3-2, located on the west bench above Bush Draw.

Environmental Consequences: The Proposed Action would result in localized short-term increases in carbon monoxide, nitrogen dioxide, ozone, and sulfur dioxide concentrations, but well below applicable ambient air quality standards. Hazardous air pollutant concentrations would be well below standards and the related short and long term cancer risks to well rig operators would be below significance levels. There are no nearby residences to Well 3-2's location. Minor adverse impacts to air quality would result in the immediate vicinity of the well development. These impacts would include dust or odors from oil and gas operations that can be irritable to individuals with chemical sensitivities or breathing difficulties. Since the oil and gas development would occur approximately 8 southeast of Walden, these impacts would not affect town residents or visitors.

Construction of the pad would create some fugitive dust, depending on the soil moisture and weather at the time. The well is located south of County Road 12E, and north of County Road 23A. Due to the distance to the County Road 12E, prevailing winds, and the topography, dust control is not expected to be necessary to insure traffic safety during pad and road construction. The small amount of dust and its short duration would not impact air quality in the area.

Mitigation: None needed.

CULTURAL RESOURCES

Affected Environment: Two cultural inventories were completed; the first (CR-09-05) was done for the 18-1 well and the second (CR-09-41) was completed for the 3-2 well. Two historic ditch segments 5JA1910.1 and 5JA1911.1 were recorded for report #CR-09-05 but were determined to be not eligible to the National Register of Historic Places. No site or isolated finds were associated with the 3-2 well location.

Environmental Consequences: No sites or isolated finds were recorded. There would be no effect from the proposed action. No historic properties would be affected.

Mitigation: There is no avoidance necessary for sites 5JA1910.1 or 5JA1911.1 because they are not significant.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Past actions such as livestock grazing, motorized travel, well development, recreation, etc. that have caused disturbance of vegetation and soil have contributed to the invasion and spread of invasive, non-native species (noxious weeds). There are no known invasive, non-native species (noxious weeds) growing within the allotments. If present, species would be located along roadways, and in high-use areas, such as livestock watering areas. Soil or vegetation disturbing activities provide an avenue for the establishment and expansion of invasive, non-native species. The BLM monitors these known areas to control the spread of these species.

Environmental Consequences: Any type of soil or vegetation disturbance in an area where non-native, invasive species are established promotes their expansion. During the drilling of the wells there is would be limited ground disturbance. Once the drilling is completed seeding of bare areas would occur. This would limit the potential for invasive (noxious) plants to spread throughout the project site.

Mitigation: None needed.

MIGRATORY BIRDS

Affected Environment: The proposed well sites would be located in sagebrush steppe habitat. Migratory birds expected to inhabit the project sites include Sage Sparrows, Horned Larks, Western Kingbirds, Common Nighthawks, Green-tailed Towhees, Red-tail Hawks, Prairie Falcons, Western Bluebirds, American Kestrels, Burrowing owls, Swainson's hawks, and golden eagles.

Environmental Consequences: The proposed project would eliminate a small amount of sagebrush habitat. However, no take of migratory species is expected to occur as a result of the project since construction is scheduled after the peak nesting season (July 15th). If the construction of roads and pads is completed during the peak nesting season (April 1st to July 15th) it is possible that a few nests would be destroyed and/or the activity may cause nest abandonment. The reclamation plan, which would be implemented after project completion, would adequately restore most of the sagebrush habitat lost due to the project's construction activities. Accordingly, the Proposed Action would not have any major direct, indirect, or cumulative impacts on migratory birds.

In the No Action Alternative, migratory birds would not be impacted as the wells and access roads would not be built and sagebrush habitat would not be eliminated.

Mitigation: None needed

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment: The Proposed Action is located within the North Platte River basin, which is tributary to the Platte River System. The USFWS has determined that any water depletion within the Platte River jeopardizes the continued existence of one or more federally-listed threatened or endangered species and adversely modifies or destroys designated and proposed critical habitat. Depletions may affect and are likely to adversely affect the whooping crane, the interior least tern, the piping plover, and the pallid sturgeon in Nebraska. In the fall of 2006, an agreement was signed between the governors of Colorado, Nebraska, and Wyoming and the U.S. Secretary of the Interior to implement a basin-wide Platte River Recovery Implementation Program. The Program will provide ESA compliance for water users in the Platte River basin for effects on the target species and habitat, and went into effect on January 1, 2007.

The proposed well site #3-2 would be located in habitat occupied by Greater sage-grouse, a BLM designated sensitive species. While sage-grouse occupy the project area on a yearlong basis, the area is especially important as nesting habitat for sage-grouse. One sage-grouse breeding complex (i.e. referred to as a lek) is located 1.5 miles from Bush Draw Federal #3-2. The sagebrush habitat adjoining the lek provides hiding and nesting cover for sage-grouse during the breeding season. This well would be located within the sage-grouse core area identified by the Colorado Division of Wildlife (CDOW) as critically important habitat for Greater sage-grouse. Well 3-2 would also be located next to the Bush Draw water well which is used by CDOW as a wet seep to improve habitat for sage-grouse.

No other threatened, endangered or sensitive species are known to inhabit the proposed project area.

Environmental Consequences: The drilling of both wells would represent an initial depletion of 4.49 acre-ft, using Wellstar's estimate of 23,205 bbls of water/well drilled. Private water sources would be used. It is unknown at this time what will be done with produced water. If produced water is not re-injected, then the actual depletion could be larger, and produced water would be considered a federal depletion. A programmatic biological opinion was completed on June 16, 2006, that covers new depletions, but the exact reasonable and prudent alternatives for federal depletions from new projects is still being determined, especially for non-agricultural related activities. The BLM is working with the USFWS, and the applicant and the BLM would need to comply with the reasonable and prudent alternatives once the USFWS determines them.

The distance from the Bush Draw Federal #3-2 to the lek, located 1.5 miles to the northwest would likely impact breeding and nesting sage-grouse. If drilling activities were to take place during the breeding or nesting season (March 1 to June 30), impacts to sage grouse using this habitat would be expected. Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, nest abandonment, destruction of nests and loss of habitat. Other impacts, such as habitat fragmentation and the spread of exotic plants can also degrade sage grouse habitat (Connelly et al. 2004). Noise and increased human activity related to drilling can disrupt breeding and nesting (Connelly et al. 2004). Holloran and Anderson (2004) found a higher annual decline in male lek attendance at leks within 3.2km from drilling activity. To prevent significant impacts to sage grouse species, construction and drilling activities associated with the proposed access roads, pipelines and well pads should not be permitted from March 1 to June 30. This timing limitation would prevent accidental nest destruction, nest and lek abandonment and displacement into less suitable habitat. Individual well pad construction would not have significant negative impacts on sage grouse habitat.

