# **OPERATIONS PLAN** (43 CFR SUBPART 3250)

# GERLACH GEOTHERMAL EXPLORATION PROJECT

# FEDERAL GEOTHERMAL LEASES: NVN-55718 NVN-75228 NVN-98640 NVN-98641 NVN-100029

# WASHOE COUNTY, NEVADA

OCTOBER 2021

APPLICANT: ORNI 26 LLC 6140 PLUMAS ST RENO, NV 89519

# GERLACH GEOTHERMAL EXPLORATION PROJECT ORNI 26 LLC OPERATIONS PLAN

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# ACRONYMS AND ABBREVIATIONS

AOI	Area of Interest
BLM	Bureau of Land Management
Ε	East
EPA	United States Environmental Protection Agency
H <sub>2</sub> S	hydrogen sulfide
Ν	North
NCG	Non-condensable gas
NDEP	Nevada Division of Environmental Protection
NDOM	Nevada Division of Minerals
NORM	Naturally Occurring Radioactive Materials
Ormat	ORNI 26 LLC
Project	Gerlach Geothermal Exploration Project
R	Range
Т	Township
UTM	Universal Transverse Mercator
WCHD-AQMD	Washoe County Health District-Air Quality Management

# 1.0 INTRODUCTION AND ORGANIZATION

#### 1.1 **Project Summary**

ORNI 26 LLC (Ormat) is proposing to construct, operate, and maintain the Gerlach Geothermal Exploration Project (Project) in Washoe County, Nevada, located less than one mile northwest of Gerlach, Nevada (Figure 1). The Project would include the drilling and testing of geothermal wells and access road construction.

Some of the wells proposed as part of the Project would be located within federal geothermal leases on public lands managed by the Bureau of Land Management (BLM) (**Figure 1, Table 1**). The Area of Interest (AOI) for the Project encompasses approximately 2,724 acres (**Figure 2**).

Lease Number	Township (T) and Range (R)	Section Number	Acreage
NVN-55718	T.32N., R.23E.	All or portions of Sections 9, 10, 15, 16	1,252
NVN-75228	T.32N., R.23E.	All or portions of Sections 3, 4, 10	1,521
NVN-98640	T.33N., R.23E.	All or portions of Sections 25, 31, 32, 33, 34, 35, 36	1,040
NVN-98641	T.32N., R23E.	All or portions of Sections 13, 14, 16, 17, 18, 19, 20, 21	1,640
NVN-100029	T.32N., R23E.	All or portions of Sections 15, 16	251

 Table 1:
 Federal Geothermal Leases

# **1.2 Operations Plan Organization**

The information contained in this Operations Plan is provided as requested in 43 Code of Federal Regulations 3261.12:

- Well pad layout and design;
- A description of existing and planned access;
- A description of any ancillary facilities;
- The source of drill pad and road building material;
- The water source;
- A statement describing surface ownership;
- Plans for surface reclamation;
- A description of procedures to protect the environment and other resources; and
- Additional information.

#### 2.0 **PROJECT DESCRIPTION**

#### **Geothermal Well Field** 2.1

# 2.1.1 Well Field Location

Ormat expects that up to 21 geothermal exploration wells would be drilled and tested within the federal geothermal leases (Figures 3 and 4; Table 2).

Well Name (Kettleman	Lease Number	Lease Number Legal Description <sup>1</sup> Approximate U' Coordinates (NA		
No.)		(Section Number & Aliquot Part)	Easting (m)	Northing (m)
11-21	NVN-98641	Section 21, NW <sup>1</sup> / <sub>4</sub> of NW <sup>1</sup> / <sub>4</sub>	298121	4502331
12-15	NVN-55718	Section 15, Lot 2 (NW <sup>1</sup> / <sub>4</sub> of NW <sup>1</sup> / <sub>4</sub> )	299683	4503747
15-10	NVN-75228	Section 10, NW 1/4 of SW 1/4	299771	4504612
18B-10	NVN-75528	Section 10, Lot 1 (SW 1/4 of SW 1/4)	299754	4504117
24-10	NVN-75228	Section 10, SW <sup>1</sup> / <sub>4</sub> of NW <sup>1</sup> / <sub>4</sub>	299887	4504815
37-16	NVN-98641	Section 16, SE <sup>1</sup> / <sub>4</sub> of SW <sup>1</sup> / <sub>4</sub>	298549	4502691
45-16	NVN-100029	Section 16, Lot 3 (NW 1/4 of SE 1/4)	298971	4502959
58-3	NVN-75228	Section 3, SW <sup>1</sup> / <sub>4</sub> of SE <sup>1</sup> / <sub>4</sub>	300605	4505690
61-16	NVN-100029	Section 16, NW 1/4 of NE 1/4	299100	4503865
62-20	NVN-98641	Section 20, NW 1/4 of NE 1/4	297491	4502183
63-3	NVN-75228	Section 3, SW <sup>1</sup> / <sub>4</sub> of NE <sup>1</sup> / <sub>4</sub>	300920	4506573
66-3	NVN-75228	Section 3, NW <sup>1</sup> / <sub>4</sub> of SE <sup>1</sup> / <sub>4</sub>	300756	4506121
67-16	NVN-100029	Section 16, Lot 6 (SW ¼ of SE ¼)	299157	4502676
68-9	NVN-55718	Section 9, SW <sup>1</sup> / <sub>4</sub> of SE <sup>1</sup> / <sub>4</sub>	299162	4504057
71-3	NVN-75228	Section 3, Lot 1 (NE <sup>1</sup> / <sub>4</sub> of NE <sup>1</sup> / <sub>4</sub> )	301116	4506988
73-16	NVN-55718	Section 16, Lot 1 (SE <sup>1</sup> / <sub>4</sub> of NE <sup>1</sup> / <sub>4</sub> )	299389	4503455
75-9	NVN-55718	Section 9, NE <sup>1</sup> / <sub>4</sub> of SE <sup>1</sup> / <sub>4</sub>	299415	4504689
77-9	NVN-55718	Section 9, SE 1/4 of SE 1/4	299291	4504391
82-16	NVN-55718	Section 16, NE 1/4 of NE 1/4	299502	4503779
86-16	NVN-100029	Section 16, Lot 4 (NE 1/4 of SE 1/4)	299586	4502866
87-9	NVN-55718	Section 9, SE <sup>1</sup> / <sub>4</sub> of SE <sup>1</sup> / <sub>4</sub>	299607	4504269

Table 2: **Gerlach Well Sites on Federal Geothermal Leases** 

UTM = Universal Transverse Mercator

#### 2.1.2 <u>Construction Procedures and Surface Disturbance</u>

Each well pad would be approximately 300 feet by 300 feet (approximately 2.1 acres per pad) (**Figure 5**). Actual dimensions of the well pad would be modified to best match the specific physical and environmental characteristics of the site and to minimize grading (cut and fill). Total surface disturbance associated with new well pad construction would be approximately 44.1 acres (2.1 ac./pad \* 21 pads).

Drill pad preparation activities would include clearing, earthwork, drainage, and other improvements necessary for efficient and safe operation and for fire prevention. Only those drill pads scheduled to be drilled would be cleared. Clearing would include removal of organic material, stumps, brush and slash, which would either be removed and taken to an appropriate dump site or left on-site. Topsoil would be stripped (typically to the rooting depth) and salvaged during the construction of all pads, as feasible. Salvaged topsoil (and cleared organic material, stumps, brush and slash, if saved) would be stockpiled on the pads for use during subsequent reclamation of the disturbed areas.

Each drill pad would be prepared to create a level pad for the drill rig and a graded surface for the support equipment. Storm water runoff from undisturbed areas around the constructed drill pads would be directed into ditches surrounding the drill pad and back onto undisturbed ground, consistent with best management practices for storm water. The pad surface would be graded to prevent the movement of storm water off the constructed site but rather into the reserve pit and has been designed for a 100-year storm.

Reserve pits would be constructed in accordance with best management practices identified in the "Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (The Gold Book)" (Fourth Edition – Revised 2007) on each pad for the containment and temporary storage of water, drill cuttings and circulating drilling mud during drilling operations. Geothermal fluid produced from the well during flow testing would also drain to the reserve pit.

The reserve pits would be fenced with an exclosure fence on three sides and then fenced on the fourth side once drilling has been completed to prevent access by persons, wildlife, or livestock (**Figure 6**). The fence would remain in place until pit reclamation begins. To prevent livestock, wildlife, and persons from becoming entrapped, one side of the reserve pit walls would be sloped at an approximate 30 percent incline. The reserve pit would measure approximately 75 feet by 200 feet by 10 feet deep.

Once drilling is complete, the shoulders of the pad could be reclaimed, but the majority of the pad must be kept clear for ongoing operations and the potential need to work on or re-drill the well. See Section 2.5 for a description of reclamation procedures.

#### 2.1.3 <u>Well Drilling and Testing</u>

Specific drilling information is provided in **Table 3**.

Rig Type	Rig Height (feet)	Trucks Needed (on average)	Drilling Time (days) <sup>1</sup>	Workers On-Site	Depth Drilled (feet)
Large rotary drilling rig	160-170	25+ tractor/trailer 8 small trucks	45 <sup>2</sup>	Avg. = 9-10 Max = 18	~ 7,000
	<sup>1</sup> Difficulties encountered during the drilling process, including the need to re-drill the well, could as much as				
double the time required to successfully complete each well.					
<sup>2</sup> Drilling would be conducted 24 hours a day, 7 days a week.					

# Table 3:Well Drilling Specifics

The drilling supervisor and mud logger would typically sleep in a trailer on the active drill site while the well is being drilled. The drilling crew may also live "on-site" during the drilling operations in a self-contained, mobile "bunkhouse" (comparable in size to a double-wide trailer, containing sleeping quarters, galley, water tank, and septic tank) or portable trailers. These quarters for the drilling crew would be placed on one of the drill sites not being actively drilled, or in the case of the first well to be drilled, quarters would be placed on the active well pad. Drilling crews typically include one drilling supervisor, one company man, one mud logger, one tool pusher, one derrickman, one motorman, and up to four floorhands. Alternatively, the drilling crew may acquire accommodations in Gerlach, depending on lodging availability.

"Blow-out" prevention equipment would be utilized while drilling below the surface casing. During drilling operations, a minimum of 10,000 gallons of cool water and 12,000 pounds of inert, non-toxic, non-hazardous barite (barium sulfate) would be stored at each well site for use in preventing uncontrolled well flow (i.e., "killing the well"), as necessary.

The well bore would be drilled using non-toxic, temperature-stable drilling mud composed of a bentonite clay-water or polymer-water mix for all wells. Variable concentrations of additives would be added to the drilling mud as needed to prevent corrosion, increase mud weight, and prevent mud loss. Some of the mud additives may be hazardous substances, but they would only be used in low concentrations that would not render the drilling mud toxic. Additional drilling mud would be mixed and added to the mud system as needed to maintain the required quantities.

Target depths at the Gerlach geothermal field range between 1,500 and 7,500 feet below ground surface but may change pending results of well testing. Further, depending on the subsurface targets, directional drilling may be employed to intercept geothermal targets. Well casing would meet all requirements outlined in Geothermal Resources Operational Order No. 2, where the surface casing string would be set at no less than 200 feet to prevent co-mingling of the geothermal fluids with underground aquifers.

Each well may need to be worked over or redrilled. Depending on the circumstances encountered, working over a well may consist of lifting the fluid in the well column with air or gas or stimulation of the formation using dilute acid or rock fracturing techniques.

Well redrilling may consist of: 1) reentering and redrilling the existing well bore; 2) reentering the existing well bore and drilling and casing a new well bore; or 3) sliding the rig over a few feet on the same well pad and drilling a new well bore through a new conductor casing. While the drill rig is still over the well, the residual drilling mud and cuttings would be flowed from the well bore and discharged to the reserve pit.

#### Short-Term Well Testing

Each short-term well test, lasting approximately three to five days on average, would consist of flowing the well into the reserve pit or portable steel tanks brought onto the well site while monitoring geothermal fluid temperatures, pressures, flow rates, chemistry, and other parameters. An "injectivity" test may also be conducted by injecting the produced geothermal fluid from the reserve pit or steel tanks back into the well and the geothermal reservoir. The drill rig would likely be moved from the well site following completion of the short-term test(s). Each short-term well test is expected to flow approximately 1.5 million gallons of geothermal brine.

#### Long-Term Well Testing

One or more long-term flow test(s) of each well drilled would likely be conducted following the short-term flow test(s), to more accurately determine long-term well and geothermal reservoir productivity. The long-term flow test(s), each lasting between seven and 30 days, would be conducted by pumping the geothermal fluids from the well through on-site test equipment, closed to the atmosphere (using a line shaft turbine pump or electric submersible pump), to the reserve pit. A surface booster pump would then pump the residual produced geothermal water/fluid through a temporary eight to ten-inch diameter pipeline to either inject the fluid into one of the other geothermal wells drilled within the Project area or to the reserve pit on another well pad. The temporary pipeline would be carried by workers and hand laid either "cross-country" or on the surface of the disturbed shoulders on the access roads connecting the full-size geothermal wells (as required, roads would be crossed by trenching and burying the temporary pipe in the trench). The on-site test equipment would include standard flow metering, recording, and sampling apparatus. Each long-term well test is expected to flow approximately 15 million gallons of geothermal brine.

#### 2.2 Site Access and Road Construction

Principal access to the Project area is from NV-447 and County Road 34. The Project area is traversed by numerous roads and "two-tracks." All existing access roads would require an additional 10 feet width of surface disturbance for road improvement. Well sites requiring new access roads would require a total of 20 feet width of surface disturbance in order to accommodate a 15-foot-wide drivable roadbed. New and improved access roads would be constructed using a dozer and/or road grader. New and/or improved access roads would be required as identified in **Table 4** (Figures 3 and 4):

Access Road Type	Road Length (feet)	Road Length (miles)	Disturbance (acre)
New Road	4,218	0.8	2.0
Improved Road	11,959	2.3	2.7
Total	16,177	3.1	4.7

Table 4:Road Construction Lengths and Disturbance Totals

The total estimated area of surface disturbance required for new access road construction, assuming a 15-foot wide drivable roadbed (20-foot wide total width of surface disturbance) would be approximately 2.0 acres (4,218 feet of road \* 20-foot-wide surface). Total estimated area of surface disturbance required for improvements to existing access roads would be approximately 2.7 acres (11,959 feet of existing road \* 10-foot-wide additional surface disturbance). In sum, it is estimated that a total of 4.7 acres of disturbance would be required for access road construction within the Project AOI.

