

## JUNE 2019 STIPULATIONS AND NOTICES

<b>STIPULATIONS</b>	
<b>UT-S-01</b>	<p style="text-align: center;"><b>AIR QUALITY</b></p> <p>All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower shall not emit more than 2 grams of NO<sub>x</sub> per horsepower-hour.</p> <p><b>Exception:</b> This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p> <p><b>AND</b></p> <p>All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gram of NO<sub>x</sub> per horsepower-hour.</p> <p><b>Exception:</b> None</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>
<b>UT-S-102</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE – FRAGILE SOILS/SLOPES 30 PERCENT OR GREATER</b></p> <p>No surface disturbing proposed projects involving construction on slopes greater than 30. If the action cannot be avoided, rerouted, or relocated than a proposed project will include an erosion control strategy, reclamation and a site plan with a detailed survey and design completed by a certified engineer. This proposed project must be approved by the BLM prior to construction and maintenance.</p> <p><b>Exception:</b> None</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>
<b>UT-S-111</b>	<p style="text-align: center;"><b>NO SURFACE OCCUPANCY – WETLAND/HYDRIC SOILS</b></p> <p>No surface occupancy on wetland soils or soils identified as having hydric soil properties.</p> <p><b>Exception:</b> Consider exceptions to NSO if a site-specific environmental analysis determines that other placement alternatives would cause undue or unnecessary degradation to resources. In addition, require the operator to submit a plan prior to commencing operations that addresses:</p> <ul style="list-style-type: none"> <li>• Erosion control strategies;</li> <li>• Mitigation to protect surface from rutting, compaction, and displacement, and disruption of surface and subsurface hydrologic function;</li> <li>• Mitigation or restoration measures to restore hydrologic function to site;</li> <li>• Proper survey and design by a certified engineer.</li> </ul> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>STIPULATIONS</b>	
<b>UT-S-121</b>	<p style="text-align: center;"><b>NO SURFACE OCCUPANCY – RIPARIAN AND WETLAND AREAS</b></p> <p>No surface disturbance and/or occupancy within buffer zones around natural springs. Base the size of the buffer on hydrological, riparian, and other factors necessary to protect the water quality of the springs. If these factors cannot be determined, maintain a 330-foot buffer zone from outer edge.</p> <p><b>Exception:</b> Consider exceptions if it can be shown that (1) there are no practical alternatives to the disturbance, (2) all long-term impacts can be fully mitigated, and (3) the activity will benefit and enhance the riparian area. Consider compensatory mitigation where surface disturbance cannot be avoided within riparian wetland habitats on a site-specific basis.</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>
<b>UT-S-133</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE – RIPARIAN/AQUATIC HABITATS</b></p> <p>In order to protect important wildlife species and habitat values from disturbance, seismic work, well development, rights-of-way, and other disturbance activities excluding maintenance activities, would be restricted within 1,200 feet of riparian/aquatic habitat yearlong, if the proposed activity could significantly impact water quality or productivity of the riparian/wetland zone.</p> <p><b>Exception:</b> Exceptions may be granted by BLM if it can be shown that the proposed activity will not seriously disturb the wildlife habitat values being protected.</p> <p><b>Modification:</b> None.</p> <p><b>Waiver:</b> None</p>
<b>UT-S-133A</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE – LIVE WATER</b></p> <p>No occupancy will be allowed within 1,200 feet of live water.</p> <p><b>Exception:</b> None</p> <p><b>Modification:</b> This distance may be modified when specifically approved in writing by the authorize officer of the BLM.</p> <p><b>Waiver:</b> None</p>
<b>UT-S-233</b>	<p style="text-align: center;"><b>TIMING LIMITATION – CRUCIAL MULE DEER AND ELK WINTER HABITAT</b></p> <p>Restrict surface disturbing activities in crucial mule deer and elk habitats from <b>December 15 to April 15</b> to protect winter habitats.</p> <p><b>Exception:</b> This stipulation does not apply to the maintenance and operation of existing and ongoing facilities. An exception may be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated or it is determined the habitat is not being used during the winter period for any given year.</p> <p><b>Modification:</b> The Field Manager may modify the boundaries of the stipulation area if (1) a portion of the area is not being used as crucial winter range by</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>STIPULATIONS</b>	
	<p>deer/elk, (2) habitat outside of stipulation boundaries is being used as crucial winter range and needs to be protected, or (3) the migration patterns have changed causing a difference in the season of use.</p> <p><b>Waiver:</b> A waiver may be granted if the winter range habitat is unsuitable or unoccupied during winter months by deer/elk and there is no reasonable likelihood of future winter range use.</p>
<b>UT-S-276</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE/TIMING LIMITATIONS – BALD EAGLE</b></p> <p>The Lessee/Operator is given notice that the lands in this parcel contains nesting/winter roost habitat for the bald eagle, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside the bald eagle breeding or roosting season. A temporary action is completed prior to the following breeding or roosting season, leaving no permanent structures and resulting in no permanent habitat loss. A permanent action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances (e.g., creation of a permanent structure). The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act (ESA). Integration of, and adherence to, these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage.</p> <p>Current avoidance and minimization measures include the following:</p> <ol style="list-style-type: none"> <li>1. Surveys will be required prior to operations, unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s), and be conducted according to protocol.</li> <li>2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.</li> <li>3. Water production will be managed to ensure maintenance or enhancement of riparian habitat.</li> <li>4. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season of January 1 to August 31, unless the area has been surveyed according to protocol and determined to be unoccupied.</li> <li>5. Temporary activities within 0.5 miles of winter roost areas, e.g., cottonwood galleries, will not occur during the winter roost season of November 1 to March 31, unless the area has been surveyed according to protocol and determined to be unoccupied.</li> <li>6. No permanent infrastructure will be placed within 1.0 mile of nest sites.</li> <li>7. No permanent infrastructure will be placed within 0.5 miles of winter</li> </ol>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>STIPULATIONS</b>	
	<p>roost areas.</p> <ol style="list-style-type: none"> <li>8. Remove big game carrion from within 100 feet from lease roadways occurring within bald eagle foraging range.</li> <li>9. Avoid loss or disturbance to large cottonwood gallery riparian habitats.</li> <li>10. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat. Utilize directional drilling to avoid direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.</li> <li>11. All areas of surface disturbance within riparian areas and/or adjacent uplands should be re-vegetated with native species.</li> </ol> <p>Additional measures may also be employed to avoid or minimize effects to the species between the lease sale stage and lease development stage. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.</p> <p><b>Exception:</b> None  <b>Modification:</b> None  <b>Waiver:</b> None</p>