Greater sage-grouse have established a lek site on the existing proposed access road, JCR 23A. Increased traffic on JCR 23A may contribute to a decrease in lek attendance and increase vehicle collisions. In order to prevent disturbing breeding greater sage-grouse during their breeding season, no nonemergency traffic should use this road between 6pm and 9am during the peak lek attendance, March 1 to May 30 (CCP, 2008).

In the No Action Alternative, the sagebrush habitat would not be affected; the cover for breeding sage grouse would not be disturbed, and the lek on JCR 23A would not be impacted by well #3-2. There would not be any water depletion jeopardizing the federally-listed threatened or endangered species in the Platte River system.

Mitigation: If the produced water is not re-injected within Jackson County, then an additional depletion would need to be calculated and an alternative to offset the depletion would be implemented.

- CO-30: No surface disturbing activities between March 1 and June 30 in order to protect nesting greater sage-grouse.

- In order to prevent disturbance to breeding sage-grouse during their breeding season, no nonemergency traffic will use JCR 23A between 6pm and 9am during the peak lek attendance, March 1 to May 30. This applies to all activities for the duration of the well.

Finding on the Public Land Health Standard for Threatened & Endangered species: The area is currently meeting Land Health Standard #4. Based on the field visit during the onsite, and that such a small area is affected (10 acres), the Proposed Action would not affect the area's ability to meet the Standard 4.

WASTES- HAZARDOUS OR SOLID

Affected Environment: Some potentially hazardous materials would be used during well drilling and maintenance. In addition, solid waste would be generated during these proposed activities.

According to 29 CFR 1910.1200(g), the oil and gas operator is to maintain a file containing Material Safety Sheets (MSDS) for all chemicals, compounds, and/or substances which are utilized during the course of construction, drilling, completion, and production operations of this project. This file is to be available at all times employees are present at the site. Hazardous materials that may be present at the site include drilling mud and cementing products that are primarily inhalation hazards. Flammable or combustible motor fuels would be present. Proprietary materials necessary for well completion and stimulation such as acids and corrosives are often used. Human solid and liquid wastes would be generated primarily during the construction and drilling phases of the project.

Environmental Consequences: There would be no direct, indirect, or cumulative impacts from the Proposed Action. However, this is dependent upon responsible use of chemicals and immediate containment and adequate cleanup in the event of a release. Consequences would be dependent on the volume and nature of the material released. In most situations involving hazardous materials, there are ways to remediate the area that has been contaminated. The operator is required to immediately contact BLM KFO, remove all free oil, and coordinate with the BLM in cleanup and bioremediation operations.

In the No Action Alternative, solid waste and hazardous materials used during well drilling and maintenance would not be present.

Mitigation: None needed

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed well #3-2 is within the Canadian River 5th order watershed, which is within the North Platte River basin. The well location is located on the bench above Bush Draw, an intermittent drainage that is tributary to the Canadian River. The drainage has two impoundments for livestock and wildlife water near the proposed well #3-2 and provides the only livestock water for the allotment.

The Canadian River is almost entirely on private land and is not routinely monitored for water quality. Due to the intermittent nature of Bush Draw, water quality is also not monitored. This segment of the Canadian River and its tributaries are classified for coldwater aquatic life- class 1, water supply, agriculture and primary contact recreation. There are no known water quality concerns.

Approximately 680 feet east of the well pad is Upper Bush Draw Well which was originally drilled in hopes of providing additional livestock water within the grazing allotment. The well's yield is too low (1 gpm), however, and is used to improve sage grouse habitat by allowing the pumped water to spread out on the ground. The total well depth is 200 feet, with perforated casing at 174-180 feet from the surface in a hard sandstone layer of the Coalmont formation. Groundwater quality is considered to fully support agricultural uses.

Environmental Consequences: The proposed access road and well pad disturbance is greater than 1 acre and would require a stormwater permit or low erosivity waiver under the Clean Water Act. Wellstar is responsible for obtaining the permit prior to any surface disturbance and complying with any conditions of the permit.

Due to the gentle terrain and minimal dirtwork needed to construct the pad and the road, surface water quality concerns are limited. The pad's northwest corner has been rounded to keep the pad on the bench and not extending down the slope into Bush Draw. By berming the pad, there will be little to no soil movement off the pad and into the drainage.

Ground water quality will be protected by standard well completion practices which are designed to keep fluids from travelling along the well stem and between formations. The well's planned production zone is thousands of feet below Upper Bush Draw's water yielding zone, and would not affect the water well.

Mitigation: N/A

Finding on the Public Land Health Standard for water quality: The area is considered to be meeting Land Health Standard #5. The Proposed Action would not impact water quality or the area's ability to continue to meet the Standard.

SOILS (includes a finding on Standard 1)

Affected Environment: Soil information is from the Jackson County Soil Survey. Although the survey is not intended for site specific information, it does help predict the project area's soils and their limitation. The proposed well pad and access road are located on a flat that is mapped as almost entirely Morset loams, 1-15% slopes. The soils formed in mixed calcareous outwash and have a topsoil layer of about 4 inches thick with a loam texture. The loam subsoils have layers with lime accumulations and are moderately to strongly alkaline. Gravels and stones can make up to 20% of the volume, and generally increase with depth. Permeability is moderate and plant available moisture is high. The hazards of wind and water erosion are slight.

Environmental Consequences: The proposed well location and road are along such a flat terrace that there are few indirect soil concerns. During the onsite visits, the proposed pad location was moved slightly to the east to keep the entire pad on the flat terrain. This reduced the

cut and fill, and will reduce possible sediment loading into Bush Draw. Topsoil stockpiles were also relocated to the east side of the pad, making it easier to respread the topsoil and keeping the piles farther from the slopes overlooking Bush Draw. Protection of the topsoil will be essential to insure that alkaline subsoil is not used to reclaim disturbed areas and to maximize seeding success. The applicant's submitted Plan of Operations states that topsoil piles that are not respread within a 1 year timeframe will be reseeded. In a one year time period, there can be a significant decrease in the microbial populations in the soil, reducing the topsoil's fertility. This environmental assessment's design features include seeding if piles remain after 6 months, which helps insure less wind and water erosion of the piles and better fertility. Vegetation should not be scraped off separately from the topsoil, but should be removed with the topsoil and remain part of the topsoil piles. This also helps maintain the pre-disturbance organic matter content of the soil and the microbial populations.