Constructed access roads crossing existing drainages may require installation of culverts. Culvert installation would follow BLM design criteria and would be constructed pursuant to standards established in the Gold Book (Fourth Edition - Revised 2007).

# 2.3 Water Requirements and Source

Water required for well drilling could range up to as much as 35,000 gallons per day. Water requirements for grading, construction, and dust control would average substantially less, at around 6,000 gallons per day. One or more portable water tank(s), holding a combined total of at least 10,000 gallons, would be maintained on the well sites during drilling operations.

Water necessary for these activities would be obtained from shallow water well(s) drilled from one or more of the proposed drill sites, as approved by the BLM and under a waiver for the temporary use of ground water from the Nevada Department of Water Resources, where each well location would be determined upon individual need, likely at a pad central to the Project area. Each water well would be temporary, drilled by a licensed water well driller and cemented with seven-inch casing to provide a sanitary seal at the surface. The well would be drilled down to a productive interval of sands, gravels, or fractures (estimated at between 100 and 1,000 feet below ground surface). An electric submersible pump on four-inch column pipe would then be run to below the producing interval. The well would be plugged and abandoned in accordance with Nevada Administrative Code 534.420, with cement plugs across the bottom of the casing and, if needed, with additional plugs to isolate individual producing zones if identified as present. No additional surface disturbance would be associated with the drilling of each temporary water well because, if drilled, they would be located on existing geothermal well pads.

Alternatively, water could be obtained from an established private ranch source and trucked to each construction or drill site, or as a bulk water purchase from the Gerlach General Improvement District (GGID), pending contract and availability from GGID.

# 2.4 Aggregate Requirements and Source

Aggregate material would be obtained from one of two sources: the preferred source would be through a BLM minerals material contract for an existing aggregate pit northwest of Gerlach, and the secondary source would be from a private aggregate pit located east of Transfer Station Road (Figures 3 and 4, Table 5).

Aggregate Source Area	Township, Range, Section	Approximate UTM Coordinates (NAD83)		
		Easting (m)	Northing (m)	
Existing Public Source	T.32N., R.23E., Sec. 16	299003	4503666	
Existing Private Source	T.32N., R.23E., Sec. 15	299851	4503528	

#### Table 5:Aggregate Sources

Drill pads and access roads were selected to minimize the need for aggregate application, with the majority of the proposed well pads consisting of an approximate even mix of cut and fill to make a stable surface. At most, each drill pad (exclusive of the reserve pit) would be covered with up to six inches of gravel. While the Project would likely utilize much less, a conservative estimate for the total aggregate required for well pad construction is estimated at 42,000 cubic yards (approximately 2,000 cubic yards/pad \* 21 pads).

Access roads would be covered with up to four inches of gravel, as necessary to create an all-weather surface and to prevent the formation of ruts. Total aggregate required for access road construction is estimated at 2,996 cubic yards (approximately 3.1 miles of access roads \* 15-foot width \* 4-inch depth).

Total aggregate required for the well pad and access road construction is estimated at 44,996 cubic yards.

#### 2.5 Surface Reclamation

After the well drilling and testing operations are completed, the liquids from the reserve pits would either naturally evaporate or be removed as necessary to reclaim the reserve pits. The solid contents remaining in each of the reserve pits, typically consisting of non-hazardous, non-toxic drilling mud and rock cuttings, would be tested to confirm that they are not hazardous. Typical tests may include the Toxicity Characteristic Leaching Procedure (United States Environmental Protection Agency [EPA] Method 1311), tested for heavy metals; pH (EPA method 9045D); Total Petroleum Hydrocarbons/Diesel (EPA Method 8015B); and Oil and Grease (EPA Method 413.1). Non-hazardous and non-toxic drilling mud and cuttings would be buried in the reserve pit, and any drilling mud and/or cuttings identified as hazardous and toxic would be disposed of according to Nevada Division of Environmental Protection (NDEP) regulations.

If a well is judged by Ormat to have no commercial potential, it may continue to be monitored, but would eventually be plugged and abandoned in conformance with the well abandonment requirements of the BLM and Nevada Division of Minerals (NDOM). Abandonment typically involves filling the well bore with clean, heavy abandonment mud and cement until the top of the cement is at ground level, which is designed to ensure that fluids would not move across these barriers into different aquifers. The well head (and any other equipment) would then be removed, the casing cut off well below ground surface, and the hole backfilled to the surface.

The portions of the cleared well sites not needed for operational and safety purposes (i.e., the "shoulders" of the pad) would be recontoured to a final or intermediate contour that would blend

with the surrounding topography as much as possible. Areas able to be reclaimed would be ripped, tilled, or disked on contour, as necessary and reseeded with native grasses and forbs. The stockpiled topsoil would also be spread on the area to aid in revegetation.

#### 2.6 Summary of Surface Disturbance

Total surface disturbance for the Project would be approximately 53.8 acres (Table 6).

# Table 6:Maximum Project Surface Disturbance

Activity	Maximum Surface Disturbance (acres)
Well Pads	44.1
New Road Construction	2.0
Existing Road Improvement	2.7
Proposed Aggregate Pit	5.0
Total	53.8

#### **3.0 ENVIRONMENTAL PROTECTION**

#### **3.1** Adopted Environmental Protection Measures

Ormat would comply with all special lease stipulations attached to leases NVN-55718, NVN-75228, NVN-98640, NVN-98641, and NVN-100029, which are applicable to Project operations. In addition to measures described in the following sections, Ormat would also institute the following measures:

- Water would be applied to the ground during the construction and utilization of the drill pads, access roads, and other disturbed areas as necessary to control dust.
- Portable chemical sanitary facilities would be available and used by all personnel during periods of well drilling and/or flow testing, and construction. These facilities would be maintained by a local contractor.
- To prevent the spread of invasive, nonnative species, all vehicles, heavy earth-moving construction equipment, mobile trailers and RV campers brought to and used on the Project site would go through high pressure washing of the entire vehicle/unit at a commercial wash station prior to arriving and/or being used on the Project site.
- If needed, certified noxious weed free hay and straw bales would be purchased and used on the Project site.
- Seed mixes for the rehabilitation and/or re-vegetation of all disturbed areas related to this Project would be certified as weed-free, per BLM standards.
- All construction and operating equipment would be equipped with applicable exhaust spark arresters. Fire extinguishers would be available on the active sites. Water that is used for construction and dust control would be available for firefighting. Personnel would be allowed to smoke only in designated areas.
- Following Project construction, areas of disturbed land no longer required for operations would be reclaimed to promote the reestablishment of native plant and wildlife habitat.
- Any areas containing eligible and unevaluated cultural sites would be avoided, or the potential for impacts mitigated in a manner acceptable to the BLM. Ormat employees, contractors, and suppliers would be reminded that all cultural resources are protected and if uncovered shall be left in place and reported to the Ormat representative and/or their supervisor.
- The wellheads would each be painted a color that blends with the surrounding landscape to minimize visibility.

#### **3.2** Fire Prevention and Control

#### Fire Contingency Plan

1. Any small fires which occur around the well pad during drilling and/or testing operations should be able to be controlled by rig personnel utilizing on-site firefighting equipment.

- 2. The BLM Winnemucca District Office (775.623.1500) would be notified of any wildland fire, even if the available personnel can handle the situation or the fire poses no threat to the surrounding area. Additionally, the Sierra Front Interagency Dispatch would be notified (775.883.5995).
- 3. A roster of emergency phone numbers would be available on-site so that the appropriate firefighting agency can be contacted in case of a fire.
- 4. All vehicles shall carry at a minimum a shovel and five gallons of water (preferably in a backpack pump), in addition to a conventional fire extinguisher.
- 5. Adequate firefighting equipment (a shovel, a Pulaski, standard fire extinguisher(s), and at least a 100-gallon water tank with pump) shall be kept readily available at each active drill site.
- 6. Vehicle catalytic converters (on vehicles that would enter and leave the drill site on a regular basis) shall be inspected often and cleaned of all flammable debris.
- 7. All cutting/welding torch use, electric-arc welding, and grinding operations shall be conducted in an area free, or mostly free, from vegetation. At least a 100-gallon water tank with pump and shovel shall be on hand to extinguish any fires created from sparks. A welding tent would be used, as appropriate. At least one person in addition to the cutter/welder/grinder shall be at the work site to promptly detect fires created by sparks.
- 8. Personnel would be responsible for being aware of and complying with the requirements of any fire restrictions or closures issued by the BLM Winnemucca District Office, as publicized in the local media or posted at various sites throughout the field office district.

# **3.3** Surface and Ground Water Protection

Exclusive of short- and long-term flow testing wherein fluids would be discharged to the reserve pit, geothermal fluids would not be discharged to the ground under normal operating conditions. Also, each drill pad is graded towards the reserve pit to prevent movement of storm water runoff from the pad. Further, geothermal wells are cased to prevent co-mingling of the geothermal fluids with underground aquifers.

Each drill pad would be prepared to create a level pad for the drill rig and a graded surface for the support equipment. Storm water runoff from undisturbed areas around the constructed drill pads would be directed into ditches surrounding the drill pad and back onto undisturbed ground, consistent with best management practices for storm water. The site would be graded to prevent the movement of storm water from the pad off the constructed site and has been designed for a 100-year storm event.

# **3.4 Wildlife Protection**

Erosion control measures after construction would include revegetation and periodic maintenance. Disturbed areas that would not be used after construction would be revegetated with the proper seed mixture and planting procedures prescribed by the BLM. Any topsoil enriched in organic material may be stockpiled on previously disturbed areas and applied to enhance areas to be reclaimed by revegetation.

To prevent undue degradation and removal of habitat, cover and food, existing roads would be used whenever possible and cross-country travel would be restricted to designated construction areas. Speed limits of 35 miles per hour would be observed on all unpaved roads in the Project area in order to minimize dust and avoid collision and incidental death of local wildlife.

To prevent a violation of the Migratory Bird Treaty Act and per lease stipulations, Ormat would contract a qualified wildlife biologist to conduct a preconstruction survey for nesting migratory birds during the breeding season (March 1 – August 31) and prior to any ground clearing or other surface disturbance. The survey would include the proposed footprint of disturbance and an appropriate-sized buffer area. If disturbance is not completed within the timeframe established as a condition in the Geothermal Drilling Permit for the preconstruction survey, an additional survey may be required after consultation with the BLM. If active nests are found, and in consultation with the nest until the nesting attempt has been completed. If active nests are not found, surface disturbance activities would occur within the survey validity timeframe.

# 3.5 Cultural Resource Protection

Cultural resource surveys have been conducted. In consultation with BLM and with Nevada State Historic Preservation Office concurrence, any areas which contain cultural resources of significance or whose eligibility for inclusion on the National Register of Historic Places is unevaluated, would be mitigated or "treated" and recorded as appropriate. Ormat employees, contractors, and suppliers would be reminded that all cultural resources are protected and if uncovered, the resource shall be left in place, work would cease, and notification would be made to the Ormat representative and the appropriate BLM authorized officer, by telephone, with written confirmation to follow, immediately upon such discovery.

#### **3.6** Minimization of Air Pollution

Ormat would comply with any air quality requirements prescribed by the Washoe County Health District–Air Quality Management Division (WCHD-AQMD). Water would be applied to the ground during the construction and utilization of the drill pads and access roads, as necessary to control fugitive dust.

Ormat would obtain a Dust Control Permit with the WCHD-AQMD and implement the required actions to minimize fugitive dust emissions during the well drilling and construction phases of the Project.

# 3.7 Minimization of Noise Pollution

To abate noise pollution, mufflers would be used on all drilling rig engines. Each well pad may have one rock muffler. Rock mufflers are approximately 30 feet tall with a diameter of about 10 feet and are used to attenuate steam venting noise during well testing.

#### **3.8** Minimization of Hazards to Public Health and Safety

Construction and operation activities would be conducted in a manner to avoid creating any hazards to public health and safety. The Project is located outside of residential areas and would not likely cause hazards to public health and safety. Injury contingency, spill or discharge contingency, and hydrogen sulfide ( $H_2S$ ) contingency plans are provided below:

#### Injury Contingency Plan

Drilling operators are required by law to safety train workers and to have first aid equipment onsite. Ormat supervises the drilling operations to ensure that all safety procedures and best safety practices are in place and adhered to throughout the drilling program. Ormat's drilling operations are required to be in compliance with all existing laws pertaining to safety and environmental protection. Safety meetings are held prior to any major operation, such as running casing, cementing, or unloading the well. Drilling contractors would typically have daily safety meeting with crews and review any issues that could come up during the 12 hours that each crew is at work.

In the event injuries occur in connection with an Ormat operation, specific and immediate attention would be given, along with proper transportation to a medical facility.

