Table OP-A6-1 Mitigation based on Stipulations for Development in Core Sage Grouse Population Areas - Wyoming Game and Fish Department - July 2008 (Page 1 of 3)

WGFD Oil and Gas Lease Stipulation [1]	LC ISR, LLC Mitigation
1) One well pad per 640 acres. No more than 11 well pads within 1.9 miles of the perimeter of occupied sage grouse leks with densities not to exceed 1 pad per 640 acres (Holloran 2005). Clustering of well pads may be considered and approved on a case-by-case basis.	a) Production of oil and gas generally occur by draining, pumping, or venting the petroleum fluid from the host formation. The rate of production depends on the permeability of the host formation and the fluid reservoir pressures. As production progresses, secondary and tertiary production techniques, which involve injection of water or carbon dioxide, may be used to 'wash' more fluid from the host formation. Permeability enhancement techniques, e.g. hydraulic fracturing, may also be used to improve fluid movement in oil and gas fields. In contrast, the uranium is not present as a fluid in the host formation. Rather, it is part of solid mineral assemblages. ISR depends on injection of a solution (essentially carbonated water) to mobilize the uranium into ground water and then pumping out the ground water. Permeability enhancement techniques are not appropriate for ISR development as they allow for preferential flow pathways which would bypass ore. b) Oil and gas development is generally grouped by 'fields', each of which may cover many square miles and be in production for decades. ISR development generally occurs by 'mine units', and at Lost Creek, each mine unit of the six mine units may cover about 50 acres (**Section OP 1.0**, **Figure OP-2a**). A mine unit is generally in production for a few years, and ground water restoration and surface reclamation are required once production ceases. Mine units are generally developed and reclaimed in succession. At Lost Creek, six mine units are planned, and the anticipated life-of-mine is ten years (**Section OP 2.1**, **Figure OP-4a**). c) Oil and gas wells are required to be spaced apart for optimum field development and to protect correlative rights of adjacent owners (i.e., to reduce the possibility of 'draining' petroleum out from under neighboring properties). In contrast, the spacing of ISR wells is dependent upon the ore distribution, which in Wyoming is generally in long, narrow 'roll front' deposits (**Figure OP-2b**), and on the permeability of the host rock. As a result, ISR development is generally occurs in a much smaller area than oil and gas development. In addition, once the general outlines of the deposit are known from exploration drilling, the more detailed delineation drilling necessary to determine ore grade and producible ore zones only occurs within the narrow deposit outline. Geophysical exploration techniques, such as 3D seismic surveying, are not applicable to uranium ore deposits. d) Well pads for oil and gas development may be on the order of three to four acres during drilling to accommodate the relatively large drilling rigs and associated equipment and on the order of 0.5 acres during production to accommodate the necessary equipment. In contrast, the well pads for drilling of ISR wells are on the order of 0.25 acre, and once the wells are completed, the area is reclaimed with the exception of the wellhead, which occupies a few square feet. (**Sections OP 2.5** and **OP 3.2**). e) The closest lek to the Mine Units is the Crooked Well Lek, which is considered 'occupied but inactive' (**Figure OP-A6-2**). No sage grouse have been seen on the lek during seasonal surveys in the last four years (**Appendix D9**), and none were seen during informal surveys after 1994 (**Attachment D9-4**).

Table OP-A6-1 Mitigation based on Stipulations for Development in Core Sage Grouse Population Areas - Wyoming Game and Fish Department - July 2008 (Page 2 of 3)

WGFD Oil and Gas Lease Stipulation [1]	LC ISR, LLC Mitigation
2) Surface disturbance will be limited to <5% of sagebrush habitat per 640 acres. Distribution of disturbance may be considered and approved on a case-by-case basis.	a) Surface disturbance will be limited to less than 6% of the Permit Area, which covers about 4,500 acres. The disturbance, by section, is outlined on **Table OP-A6-3**. The size of the Permit Area is based on several factors in addition to ore distribution. Those factors include historic claims boundaries, spacing of disposal wells, and other practical considerations. b) The type of disturbance in an ISR permit area differs from that in an oil and gas field. As noted above (Item 1d), the well pads are smaller because the rig sizes are smaller. Also, after drilling is complete, access to the area is almost always by pickup, not the larger haul tankers used in oil and gas fields. Testing and repair equipment are also proportionately smaller for ISR than for oil and gas wells. In contrast to the large-scale workover rigs generally needed for oil and gas wells, the ISR workover rigs are mounted on F550 pickup trucks and are significantly quieter. As a result, road widths, turn-arounds, garages, and other support facilities are also proportionately smaller. c) Unlike many oil and gas exploration and development activities, exploration and development work at ISR operations generally occurs only during the day, not round-the-clock..
3) No Surface Occupancy within 0.6 mi of the perimeter of occupied sage grouse leks. (Carr 1967, Wallestad and Schadweiler 1974, Rothenmaier 1979, Emmons 1980, Schoenber 1982 as analyzed by Colorado Greater Sage Grouse Conservation Plan Steering Committee 2008).	a) No surface occupancy is planned within 0.6 miles of the sage grouse leks in the vicinity of the Lost Creek Project.
4) Locate main haul trunk roads used to transport production and/or waste products to a centralized facility or market point >1.9 miles from the perimeter of occupied sage grouse leks (Lyon and Anderson 2003). Locate other roads used to provide facility site access and maintenance >0.6 miles from the perimeter of occupied sage grouse leks. Construct roads to minimum design standards needed for production activities while minimizing surface disturbance and traffic.	a) Main roads to the vicinity of the site include the already established Sooner Road (BLM Road 3215) and Wamsutter-Crooks Gap Road (Sweetwater County Road 23), which are both public, improved roads. No additional habitat disturbance will be needed for use of either of these roads. The Green Ridge Lek is located approximately 0.12 miles east of Sooner Road, and the Discover Lek is located about 1.5 miles east of the Wamsutter-Crooks Gap Road. b) Access to the site from the Sooner Road and Wamsutter-Crooks Gap Road will follow an existing east-west two-track to minimize new habitat disturbances. The two-track will need to be upgraded for the project. Three existing leks are about 0.5 miles from the access roads; however, line-of-sight analyses indicate there is limited visibility of the roads from the lek. Roads within the site will also follow existing two-tracks, wherever possible, and will be designed and constructed to the lowest appropriate standard, to adequately accommodate their intended functions and safety considerations.
5) Locate electrical supply lines at least 750 m (0.5 miles) from the perimeter of occupied sage grouse leks. Design electrical lines to be raptor- proof by installing anti-perching devices, or burying them when possible.	a) All supply lines will be located greater than 0.5 miles from any active lek perimeters Anti-perching devices will be installed on all new power poles and cross-arms to reduce raptor and corvid use.