Prior to the ground freezing and snow accumulation, the well pad area should be in a stable state to reduce soil erosion and transport during the following spring runoff. This may require erosion control along the west side of the pad to prevent disturbed areas (fills, berms, pad surfaces) from eroding into Bush Draw, depending on the distance from their toe to the start of the slope.

Mitigation:

- The applicant's submitted Plan of Operations states that topsoil piles that are not respread within a 1 year timeframe will be reseeded. This EA's design features include seeding if piles remain after 6 months.
- Prior to the ground freezing and snow accumulation (generally October 31st), the well pad area should be in a stable state to reduce soil erosion and transport during the following spring runoff.

Finding on the Public Land Health Standard for upland soils: The area is currently meeting Land Health Standard #1. The proposed disturbance is fairly small on a landscape scale, even if all proposed Wellstar wells are drilled and would not affect the soils from continuing to meet the Standard.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed action is located in grazing allotment # 07010. The vegetation found in this allotment is a mixture of sagebrush and grasses. The common grasses found in the area are; fescues species, wheat grass species, stipa species and poa species. Common forbs found in the area are; lupin species, phlox species and larkspur species. Due to the type of soil found in this area, the vegetation can support a good cover of grass species. However, there are inclusions that have a majority of a low growing shrub with little grass vegetation.

Environmental Consequences: Under the Proposed Action, a total of about 5 acres would be disturbed for well 3-2. Thus, there would be direct impacts in the form of vegetation loss as a result of the Proposed Action. However, with the proposed reclamation utilizing native species seed mix, there would be minimal indirect and cumulative effects to the area's vegetation as a result of the Proposed Action.

In the No Action Alternative, vegetation would not be disturbed.

Mitigation: None needed

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial Allotment #s 07010 was assessed for standards in 2008. The allotment is meeting the vegetation portion.

NOISE

Affected Environment: Sound levels in the project area would vary greatly, depending on proximity to existing residences, roadways, or other sources. These sound levels would fluctuate with variations in weather conditions including temperature, wind, humidity, and the general topography of the area. No background noise studies have been conducted, but the project area is located in the vicinity of the town of Walden and existing county roads, with noise disturbance already present to a degree.

Environmental Consequences: There would be a short-term increase in noise levels from the Proposed Action while drilling would occur. The distance to existing roads, the temporary nature of the road construction and maintenance, and the use of quiet electric motors and well lubricated pumpjacks would limit any harmful effects of noise occurring as a result of the Proposed Action.

In the No Action Alternative, the noise level would not change from the current condition.

Mitigation: None needed

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed wells would be constructed in sagebrush steppe habitat which is occupied by a variety of terrestrial wildlife. Mule deer and Rocky Mountain elk move through the project area at various times in the year en-route to summer and winter range. Pronghorn use the area surrounding well #3-2 during the summer and moose inhabit the area around well #18-1 in summer and winter. Small mammals including badgers, coyotes, and a variety of rodents inhabit the area on a yearlong basis. Cougar and black bear are occasionally seen in the area of well #18-1.

Environmental Consequences: The proposed project is not expected to conflict with terrestrial wildlife, since habitat disturbance would be minimal. Most vegetative disturbances associated with the project would be reclaimed. Harassment or disturbance of wildlife would also be minimal since drilling activities would be short-term, in isolated areas, and not likely to occur during periods of animal concentration. Animals may temporarily avoid the project area during and after operations due to noise, increased activity, and unfamiliar surroundings. Well 18-1 is located in moose winter range, which may impact the behavior of a few animals and cause additional stress during an already difficult time of year. The Proposed Action would not result in any major direct, indirect, or cumulative impacts to the area's terrestrial wildlife.

In the No Action Alternative, there would not be any type of conflict with terrestrial wildlife and habitat disturbance would not occur. Stress to wildlife due to noise and increased activity would not occur.

Mitigation: To reduce conflicts to wintering moose, no surface use is allowed during the period of December 1 through April 30 (this does not apply to operation and maintenance of production facilities).

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The area is currently meeting Land Health Standard #3. Based on the field visit during the onsite, and that such a small area is affected (10 acres), the Proposed Action would not affect the area's ability to meet the Standard 3.

CUMULATIVE IMPACTS SUMMARY:

Cumulative impacts may result from the development of the Proposed Action when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. Currently three wells exist within a one-mile radius of the proposed well #3-2. Other past or existing actions near the project area that have influence on the landscape are recreation, hunting, grazing, and ranching activities.

The geographic scope for the cumulative impact analysis is Jackson County. The 1991 Colorado Oil and Gas Leasing Final Environmental Impact Statement (O&G EIS) forecasted, for Kremmling Field Office, a total of 225 wells, of which 108 development and wildcat wells would be drilled on BLM lands (Appendix B, B20 & 21). Cumulative impacts for this forecasted development were analyzed in the O&G EIS based upon oil and gas surface disturbance totaling 2044 acres (Appendix B-2).

In regards to past actions regarding oil and gas activity, oil and gas was first discovered in northeastern Jackson County in 1926 by Continental Oil Company. This discovery marked the beginning of oil and gas development in the North McCallum Field. In 1952, oil was discovered in the Coalmont area southwest of Walden. Since that time, 13 fields have been discovered and developed, all in the North Park (Jackson County) area. Within these 13 fields, approximately 475 wells have been completed and approximately 50% of these wells were completed as dry holes.

In regards to present actions, there has been recent interest in the Coalmont (SP. Niobrara) formation in southern Jackson County. To date, there are 25 approved drilling permits for Jackson County, of these there have been several wells (three to seven) drilled on private surface and three on federal surface.

In regards to future actions, there are approximately 12 additional wells planned for development within Jackson County. When added to the impacts of all of the other actions in Jackson County, the cumulative impacts from this proposal are well within the 1% cumulative surface impacts projected for the Resource Area in the O&G EIS.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well sites, but should return

once construction is completed. Cumulative impacts to greater sage-grouse include a decrease in their ability to use the area for breeding, nesting and brood rearing activities.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Kremmling Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

PERSONS / AGENCIES CONSULTED: No comments were received from the tribes (see Appendix 2 for Native American tribe list). The proposed project was listed on the Kremmling Field Office internet NEPA register and NEPA public room board. No comments were received from the public.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

FONSI

DOI-BLM-CO-120-2009-0057-EA

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the Proposed Action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

DECISION RECORD

DECISION: It is my decision to authorize the Proposed Action as described in the attached EA. “This decision is contingent on meeting all mitigation measures and monitoring requirements listed below.”