<b>UT-S-293</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE/TIMING LIMITATIONS – CALIFORNIA CONDOR</b></p> <p>The Lessee/Operator is given notice that the lands located in this parcel contain potential habitat for the California Condor, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease if the area is known or suspected to be used by condors. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside potential habitat. A <u>temporary</u> action is completed prior to the following important season of use, leaving no permanent structures and resulting in no permanent habitat loss. This would include consideration for habitat functionality. A <u>permanent</u> action continues for more than one season of habitat use, and/or causes a loss of condor habitat function or displaces condors through continued disturbance (i.e. creation of a permanent structure requiring repetitious maintenance, or emits disruptive levels of noise).</p> <p>The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act (ESA). Integration of, and adherence to these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA, Section 7 consultation at the permit stage. Current avoidance and minimization measures include the following:</p> <ol style="list-style-type: none"> <li>1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be</li> </ol>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>STIPULATIONS</b>	
	<p>conducted by qualified individual(s) approved by the BLM, and must be conducted according to approved protocol.</p> <ol style="list-style-type: none"> <li>2. If surveys result in positive identification of condor use, all lease activities will require monitoring throughout the duration of the project to ensure desired results of applied mitigation and protection. Minimization measures will be evaluated during development and, if necessary, Section 7 consultation may be reinitiated.</li> <li>3. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season.</li> <li>4. Temporary activities within 0.5 miles of established roosting sites or areas will not occur during the season of use, August 1 to November 31, unless the area has been surveyed according to protocol and determined to be unoccupied.</li> <li>5. No permanent infrastructure will be placed within 1.0 mile of nest sites.</li> <li>6. No permanent infrastructure will be placed within 0.5 miles of established roosting sites or areas.</li> <li>7. Remove big game carrion from within 100 feet from lease roadways occurring within foraging range.</li> <li>8. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat utilize directional drilling to avoid direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.</li> <li>9. Re-initiation of section 7 consultation with the Service will be sought immediately if mortality or disturbance to California condors is anticipated as a result of project activities. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.</li> </ol> <p>Additional measures may also be employed to avoid or minimize effects to the species between the lease sale and lease development stages. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.</p> <p><b>Exception:</b> None  <b>Modification:</b> None  <b>Waiver:</b> None</p>
<b>UT-S-423</b>	<p><b>CONTROLLED SURFACE USE/TIMING LIMITATION – BALD EAGLE ROOST SITES</b></p> <p>In order to protect important wildlife species and habitat values from disturbance, seismic work, well development, rights-of-way, and other disturbance activities excluding maintenance activities, would be restricted within 0.5 miles of bald eagle roost sites between November 15 and March April 15.</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>STIPULATIONS</b>	
	<p><b>Exception:</b> Exceptions may be granted by BLM if it can be shown that the proposed activity will not seriously disturb the wildlife habitat values being protected.</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>
<b>UT-S-424</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE/TIMING LIMITATION – RAPTOR NESTING SITES</b></p> <p>In order to protect important wildlife species and habitat values from disturbance, seismic work, well development, rights-of-way, and other disturbance activities excluding maintenance activities, would be restricted within 0.5 miles of active raptor nest sites between January 1 to August 31 of each year or yearlong if the disturbance would negatively impact the suitability of the site for future nesting.</p> <p><b>Exception:</b> Exceptions may be granted by BLM if it can be shown that the proposed activity will not seriously disturb the wildlife habitat values being protected.</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>
<b>UT-S-425</b>	<p style="text-align: center;"><b>CONTROLLED SURFACE USE – SLOPES IN EXCESS OF 30 PERCENT</b></p> <p>In order to protect crucial watershed areas, no occupancy or other surface disturbance will be allowed on slopes in excess of 30 percent. This limitation does not apply to maintenance and operation of producing wells.</p> <p><b>Exception:</b> If the lessee can demonstrate that operations can take place without impact to the resource being protected, an exemption to this stipulation may be granted if approved in writing by the authorized.</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>
<b>UT-S-427</b>	<p style="text-align: center;"><b>TIMING LIMITATION – WATERFOWL HABITAT</b></p> <p>In order to protect important wildlife species and habitat values from disturbance, seismic work, well development, rights-of-way, and other disturbance activities excluding maintenance activities, would be restricted within waterfowl habitat (marsh and wetland areas).</p> <p><b>Exception:</b> Exceptions may be granted by BLM if it can be shown that the proposed activity will not seriously disturb the wildlife habitat values being protected.</p> <p><b>Modification:</b> None</p> <p><b>Waiver:</b> None</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
<b>UT-LN-14</b>	<p style="text-align: center;"><b>PRONGHORN FAWNING HABITAT</b></p> <p>The lessee/operator is given notice that this lease has been identified as containing crucial pronghorn fawning habitat. No surface use or otherwise disruptive activity allowed from May 1 through June 29 within identified crucial/important pronghorn fawning habitat from disruptive activity. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-37</b>	<p style="text-align: center;"><b>BALD EAGLE HABITAT</b></p> <p>The lessee/operator is given notice that lands in this lease have been identified as containing Bald Eagle Habitat. Modifications to the Surface Use Plan of Operations may be required in order to protect the Bald Eagle and/or habitat from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.</p>
<b>UT-LN-38</b>	<p style="text-align: center;"><b>FERRUGINOUS HAWK NEST SITES</b></p> <p>The lessee/operator is given notice that this lease has been identified as containing ferruginous hawk nest sites. No surface use or otherwise disruptive activity allowed from March 1 through August 1 which would disrupt ferruginous hawk breeding activities within 0.5 mile of an occupied nest. No surface use or otherwise disruptive activity would be allowed which would result in an aboveground facility within 0.5 mile of known ferruginous hawk nests, which have been active within the past 3 years. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43CFR3101.1-2.</p>
<b>UT-LN-39</b>	<p style="text-align: center;"><b>GOLDEN EAGLE NEST SITES AND TERRITORIES</b></p> <p>The lessee/operator is given notice that this lease has been identified as containing golden eagle nest sites. No surface use or otherwise disruptive activity allowed which would disrupt golden eagle breeding activities within 0.5 mile of an occupied nest from January 1 through August 31 or until fledgling and dispersal of young. . . Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms, the Bald and Golden Protection Act and 43 CFR 3101.1-2.</p>
<b>UT-LN-40</b>	<p style="text-align: center;"><b>GOLDEN EAGLE HABITAT</b></p> <p>The lessee/operator is given notice that lands in this lease have been identified as containing Golden Eagle Habitat. Modifications to the Surface Use Plan of Operations may be required in order to protect the Golden Eagle and/or habitat from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.</p>
<b>UT-LN-44</b>	<p style="text-align: center;"><b>RAPTORS</b></p> <p>Appropriate seasonal and spatial buffers shall be placed on all known raptor nests in accordance with Utah Field Office Guidelines for Raptor Protection from Human and Land use Disturbances (USFWS 2002) and Best Management Practices for Raptors and their Associated Habitats in Utah (BLM 2006). All</p>



## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
	<p>construction related activities will not occur within these buffers if pre-construction monitoring indicates the nests are active, unless a site-specific evaluation for active nests is completed prior to construction and if a BLM wildlife biologist, in consultation with USFWS and UDWR, recommends that activities may be permitted within the buffer. The BLM will coordinate with the USFWS and UDWR and have a recommendation within 3-5 days of notification. Any construction activities authorized within a protective (spatial and seasonal) buffer for raptors will require an on-site monitor. Any indication that activities are adversely affecting the raptor and/or its' young the on-site monitor will suspend activities and contact the BLM Authorized Officer immediately. Construction may occur within the buffers of inactive nests. Construction activities may commence once monitoring of the active nest site determines that fledglings have left the nest and are no longer dependent on the nest site. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-45</b>	<p style="text-align: center;"><b>MIGRATORY BIRDS</b></p> <p>The lessee/operator is given notice that surveys for nesting migratory birds may be required during migratory bird breeding season whenever surface disturbances and/or occupancy is proposed in association with fluid mineral exploration and development within priority habitats. Surveys should focus on identified priority bird species in Utah. Field surveys will be conducted as determined by the authorized officer of the Bureau of Land Management. Based on the result of the field survey, the authorized officer will determine appropriate buffers and timing limitations.</p>
<b>UT-LN-49</b>	<p style="text-align: center;"><b>UTAH SENSITIVE SPECIES</b></p> <p>The lessee/operator is given notice that no surface use or otherwise disruptive activity would be allowed that would result in direct disturbance to populations or individual special status plant and animal species, including those listed on the BLM sensitive species list and the Utah sensitive species list. The lessee/operator is also given notice that lands in this parcel have been identified as containing potential habitat for species on the Utah Sensitive Species List. Modifications to the Surface Use Plan of Operations may be required in order to protect these resources from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, Migratory Bird Treaty Act and 43 CFR 3101.1-2.</p>
<b>UT-LN-52</b>	<p style="text-align: center;"><b>NOXIOUS WEEDS</b></p> <p>The lessee/operator is given notice that lands in this lease have been identified as containing or is near areas containing noxious weeds. Best management practices to prevent or control noxious weeds may be required for operations on the lease.</p>



## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
<b>UT-LN-53</b>	<p style="text-align: center;"><b>RIPARIAN AREAS</b></p> <p>The lessee/operator is given notice that this lease has been identified as containing riparian areas. No surface use or otherwise disruptive activity allowed within 100 meters of riparian areas unless it can be shown that (1) there is no practicable alternative; (2) that all long-term impacts are fully mitigated; or (3) that the construction is an enhancement to the riparian areas. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-56</b>	<p style="text-align: center;"><b>DRINKING WATER SOURCE PROTECTION ZONE</b></p> <p>This lease (or a portion thereof) is within a public Drinking Water Source Protection zone. Before application for a permit to drill (APD) submittal or any proposed surface-disturbing activity, the lessee/operator must contact the public water system manager to determine any zoning ordinances, best management or pollution prevention measures, or physical controls that may be required within the protection zones. Drinking Water Source Protection plans are developed by the public water systems under the requirements of R309-600. Drinking Water Source Protection for Ground-Water Sources. (Utah Administrative Code). There may also be county ordinances in place to protect the source protection zones, as required by Section 19-4-113 of the Utah Code.</p> <p>Incorporated cities and towns may also protect their drinking water sources using Section 10-8-15 of the Utah Code. This part of the Code gives cities and towns the extraterritorial authority to enact ordinances to protect a source of drinking water ... "For 15 miles above the point from which it is taken and for a distance of 300 feet on each side of such stream..." Class I cities (greater than 100,000 population) are granted authority to protect their entire watersheds.</p> <p>Some public water sources qualify for monitoring waivers which reduce their monitoring requirements for pesticides and volatile organic chemicals (VOCs). Exploration, drilling, and production activities within Source Protection zone 3 could jeopardize these waivers, thus requiring increased monitoring. Contact the public water system to determine what effect your activities may have on their monitoring waivers. Please be aware of other State rules to protect surface and ground water: the Utah Division of Water Quality Rules R317 Water Quality Rules; and Rules of the Utah Division of Oil, Gas and Mining, Utah Oil and Gas Conservation Rules R649.</p> <p>At the time of development, drilling operators will additionally conform to the operational regulations in Onshore Oil &amp; Gas Order No. 2 (which requires the protection and isolation of all usable quality waters, <math>\leq 10,000</math> mg/L Total Dissolved Solids), Onshore Oil and Gas Order No. 7 (which prescribes measures required for the handling of produced water to insure the protection of surface and ground water sources) and the Surface Operating Standards and Guidelines for Oil and Gas Development, The Gold Book, Fourth Edition-Revised 2007 (which provides information and requirements for conducting environmentally responsible oil and gas operations).</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
	<p>Additional mitigation measures may be necessary to prevent adverse impacts from oil and gas exploration and development activities. Mitigation measures may include submitting an erosion control plan with best management practices (BMPs) that address rigorous interim reclamation which might include surface roughening, vegetative buffer strips, etc.; and sediment control through the use of sediment logs, silt fences, erosion control blankets, outlet/inlet protection of water control features such as culverts or diversion ditches, sediment traps, run on/run off pad design features. If project activities are close to sensitive areas or water sources a semi or closed-loop drilling system should be required.</p>
<b>UT-LN-58</b>	<p style="text-align: center;"><b>DRINKING WATER PROTECTION ZONE</b></p> <p>The lessee/operator is given notice that this lease parcel overlaps a drinking water protection zone for public water sources in Utah. At the time of development, drilling operators will conform to the provisions of the operational regulations and Onshore Oil &amp; Gas Order Number 2, which requires the protection and isolation of all useable quality waters.</p>
<b>UT-LN-65</b>	<p style="text-align: center;"><b>OLD SPANISH TRAIL</b></p> <p>The lessee/operator is given notice that lands in this lease are crossed by the Old Spanish Trail National Historic Trail [Old Spanish Trail Recognition Act of 2002, (Old Spanish Trail PLO 107-325)]. Modifications to the Surface Use Plan of Operations may be required to protect the historic integrity of the Trail, its resources, its values – such as landscape view sheds, and outdoor recreational opportunities associated with the foregoing.</p>
<b>UT-LN-68</b>	<p style="text-align: center;"><b>NOTIFICATION &amp; CONSULTATION REGARDING CULTURAL RESOURCES</b></p> <p>The lease area may now or hereafter be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), the Archaeological Resources Protections Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), the American Indian Religious Freedom Act (AIRFA), other statues and Executive Order 13007, and which may be of concern to Native American tribes, interested parties, and the State Historic Preservation Officer (SHPO). BLM will not approve any ground disturbing activities as part of future lease operations until it completes applicable requirements of the National Historic Preservation Act (NHPA), including the completion of any required procedure for notification and consultation with appropriate tribe(s) and/or the SHPO. BLM may require modifications to exploration and development proposals to further its conservation and management objectives on BLM-approved activities that are determine to affect or impact historic or cultural properties and/or resources.</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
<b>UT-LN-69</b>	<p style="text-align: center;"><b>HIGH POTENTIAL FOR CULTURAL RESOURCES</b></p> <p>This parcel is located in an area of high concentrations of cultural resources. Known cultural sites are fragile and many are buried under sandy deposits which migrate due to their susceptibility to wind. These sites, or large portions, are not visible from the surface. Therefore, the following mitigation measures may be applied to any surface disturbance of this parcel: 1) pre-surface disturbance cultural resource inventories; 2) pre-surface disturbance subsurface testing; 3) monitoring of ground disturbance; and 4) post-disturbance monitoring identifying resources as the soils stabilize around a project.</p>