Table OP-A6-1 Mitigation based on Stipulations for Development in Core Sage Grouse Population Areas - Wyoming Game and Fish Department - July 2008 (Page 3 of 3)

WGFD Oil and Gas Lease Stipulation [1]	LC ISR, LLC Mitigation
6) Exploration and development activity will be allowed from July 1 to March 14. In Core Population Areas that also contain sage grouse winter concentration areas, exploration and development activity will be allowed only from July 1 to December 1 in the winter concentration areas.	a) LC ISR, LLC has, and will continue to limit, exploration activities to the specified time frames. As noted in Stipulation 1, delineation drilling and development within the Permit Area only occurs in a narrow swath along the ore zone, and generally only within two mine units at one time. In order for surface coal mining to progress effectively, an exemption is generally granted to allow for year-round activity once topsoil is stripped from a specified mine pit area - the 'first step' in mining (development) in that area. Although topsoil is not stripped from entire ISR mine units during delineation drilling (see Stipulation 2), the beginning of delineation drilling is analogous to topsoil stripping at coal mines as it represents the 'first step' in mining. Therefore, a similar exemption for ISR mine units is necessary for mining to progress effectively. b) Facility construction will not be initiated from March 15 to June 30. Per the August 5th WGFD email (Addendum OP-A6-A), drilling and construction activities within the monitor well ring will continue year-round but will not be initiated from March 15 to June 30. c) No data on winter concentration areas has been found for the vicinity.
7) Limit noise sources to 10 dBA above natural, ambient noise (~39 dBA) measured at the perimeter of a lek from March 1 to May 15 (Inglefinger 2001, Nicholoff 2003).	a) Baseline noise measurements were made in 2007 and again in 2009. In 2007, the noise measurements less than 40 dB(A), and in 2009, the noise measurements ranged from 68 to 89 dB(A); the difference being the substantially higher wind speed when the measurements were made in 2009. b) Noise measurements for various equipment indicate the highest levels are on the order of 95 dB(A) at the equipment, with levels declining below background (wind noise) within a couple of hundred feet (Figure OP-A5-5 and Tables OP-A5-4a and 4b).

[1] http://gf.state.wy.us/wildlife/wildlife_management/sagegrouse/FINALStateLandCoreAreaSageGrouseStips7312008.pdf. The oil and gas lease stipulations are included in accordance with the following provision: "There is no published research on specific impacts on sage grouse. Since development scenarios (well density, roads, activity) are similar to oil and gas, assume impacts are similar to oil and gas development. Use same stipulations used for oil and gas. In-situ uranium permitting should include a requirement to acquire data on sage grouse response to development and operation." The references as cited in the stipulations (WGFD, 2008) are:

Carr, H. D. 1967. Effects of sagebrush control on abundance, distribution, and movements of sage grouse. Job Completion Report. W-37-R-20.Job 8a. Colorado Game, Fish and Parks Department, Colorado, USA.
Colorado Greater Sage-Grouse Conservation Plan Steering Committee. 2008. The Colorado Greater Sage-Grouse Conservation Plan. Colorado Division of Wildlife. Denver, CO. Unpublished Report.
Emmons, S. R. 1980. Lek attendance of male sage grouse in North Park, Colorado. Thesis, Colorado State University, Fort Collins, Colorado, USA.
Holloran, M. J. 2005. Greater sage-grouse (*Centrocercus urophasianus*) population response to natural gas field development in western Wyoming. Dissertation. University of Wyoming, Laramie, USA.
Inglefinger, F. M. 2001. The effects of natural gas development on sagebrush steppe passerines in Sublette County, Wyoming. M.S. Thesis, Univ. of Wyoming, Laramie. 110pp.
Lyon, A. G. and S. H. Anderson. 2003. Potential gas development impacts on sage grouse nest initiation and movement. Wildlife Society Bulletin 31:486-491.
Nicholoff, S. H., compiler. 2003. Wyoming Bird Conservation Plan, Version 2.0 Wyoming Partners In Flight. Wyoming Game and Fish Department, Lander, Wy.
Rothenmaier, D. 1979. Sage grouse reproductive ecology: breeding season movements, strutting ground attendance and nesting. Thesis, Univ. of Wyoming, Laramie, Wyoming, USA.
Schoenberg, T. J. 1982. Sage grouse movements and habitat selection in North Park, Colorado. Thesis, Colorado State University, Fort Collins, Colorado, USA.
Wallestad, R. O., and P. Schladweiler. 1974. Breeding season movements and habitat selection of male sage grouse. Journal of Wildlife Management 38:634-637.