RATIONALE: The Proposed Action, to permit the drilling of the Bush Draw Federal #18-1 and Bush Draw Federal #3-2 wells, will allow for energy exploration in an environmentally sound manner. The design features of the Proposed Action and mitigation measures included below will ensure that the applicable natural resources are adequately protected.

MITIGATION MEASURES:

If the produced water is not re-injected within Jackson County, then an additional depletion would need to be calculated and an alternative to offset the depletion would be implemented.

In order to prevent disturbance to breeding sage-grouse during their breeding season, no nonemergency traffic will use JCR 23A between 6pm and 9am during the peak lek attendance, March 1 to May 30. This applies to all activities for the duration of the well.

To protect nesting sage-grouse, no surface disturbing activities between the period of March 1 through June 30.

To reduce conflicts to wintering moose, no surface use is allowed during the period of December 1 through April 30 (this does not apply to operation and maintenance of production facilities).

The applicant’s submitted Plan of Operations states that topsoil piles that are not respread within a 1 year timeframe will be reseeded. This EA’s design features include seeding if piles remain after 6 months.

Prior to the ground freezing and snow accumulation (generally October 31st), the well pad area should be in a stable state to reduce soil erosion and transport during the following spring runoff.

COMPLIANCE/MONITORING: Potential to disturb fossil resources during construction of the road and well pad is moderate to high. One time spot monitoring immediately following well pad and road construction by a qualified and BLM permitted paleontologist is recommended. One time spot monitoring will be completed prior to staging of the drilling rig and support equipment on the well pad locations. If fossils are discovered they will be mitigated by collection and data recovery.

NAME OF PREPARER: Kelly Hodgson

NAME OF ENVIRONMENTAL COORDINATOR: Pete McFadden

DATE: 10/20/2009

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Peter McFadden

DATE SIGNED: 10/20/2009

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist

Appendix 2 – Native American Tribe List

Appendix 3 - References

ATTACHMENTS:

- 1). Standard Conditions of Approval
- 2). Seed mix

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: Applications for Permits to Drill (APDs) Bush Draw Federal 18-1 and 3-2

Project Leader: Kelly Hodgson

Consultation/Permit Requirements:

Consultation	Date Initiated	Date Completed	Responsible Specialist/ Contractor	Comments
Cultural/Archeological Clearance/SHPO	10-12-2008	7-27-2009	B.Wyatt	Two cultural resource reports #CR-09-05 and #CR-09-41 were completed. The proposed action is a no effect, there are no historic properties that would be affected.
Native American	7-2-2008 and 2-23-2009	7-27-2009	B.Wyatt	To date no Native American Tribe has identified any area of traditional spiritual concern.
T&E Species/FWS	N/A	N/A	McGuire	
Permits Needed (i.e. Air or Water)			Wellstar	Due to size of disturbance, Wellstar must obtain a stormwater permit or low erosivity waiver.

(NP) = Not Present

(NI) = Resource/Use Present but Not Impacted

(PI) = Potentially Impacted and Brought Forward for Analysis.

NP NI PI	Discipline/Name	Date Review Comp.	Initials	Review Comments (required for Critical Element NIs, and for elements that require a finding but are not carried forward for analysis.)
CRITICAL ELEMENTS				
PI	Air Quality Belcher	7/22/09	PB	See write-up
NP	Areas of Critical Environmental Concern Cassel			There are no Areas of Critical Environmental Concern in the proximity of the proposed project area.
NP	Cultural Resources Wyatt	7-27-09	BBW	Two cultural resource reports #CR-09-05 and #CR-09-41 were completed. The proposed action is a no effect, there are no historic properties that would be affected.
NP	Environmental Justice Cassel	9/22/09	SC	According to the most recent Census Bureau statistics (2000), there are no minority or low income communities within the Kremmling Planning Area.
NP	Farmlands, Prime and Unique Belcher	7/21/09	PB	There are no farmlands, prime or unique, in the proximity of the proposed project area.
NP	Floodplains Belcher	7/21/09	PB	The Proposed Action is located away from any floodplain.
NP	Invasive, Non-native Species Johnson Hughes	9/23/09	ZH	There are no known invasive, non-native species (noxious weeds) growing in the project area. Since soil or vegetation disturbing activities provide an avenue for the establishment or expansion of invasive, non-native species, the BLM would monitor the

					project area for compliance of weed management
PI	Migratory Birds	McGuire	8/3/09	MM	See write-up
NI	Native American Religious Concerns	Wyatt	7-27-09	BBW	To date no Native American Tribe has identified any area of traditional spiritual concern.
PI	T/E, and Sensitive Species (Finding on Standard 4)	McGuire	8/3/09	MM	See write-up
PI	Wastes, Hazardous and Solid	Hodgson	7/21/09	KH	See analysis in EA.
PI	Water Quality, Surface and Ground (Finding on Standard 5)	Belcher	7/22/09	^PB	See the Water Quality section in EA.
NP	Wetlands & Riparian Zones (Finding on Standard 2)	Belcher	7/22/09	PB	The well location and road are located in an upland area and would not impact any wetland or riparian zone.
NP	Wild and Scenic Rivers	Windsor	8/14/09	AW	There are no eligible Wild and Scenic River segments in the proposed project area.
NP	Wilderness	Windsor	8/14/09	AW	There is no designated Wilderness or Wilderness Study Areas in the proximity of the proposed project area.
NON-CRITICAL ELEMENTS (A finding must be made for these elements)					
PI	Soils (Finding on Standard 1)	Belcher	7/24/09	PB	See the Soil Section in the EA,
PI	Vegetation (Finding on Standard 3)	Johnson Torma Hughes	8/14/09	PT	See vegetation Section
NP	Wildlife, Aquatic (Finding on Standard 3)	McGuire	8/3/09	MM	No aquatic wildlife present.
PI	Wildlife, Terrestrial (Finding on Standard 3)	McGuire	8/3/09	MM	See write-up
OTHER NON-CRITICAL ELEMENTS					
NI	Access/Transportation	Monkouski	8/20/2009	JJM	There would be no impacts under the proposed action or no action alternative. The county road and proposed new access road on BLM-administered public lands would remain open to the public.
NP	Forest Management	K. Belcher	8/13/09	KB	No forest resources present in the vicinity of the proposed action.
NI	Geology and Minerals	Hodgson	7/21/09	KH	The proposed casing and cementing programs follow Onshore Order #2 and appear to be adequate to protect and/or isolate all resources.
NI	Fire	Wyatt	7-27-09	BBW	Well pads because of their size and roads would provide potential fuel breaks from wildland fire. Furrows created of sagebrush and other vegetation from well pad and road construction are a potential fire hazard because of the concentration of fuels. These should be mitigated through the dispersal of biomass material.
NI	Hydrology/Water Rights	Belcher	7/24/09	PB	Hydrologic concerns are in the Water Quality and Soil sections of the EA. Private water rights are used to drill the wells and are administered by the state of Colorado.
PI	Paleontology	Rupp	9/25/2009	FGR	Potential to disturb fossil resources during construction of the road and well pad is moderate to high. One time spot monitoring immediately following well pad and road construction by a qualified and BLM permitted