<b>UT-LN-70</b>	<p style="text-align: center;"><b>HIGH POTENTIAL FOR CULTURAL RESOURCE OCCURRENCE</b></p> <p>The lessee/operator is given notice that lands in this lease contain significant Cultural Resources. Modifications to the Surface Use Plan of Operations may be required for the protection of these resources. Class III level block inventories may be required to determine resource location and possible impact to the resource.</p>
<b>UT-LN-83</b>	<p style="text-align: center;"><b>SITE RIGHT-OF-WAY</b></p> <p>The lessee/operator is given notice that lands in this lease have an existing site ROW present. Modifications to the Surface Use Plan of Operations may be required or other appropriate mitigation as deemed necessary by the BLM Authorized Officer in order to protect the valid existing rights.</p>
<b>UT-LN-84</b>	<p style="text-align: center;"><b>UTAH TEST AND TRAINING RANGE MILITARY OPERATIONS AREA (MOA)</b></p> <p>All or portions of this parcel are located underneath Utah Test and Training Range (UTTR) Airspace. The airspace is comprised of Military Operations Areas and Restricted Airspace. Due to potential interference with military operations, operations on the lease may be subject to special conditions such as</p> <ol style="list-style-type: none"> <li>1. The MOA air space starts at 100 ft. above ground surface. No towers or rigs may be installed in excess of 99 ft. above ground level (AGL) without UTTR coordination.</li> <li>2. Remote sensing, Remote sensing, lights, heat producing engines, reflective surfaces such as fluid pits, or other contrivances used in fluid minerals operation could cause interference with military operations, and their use may be restricted.</li> </ol> <p>Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-96</b>	<p style="text-align: center;"><b>AIR QUALITY MITIGATION MEASURES</b></p> <p>The lessee is given notice that the Bureau of Land Management (BLM) in coordination with the U.S. Environmental Protection Agency and the Utah Department of Air Quality, among others, has developed the following air quality mitigation measures that may be applied to any development proposed on this lease. Integration of and adherence to these measures may help minimize adverse local or regional air quality impacts from oil and gas</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
	<p>development (including but not limited to construction, drilling, and production) on regional ozone formation.</p> <ul style="list-style-type: none"> <li>• All internal combustion equipment would be kept in good working order.</li> <li>• Water or other approved dust suppressants would be used at construction sites and along roads, as determined appropriate by the Authorized Officer.</li> <li>• Open burning of garbage or refuse would not occur at well sites or other facilities.</li> <li>• Drill rigs would be equipped with Tier II or better diesel engines.</li> <li>• Vent emissions from stock tanks and natural gas TEG dehydrators would be controlled by routing the emissions to a flare or similar control device which would reduce emissions by 95% or greater.</li> <li>• Low bleed or no bleed pneumatics would be installed on separator dump valves and other controllers.</li> <li>• During completion, flaring would be limited as much as possible. Production equipment and gathering lines would be installed as soon as possible.</li> <li>• Well site telemetry would be utilized as feasible for production operations.</li> <li>• Stationary internal combustion engine would comply with the following standards: 2g NOx/bhp-hr for engines &lt;300HP; and 1g NOx/bhp-hr for engines &gt;300HP.</li> </ul> <p>Additional site-specific measures may also be employed to avoid or minimize effects to local or regional air quality. These additional measures will be developed and implemented in coordination with the U.S. Environmental Protection Agency, the Utah Department of Air Quality, and other agencies with expertise or jurisdiction as appropriate based on the size of the project and magnitude of emissions.</p>
<b>UT-LN-99</b>	<p style="text-align: center;"><b>REGIONAL OZONE FORMATION CONTROLS</b></p> <p>To mitigate any potential impact oil and gas development emissions may have on regional ozone formation, the following Best Management Practices (BMPs) would be required for any development projects:</p> <ul style="list-style-type: none"> <li>• Tier II or better drilling rig engines</li> <li>• Stationary internal combustion engine standard of 2g NOx/bhp-hr for engines &lt;300HP and 1g NOx/bhp-hr for engines &gt;300HP</li> <li>• Low bleed or no bleed pneumatic pump valves</li> <li>• Dehydrator VOC emission controls to +95% efficiency</li> <li>• Tank VOC emission controls to +95% efficiency</li> </ul>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
<b>UT-LN-101</b>	<p style="text-align: center;"><b>AIR QUALITY</b></p> <p>All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 grams of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower. AND All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO<sub>x</sub> per horsepower-hour. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-102</b>	<p style="text-align: center;"><b>AIR QUALITY ANALYSIS</b></p> <p>The lessee/operator is given notice that prior to project-specific approval, additional air quality analyses may be required to comply with the National Environmental Policy Act, Federal Land Policy Management Act, and/or other applicable laws and regulations. Analyses may include dispersion modeling for deposition and visibility impacts analysis, control equipment determinations, and/or emission inventory development. These analyses may result in the imposition of additional project-specific air quality control measures.</p>
<b>UT-LN-107</b>	<p style="text-align: center;"><b>BALD EAGLE</b></p> <p>The Lessee/Operator is given notice that the lands in this parcel contains nesting/winter roost habitat for the bald eagle. The bald eagle was de-listed in 2007; however, it is still afforded protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 1940). Therefore, avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside the bald eagle breeding or roosting season. A <u>temporary</u> action is completed prior to the following breeding or roosting season leaving no permanent structures and resulting in no permanent habitat loss. A <u>permanent</u> action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances, i.e. creation of a permanent structure. The following avoidance and minimization measures have been designed to ensure activities carried out on the lease will not lead to the need to consider listing the eagle as threatened or endangered. Integration of, and adherence to the following measures will facilitate review and analysis of any submitted permits under the authority of this lease.</p> <p>Current avoidance and minimization measures include the following:</p> <ol style="list-style-type: none"> <li>1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by qualified individual(s), and be conducted according to protocol.</li> <li>2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization</li> </ol>

JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
	<p>measures will be evaluated.</p> <ol style="list-style-type: none"> <li>3. Water production will be managed to ensure maintenance or enhancement of riparian habitat.</li> <li>4. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season of January 1 to August 31, unless the area has been surveyed according to protocol and determined to be unoccupied.</li> <li>5. Temporary activities within 0.5 miles of winter roost areas, e.g., cottonwood galleries, will not occur during the winter roost season of November 1 to March 31, unless the area has been surveyed according to protocol and determined to be unoccupied.</li> <li>6. No permanent infrastructure will be placed within 1.0 mile of nest sites.</li> <li>7. No permanent infrastructure will be placed within 0.5 miles of winter roost areas.</li> <li>8. Remove big game carrion from within 100 feet of lease roadways occurring within bald eagle foraging range.</li> <li>9. Avoid loss or disturbance to large cottonwood gallery riparian habitats.</li> <li>10. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat Utilize directional drilling to avoid direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.</li> <li>11. All areas of surface disturbance within riparian areas and/or adjacent uplands should be re-vegetated with native species.</li> </ol> <p>Additional measures may also be employed to avoid or minimize effects to the species between the lease sale stage and lease development stage. These additional measures will be developed and implemented in coordination with the U.S. Fish and Wildlife Service.</p>
<b>UT-LN-113</b>	<p style="text-align: center;"><b>WESTERN YELLOW-BILLED CUCKOO</b></p> <p>The Lessee/Operator is given notice that the lands in or adjacent to this parcel contain potentially suitable habitat that falls within the range for western yellow-billed cuckoo, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend upon whether the action is temporary or permanent, and whether it occurs within or outside the breeding and nesting season. A temporary action is completed prior to the following breeding season leaving no permanent structures and resulting in no permanent habitat loss. A permanent action could continue for more than one breeding season and/or cause a loss of habitat or displace western yellow-billed cuckoos through disturbances. The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act. Integration of, and adherence to, these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following</p>