- Ambulance (911)
- Saint Mary's Regional Medical Center 235 W 6<sup>th</sup> Street Reno, NV 89503

#### Spill or Discharge Contingency Plan

- 1) Potential Sources of Accidental Spills or Discharges
  - a) Geothermal Fluid
    - i) Accidental geothermal fluid spills or discharges are very unlikely because the hole would be cased, and blowout prevention equipment would be utilized. However, accidental discharges or spills could result from any of the following:
      - (1) Loss of well control (blowout);
      - (2) Pipeline leak or rupture; or
      - (3) Leakage from test tank.
  - b) Drilling Muds
    - i) Muds are a mixture of water, non-toxic chemicals and solid particles used in the drilling operations to lubricate and cool the bit in the hole, to carry cuttings out of the hole, to maintain the hole condition and to control formation pressure. Drilling muds are prepared and stored in metal tanks at the drilling site. Waste drilling mud and cuttings are discharged into the reserve pit, which is open and is adequately sized to hold the volume necessary for the operation. Accidental discharges of drilling mud are unlikely, but could occur by:
      - (1) Overflow of the reserve pit;
      - (2) Reserve pit wall seepage or wall failure;

- (3) Discharge from equipment failure on location; or
- (4) Shallow lost circulation channeling to the surface.
- c) Lubricating or Fuel Oils and Petroleum Products
  - i) A discharge of this type would probably be very small and from equipment used in the field. To minimize the potential for spills, all petroleum products on-site are labeled, stored, and handled in conformance with applicable federal and state requirements. All materials except diesel fuel are stored in the original shipping containers. Diesel fuel is stored in on-board tanks on the drill rig and replenished from a bulk tank truck using an electric transfer pump and hard lines. Supervisors trained in spill prevention, containment and clean-up are on-site, 24 hours a day. Potential locations for accidental spills are:
    - (1) Drilling equipment and machinery at and around the drilling location;
    - (2) Other miscellaneous equipment and machinery at well site and roads;
    - (3) Storage areas; and
    - (4) Equipment servicing areas.
- d) Construction/Maintenance Debris
  - i) Trash shall be contained on-site and hauled to an approved landfill. Burial of trash on-site shall not be permitted.
- e) Plan for Cleanup and Abatement
  - i) In the event of discharge of formation fluids, drilling muds or petroleum products, the person responsible for the operation would make an immediate investigation, then contact the Drilling Supervisor and advise of the spill. The Drilling Supervisor would in turn call out equipment, regulate field operations, or do other work as applicable for control and cleanup of the spill, as follows:
    - (1) Action Small, Containable Spill

If the spill is small (i.e., less than 25 gallons) and easily containable without endangering the watershed, the Drilling Supervisor would direct and supervise complete cleanup and return to normal operations.

(2) Action - Large or Uncontainable Spill

If the spill is larger than 25 gallons, or is not easily contained, endangers, or has entered the watershed, the Drilling Supervisor would proceed to take necessary action to curtail, contain and clean up the spill, as above, and notify personnel as listed below.

(3) Notification

The Drilling Supervisor would, as quickly as practicable:

- (a) Call out contractor(s), as required.
- (b) Notify the Ormat Project Manager.
- (c) Notify the local and state law enforcement agencies if the public safety is threatened.

(d) The Ormat Project Manager would notify the following as soon as practical and work closely with them in all phases of the curtailment, containment, and cleanup operations:

NDOM State of Nevada 400 W. King Carson City, NV 89703 775.684.7040

NDEP Division of Emergency Management 2525 Carson St. Carson City, NV 89711 775.687.4240

BLM Winnemucca District Office (within 24 hours of the knowledge of a reportable release) 5100 E. Winnemucca Blvd. Winnemucca, NV 89445 775.623.1500

National Response Center 800.424.8802

The Drilling Supervisor would also advise local population and affected property owners, if spill affects residents or property.

#### f) Specific Procedures

(1) For geothermal fluid spills:

Contain spillage with dikes if possible and haul to disposal site by vacuum or water trucks or dispose of in a manner acceptable to the NDOM and BLM.

(2) For drilling mud:

Repair reserve pit or contain with dikes. Haul liquid to another reserve pit, available tanks, or approved disposal site.

(3) For petroleum products:

Contain spill with available manpower. Use absorbents and dispose of same in approved disposal area. Spills of petroleum products in excess of 25 gallons must be reported to NDEP as soon as possible, but no later than the end of the first working day of the release at:

- In-state: 775.687.9485
- Out-of-state: 888.331.6337

For (1) through (3) above, Ormat would have the source of spill repaired at the earliest practical time and continue working crews and equipment on cleanup until all concerned agencies are satisfied.

g) Confirm notification to agencies and regulatory bodies.

Telephone notification shall be confirmed by the Ormat Project Manager in writing, within two weeks of telephone notification. Written confirmation would contain:

- (1) Reason for the discharge or spillage.
- (2) Duration and volume of discharge or spillage.

- (3) Steps taken to correct problem.
- (4) Steps taken to prevent recurrence of problem.

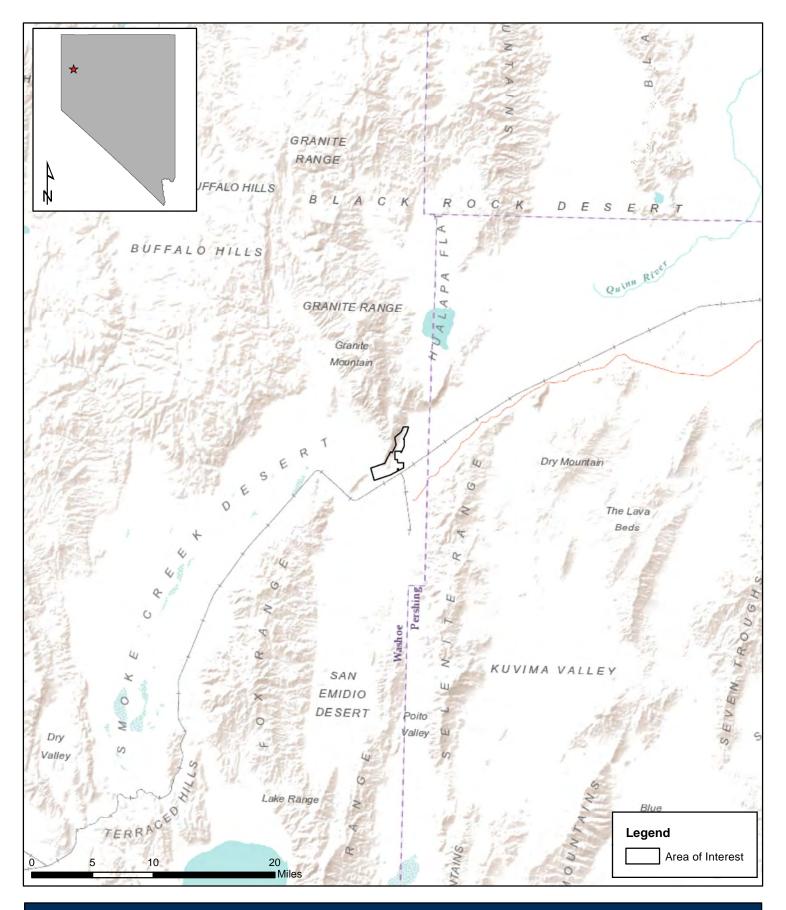
#### Hydrogen Sulfide Contingency Plan

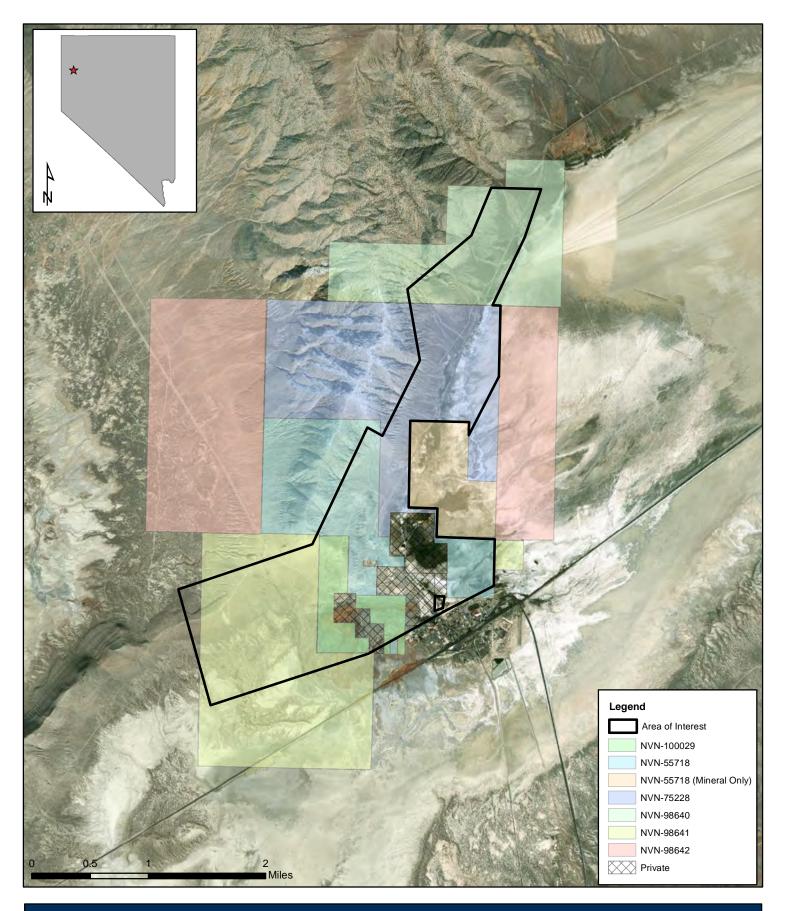
Non-condensable gas (NCG) concentrations within geothermal systems can vary greatly and depend on the temperature, geologic setting, and rock types. The Project is considered a non-magmatic, low-enthalpy type geothermal system so it is reasonable to assume  $H_2S$  concentrations are low and do not need abatement. During exploration drilling, well control practices keep the geothermal fluids in the reservoir so there is no exposure pathway. During flow tests, brine is directed to a flash vessel which directs steam and exsolved NCGs, such as  $H_2S$ , upwards and well above head level. Additionally, the steps below would be taken to help prevent exposure to  $H_2S$  during exploration drilling and testing:

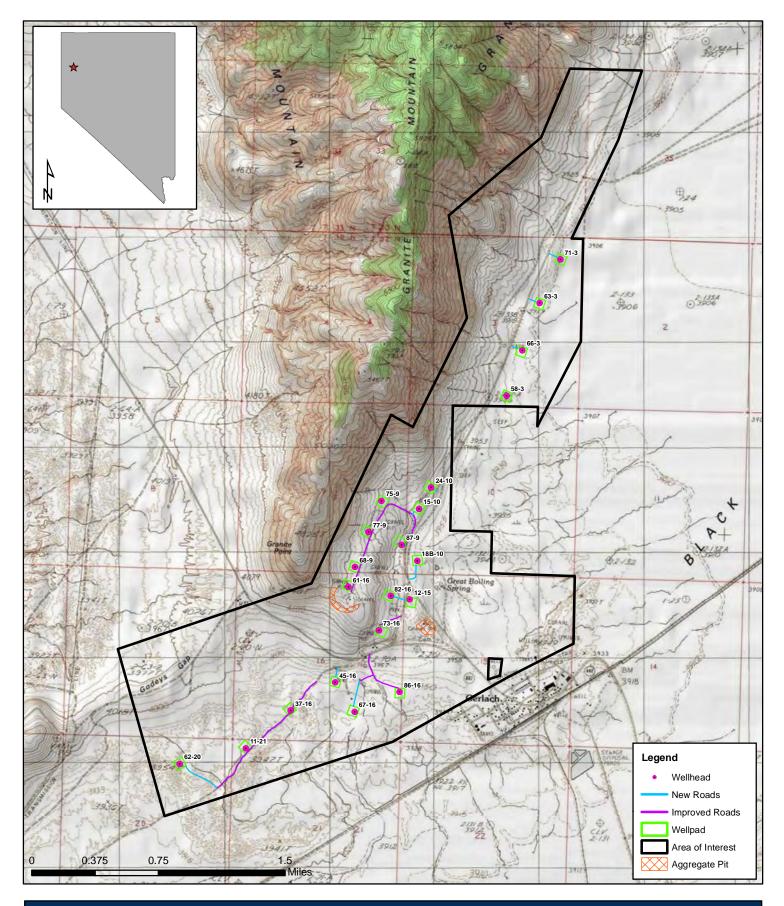
- 1. Although there is very little chance that drilling in these moderate-temperature geothermal reservoirs would encounter substantial H<sub>2</sub>S, continuous H<sub>2</sub>S monitors would be on the rig floor and at the mud tanks and shaker to alert workers should elevated H<sub>2</sub>S levels be detected. Personal H<sub>2</sub>S monitors would be required for all onsite drilling personnel. Signs would be posted to inform workers and visitors of any potential issues.
- 2. Drilling parameters would be continuously monitored, and any changes in gas concentrations, formation pressures, or potential for flow are provided to the driller and supervisor. The blowout prevention equipment would be in place to shut off any unexpected gas flows. In the event any evidence of high gas concentrations are detected in the drilling fluids, the drilling fluids consultant would obtain materials and design a program to safely circulate out the gas bubble and to treat and remove any H<sub>2</sub>S using caustic soda, peroxide, soda ash, lime, or other technology as appropriate.

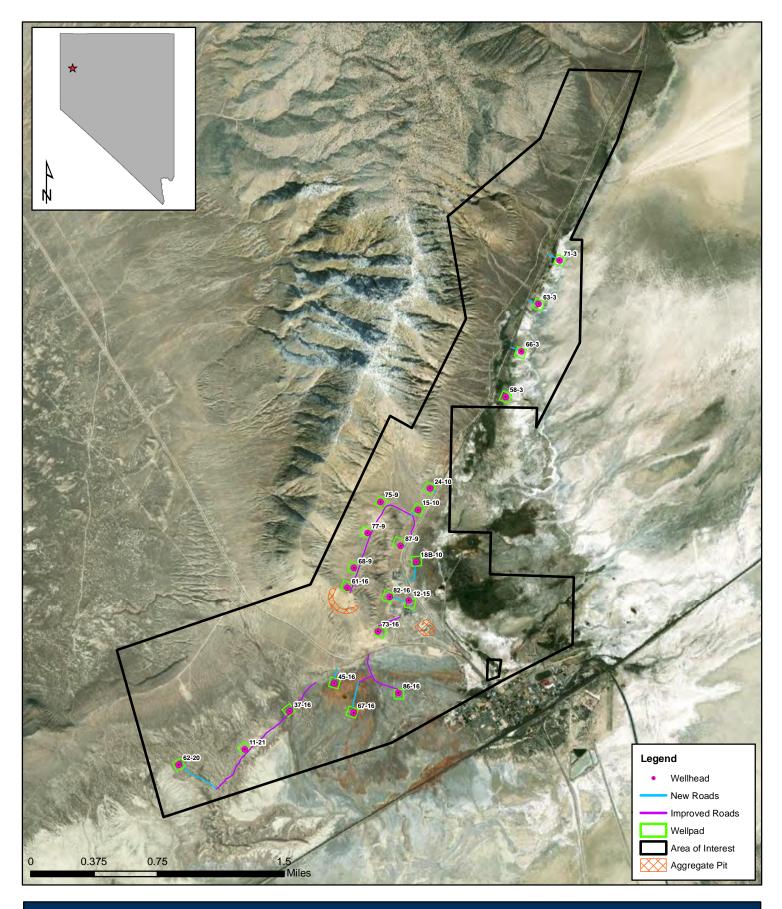
#### Naturally Occurring Radioactive Materials (NORM)