					paleontologist is recommended. One time spot monitoring will be completed prior to staging of the drilling rig and support equipment on the well pad locations. If fossils are discovered they will be mitigated by collection and data recovery.
PI	Noise	Monkouski	8/20/2009	JJM	See analysis in EA.
NI	Range Management	Johnson Torma Scott	8/14/09	PT	Livestock AUMs or use would not be impacted by the drilling operation.
NI	Lands/ Realty Authorizations	Cassel	7/24/09	SC	There are no leases or permits in the location of the proposed action. There is a buried telephone line ROW to Centurytel (COC-9231). The proponent must locate this line before doing any drilling.
NI	Recreation	Monkouski Windsor	7/14/09	AW	Existing recreational uses in the general area include hunting; wildlife viewing; and driving for pleasure. There are no recreation activity plans or other special recreation designations for this area. Recreation resources would not be impacted by the proposed action or the no action alternative.
NI	Socio-Economics	Cassel	9/22/09	SC	There is always an economic benefit to the county when wells are drilled and the State when production occurs.
NI	Visual Resources	Windsor	8/14/09	AW	The proposed action is within visual resource inventory (VRI) Class III. The level of change to the landscape from the access road, well pad and the long-term facilities would be moderate. The design feature of painting long-term facilities Covert Green would reduce the visual impacts by repeating the colors in the surrounding landscape. Visual resources would not be impacted by the proposed action or the no action alternative.
PI	Cumulative Impact Summary	Hodgson	10/9/09	KH	See analysis in EA.
FINAL REVIEW					
	P&E Coordinator	McFadden			

Appendix 2

NATIVE AMERICAN TRIBES CONTACTED:

Ivan Posey, Chairman
Shoshone Business Council
Shoshone Tribe
P O Box 538
Ft. Washakie, WY 82514

Mr. Norman Tidzump
Tribal Historic Preservation Officer
Shoshone Tribe, Cultural Center
P.O. Box 538
Fort Washakie, WY 82514

Ernest House, Sr., Chairman
Ute Mountain Ute Tribe
P O Box JJ
Towaoc, CO 81334

Mr. Terry Knight, Sr.,
NAGPRA Representative
Ute Mountain Ute Tribe
P O Box 468
Towaoc, CO 81334

Harvey Spoonhunter, Chairman
Northern Arapaho Business Council
P O Box 328
Fort Washakie, WY 82514

THPO Director
Northern Arapaho Tribe
P O Box 396
Fort Washakie, WY 82514

Ernest House, Jr., Executive Secretary
Colorado Commissioner of Indian Affairs
130 State Capitol
Denver, Colorado 80203

Robert Goggles, NAGPRA Representative
Northern Arapaho Tribe
328 Seventeen Mile Road
Arapaho, WY 82510

Mathew Box, Chairman
Southern Ute Indian Tribe
P O Box 737
Ignacio, CO 81137

Neil Cloud, NAGPRA Representative
Southern Ute Tribe
Mail Stop #73
Ignacio, CO 81137

Curtis Cesspooch, Chairman
Uintah & Ouray Tribal Business Committee
P O Box 190
Ft. Duchesne, UT 84026

Betsy Chapoose, Director
Cultural Rights & Protection Specialist
Uintah & Ouray Tribe
P O Box 190
Fort Duchesne, UT 84026

Appendix 3

REFERENCES:

Bureau of Land Management. 1991. Colorado Oil and Gas Leasing and Development. Final Environmental Impact Statement. U.S. Dept. of Interior.

CCP. 2008. Colorado Greater sage-grouse Conservation Plan. Colorado.

Connelly, J.W., S.T. Knick, M.A. Schroeder and S.J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

Holloran, M.J., and S.H. Anderson. 2004. Sage-grouse response to natural gas filed development in northwestern Wyoming. Page 16 in Proceedings of the 24th Meeting of the Western Agencies Sage and Columbian Sharp-tailed Grouse Technical Committee. Wenatchee, Washington (Abstract).

Attachment #1

**CONDITIONS OF APPROVAL FOR APPLICATIONS FOR PERMIT TO DRILL
(APDs)**

Operator: Wellstar Corporation

The Bureau of Land Management, Kremmling Field Office, address and telephone contacts are:

Address: 1116 Park Av., Kremmling, CO, 80459
Office Phone: (970) 724-3000 Fax: (970) 724-9590
Natural Resource Specialist: Kelly Hodgson, Office Phone (970) 724-3015

The Bureau of Land Management, Little Snake Field Office, address and telephone contacts are:

Address: 455 Emerson Street. Craig, CO, 81625
Office Phone: (970) 826-5000 Fax: (970) 826-5022
Petroleum Engineer: Stanley Eng, Office Phone (970) 826-5075
Assistant Field Manager: Jerry Strahan Office Phone (970) 826-5099

All lease and/or unit operations are to be conducted in such a manner to ensure full compliance with the applicable laws, regulations (43 CFR Part 3160), Onshore Oil and Gas Orders No. 1, 2, 3, 4, 5, 6 and 7, Notice to Lessees, and the approved plan of operations. Approval of this application does not relieve you of your responsibility to obtain other required federal, state, or local permits. A copy of the approved Form 3160-3 and the pertinent drilling plan, along with any advisory narratives and conditions of approval, shall be available at the drillsite to authorized representatives at all times. The operator is considered fully responsible for the actions of his subcontractors.

Your review and appeal rights are contained in 43 CFR 3165.3 and 3165.4.