## JUNE 2019 STIPULATIONS AND NOTICES

### LEASE NOTICES

these measures could reduce the scope of Endangered Species Act, Section 7 consultation at the permit stage. Avoidance and minimization measures include the following:

1. Habitat suitability within the parcel and/or within a 0.25 mile buffer of the parcel will be identified prior to lease development to identify potential survey needs.
2. Protocol Breeding Season Surveys will be required in suitable habitats prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by permitted individual(s), and be conducted according to protocol.
3. For all temporary actions that may impact cuckoo or suitable habitat:
  - a. If action occurs entirely outside of the cuckoo breeding season (June 1 – Aug 31), and leaves no structure or habitat disturbance, action can proceed without a presence/absence survey.
  - b. If action is proposed between June 1 and August 31, presence/absence surveys for cuckoo will be conducted prior to commencing activity. If cuckoo are detected, activity should be delayed until September 1.
  - c. Eliminate access routes created by the project through such means as raking out scars, revegetation, gating access points, etc.
4. For all permanent actions that may impact cuckoo or suitable habitat:
  - a. Protocol level surveys by permitted individuals will be conducted prior to commencing activities.
  - b. If cuckoos are detected, no activity will occur within 0.25 mile of occupied habitat.
  - c. Avoid drilling and permanent structures within 0.25 mile of suitable habitat unless absence is determined according to protocol level surveys conducted by permitted individual(s).
  - d. Ensure noise levels at 0.25 mile from suitable habitat do not exceed baseline conditions. Placement of permanent noise-generating facilities should be determined by a noise analysis to ensure noise does not encroach upon a 0.25 mile buffer for suitable habitat.
5. Temporary or permanent actions will require monitoring throughout the duration of the project to ensure that western yellow-billed cuckoo or its habitat is not affected in a manner or to an extent not previously considered. Avoidance and minimization measures will be evaluated throughout the duration of the project.
6. Water produced as a by-product of drilling or pumping will be managed to ensure maintenance or enhancement of riparian habitat.
7. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.



## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
	<p>8. Ensure that water extraction or disposal practices do not result in change of hydrologic regime that would result in loss or degradation of riparian habitat.</p> <p>9. Re-vegetate with native species all areas of surface disturbance within riparian areas and/or adjacent uplands.</p> <p>Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.</p>
<b>UT-LN-128</b>	<p style="text-align: center;"><b>FLOODPLAIN MANAGEMENT</b></p> <p>The lessee/operator is given notice that, in accordance with Executive Order 11988, to avoid adverse impact to floodplains 1) facilities should be located outside the 100 year floodplain, or 2) would be minimized or mitigated by modification of surface use plans within floodplains present within the lease.</p>
<b>UT-LN-135</b>	<p style="text-align: center;"><b>COUNTY COORDINATION</b></p> <p>The Lessee/Operator is given notice that development of this parcel is of particular concern to the County, and that coordination with the County may be necessary when development takes place.</p>
<b>UT-LN-143</b>	<p style="text-align: center;"><b>RAPTORS</b></p> <p>The lessee/operator is given notice that appropriate seasonal and spatial buffers shall be placed on all known raptor nests in accordance with Utah Field Office Guidelines for Raptor Protection from Human and Land use Disturbances (USFWS 2002) and BMPs for Raptors and their Associated Habitats in Utah (BLM 2006). All construction-related activities will not occur within these buffers if pre-construction monitoring indicates the nests are active, unless a site specific evaluation(survey) for active nests is completed prior to construction and if a BLM wildlife biologist, in consultation with USFWS and UDWR, recommends that activities may be permitted within the buffer. The BLM will coordinate with the USFWS and UDWR and have a recommendation within 3 to 5 days of notification. Any construction activities authorized within a protective (spatial and seasonal) buffer for raptors will require an onsite monitor. Any indication that activities are adversely affecting the raptor and/or its young the onsite monitor will suspend activities and contact the BLM Authorized Officer immediately. Construction may occur within the buffers of inactive nests. Construction activities may commence once monitoring of the active nest site determines that fledglings have left the nest and are no longer dependent on the nest site. Modifications to the Surface Use Plan of Operations may be required in accordance with Section 6 of the lease terms and 43 CFR 3101.1-2.</p>