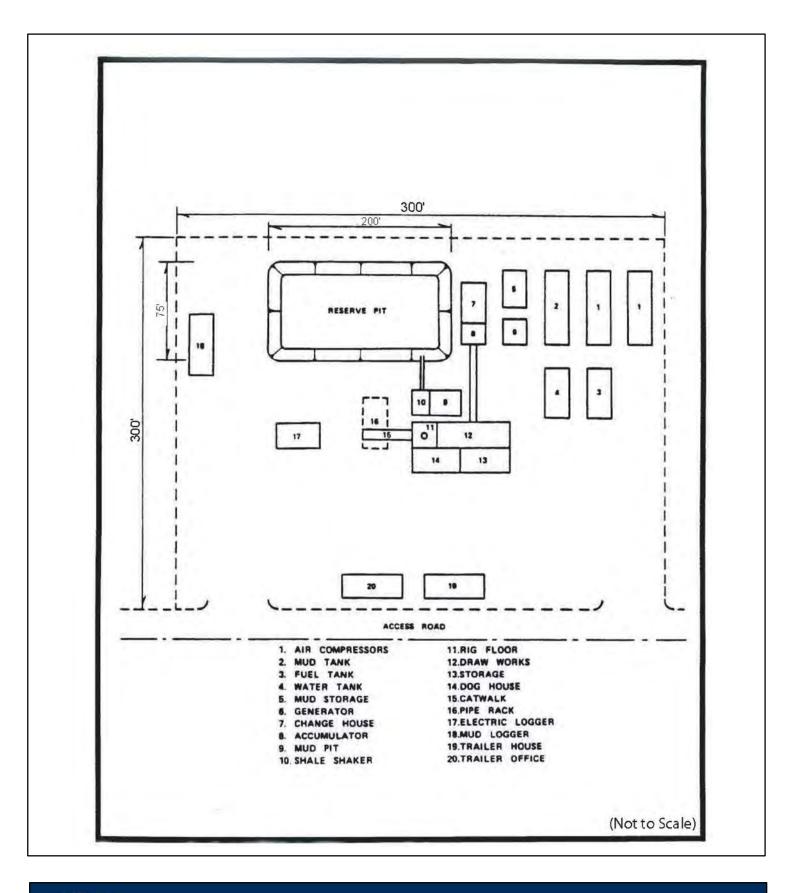
There is no known source of elevated NORM at the Project, such as young marine shales or potassium-rich granitic bodies. The main rock units in the Project area include alluvium (minor sediments such as sandstone and siltstone) and granite. Additionally, exposure to NORM through geothermal scale should not be a consideration since there would be no long-term production through piping during this exploration phase of the Project.







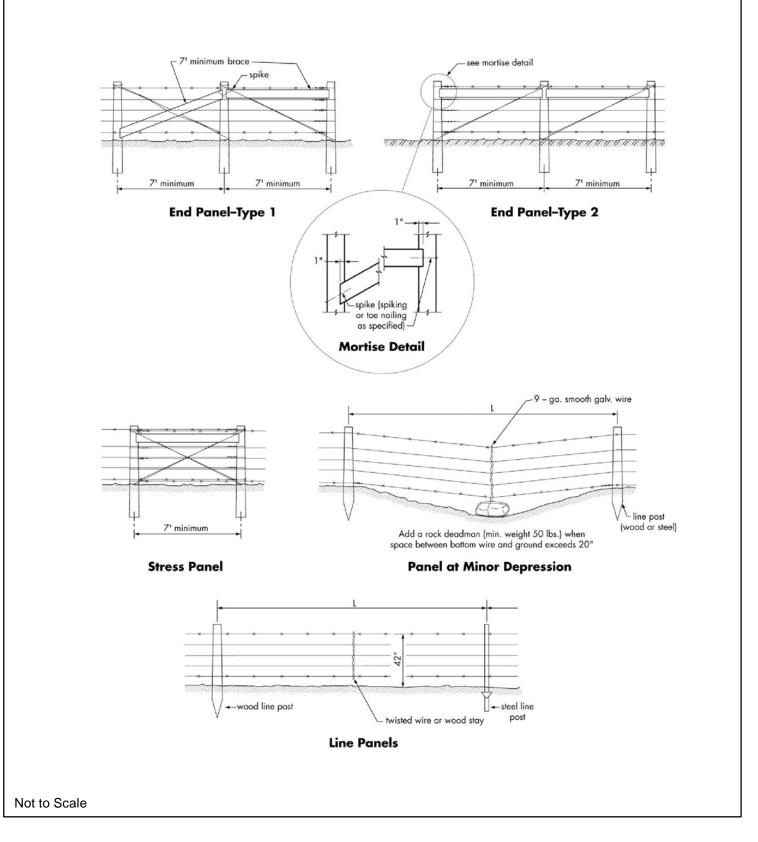




Gerlach Geothermal Exploration Project

Washoe County, Nevada, USA







# Appendix A: Federal Geothermal Lease Stipulations

NVN-55718 NVN-75228 NVN-98640 NVN-98641 NVN-100029 Form 3790-24

(November 1984)

BLM MINERALS MGT —

# ORIGINAL UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FORM APPROVED OBM NO. 1004-0039 Expires January 31, 1986

Seriel No. N 5 5 7 1 8

OFFER TO LEASE AND LEASE FOR GEOTHERMAL RESOURCES Series

The undersigned (see reverse) offers to leave all or any of the lands in item 2 that are available for lease pursuant to the Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025).

		Read Instructions Before	Completing		
1. Name	San Emidio R	esources Inc.			
Street	P.O. Box 40				
City, State, Zip	Code Empire, NV	89405			A
2. Surface managi	ing agency if other than BLM:		Unit/Project		
Legal description	on of land requested (segregate by pu	blic domain and acquired lands);			£1,919-
Т.	R,	Meridian	State	County	67,919 19
					1999
					41.
				Total acres applied for	
				Percent U.S. interest	
Amount remitted:	Filing foc \$	Renuel for \$		Toni \$	
3. Land included	in lease:	DO NOT WRITE BELO	W THIS LINE	· ·	
Τ.	<b>R</b> .	Mcridian	State	County	
	T. 32 N., R. 23	E., MDM, Nevada, Washo	e County		
	sec. 09, a11;			_	
	sec. 10, WinEz,	Eżnwż, neżswż, seż; ,2,5, eżneż, wżseżswżsw	Pacord Posted	Date By	
	sec. 16, 1ot 1,	NE4N64.	thr Plat		+
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	PARCEL NO. 3 - Ge	rlach KGRA	NUSE Pist	assin 3	
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In accordance with the above offer, or the previously submitted competitive bid, this lease is issued granting the exclusive right to drill for, extract, produce, remove, white, sell, and dispose of all the geothermal resources in the lands described in item 3 together with the right to build and maintain accessary improvements thereapon, for a primary term of 10 years. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Scoretory of the Interior's regulations and formal orders in office as of lease issuance and, when not inconsistent with lease rights granted or specific provisions of this lease, regulations and formal orders hereafter promutgated.

Type of lease:	Acting Class. Branch of Lands JUN 1 9 1992
□ Other	EFFECTIVE DATE OF LEASE JUL 0 1 1992

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4. (n) Undersigned certifies that:

- (1) Offerer is a chizer of the United States; an association of such cificens; a manicipality; or a corporation organized under the laws of the United States, any State or the District of
- (1) OFFORT & a CREET OF THE UNITED STREET, IN RESOCUTION to Some CHECKEN; a manufamility; or a Corporation or generics and the offer of the offer and holding an interest to the offer are to compliance with 43 CFR 3200 and the authorizing Act; (3) Offeror's chargeable interests, direct and indirect, do not exceed that indirect under the Act; and (4) Offeror is not considered a manufamer, with 43 CFR 3200 and the State; in which he lands covered by this offer are located.
   (b) Undersigned agrees that signature to this offer constitutes acceptance of this ideae, including all terms, conditions and stipulations of which offeror has been given notice, and suy amentment or separate lease that may cover any land described in this offer open to lease application at the time this offer was filed har onlined for any reason from this lease. The offertor harber agrees that his offer constitutes are open to lease application at the time this offer was filed har onlined for any reason from this lease. The offertor harber agrees that this offer one withdrawa, effect in which or part, unleas the withdrawal is received by the BLM State Office before this lease, an amendment to this lease, or a separate lease that many cover any land described to the two there is the table offer one of the lease the withdrawal is received by the BLM State Office before this lease, an amendment to this lease, or a separate lease that and described to the table table to be the bard to the table to be table to be table to be table to be table.

icase, whichever covers the land described in the withdrawel, has been signed on behalf of the United States. This offer will be rejected and will affind the offeror so priority if it is not properly completed and executed in accordance with the regulations, or if it is not accordanced by the requirest payments. This offer will be rejected and will affind the offeror so priority if it is not properly completed and executed in accordance with the regulations, or if it is not accordanced by the requirest payments. This offer will be rejected and will affind the offeror so priority if it is not properly completed and executed in accordance with the regulations, or if it is not accordanced by the requirest payments. This IS U.S.C. Sec. 1001 makes it a critice for any person knowingly and withfully to make to any Department or agency of the United States any false. Intrinous or fauldulent statements or representa-

HAR A TO DRY HEALET WILLIAM TO JULISON TOTAL	
Daily executed this 8 day of MAY 1992 M	Contract frances (Signature of Laborator de Atachier - In-Part)

#### LEASE TERMS

Sec. 1. Rentals-Renats shall be paid to proper office of lessor in advance of each lesse year will there is production in commercial quantities from the lessod lands. Assual rantal rates per while there is production in commercial quantities from the rotation and a state respective leaves and the state respective leaves. If this leave or a portion thereof is committed to an approved cooperative or unit plan which

Includes a well expected whether is committed to an approve cooperative that pair wheth allocation of production, reyalities shall be paid on the production allocated to this lease. However, senses remains shall continue to be due for shoar lands not within a participating area. Failure to pay annual remain, it due, on or before the analyersary date of this lease by operation of rest working day if office is closed) shall antonastically torminate this lease by operation of the fact that may be an example to be the fact that an extended to this lease by operation of the fact that the fact that the fact that the fact that the fact the fact to be the fact that the fact the fact the fact that the fact that the fact that the

law. Rentals may be suspended by the Secretary upon a sufficient abowing by let

Sec. 1. Royaltian-Royalties shall be paid to proper office of lessor. Royalties shall be com-puted in accordance with regulations and orders. Royalty rates on production art: 10 percent for steam, host, or energy: 5 percent for byproduces; and 5 percent for deminantized water. Lessor reserves the right to establish rotationable minimum values on production after giving lesson noises and an exportantly to be heard. Royalties shall be due and payable on the last day of the month following the month in which production occurred. A runknum royalty shall be due for any lesse year beginning on or ofter the commencement of production in commercial quantities in which royalty payments aggregate less than S2 per acro. Lesson shall pay such difference at the end of lesse year. This ministran royalty may be walved, suspended, or reduced, and the above royalty rates may be reduced for all or portions of this lesse if the Secretary determines that such action is necessary to encourage the greatest attimute recovery of the lessed measures, or is otherwise instified. shimate recovery of the loased nacerces, or is otherwise justified.

Sec. 3. Bonds-Lessee shall file and maintain any boad required under regulations.

Sec. 4. Diligence, one of development, unitionion, and drainage-Lessee shall perform diligent Sec. - A programmer and or overangement, and assessed and appropriate and assessed assessed assessed assessed as a production in the public internet and to require lesson reserves right to specify rates of development and production in the public internet and to require lesson to subscribe to a cooperative or unit plan, whith 30 days of notice, if desired notices are for proper development and operation of the non. field, or pool substraining these lesson large large compared and produce wells recently to protect lesson from the fore deviation of the none. Field, or pool substraining these lesson large large compared evelopment and approximation of the none. ed lands from drainage or pay compensatory royalty for drainage in amount determined by

Sec. S. Documents, evidence, and inspection-Lesson shall the with proper office of lessor, met later then (30) days, after offective date memor, any contract or evidence of other arrangeand space that (40) days, after etterator date memori, any contrast or evidence or other arrange-ment for the also or disposal of production. At such times and in such form as lensor may presente-lessere shall furnish detailed setterators showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or qualicably lost. Lensee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and deprecis-tion comes

tion costs. In the form prescribed by lessor, lesses shall keep = daily drilling record, a log\_ and complete information on well surveys and to its and keep = record of subsections investigations and familit copies to lessor when required. Lesses shall keep upon at all reasonable times for inspection by any antonized officer of lessor, the lesses prenises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the lessed lands. Lessos shall maintain copies of all contracts, sales agrouments, accounting records, and documentation such as billings, involces, or similar documen-tation the support costs claimed as manufacturing, preparations, and/or transpiration costs. All such records shall be maintained in lesser's accounting offices for future and by lessor. Lesses abail maintain recurined records for 6 years after they are nonconductor. I an andir or investigashall maintain required records for 6 years after they are generated or, if an andh or investiga-tion is underway, usual released of the obligation to maintain such records by lessor. During existence of this lesse, information obtained under this section shall be cloud to in-

spection by the public in accordance with the Preedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations-Lossee shall conduct operations in a manner that minimizer adverse impacts to the land, air, and water, to enforce), biological, visual, and other mecuanes, adverse impacts to the land, air, and water, to enforce), biological, visual, and other mecuanes, and to other land uses or meers. Lessee shall not reasonable measures dootned peccessary by

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or to accomplish the intens of this section. To the extent consistent with leased rights granted. such measures may include, but are not limited to, modification to shing or design of familities, throing of operations, and specification of interim and famil reflemation measures. Lessor merves the right to continue existing uses and to methorize future uses upon or in the lessed lands, in--Titles, cluding the approval of casesnessis or rights-of-ways. Such uses shall be conditioned so as to

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prevent unaccessary or unreasonable interference with rights of lessees. Prior to distarbing the surface of the lessed lands, lesses shall contact lessor to be apprised of procedures to be followed and modifications or reelamation measures that may be necessary. er procedures to he rostowed and mean-autom or special studies to determine the extension. Arises to be disturbed may require investories or special studies to determine the extent of im-parts to disturbed may require investories or special studies to determine the extent of m apecial studies under guidelings provided by lessor. If in the conduct of operations, throatened or cadagered species, objects of historic or scientific interest, or substantial unsubjected covironmental effects are observed, lease shall iromediately contact lessor. Lesses shall cease any operations that would result in the descruction of such species or objects.