CONDITIONS OF APPROVAL

STANDARD CONDITIONS

1. The Kremmling Field Office and the Little Snake Field Office (970) 826-5000 will be given 48-hour notification prior to commencing construction and/or reclamation work.
2. Notify Little Snake Field Office at (970) 826-5000 at least **48**-hours in advance to witness running and cementing of surface casing and testing of the BOPE.
3. The notice of spud will be reported orally to the Little Snake Field Office at (970) 826-5000 at least **48**-hours after spudding. This notice shall include spud date, time, details of spud (hole, casing, cement, etc.), API well number, and date the rotary rig was moved on location. If the spudding occurs on a weekend or holiday, wait until the following regular workday to make this report. The oral notice shall be followed by written notification within 5 working days.
4. No hazardous materials, hazardous wastes, or trash will be disposed of on public lands or on private surface overlying the oil and gas lease. If a release does occur, it will be reported to the Kremmling Field Office immediately at (970) 724-3000.
5. The wellsite disturbance area will be brush cleared and topsoil salvaged before any excavation or fill commences.
6. All survey stakes representing the leveled drill pad, the crest of excavations, the toe of embankments, the reserve pit, and the access road will be in place prior to construction. Staking shall include the well location, two 200-foot directional reference stakes, the exterior dimensions of the drill pad, reserve pit and other areas of surface disturbance, cuts and fills, and centerline flagging of new roads with road flagging being visible from one to the next.

7. Construction activities will not be allowed to commence if the topsoil cannot be separated from the subsoil during adverse environmental conditions (i.e. when soils are frozen or muddy).
8. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
9. Drainage for runoff water will be provided to divert runoff water away from the reserve pit, cut and fill portions of the well location and the topsoil stockpile. Runoff water that concentrates and forms rills on the well location will be diverted and/or dispersed to prevent erosion of the fill slopes. Any ditches designed to provide runoff drainage will be constructed on a minimal grade and will release water onto undisturbed ground without causing accelerated erosion. The operator will take additional measures if erosion is occurring within the runoff water drainage system.
10. If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed timeframe. Operations will resume only upon written notification by the Authorized Officer.

STANDARD STIPULATIONS

11. If cultural or paleontological resources are discovered during exploration operations under this license, the licensee shall immediately notify the Field Officer Manager and shall not disturb such discovered resources until the Field Officer Manager issues specific instructions.
 - a. Within 5 working days after notification, the Field Office Manager shall evaluate any cultural resources discovered and shall determine whether any action may be required to protect or to preserve such discoveries.
 - b. The cost of data recovery for cultural resources discovered during exploration operations shall be borne by the licensee, if the licensee is ordered to take any protective measures. Ownership of cultural resources discovered shall be determined in accordance with applicable law.
 - c. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the Authorized Officer at (970) 724-3000. Within five working days the Authorized Officer will inform the operator as to:
 1. Whether the materials appear eligible for the National Register of Historic Places;
 2. The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again and,
 - d. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation, and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the operator will then be allowed to resume construction.
 - e. Pursuant to 43 CFR 10.4(g) (Federal Register Notice: Monday December 4, 1995, Vol 60, No. 232) the holder of this authorization must notify the Authorized Officer, by telephone (970) 724- 3000, 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), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.
12. The reserve pit will be designed to exclude runoff water and maintain a 2-foot freeboard between the maximum

fluid level and the lowest point of containment. The reserve pit will not be used for disposal of any materials or fluids, except for materials or fluids specifically addressed in the drilling program or having a subsurface origin. If oil or oily substance is in the reserve pit, it must be removed within 30 days after the drilling rig is removed. Netting will be installed if oily substance is present in the reserve pit.

13. The perimeter of the reserve pit and production pits, if any, will be fenced with woven wire with 2 strands of barbed wire, properly spaced, on the top and all held in place by side posts and corner H-braces to inhibit entry by livestock and wildlife. The fence will be maintained until backfilling or removal of facilities occurs.
14. In the event downhole operations threaten to exceed the required 2-foot freeboard, regarding reserve pit fluids, immediate notification will be provided to the Authorized Officer with concurrent steps taken to minimize the introduction of additional fluids, until alternative containment methods can be approved.
15. Reserve pit fluids will be allowed to evaporate through one entire summer season (May-September) after drilling is completed, unless an alternative method of disposal is approved. After the fluids evaporate, the reserve pit mud will be allowed to dry sufficiently to allow backfilling. The backfilling of the reserve pit will be completed within 30 days after dry conditions exist and will meet the following minimum requirements:
 - a. Backfilling will be done in such a manner that the mud and associated solids will be confined to the pit and not squeezed out and incorporated in the surface materials.
 - b. There will be a minimum of 5 feet of cover, or return to approximate original contour on the pit.
 - c. When the work is completed, the pit areas will support the weight of heavy equipment without sinking and over time shall not subside over 6-inch depth.
16. If installed, production facilities will be located on cut portions of the existing drill pad.
17. In the event production is established, all land surfaces that are to remain free of vegetation (roads and well location) will be monitored for and protected from wind erosion; dry powdery soil will be treated to minimize wind erosion.
18. Prior approval is required to remove reserve pit fluids from the reserve pit; a request of this type will need to include the destination of the fluids and if the destination is not a State approved facility, the request will include State approval of the destination. Fluids may be moved to another reserve pit within the same field with verbal approval of the authorized officer.
19. All pits, cellars, rat holes and other bore holes unnecessary for further lease operations, excluding the reserve pit, will be backfilled immediately after the drilling rig is released. Pits, cellars and/or bore holes that remain on location must be fenced as specified for the reserve pit in the applicant's Surface Use Plan.
20. In the event a producing well is established, all new production equipment which has open-vent exhaust systems will be constructed in such a way to prevent the entry and perching of birds and bats.
21. All permanent structures (on-site for six months or longer) constructed or installed (including oil well pumpjacks) will be painted a flat, non-reflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with OSHA (Occupational Safety and Health Act) will be excluded.
22. Surface facilities should appear to blend in to the existing landscape to the greatest possible extent. Facilities should not be located on ridgelines or extend above them. Facilities should be minimal in size (or located underground) and colored and texture to blend in with the surroundings.
23. A containment berm must be installed around all storage tanks, including temporary tanks. Compaction and construction of the berm surrounding the tank or tank battery will be designed to prevent lateral movement of fluids through the utilized materials, prior to storage of fluids. The berm must be constructed to contain at minimum 110 percent of the storage capacity of the largest tank within the berm. All loading lines will be placed inside the berm.