## JUNE 2019 STIPULATIONS AND NOTICES

<b>LEASE NOTICES</b>	
<b>UT-LN-158</b>	<p style="text-align: center;"><b>WATERFOWL AND SHOREBIRDS</b></p> <p>The lessee/operator is given notice that this lease has been identified as containing waterfowl and shorebird habitat. The area of this parcel is within the vicinity of the Great Salt Lake and migratory bird flyways. Produced water and pits may require netting or other devices that deter use by these species and prevent access and mortality of birds and other animals. In addition, the operator is required to monitor open pits, produced water, and other BMPS listed in “The Gold Book.” Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-159</b>	<p style="text-align: center;"><b>CENTRAL PACIFIC RAILROAD GRADE ACCESS</b></p> <p>The lessee/operator is given notice that accessing lease parcels from, on or across the Central Pacific Railroad Grade for exploration, drilling, construction, or other activities may be limited or prohibited to protect the Historic District’s integrity. Based on the result of the field survey associated with the review of the Surface Use Plan of Operations, the authorized officer will determine appropriate buffers, road designs and road crossings, if applicable. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>
<b>UT-LN-160</b>	<p style="text-align: center;"><b>CENTRAL PACIFIC RAILROAD GRADE HISTORIC DISTRICT</b></p> <p>The lessee/operator is given notice that lands in this lease are near the East and West Central Pacific and Union Pacific Railroad Grades [The Pacific Railroad Act of 1862] (Central Pacific Railroad Grade), a Historic District listed on the National Register of Historic Places (NRHP). This resource is protected by the Cultural Resources stipulation, as established in Handbook H-3120-1. To avoid adverse affects to the Historic District (36 CFR 800.5.a.1), appropriate avoidance, minimization, or mitigation may be required to protect the integrity of the Historic District (e.g., the grade, town sites, sidings, trestles and culverts, as well as the associated setting) (36 CFR 800.6). The use of heavy equipment/haul trucks on the grade, or crossing the grade, may not be permitted, as the grade is not engineered for such frequent heavy loads. Additionally, to protect the Historic District’s integrity (36 CFR 60.4), some or all aboveground operational structures and roads that are visible from the grade may need to be appropriately mitigated. Coordination with the National Park Service by the BLM may be necessary. Modifications to the Surface Use Plan of Operations may be required in accordance with section 6 of the lease terms and 43 CFR 3101.1-2.</p>

## JUNE 2019 STIPULATIONS AND NOTICES

### THREATENED & ENDANGERED LEASE NOTICES

#### CALIFORNIA CONDOR

The Lessee/Operator is given notice that the lands located in this parcel contain potential habitat for the California Condor, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease if the area is known or suspected to be used by condors. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside potential habitat. A temporary action is completed prior to the following important season of use, leaving no permanent structures and resulting in no permanent habitat loss. This would include consideration for habitat functionality. A permanent action continues for more than one season of habitat use, and/or causes a loss of condor habitat function or displaces condors through continued disturbance (i.e. creation of a permanent structure requiring repetitious maintenance, or emits disruptive levels of noise).

The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act. Integration of, and adherence to these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of Endangered Species Act, Section 7 consultation at the permit stage. Current avoidance and minimization measures include the following:

**T&E-11**

1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by qualified individual(s) approved by the BLM, and must be conducted according to approved protocol.
2. If surveys result in positive identification of condor use, all lease activities will require monitoring throughout the duration of the project to ensure desired results of applied mitigation and protection. Minimization measures will be evaluated during development and, if necessary, Section 7 consultation may be reinitiated.
3. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season.
4. Temporary activities within 0.5 miles of established roosting sites or areas will not occur during the season of use, August 1 to November 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
5. No permanent infrastructure will be placed within 1.0 mile of nest sites.
6. No permanent infrastructure will be placed within 0.5 miles of established roosting sites or areas.
7. Remove big game carrion 100 feet from lease roadways occurring within foraging range.
8. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat. Utilize directional drilling to avoid

## JUNE 2019 STIPULATIONS AND NOTICES

---

### THREATENED & ENDANGERED LEASE NOTICES

direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.

9. Re-initiation of section 7 consultation with the Service will be sought immediately if mortality or disturbance to California condors is anticipated as a result of project activities. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Additional measures may also be employed to avoid or minimize effects to the species between the lease sale and lease development stages. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the Endangered Species Act.