Sec. 7. Production of hyproducts—If the production, use, or conversion of geothermal versarius from these leased tands is associable of producing a volvable hyproduct or hyproducts, including commercially dominerationed water for beneficial uses in accordance with applicable State water laws, lessor may require substantial beneficial production or use thereof by lessee.

Sec. 8. Damagos to property-Lease shall pay leasor for damage to leasor's improvements, and shall nove and hold leasor hamaless from all claims for damage or harm to persons or property as a result of lasse operations.

Sec. 9. Protection of diverse interasts and equal opportunity—Lessee shall maintain a safe working environment in accordance with standard industry practices and take measures necessary to pro-text the beaks and safety of the public. Lessor reserves the right to ensure that production is sold at reasonable prices and in prevent monopoly.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, an avended, and regulations and relevant orders of the Secutary of Labor issued parsamet thereto. Nativer issue nor induce's subcontractor stuff maintain segregated facilities,

Sec. 10. Transfer of lease interests and relinquishment of izzac-As required by regulations, leases shall file with leaser, any assignment or other transfer of an interest in this lease. Lease any relinquish this lease or any legal subdivision by filing in the proper office a written relin-quisinment, which shall be affective as of the date of filing, subject to the continued obligation of the lessee and survey to pay all accrued restals and royaltics.

Sec. 11. Delivery of premises-At such time as all or portions of this lease are returned to lessor, issues shall place all wells in condition for suspension or abandonment, reclaim the land a specified by lessor, and within a reasonable period of time, remove equipment and improvements not decaned necessary by lessor for promervation of producible wells or continued presection of the anvironment.

Sec. 12. Proceedings in case of default—if lassee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation in accordance with the Act. However, if this lease incluies land known to contain a well capable of production in commercial quantition, it may be cancelled only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor or any other legal and equitable searedy, including waiver of the default. Any such remety or valver shall not provent later cancellation for the same default occurring at any other time.

Whenever the lesser falls to somply in a timely manner with any of the provisions of the Act, this lesse, the regulations, or formal orders, and immediate action is required, the Lessor may enter on the lessed lands and take measures doemed necessary to corroo the failure at the expense of the Lessee.

Sec. 13. Heira and successors-in-interest-Bach obligation of this lease shell extend to and be binding upon, and every beaclit heroof shall intere to, the heirs, executors, administrators, suc-ensures, or assigns of the respective partice hereto. 1.0

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- 4. Its Undersegned certifies dus:
  (1) Offere is a clicken of the United States: An exocisition of such clicken; a multipality: or a comparation organized under the laws of the United States. Any State or the District of Columbus; (2) All parties holding an interm in the offer are in complete with 43 CFR 3200 and the automating Act; (3) Offerer's chargeoble interacts, direct and indertate, do not exceed that allowed under the takes and (4) Offerer is not considered is reiner under the tawn of the State in which the fands covered by the offer are in complete with 43 CFR 3200 and the automating Act; (3) Offerer's the covered by the offer are in complete under the takes that allowed under the takes and (4) Offerer is not considered is reiner under the tawn of the State in which the fands covered by the offer or has been given notice, and any argundance of shale lakes, including all terms, conditions and subplications of which offerer has been given notice, and any argundance or septements that the offer the base of the cancel described in this offer organized under the take the time the offer was filed but antities for any taxies. The offerer farther are stated that the whole or part, uplets the wilderwell is received by the BLM State Office bafere this least, as amendation, to the land, data and any argundance is any, which affere constructs acceptance of part, uplets the described in the affer was filed by the BLM State Office bafere this least, as amendation, to the land, data states. The offerer base described in the willderwell, has been signed on basil of its barned. States.
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GEORGE, VRAME

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#### LEASE TERMS

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See. 1. Rented - Renals shall be part to proper office of tensor in stivance of such lake year until these is production in commargial quantities from the leased lands. Annual result rates per easy of fraction thereof are: 31 for non-comparitive leases and 32 for competitive leases.

If this lotse or a portion shareof is committed to an approved cooperative or unit plan which If this loads of a portion plasmoir is commutant to an approved coordenative or utilit plan which includes: a well capable of producting leased resources, and the plan contrastes a provision for alternation of production, royables aball be push on the production alternative to this lease. However, armosi renatis shall capitance to be due for those lands on writhin a participating area. Failure to pay annual renati, if due, on or before the anniversary date of this lease for near official working day if office it along i shall automatically terminate this lease by operation of law, Renatic may be superiode by the Sacreary upon a sufficient aboving by lease.

Sec. 2. Royalties---Royalties shall be mid to proper office of lessor. Royalties shall be com-tasted in accordance with regulations and orders. Royalty rates on production tree: 10 percent for issue, heat, or energy, 5 percent for byperducts; and 5 percent for dominantipad water. Lossor meanwes the right to establish reasonable minimum values on production there giving trees makes and an opportunity to be heard. Royalties shall be due ont percent for the result of the month following the month in which production occurred. A minimum royalty shall be due for any issue year buginating of or after the components of production in constructed quantities to which royalty permane aggregate less than 52 per terms, ussue shall pay such difference at the end of lesse year. This minimum royalty may be waived, supported, or reduced, and the where royalty rave may be reduced for all or portions of the base if the Sacretary determines that each action is recomment to minomy the grantes ultimate according the stand trees the start is produced for all or portions of the same if the Sacretary determines that each action is recomment to minomy the grantes ultimate according the products, or is otherwise justified.

Sec. 3. Sonds-i.essee that file and malantin any bond required under regulation

See, 4. Diligeness, nuclei developments, unitization, and drainage—Lesam shall perform diligents a splottators as required by regulations and shall proved accesses and drainage to, loss of, or while of lassed resources. Losso measures tight to appendy rates of developments and production in the public interest and to require lesses to subtrime to a cooperative or that plan, within 30 days of nesters. If present remnancy for proper developments and operation of the area. Sold, or production; there issued internance that while out product wells reacted by productive to prove based backs internative transactions. Lasson shall drill and produce wells reacted by provide the based. ----

Sec. 5. Documents, evaluates, and importion—Lasses shall file with proper offers of lesses, not tuse than (30) days, after affective data thereof, may comment or svidence of other artange-ment for the sale or dispond of products on. At such times and is such form as lessor may protection, inspace that formula denoted statements above an another and quality of all products removed and cold, precession berefrom, and attempts used for products or unavoidably bait. sense must purmat sections tratectory abovery subsection personal of a product previous products records and sold, proceeds, therefrom, and antopy used for production persones or unavoidably lost. Letted TRAY of statements of presenter plants and ashered atte disgramme showing developments works and improvements, and reports with respect to perfits un relevant, superdifferent, and dependence tion met

tion cost. In the form prescribed by lessor, issues shall keep a daily drilling rooord, a tog, and complete information on well serveys and tests and keep a meand of tubetriate investigators and furthish copies to lesser when required. Lessor shall keep open at all manorable draws for hospection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and furthers thereon, and all books, accounts, maps, and rooorda relative to operations, nurveys, or investigators of or in the leased lands. Lesson thall mainture copies of all converts, sales afterstream, accounting meaning, and documentation path at billings, involves, or similar document, sales afterstream, accounting meaning an manufacturing, preparations, and/or transportation could be hall nationals required a second by 6 of years after they are generated or. It we suffly investiga-tion is underway, until released of the obligation to maintain tech records by better. During asistence of this lease, information obstand under this section shall be cloud to in-spection by the public in accountance with the President of allowing of laterminish of the station of the lease.

Sec. 6. Conduct of operations--Lessee shall conduct operations in a memory that minimizes adverse surpraces to the land, air, and water, to taitural, biological, visual, and other resources, and so other land uses or places. Lesses shall take two-operation constants derived processery by

issuer to second like the istanti of this section. To the same consistent with based rights proved, such manufers may include, but are not included to, modification to subar of design of feedbeer, downg of operations, and specification of traction and float reclamption manufers. Lease reserve the right to continue a kineting uses and to authorize fibers uses upon or in the leased lands, in-cluding the approval of waveners: of tights of ways. Such uses shall be conditioned to as so receiver.

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the tight to continue attuining uses and to authorize future uses upon or in the leased lands, in-chaing the approval of examples of tights-of-ways. Such uses shall be conditioned to as to proved unnecessary or unteractionable interference with rights of lesses. Prior to disturbing the turbure of the leased lands, inner shall contact insect to be apprived of procedures to be followed and medifications or reclamation measures that may be necessary. Attent to disturbing may require invarianticity or reclassing to measure that may be necessary. Attent to be disturbed may require invariantics for reclassing to measure that may be necessary, attent to the processing such that the state of the state of the state of the state of the parts in other measures, hence may be require to remain a miner the state of operations, threatened or anticipant and participant attents of participant of the conduct of operations, threatened or antangened species, objects of histories of scattering termination to contain the state state and interference that and objects of histories of an endation of any termination of a state and the state and interference in the double termination of any termination of any termination of any termination of a state and the analytic of the state to be apprinted and or antangenes and objects of histories of any termination of a state and before any termination of any te operations that would retail in the douttuction of such species or objects.

Rec. 7. Production of hyperoducts—If the production, ten, or schwersion of geothermal resources from these brand lands it succeptible of producing a valuable byproduct or hyperoducts, including commercially dominaralized water for beneficial uses is accordance with applicable dame water laws, instor gray require substantial sumeficial production or the thereof by instance.

jes, k. Dama est shall give Demages to property—Lesses shell pay lesses for damage to lessor's improvements, if save and hold lesser barrians from all clears for damage or herm to paraons or property as a result of base operations.

Spo. 9. Protection of diverse intensis and equal opportantly—Lesses shall maintain a life witching environment in accordance with standard industry prototont and take ressource machines into the rate the health and allevan the public. Lesson reserves the right to ensure that production is sold at reasonable priors and to prevent monopoly. Lesses that comply with Executive Order No. 11246 of September 24, 1965, as an ended, and regulations and elevant orders of the formany of Labor issued pursuant thereto. Neither lesses not issues? a publication order of the formany of Labor issued pursuant thereto. Neither lesses not issues? a publication order of the formany of Labor issued pursuant thereto. Neither

See, 5D. Transfer of lease interests and related through of lease--As required by regulations, tespec shall file with lease, any assignment of other transfer of an interest in this lease. Lessas may relicquist this tease or any legal cutodivision by filing in the proper office a wroten relie-galationer, which shall be atteauve as of the state of filing, subject to the conduced colligation. of the langes and surety to pay all scores tentals and royalsias.

Sec. 11. Delivery of promises — As such time as all or portions of the lease are retained to issue; insues shall office all wells in condition for mapproxime to characterizeriz, reduce the lard as specified by issues, and wells in conductive period of time, remove equipment and structure more not desired heppenary by lessor for preservation of productive wells or contributed protection of the endoarce. of the environment,

Sec. 12. Proceedings in case of default-11 leases fails to comply with any previations of this lease, and the noncompliance coefficients for 30 days given written notice thereof, gut takes shall be unified to carcellation in accordance with the Act. However, if this leave includes land increme to contribe a well capable of production is compared quantities, it may be appealed only by pullicial proceedings. This provides shall not be constructed to proven the same notice only by pullicial proceedings. This provides the land, but he can be constructed to prove the accordance only by pullicial proceedings. This provides the land increments of the failed or provide the provided of the land. Any such encoded only by pullicial proceedings of optimate the same capable of provide the action. Whenever the lesses fails to comply in a timely numer with give of the providence of the Act. this have, the regulations, or formal orders, and to be made the capable to the failure of the large.

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Sac. 13. Heirs and successors-in-intertain-Bach obligation of this issue that examt to and be binding upper, and every benefit percept shall invert to, the beta, a security, administration, suc-sensors, or assigns of the respective parties horses.

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#### CONTINGENCY RIGHTS STIPULATION

The Bureau of Land Management has reviewed existing information and planning documents and, except as noted in other attached stipulations, knows of no reason why normal dovelopment, subject to the controls of applicable laws and regulations and the lease terms and conditions, can not proceed on the leased lands. However, specific development activities could not be identified prior to lease issuance since the nature and extent of geothermal resources were not known and specific operations have not been proposed. The leases is hereby made aware that consistent with 43 CFR 3200.4, all post lease operations will be subject to appropriate environmental review and may be limited or denied only if unmitigatable and significant impacts on other land uses or resources would result.

Sage Grouse Stipulations for Geothermal Operations: These stipulations are based on the Interim Sage grouse Management Guidelines for Nevada and in all cases refer to known habitat except as noted.

Known Breeding habitat and Leks: February through June, but may vary on site specific basis. Avoid all activity within 3.3 km. (2 miles) of known loks during the mating season H March through May, or as determined by Field Office and Wildlife Personnel. NSO within 1km (0.6 mile) of known loke all times,

#### Nesting Habitat and Brood rearing habitats: (April through August per Interim NV Guidelines) Within 6 miles of lok, maximum of 12 miles per guidelines:

Known: Avoid all development or exploration activity during the nesting and brood rearing season with 1 km (0.6 mile) of known habitat. Where possible, NSO of any sort on such sites during the specified period.

Potential: Avoid permanent occupancy of potential habitat where possible.

#### Winter Habitats: (October through March)

Known: Avoid all development or exploration activity during the winter range season with 1 km. (0.6 mile) of known habitat. Where possible, NSO of any sort on such sites during the specified period.

Potential: Avoid permanent occupancy of potential habitat where possible,

General Sage Grouse Stipulations: Prior to entry on any lease areas that include known-or potential habitat, the lessee (operator) shall contact the appropriate BLM Authorized Officer to discuss any proposed activities. All power poles and potential raptor perchos will be designed or retrofitted to eliminate use by raptors. All surface disturbance that occurs in potential or known habitat shall be reclaimed as seen as possible in such a way as to result in conditions suitable for sage grouse habitat,

RECEIVED Bur, of Land Management

7:30 OCT 2 4 2001

NEVADA STATE OFFICE RENO, NEVADA

when Recorded mail To: George Vrame 5618 W, 95t ST. Oak Lawm, II. 60453

Jerrys Vrance Signature

:•>

Form 3200-24a (September 2008)

Reno

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT OFFER TO LEASE AND LEASE FOR GEOTHERMAL RESOURCES

(For New Leases Issued Under the Energy Policy Act of 2005 [August 5, 2005])

Serial No.