24. Control of noxious weeds will be required through successful vegetation establishment and/or herbicide application. It is the responsibility of the lease operator to insure compliance with all local, state, and federal laws and regulations, as well as labeling directions specific to the use of any given herbicide.

RECLAMATION PERFORMANCE STANDARDS

25. The lessee is required to use the reclamation practices necessary to reclaim all disturbed areas. Reclamation will ensure surface and subsurface stability, growth of a self-regenerating permanent vegetative cover and compatibility with post land use. The vegetation will be diverse and of the same seasonal growth as adjoining vegetation. Post land use will be determined by the Authorized Officer but normally will be the same as adjoining uses.

Reclamation practices which must be applied or accomplished are: re-grading to the approximate original contour, effectively controlling noxious weeds, separating, storing and protecting topsoil for redistribution during final abandonment, seeding and controlling erosion. If topsoil is not present, or quantities are insufficient to achieve reclamation goals, a suitable plant growth media will be separated, stored and protected for later use. Reclamation will begin with the salvaging of topsoil and continue until the required standards are met. Topsoil that is stored for 1 year or longer will be seeded with naturally occurring species to retain topsoil vigor. If use of the disturbed area is for a short time (less than one year), practices which ensure stability will be used as necessary during the project, and reclamation, with the exception of vegetative establishment, will be completed within one year. If use of the area is for greater than one year, interim reclamation is required on the unused areas. Interim reclamation of the unused areas will begin immediately upon completion of the permanent facility(s).

For both short and long term projects vegetative establishment will be monitored annually. If the desired vegetation is not established by the end of the second growing season, practices necessary for establishment will be implemented prior to the beginning of the next growing season. Interim reclamation, unless otherwise approved, will require meeting the same standards as final abandonment with the exception of original contour.

Annual reports consisting of reclamation practices completed and the effectiveness of the reclamation will be provided to the Kremmling Field Office. The first report will be due in January following initiation of reclamation practices and annually thereafter until final abandonment is approved.

There are numerous reclamation practices and techniques that increase the success rate of reclamation and stabilization. With the exception of those stated above, it is the lessee's prerogative to use those they choose to accomplish the objective. Additional site specific mitigations may be specified and required. However, it is recommended that state-of-the-art reclamation, stabilization, and management practices be used to achieve the desired objective in a timely and cost-effective manner.

The following definitions and measurements will be used to accomplish and determine if reclamation has been achieved:

Permanent vegetative cover will be accomplished if the basal cover of perennial species, adapted to the area, is at least ninety (90) percent of the basal cover of the undisturbed vegetation of adjoining land or the potential basal cover as defined in adjacent undisturbed areas.

Diversity will be accomplished if at least two (2) perennial genera and three (3) perennial species that are adapted to the area make up the basal cover of the reclaimed area in precipitation zones thirteen (13) inches or less. One species will not make up more than fifty (50) percent of the perennial vegetation by basal cover.

Self-regeneration and adaptation to the area will be evident if the plant community is in good vigor, there is evidence of successful reproduction, and the species are those commonly found in the area.

Surface stability will be accomplished if soil movement as measured by deposits around obstacles, depths of truncated areas, and height of pedestalling, is not greater than three tenths (0.3) of an inch and if erosion channels (rills, gullies, etc.) are less than one (1) inch in depth and at intervals greater than ten (10) feet.

If this standard is not met by the end of the second growing season, two alternatives exist depending on the severity of the erosion:

If erosion were greater than two (2) times the allowable amount, corrective action would have to be taken by the responsible company at that time;

If erosion is less than or equal to two (2) times the allowable amount, and it is determined the erosion occurred during vegetative establishment and the site may become stable, no corrective action would be required at that time. Another measurement would be performed a year later to determine if stability standards had been met. If the original measurements have not increased by more than the allowed standard, the standard would be considered met. However, if the increase were greater than the allowed standard, corrective action would be required.

Subsurface stability (mass wasting event) is of concern if disturbance has included excavation over four (4) feet in depth and greater than 10,000 square feet in area on slopes thirty five (35) percent and greater, or on any erosion-prone slope. When these conditions occur, length of liability for reclamation and final abandonment will continue for ten (10) years following re-contouring to original contour or for such time that climatic patterns provide two (2) consecutive years in which measurable precipitation totals at least 120 percent of average from October 1 through September 30, as measured by data averaged from nearby regional weather stations. The Authorized Officer may waive this stipulation, or portions of it. Such waiver will be documented and justified when not applicable, or when objectives are accomplished through another method.

SITE SPECIFIC CONDITIONS

Mitigation:

- If the Surface Use Plan, submitted to the Kremmling Field Office as part of the applications, is altered, the authorized officer must be contacted.
- If the produced water is not re-injected within Jackson County, then an additional depletion would need to be calculated and an alternative to offset the depletion would be implemented.
- In order to prevent disturbance to breeding sage-grouse during their breeding season, no nonemergency traffic will use JCR 23A between 6pm and 9am during the peak lek attendance, March 1 to May 30. This applies to all activities for the duration of the well.
- To protect nesting sage-grouse, no surface disturbing activities between the period of March 1 through June 30.
- To reduce conflicts to wintering moose, no surface use is allowed during the period of December 1 through April 30 (this does not apply to operation and maintenance of production facilities).
- The applicant's submitted Plan of Operations states that topsoil piles that are not respread within a 1 year timeframe will be reseeded. This EA's design features include seeding if piles remain after 6 months.
- Prior to the ground freezing and snow accumulation (generally October 31st), the well pad area should be in a stable state to reduce soil erosion and transport during the following spring runoff.

Design Features of the Proposed Action:

- On-site production facilities would be applied for via sundry notice if the well(s) is a producer.
- New access roads would be built to a 14' wide travel surface with minimum standards incorporated. If the associated well is a producer, then within six months of completion of drilling operations, the access road would be upgraded and constructed to include turnouts and would be surfaced with crushed rock or gravel for all-weather access. The new roads would be maintained as necessary and would remain until the wells are abandoned, at which time they would be obliterated and the road and pad areas reclaimed.
- In the event of a dry hole, the drill site and roadways would be restored to their original condition (as near possible) within 180 days after the well is plugged, or until conditions allow.
- Any long-term topsoil piles stored longer than six months would be seeded. Wellstar indicated during on-sites that once the pads were partially reclaimed, topsoil piles would be spread. Topsoil must be of an adequate volume to spread to a 2-3-inch depth at final reclamation.
- Wellstar must obtain a storm-water permit from the state prior to drilling.