NVN098640

# The undersigned (see page 2) offers to lease all or any of the lands in item 2 that are available for lease pursuant to the Geothermal Steam Act of 1970, as amended (30 U.S.C. 1001-1025). READ INSTRUCTIONS BEFORE COMPLETING 1. Name 1a. Street Ormat Nevada Inc 1d. Zip Code 1c. State 1d. Zip Code

2. Surface managing agency if other than BLM: \_\_\_\_

Amount remitted: Processing Fee \$ \_

Legal description of land requested (segregate by public domain and acquired lands): Enter T., R., Meridian, State and County

NV

Future rental payments must be made on or before the anniversary date to: Office of Natural Resources Revenue (ONRR) http://www.onrr.gov/ReportPay/payments.htm

Total Acres Applied for \_\_\_\_\_

89519

Percent U.S. interest

Rental Fee \$ \_\_\_\_\_ Total \$ \_\_\_\_\_

\_\_\_ Unit/Project: \_\_

DO NOT WRITE BELOW THIS LINE 3. Land included in lease: Enter T., R., Meridian, State and County T.0330N, R.0230E, 21 MDM, NV T.0330N, R.0230E, 21 MDM, NV T.0330N, R.0230E, 21 MDM, NV Sec. 031 LOTS 6-10; Sec. 024 SW; Sec. 034 NE,S2; 025 S2SW,SE; 031 SE; 035 ALL: 025 NE,N2NW,SENW,NESW; 032 SW; 036 ALL; 026 S2SW,S2SE; 033 SE;

Total Acres in Lease 3351.900

Rental Retained \$ 6704.00

In accordance with the above offer, or the previously submitted competitive bid, this lease is issued granting the exclusive right to drill for, extract, produce, remove, utilize, sell, and dispose of all the geothermal resources in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon, for a primary term of 10 years and subsequent extensions thereof in accordance with 43 CFR subpart 3207. Rights granted are subject to: applicable laws; the terms, conditions, and attached stipulations of this lease; the Secretary of the Interior's regulations and formal orders in effect as of lease issuance; and, when not inconsistent with the provisions of this lease, regulations and formal orders hereafter promulgated.

Type of Lease:	BY MEMA H. (M.S.C.
<ul> <li>Noncompetitive</li> <li>Noncompetitive direct use (43 CFR subpart 3205)</li> </ul>	Kenba K. (Sjening Official) McCerson
Comments: NV-19-09-064	Chief, Branch of Mineral Resources, Fluids UC 1 1 0 2019 (Title) NOV 0 1 2019 (Date)
	EFFECTIVE DATE OF LEASE

ESSEE

(Continued on page 2)

4. (a) The undersigned certifies that:

- (1) The offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States, any State or the District of Columbia; (2) All parties holding an interest in the offer are in compliance with 43 CFR part 3200 and the authorizing Act; (3) The offeror's chargeable interests, direct and indirect, do not exceed those allowed under the Act; and (4) The offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located.
- (b) The undersigned agrees that signing this offer constitutes acceptance of this lease, including all terms, conditions and stipulations of which the offeror has been given notice. The offeror further agrees that this offer cannot be withdrawn, either in whole or part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford the offeror no priority if it is not properly completed and executed in accordance with the regulations or if it is not accompanied by the required payments. Title 18 U.S.C. § 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this day of, 20, Printed Name	e of Lessee or Attorney-in-fact)	(Signature of Lessee or Attorney-in-fact)
LEASE	TERMS	
<ul> <li>Sec. 1. Rentals—Rentals must be paid to the proper office of the lessor in advance of each lease year. Annual rental rates per acre or fraction thereof, as applicable, are:</li> <li>(a) Noncompetitive lease (includes post-sale parcels not receiving bids, a direct use lease or a lease issued to a mining claimant): \$1.00 for the first 10 years; thereafter \$5.00; or</li> <li>(b) Competitive lease: \$2.00 for the first year; \$3.00 for the second through tenth year; thereafter \$5.00. Annual rental is always due by the anniversary date of this lease (43 CFR 3211.13), regardless of whether the lease is in a unit or outside of a unit, the lease is in a out or or to, or royalties or direct use fees apply to the production.</li> <li>Rental may only be credited toward royalty under 43 CFR 3211.15 and 30 CFR 218.303. Rental may not be credited against direct use fees. Failure to pay annual rental timely will result in late fees and will make the lease sub content to the rimation in accordance with 43 CFR 3213.4.</li> </ul>	premises and all wells, improvements, records relative to operations, surveys, o all contracts, sales agreements, account regarding the sale, disposition, or use o generated using resources produced fror direct use fees. All such records must be produced upon request by lessor or less	she times for inspection by any authorized officer of lessor, the leased machinery, and fixtures thereon, and all books, accounts, maps, and r investigations on or in the leased lands. Lessee must maintain copies of ing records, billing records, invoices, gross proceeds and payment data f geothermal resources, byproducts produced, and the sale of electricity m the lease, and all other information relevant to determining royalties or emaintained in lessee's accounting offices for future audit by lessor and sor's authorized representative or agent. Lessee must maintain required rated or, if an audit or investigation is underway, until released of the lessor.
Sec. 2. (a) Royalties—Royalties must be paid to the proper office of the lessor. Royalties are due on the last day of the month following the month of production. Royalties will be computed in accordance with applicable regulations and orders. Royalty rates for geothermal resources produced for the commercial generation of electricity but not sold in an arm's length transaction are: 1.75 percent for the first 10 years of production and 3.5 percent after the first 10 years. The royalty rate is to be applied to the gross proceeds derived from the sale of cleetricity not cordance with 30 CFR part 206 subpart H. The royalty rate for byproducts derived from geothermal resource production that are minerals specified in section 1 of the Mineral Leasing Act (MLA), as anneded (30 U.S.C. 181), is 5 percent, except for sodium compounds, produces bare 29, 2001 (Pub. L. No. 109-338, §102; note to 30 U.S.C. 362) for which the royalty rate is 2 percent. No royalty is due on byproducts that are not specified in 30 U.S.C. § 181. (43 CFR 3211.19) If this lease or a portion thereof is committed to an approved communitization or unit agreement and the agreement contains a provision for allocation of production, royalties must be paid on the production allocated to this lease. (b) Arm's length transactions—The royalty rate for geothermal resources sold by you or your affiliate at	the land, air, and water, to cultural, biolo must lake reasonable measures deemed consistent with leased rights granted, su design of facilities, timing of operation reserves the right to continue existing u approval of easements or rights-of-w unreasonable interference with rights o contact lessor to be apprised of procedu necessary. Areas to be disturbed may re other resources. Lessor may require le guidelines provided by lessor. If, in th historic or scientific interest, or subsi	must conduct operations in a manner that minimizes adverse impacts to sgical, visual, and other resources, and to other land uses or users. Lessee necessary by lessor to accomplish the intent of this section. To the extent to measures may include, but are not limited to, modification to siting or use and specification of interim and final reclamation measures. Lessor ses and to authorize future uses upon or in the leased lands, including the ay. Such uses will be conditioned so as to prevent unnecessary or flessee. Prior to disturbing the surface of the leased lands, lessee must res to be followed and modifications or reclamation measures that may be quire inventories or special studies to determine the extent of impacts to see to complete minor inventories or short term special studies under te conduct of operations, threatened or endangered species, objects of tantial unanticipated environmental effects are observed, lessee must st case any operations that are likely to affect or take such species, or estruction of such habitats or objects.
(b) Arm's rengin transactions—The royary rate to geometrian resources sold by you of you annuale at arm's length to a purchaser is 10 percent of the gross proceeds derived from the arm's-length sale (43 CFR 3211.17, 3211.18)		e production, use, or conversion of geothermal resources from these leased

production or use thereof by lessee.

(c) Advanced royalties-In the absence of a suspension, if you cease production for more than one calendar month on a lease that is subject to royalties and that has achieved commercial production, your lease will remain in effect only if you make advanced royalty payments in accordance with 43 CFR 3212.15(a) and 30 CFR 218.305.

(d) Direct use fees—Direct use fees must be paid in lieu of royalties for geothermal resources that are utilized for commercial, residential, agricultural, or other energy needs other than the commercial production or generation of electricity, but not sold in an arm's length transaction (43 CFR 3211.18; 30 CFR 206.356). This requirement applies to any direct use of federal geothermal resources (unless the resource is exempted as described in 30 CFR 202.351(b) or the lessee is covered by paragraph (e), below) and is not limited to direct use leases. Direct use fees are due on the last day of the month following the month of production. (e) If the lessee is a State, tribal, or local government covered by 43 CFR 3211.18(a)(3) and 30 CFR 206.366, check here: D. A lessee under this paragraph is not subject to paragraph (d), above. In lieu of royalties, the lessee under this paragraph must pay a nominal fee of

Sec. 3. Bonds-A bond must be filed and maintained for lease operations as required by applicable regulations.

Sec. 4. Work requirements, rate of development, unitization, and drainage--Lessee must perform work requirements in accordance with applicable regulations (43 CFR 3207.11, 3207.12), and must prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves the right to specify rates of development and production and to require lessee to commit to a communitization or unit agreement, within 30 days of notice, if in the public interest. Lessee must drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in the amount determined by lessor. Lessor will exempt lessee from work requirements only where the lease overlies a mining claim that has an approved plan of operations and where BLM determines that the development of the geothermal resource on the lease would interfere with the mining operation (43 CFR 3207.13).

Sec. 5. Documents, evidence, and inspection-Lessee must file with the proper office of the lessor, not later than (30) days after the effective date thereof, any contract or evidence of other arrangement for the sale, use, or disposal of geothermal resources, byproducts produced, or for the sale of electricity generated using geothermal resources produced from the lease. At such times and in such form as lessor may prescribe, lessee must furnish detailed statements and all documents showing (a) amounts and quality of all geothermal resources produced and used (either for commercial production or generation of electricity, or in a direct use operation) or sold; (b) proceeds derived therefrom or from the sale of electricity generated using such resources; (c) amounts that are unavoidably lost or reinjected before use, used to generate plant parasitic electricity (as defined in 30 CFR 206.351) or electricity for lease operations, or otherwise used for lease operations related to the commercial production or generation of electricity; and (d) amounts and quality of all byproducts produced and proceeds derived from the sale or disposition thereof. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest.

In a format and manner approved by lessor, lessee must: keep a daily drilling record, a log, and complete information on well surveys and tests; keep a record of subsurface investigations; and furnish copies to lessor when required.

Sec. 8. Damages to property-Lessee must pay lessor for damage to lessor's improvements, and must save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

lands is susceptible of producing a valuable byproduct or byproducts, including commercially demineralized

water for beneficial uses in accordance with applicable State water laws, lessor may require substantial beneficial

Sec. 9. Protection of diverse interests and equal opportunity—Lessee must maintain a safe working environment in accordance with applicable regulations and standard industry practices, and take measures necessary to protect public health and safety. Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. Lessee must comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractor may maintain segregated facilities

Sec. 10. Transfer of lease interests and relinquishment of lease-As required by regulations, lessee must file with lessor any assignment or other transfer of an interest in this lease. Subject to the requirements of 43 CFR subpart 3213, lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which will be effective as of the date BLM receives it, subject to the continued obligation of the lessee and surety to be responsible for: paying all accrued rentals and royalties; plugging and abandoning all wells on the relinquished land; restoring and reclaiming the surface and other resources; and complying with 43 CFR 3200.4

Sec. 11. Delivery of premises-At such time as all or portions of this lease are returned to lessor, lessee must place all wells in condition for suspension or abandonment, reclaim the land as specified by lessor, and within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells or continued protection of the environment.

Sec. 12. Proceedings in case of default-If lessee fails to comply with any provisions of this lease or other applicable requirements under 43 CFR 3200.4, and the noncompliance continues for 30 days after written notice thereof, this lease will be subject to termination in accordance with the Act and 43 CFR 3213. This provision will not be construed to prevent the exercise by lessor of any other legal and equitable remedy or action, including waiver of the default. Any such remedy, waiver, or action will not prevent later termination for the same default occurring at any other time. Whenever the lessee fails to comply in a timely manner with any of the provisions of the Act, this lease, the regulations, or other applicable requirements under 43 CFR 3200.4, and immediate action is required, the lessor may enter on the leased lands and take measures deemed necessary to correct the failure at the lessee's expense.

Sec. 13. Heirs and successors-in-interest-Each obligation of this lease will extend to and be binding upon, and every benefit hereof will inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto

#### INSTRUCTIONS

#### A. General

- 1. Items 1 and 2 need to be completed only by parties filing for a noncompetitive lease. The BLM will complete the front of the form for other types of leases. The BLM may use the "Comments" space under Item 3 to identify when: the lessee has elected to make all lease terms subject to the Energy Policy Act of 2005 under 43 CFR 3200.7(a)(2) or 43 CFR 3200.8(b) (box labeled "converted lease" must also be checked); the lease is being issued noncompetitively to a party who holds a mining claim on the same lands as is covered by the lease under 43 CFR 3204.12; the lease is a direct use lease issued to a State, local, or tribal government (box at section 2(e) under Lease Terms must also be checked); the lease is a competitive lease with direct-use-only stipulations attached; or other special circumstances exist. A lessee who seeks to convert only the royalty rate of a lease under 43 CFR 3212.25 or who qualifies for a case-by-case royalty rate determination under 43 CFR 3211.17(b)(1)(i) should not use this form, but should instead use an addendum to the existing lease.
- 2. Entries must be typed or printed plainly in ink. The offeror must sign the form (Item 4) in ink.
- 3. An original and two copies of this offer must be prepared and filed in the proper BLM State Office. See regulations at 43 CFR 1821.10 for office locations.
- 4. If more space is needed, additional sheets must be attached to each copy of the form submitted.

#### B. Specific

Item 1-Enter the offeror's name and billing address.