- The operator is required to immediately contact BLM KFO, remove all free oil, and coordinate with the BLM in cleanup and bioremediation operations.
- Long-term facilities and tanks would be painted Covert Green in order to meet Visual Resource Management (VRM) conditions of approval.

Bush Draw Federal #18-1

- Wellstar would reach an agreement with all affected land owners regarding surface use. Leasing of the surface, right of way applications and bonding amounts would be agreed upon by Wellstar and the prospective surface owner. Adherence to the Surface Use Plan, including any specifications and/or regulations, enforcement, monitoring of construction, maintenance and reclamation would be the responsibility of Wellstar and the surface owner to which they have an agreement.

REGULATORY REMINDERS

- A. This permit is valid for a period of one year from the date of approval. Any requests for extensions must be submitted prior to the end of the one-year period. If the permit terminates, any surface disturbance created under the permit must be rehabilitated in accordance with the approved plan within 90 days of termination, unless otherwise approved by the Authorized Officer. An expired permit may be reinstated at the Authorized Officer's discretion; however, future operations may require a new application be filed for approval.
- B. All drilling operations, unless otherwise specifically approved in the APD, must be conducted in accordance with Onshore Oil and Gas Order No. 2; Drilling Operations.
- C. All 7-Day Requirement responses are made part of this APD.
- D. There shall be no deviation from the proposed drilling and/or workover program as approved, without prior approval from the Kremmling and Little Snake Field Offices. Safe drilling and operating practices must be observed.
- E. Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease, which would entitle the applicant to conduct operations thereon.
- F. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the Kremmling and Little Snake Field Offices. If operations are to be suspended for more than 30 days, prior approval for certain well operations must be obtained and notification given before resumption of operations in accordance with 43 CFR 3162.3-2 and 3162.3-4.
- G. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval for subsurface abandonment operations may be granted by the Little Snake Field Office. Oral approvals must be confirmed in writing (Notice of Intention to Abandon (Form 3160-5)) within 15 days. Unless the plugging is to take place immediately upon receipt of oral approval, the appropriate resource area must be notified at least 48 hours in advance of the plugging of the well, in order to provide a representative the opportunity to witness plugging operations.
- H. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) must be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with Onshore Oil and Gas Order No. 1. Daily drilling reports, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations (with Form 3160-4) will be filed and sent to the Little Snake Field Office, 455 Emerson Street, Craig, Colorado 81625. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by the Authorized Officer.
- I. Section 102 (b) (3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1 (c), requires that "not later than the fifth business day after any well begins production on which royalty is due anywhere on a least site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days,

the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, or the date on which such production has begun or resumed.”

The date on which a well commences production, or resumes production after having been off production for more than 90 days is to be construed as follows:

1. For an oil well, the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank or the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever occurs first;
2. For a gas well, that date on which gas is first measured through sales metering facilities or the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, whichever occurs first. For purposes of this provision, a gas well shall not be considered to have been off production unless it is incapable of production.

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c) (3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3163.2(e) (2).

- J. This APD is approved subject to the requirement that, should the well be successful (completed for production or recompleted for production in a new interval), the Little Snake Field Office must be notified when it is placed in a producing status. Such notification may be provided orally if confirmed in writing, and must be received in the Little Snake Field Office by not later than the 5th business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following information items:
 1. Operator name
 2. Well name, number, and location
 3. Date well was placed on production
 4. The lease, or communitized tract, or unit participating area to which the well’s production is attributable.
- K. A separate Monthly Report of Operations, Form 3160-6, shall be submitted for each lease, unit participating area, or communitization agreement, beginning with the month in which drilling operation commence, in accordance with 43 CFR 3162.4-3. This report shall be sent to Minerals Management Service, Production Accounting Division, P.O. Box 17110, Denver, Colorado 80217.
- L. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation determined by the Authorized Officer.
- M. All produced liquids must be contained, including the dehydrator vent/condensate line effluent. All production pits must be bermed and fenced.
- N. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of 30 days or 50 MMCF following completion, whichever comes first, without the prior written approval of the authorized officer. Should gas be vented or flared without approval beyond the authorized test period, you may be directed to shut the well in until the gas can be captured or approval to continue venting or flaring is granted and you may be required to compensated the lessor for that portion of the gas that was vented or flared without approval which is determined to have been avoidably lost.
- O. Produced water from newly completed wells may be temporarily disposed of into the reserve pit for a period of up to 90 days. During the 90-day periods, an application for approval of a permanent disposal method and location will be submitted according to Onshore Order No. 7 for approval.
- P. A schematic facilities diagram as required by CFR 43, Part 3162.7-5, shall be submitted to the Little Snake Field Office within 60 days of installation or first production, whichever occurs first. All site security

regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 3162.7-5(b).

- Q. The permit holder is required to use certified weed free hay, straw and mulch on BLM lands in Colorado should the use or storage of hay, straw or mulch be necessary. Any person who knowingly and willfully violates this regulation may be subject to a fine of not more than \$1,000 or imprisonment of not more than 12 months, or both as defined in 43 USC 1733(a).

Attachment #2

Seed Mix

SEED NAME	Drill Seeding Rate	
	Application Rate PLS/Acre	Seeds/SQ. FT.
Grasses		
Western wheatgrass Pascopyrum smithii, variety. Arriba	2.97	7.5
Thickspike Wheatgrass Elymus lanceolatus var. Critana	2.13	7.5
Bluebunch wheatgrass Pseudoroegneria spicata, var. Secar (Alternate var. Goldar)	2.51	7.5
Sheep fescue Festuca ovina, var. Covar	.62	7.5
<hr/> Total	<hr/> 8.23	<hr/> 30
Forbs		
Alfalfa var. Ladak	.73	3.5
Big sagebrush Artemisia tridentata ssp. wyomingensis	.06	3.5
<hr/> Total	<hr/> .79	<hr/> 7

- * Big sagebrush and Alfalfa may be seeded when it would be better for success
- * Broadcast seeds at twice the rate

(Seed tags must be submitted to BLM after seeding.)

*** do not seed prior to October 1, to avoid sprouting.**

MULCH

Native Hay or Straw 2,000 lbs. X acres =

- Mulch is optional but it will help reclamation results.
- Must be Certified Noxious Weed Free