Item 2—Indicate the agency managing the surface use of the land and the name of the unit or project of which the land is a part. The offeror may also provide other information that will assist in establishing status of the lands. The description of land must conform to 43 CFR 3203.10. Total acres applied for must not exceed that allowed by regulations (43 CFR 3203.10; 43 CFR 3206.12).

Payments: For noncompetitive leases, the amount remitted must include the processing fee for noncompetitive lease applications (43 CFR 3204.10; 43 CFR 3000.12) and the first year's rental at the rate of \$1 per acre or fraction thereof. If the United States owns only a fractional interest in the geothermal resources, you must pay a prorated rental under 43 CFR 3211.11(d). The BLM will retain the processing fee even if the offer is completely rejected or withdrawn. To maintain the offeror's priority, the offeror must submit rental sufficient to cover all the land requested. If the land requested includes lots or irregular quarter-quarter sections, the exact acreage of which is not known to the offeror, rental should be submitted on the assumption that each such lot or quarter-quarter section contains 40 acres. If the offer is withdrawn or rejected in whole or in part before a lease issues, the BLM will return the rental remitted for the parts withdrawn or rejected.

The BLM will fill in the processing fee for competitive lease applications (43 CFR 3203.17; 43 CFR 3000.12) and the first year's rental at the rate of \$2 per acre or fraction thereof.

Item 3—The BLM will complete this space.

#### NOTICES

The Privacy Act of 1974 and the regulation at 43 CFR 2.48(d) provide that you be furnished with the following information in connection with information required by this geothermal lease application.

AUTHORITY: 30 U.S.C. 1000 et seq.

PRINCIPAL PURPOSE—The information is to be used to process geothermal lease applications.

ROUTINE USES: (1) The adjudication of the lessee's rights to the land or resources. (2) Documentation for public information in support of notations made on land status records for the management, disposal, and use of public lands and resources. (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting uses or rights in public lands or resources. (4) Transfer to the appropriate Federal, State, local, or foreign agencies, when relevant to civil, criminal, or regulatory investigations or prosecutions.

#### BLM Nevada Standard Lease Notices (NV-B,C,E,L,W-00-A-LN)

These stipulations and notices apply to all parcels ALL LANDS and represent standard Best Management Practices for ensuring compliance with extant Federal Laws and resource protection.

#### T&E, Sensitive and Special Status Species

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

#### **Migratory Birds**

The Operator is responsible for compliance with provisions of the Migratory Bird Treaty Act by implementing measures to prevent take of migratory birds. Operators should be aware that any ground clearing or other disturbance (such as creating cross-country access to sites, drilling, and/or construction) during the migratory bird (including raptors) nesting season (March 1 -July 31) risks a violation of the Migratory Bird Treaty Act. Disturbance to nesting migratory birds should be avoided by conducting surface disturbing activities outside the migratory bird nesting season.

If surface disturbing activities must be implemented during the nesting season, a preconstruction survey for nesting migratory birds should be performed by a qualified wildlife biologist, during the breeding season (if work is not completed within a specified time frame, then additional surveys may be needed). If active nests are found, an appropriately-sized no surface disturbance buffer determined in coordination with the BLM biologist should be placed on the active nest until the nesting attempt has been completed. If no active nests are found, construction activities must occur within the survey validity time frame specified in the conditions of approval.

#### **Cultural Resources and Tribal Consultation**

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

#### Fossils

This area has low to moderate potential for vertebrate paleontological resources, unless noted to have higher potential in a separate stipulation. This area may contain vertebrate paleontological resources. Inventory and/or on-site monitoring during disturbance or spot checking may be required of the operator. In the event that previously undiscovered paleontological resources are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to

the attention of the authorized officer of the BLM. Operations within 250 feet of any such discovery will not be resumed until written authorization to proceed is issued by the Authorized Officer. The lessee will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

#### Water

The Operator is responsible for compliance with provisions of the Clean Water Act, Safe Drinking Water Act, and applicable State laws and regulations regarding protection of state water resources. Operators should contact Nevada Division of Water Resources and Nevada Division of Environmental Protection regarding necessary permits and compliance measures for any construction or other activities.

#### **Mining Claims**

This parcel may contain existing mining claims and/or mill sites located under the 1872 Mining Law. To the extent it does, the geothermal lessee must conduct its operations, so far as reasonably practicable, to avoid damage to any known deposit of any mineral for which any mining claim on this parcel is located, and should not endanger or unreasonably or materially interfere with the mining claimant's operations, including any existing surface or underground improvements, workings, or facilities which may have been made for the purpose of mining operations. The provisions of the Multiple Mineral Development Act (30 U.S.C. 521 et seq.) shall apply on the leased lands.

#### Fire

The following precautionary measures should be taken to prevent wildland fires. In the event your operations should start a fire, you could be held liable for all suppression costs.

- All vehicles should carry fire extinguishers and a minimum of 10 gallons of water.
- Adequate fire-fighting equipment i.e. shovel, pulaski, extinguisher(s) and a minimum 10 gallons of water should be kept at the drill site(s).
- Vehicle catalytic converters should be inspected often and cleaned of all brush and grass debris.
- When conducting welding operations, they should be conducted in an area free from or mostly free from vegetation. A minimum of 10 gallons water and a shovel should be on hand to extinguish any fires created from the sparks. Extra personnel should be at the welding site to watch for fires created by welding sparks.
- Report wildland fires immediately to the BLM Sierra Front Interagency Dispatch Center (SFIDC) at (775) 883-5995, or to the BLM Central Nevada Interagency Dispatch Center (CNIDC) at (775) 623-3444. Helpful information to reported is location (latitude and longitude if possible), what's burning, time started, who/what is near the fire and direction of fire spread.
- When conducting operations during the months of May through September, the operator must contact the BLM Carson City District Office, Division of Fire and Aviation at (775) 885–6000, BLM Ely District Office, Division of Fire and Aviation at (775 289-1800), BLM Winnemucca District Office, Division of Fire and Aviation at (775) 623-1500, or the BLM Battle Mountain District Office, Division of Fire and Aviation at (775) 635-4000 To find out about any fire restrictions in place for the area of operation and to advise this office of approximate beginning and ending dates for your activities.

#### Pronghorn Antelope Seasonal Habitat (NV-W-01-A-TL)

**Stipulation**: Timing Limitation (TL) -No surface activity within Pronghorn Antelope Crucial Winter Habitat from November 15 through April 30.

**Objective** [Purpose]: To protect Pronghorn Antelope Crucial Winter Habitat necessary to maintaining the critical life stages of Pronghorn wildlife populations.

**Exception**: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Pronghorn Antelope and its habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Pronghorn Antelope and its habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

**Modification**: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the crucial winter pronghorn habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold.

**Waiver**: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable pronghorn habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #	Legal Land Description
NV-19-09-062	T. 32 N., R 23 E., 21 MDM, NV
	Sec. 05 LOTS 1-4
	Sec. 05 S2N2, SE, E2SW, NWSW
	Sec. 08 NE, E2SE
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, N
	Sec. 16 NW
NV-19-09-064	T. 33 N., R 23 E., 21 MDM, NV
	Sec. 24 SW
	Sec. 31 SE
	Sec. 32 SW
NV-19-09-065	T. 33 N., R 24 E., 21 MDM, NV
	Sec. 18 NW

T. 45 N., R 27 E., 21 MDM, NV Sec. 34 NENE, S2NE, SE Sec. 35 ALL T. 44 N., R 27 E., 21 MDM, NV Sec. 01 LOTS 6-10, 16 Sec. 02 ALL Sec. 03 LOTS 1-4 Sec. 03 S2N2, S2 Sec. 04 SE

NV-19-09-079

T. 45 N., R 27 E., 21 MDM, NV Sec. 14 ALL Sec. 15 NE E2SE Sec. 23 ALL Sec. 26 ALL

# NV-W-01-A-TL

### Sites Eligible for National Register of Historic Places (NV-W-07-C-NSO)

**Stipulation:** No surface occupancy (NSO) in areas containing NRHP eligible, listed and unevaluated sites and TCPs. To accomplish this, any quarter-quarter-quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside of the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where the setting and integrity is critical to their designation or eligibility (see WD RMP Action D-MR 4.1.3).

**Objective:** Protection of National Register of Historic Places Sites

**Exception:** The Authorized Officer may grant an exception if through the NHPA requirements, it is determined that the action, as proposed, does not adversely affect the long-term integrity or use of the TCP or the integrity of the site, or if the adverse effect can be mitigated. For TCPs, an exception may also be granted if the proponent, BLM, and the affected Tribe or tribal members negotiate mitigation that would satisfactorily offset the anticipated negative impacts.

**Modification:** The Authorized Officer may modify the size and shape of the restricted area is the NHPA requirements and/or Native American consultation indicate the site differs from that described in the original stipulation. Modifications may be made to allow for an increasing level of environmental protection when changing circumstances warrant stronger measures to meet goals, objectives, and outcomes identified in this RMP and any future amendments (se WO IM- 2010-117 [Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews]).

**Waiver:** The restriction may be waived if it is determined that the described lands are not, in fact, part of a National Register of Historic Places eligible or listed site. This determination would be made as a part of the NHPA requirements and in consultation with the affected tribes.

Parcel #	Legal Land Description
NV-19-09-028	T. 26 N., R 38 E., 21 MDM, NV
	Sec. 32 L1, L2, L7, L8, N2SE, SESE
NV-19-09-029	T. 26 N., R 38 E., 21 MDM, NV
	Sec. 28 W2SW, NWSE
	Sec. 29 L1, SWSW
NV-19-09-037	T. 25 N., R 38 E., 21 MDM, NV
	Sec. 14 SWSW
	Sec. 15 SESE
	Sec. 16 W2SE
NV-19-09-040	T. 25 N., R 38 E., 21 MDM, NV
	Sec. 22 NENE
	Sec. 23 NENE

NV-19-09-051	T. 36 N., R 34 E., 21 MDM, NV Sec. 28 S2S2
NV-19-09-054	T. 22 N., R 28 E., 21 MDM, NV Sec. 1 L1, L2, L4, SWSW Sec. 2 L1-L3, E2SW, SWNE, SENW Sec. 10 E2NE, NESE Sec. 12 S2SW
NV-19-09-055	T. 22 N., R 28 E., 21 MDM, NV Sec. 24 W2SW, NWSW Sec. 28 NESW
NV-19-09-056	T. 29 N., R 23 E., 21 MDM, NV Sec. 4 L1-L3 Sec. 8 L4 Sec. 9 L2, L4
NV-19-09-059	T. 30 N., R 23 E., 21 MDM, NV Sec. 7 SESW, SWSE
NV-19-09-060	T. 32 N., R 23 E., 21 MDM, NV Sec. 22 SWNW Sec. 23 NWNW Sec. 29 S2NW, NENW, NWSW, N2NE, SWNE Sec. 30 L4, SESW, SE, NWNE Sec. 31 E2NW
NV-19-09-061	T. 32 N., R 23 E., 21 MDM, NV Sec. 32 SENW, SWNE Sec. 34 NENW
NV-19-09-062	T. 321 N., R 23 E., 21 MDM, NV Sec. 11 SESE Sec. 12 N2SW, SWSW, NWSE, S2NE, NENE
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, NV Sec. 14 SENW, NESW, W2NE, NENE Sec. 16 W2W2, E2SW Sec. 17 NENW, SWNW, E2SE, SESW Sec. 18 L3, L4, SESW, W2SE, SWNE Sec. 19 SE, SENE Sec. 20 W2SW, SESE, SENW, W2NE, NENE Sec. 21 NE, NWSE, E2SW, SWSW
NV-19-09-064	T. 33 N., R 23 E., 21 MDM, NV Sec. 31 L7

NV-19-09-066	T. 21 N., R 26 E., 21 MDM, NV Sec. 24 E2SE
NV-19-09-073	T. 27 N., R 27 E., 21 MDM, NV Sec. 21 S2SW
NV-19-09-075	T. 27 N., R 27 E., 21 MDM, NV Sec. 28 N2NW, SENW
NV-19-09-078	T. 44 N., R 27 E., 21 MDM, NV Sec. 1 L5, L19
NV-19-09-081	T. 21 N., R 28 E., 21 MDM, NV Sec. 16 S2SE
NV-19-09-084	Sec. 18 L1, NENW T. 22 N., R 28 E., 21 MDM, NV Sec. 28 NESW Sec. 32 SWSE
NV-19-09-118	T. 21 N., R 25 E., 21 MDM, NV Sec. 22 NWNW
NV-19-09-121	T. 21 N., R 27 E., 21 MDM, NV Sec. 24 NWNW
NV-19-09-122	T. 21 N., R 27 E., 21 MDM, NV Sec. 2 L5, NWSE, SENW, SWNE
NV-19-09-123	T. 22 N., R 27 E., 21 MDM, NV Sec. 10 S2SE, E2SW
NV-19-09-124	T. 31 N., R 33 E., 21 MDM, NV Sec. 32 SESW
NV-19-09-125	T. 32 N., R 33 E., 21 MDM, NV Sec. 30 L2
NV-19-09-126	T. 23 N., R 27 E., 21 MDM, NV Sec. 21 S2NW, N2SW, SWSW, SWNE Sec. 24 SE, NENE
NV-19-09-130	T. 30 N., R 33 E., 21 MDM, NV Sec. 8 SENE, N2SE, SWSE Sec. 10 NWSW, SWSE
NV-19-09-131	T. 31 N., R 32 E., 21 MDM, NV Sec. 12 ALL Sec. 24 W2NW

# T. 21 N., R 27 E., 21 MDM, NV Sec. 12 E2SE, SENE Sec. 14 NW, NWSW, SESE

NV-19-09-150

# T. 31 N., R 33 E., 21 MDM, NV Sec. L2, SENE Sec. 14 L2, L2 Sec. 22 L10

### Trails (NV-W-07-D-NSO)

**Stipulation**: No Surface Occupancy (NSO) will be applied directly on National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation and within National Trail Management Corridors. NSO may be applied to additional bordering lands; the extent will be dependent upon the topography and integrity of the setting surrounding individual trail segments along the designated NHT and National Historic Trail Corridor. Prior to the establishment of a National Trail Management Corridor, at a minimum, NSO will be applied 1/8-mile on either side of the center line of the trail (for a total of a 1/4-mile wide corridor). The center line will be established either through the GIS-based line provided by the Trail Administering Agency (NPS or BLM) or through GPS-based inventories uploaded on the Nevada Cultural Resource Inventory System (NVCRIS).

**Objective** [Purpose]: To protect the National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation, and National Trail Management Corridor resources, qualities, values, and associated settings.

**Exception**: The Authorized Officer may grant an exception if, through the National Historic Preservation Act (NHPA) and Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements, it is determined that the action, as proposed or otherwise restricted, does not adversely affect the resource. An exception may be granted for actions designed to enhance the long-term utility or availability of the trail.

**Modification**: The Authorized Officer may modify the size and shape of the restricted area if the NHPA and Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements indicate the proposed action does not adversely impact the resource.

**Waiver**: The restriction may be waived if the NHPA and Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements determine that the described lands are not contributing elements to the resource. This determination can only come after consultation with the National Park Service, Nevada State Historic Preservation Office and other interested publics.

### Parcel

Legal Land Description

NV-19-09-054

### T. 22 N., R 28 E., 21 MDM, NV Sec. 1 ALL Sec. 2 ALL Sec. 10 E2 Sec. 12 ALL Sec. 14 E2, NW, NESW

NV-19-09-055

T. 22 N., R 28 E., 21 MDM, NV Sec. 24 ALL

NV-19-09-062

NV-19-09-063

NV-19-09-064

NV-19-09-065

NV-19-09-084

NV-19-09-118

NV-19-09-125

NV-19-09-126

T. 32 N., R 23 E., 21 MDM, NV Sec. 22 SWNW

T. 32 N., R 23 E., 21 MDM, NV Sec. 5 ALL Sec. 6 ALL Sec. 7 LOTS 1-2 Sec. 7 E2NW, E2 Sec. 8 ALL

T. 32 N., R 23 E., 21 MDM, NV Sec. 16 W2 Sec. 17 E2, NW, E2SW Sec. 18 NENE Sec. 20 N2NE Sec. 21 N2

T. 33 N., R 23 E., 21 MDM, NV Sec. 24 SW Sec. 25 NWNW Sec. 26 S2SW Sec. 31 LOTS 6-10, Sec. 31 SE Sec. 32 NWSW, S2SW Sec. 35 NW

T. 33 N., R 24 E., 21 MDM, NV Sec. 18 NW

T. 22 N., R 28 E., 21 MDM, NV Sec. 26 E2, NW, E2SW

T. 21 N., R 25 E., 21 MDM, NV Sec. 22 E2, SW, SENW Sec. 32 E2, SW, SENW

T. 32 N., R 33 E., 21 MDM, NV Sec. 20 NWNW, NENE Sec. 24 W2NW, NWNE Sec. 26 W2, W2NE

T. 23 N., R 27 E., 21 MDM, NV Sec. 21 NW, W2SW, NESW, W2NE, NENE Sec. 22 S2 Sec. 24 ALL Sec. 26 N2N2, W2NE, NENE Sec. 32 LOTS 5-7 Sec. 32 NESW, S2NE, NWSE

NV-19-09-127	T. 23 N., R 28 E., 21 MDM, NV Sec. 20 NW, N2SW Sec. 30 LOT 1
NV-19-09-129	T. 30 N., R 32 E., 21 MDM, NV Sec. 12 ALL Sec. 24 N2
NV-19-09-130	T. 30 N., R 30 E., 21 MDM, NV Sec. 4 LOTS 1, 4 Sec. 4 SW Sec. 8 E2 Sec. 16 SWNE
NV-19-09-131	T. 31 N., R 32 E., 21 MDM, NV Sec. 12 ALL Sec. 24 ALL Sec. 36 W2, SE, E2NE
NV-19-09-150	T. 31 N., R 33 E., 21 MDM, NV Sec. 2 LOTS 1-2, 20-21 Sec. 18 LOTS 6-7, 16-17

### Riparian Habitat Buffer (NV-B,C,W-10-B-CSU)

**Stipulation**: Controlled Surface Use (CSU) will be applied within 500 feet of riparian-wetland vegetation to protect the values and functions of these areas. An engineering plan or a study may be required by the operator that identifies the extent of the resource or how the resource will be managed or protected.

**Objective** [Purpose]: To protect the values and functions of riparian and wetland areas based on the nature, extent, and value of the area potentially affected.

**Exception**: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not affect the resource. An exception may also be granted if the proponent, BLM, and other affected interests (e.g. NDOW) negotiate mitigation that would satisfactorily offset the anticipated negative impacts. An exception may be granted for actions designed to enhance the long-term utility or availability of the riparian habitat.

**Modification**: The Authorized Officer may modify the size and shape of the restricted area if an environmental analysis indicates the actual suitability of the land for the resource differs from that in the otherwise applicable restriction. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial modifications.

**Waiver**: The restriction may be waived if it is determined that the described lands do not contain the subject resource, or are incapable of serving the requirements of the resource and therefore no longer warrant consideration as a component necessary for protection of the resource. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel #	Legal Description	
NV-19-09-027	T. 0010 S, R. 0400 E, 21 MDM, NV Sec. 024 ALL;	
NV-19-09-028	Г. 26 N., R 38 E., 21 MDM, NV Sec. 32 LOT 1 Sec. 36 SENE	
NV-19-09-032	Г. 0230N, R. 0370E, 21 MDM, NV Sec. 005 N2NE;	
NV-19-09-033	T. 0230N, R. 0370E, 21 MDM, NV Sec. 006 NENE; Sec. 008 N2SW, SESW, SENW;	

NV-19-09-043	T. 0230N, R. 0360E, 21 MDM, NV Sec. 001 NWSW;
NV-19-09-045	T. 0230N, R. 0360E, 21 MDM, NV
	Sec. 026 S2SW;
	Sec. 027 S2SE;
	Sec. 034 N2NE;
	Sec. 035 N2NW;
NV19-09-046	T. 0220N, R. 0360E, 21 MDM, NV
	Sec. 019 NENW;
NV-19-09-047	T. 0220N, R. 0360E, 21 MDM, NV
	Sec. 009 NWNE;
NV-19-09-048	T. 0220N, R. 0360E, 21 MDM, NV
1 1 - 1 - 1 - 0 - 0 - 0 - 0 - 0	Sec. 003 W2NE, E2NW, N2SW, SWNW;
•	Sec. 004 SENE, E2SE, SESW;
	Bee. out BEIVE, EZBE, BEB W,
NV-19-09-049	T. 0220N, R. 0360E, 21 MDM, NV
	Sec. 016 S2NE, NWSE, NESW, SENW;
	Sec. 018 S2NE, N2SE, SESW, S2SW, NESW;
NV-19-09-059	T. 30 N., R 23 E., 21 MDM, NV
	Sec. 7 LOT 4
NV-19-09-060	T. 32 N., R 23 E., 21 MDM, NV
	Sec. 22 S2NW;
	Sec. 23 NWNW;
NV-19-09-064	T. 33 N., R 24 E., 21 MDM, NV
	Sec. 26 SESE;
NV-19-09-081	T. 21 N., R 28 E., 21 MDM, NV
	Sec. 20 S2SW;
NV-19-09-086	T. 40 N., R 28 E., 21 MDM, NV
	Sec. 19 NWNE, S2NE, SENW;
	Sec. 20 SESE;

NV-B,C-10-B-CSU

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NV-19-09-091	T. 0220N, R. 0350E, 2 Sec. 025 Sec. 027	1 MDM, NV N2NW; SWSE, NESW;
NV-19-09-094	T. 0240N, R. 0370E, 2 Sec. 030 SWN	1 MDM, NV E, NWSE, NESW, SENW;
NV-19-09-095	T. 0240N, R. 0370E, 2 Sec. 032 S2SE	•
NV-19-09-118	T. 21 N., R 25 E., 21 M Sec. 22 SESE;	IDM, NV
NV-19-09-124	T. 31 N., R 33 E., 21 M Sec. 32 E2SW;	
NV-19-09-125	T. 32 N., R 33 E., 21 M Sec. 30 W2;	IDM, NV
NV-19-09-131	T. 31 N., R 32 E., 21 M Sec. 36 NENE	
NV-19-09-150	T. 31 N., R 33 E., 21 M Sec. 1 LOTS 2 Sec. 2 LOTS 2 T. 30 N., R 33 E., 21 M Sec 36 LOTS 1	-3, 21, 29; -3; 1DM, NV

NV-B,C-10-B-CSU

### Soil Slopes >50 percent (NV-W-11-D-NSO)

**Stipulation**: No Surface Occupancy (NSO) will be applied to slopes greater than 50% (as mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM evaluation of the area).

**Objective** [Purpose]: To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems.

**Exception**: The Authorized Officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to meet BLM's reclamation standards.

**Modification**: The Authorized Officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.

**Waiver**: The restriction may be waived if it is determined that the described lands do not include lands with slopes greater than 50 percent. This determination shall be based upon USGS mapping and a BLM evaluation of the area.

Parcel #	Legal Land Description
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, NV Sec. 16 N2NW
NV-19-09-064	T. 33 N., R 23 E., 21 MDM, NV Sec. 24 N2SW Sec. 26 S2SW Sec. 33 SE Sec. 34 S2, NE
NV-19-09-065	T. 32 N., R 24 E., 21 MDM, NV Sec. 18 ALL
NV-19-09-086	T. 40 N., R 28 E., 21 MDM, NV Sec. 17 S2SE Sec. 19 E2NE Sec. 20 N2
NV-19-09-118	T. 21 N., R 25 E., 21 MDM, NV Sec. 10 SE Sec. 22 NW, N2SW
NV-19-09-119	T. 22 N., R 25 E., 21 MDM, NV Sec. 36 NW, NWSW

NV-19-09-124	T. 31 N., R 33 E., 21 MDM, NV Sec. 32 E2SW, SENW
NV-19-09-125	T. 32 N., R 33 E., 21 MDM, NV Sec. 30 LOTS 1-2
NV-19-09-129	T. 30 N., R 32 E., 21 MDM, NV Sec. 12 NE, N2SE, SESE
NV-19-09-131	T. 31 N., R 32 E., 21 MDM, NV Sec. 36 E2E2, NENW
NV-19-09-150	T. 31 N., R 33 E., 21 MDM, NV Sec. 18 LOT 7

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NV-W-11-D-NSO

# Resource: Raptor Nest Sites (NV-W-06-B-TL)

**Stipulation:** Timing Limitation. Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA). The following timing restrictions apply.

Species	Location	Distance of Spatial Buffer Zone/Type of Restriction	Restriction Dates
Bald eagle	Nests	1/4 mile non-los and 1/2 mile los and 1 mile blasting	Jan 1 - Aug 31
	Winter roosts	1/2 mile	Dec. 1 - April 1
Northern goshawk	Nests (occupied)	1/4 mile	Feb 1 - Aug 31
	Previous Years Nests	1/2 mile los	Feb 1 - Aug 31
Golden eagle	Nests	1/4 mile non-los, 1/2 mile los	Feb 1 - Aug 31
Ferruginous hawk	Nests	1/4 mile non-los, 1/2 mile los	Mar. 1 - August 31
Red-tailed hawk	Nests	1/4 mile	Mar 1 - August 31
Swainson's hawk	Nests	1/4 mile non-los, 1/2 mile lose	Mar. 1 - August 31
Prarie falcon	Nests	1/4 mile	Mar. 1 - August 31
Burrowing owl	Nests	1/4 mile- Permanent disturbance or occupancy, 260 feet temporary disturbance	Mar. 1 - August 31
Flammulated owl	Nests	1/4 mile	April 1 0 Sept. 30.

**Objective** [Purpose]: To protect raptor nesting activities necessary to maintaining the critical life stages of existing raptor populations.

**Exception:** The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect raptor nest sites being protected by the restriction. An exception may also be granted if the proponent, BLM, and other affected interests, in consultation with Nevada Department of Wildlife, negotiate mitigation that would satisfactorily offset the anticipated impacts. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

**Modification:** The boundaries of the stipulated area may be modified if the Authorized Officer, in consultation with Nevada Department of Wildlife, determines that portions of the area can be occupied without adversely affecting raptor nesting activity. The dates for the timing restriction may be modified if new information indicates the dates are not valid for the leasehold.

Waiver: The stipulation may be waived if the authorized officer, in consultation with Nevada

Department of Wildlife determines that the entire leasehold no longer contains raptor nest sites.

<u>Parcel #</u>	Legal Land Description
NV-19-09-001	ALL LANDS
NV-19-09-002	ALL LANDS
NV-19-09-028	ALL LANDS
NV-19-09-029	ALL LANDS
NV-19-09-037 THRU NV-19-09-040	ALL LANDS
NV-19-09-051	ALL LANDS
NV-19-09-053 THRU NV-19-09-070	ALL LANDS
NV-19-09-073 THRU NV-19-09-081	ALL LANDS
NV-19-09-083 THRU NV-19-09-086	ALL LANDS
NV-19-09-109	ALL LANDS
NV-19-09-118 Thru NV-19-09-127	ALL LANDS
NV-19-09-129 THRU NV-19-09-131	ALL LANDS

NV-W-06-B-TL

Form 3200-24a (September 2008)

Noncompetitive direct use (43 CFR subpart 3205)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT OFFER TO LEASE AND LEASE FOR GEOTHERMAL RESOURCES

Serial No.

NVN098641

# (For New Leases Issued Under the Energy Policy Act of 2005 [August 5, 2005])

The undersigned (see page 2) offers to lease all or any of the lands in item 2 that are available for lease pursuant to the Geothermal Steam Act of 1970, as amended (30 U.S.C. 1001-1025).

RE	AD INSTRUCTIONS BEFORE COMPL	LETING
1. Name	la. Street	
Ormat Nevada Inc	6140 Plumas St	
1b. City	1c. State	1d. Zip Code
Reno	NV	89519
2. Surface managing agency if other than BLM:	Uni	t/Project:
Legal description of land requested (segregate by publi	c domain and acquired lands): Enter T., R., Meri	idian, State and County
		Future rental payments must be made on or before the anniversary date to: Office of Natural Resources Revenue (ONRR) http://www.onrr.gov/ReportPay/payments.htm
		Total Acres Applied for
		Percent U.S. interest
Amount remitted: Processing Fee \$	Rental Fee \$	Total \$
	DO NOT WRITE BELOW THIS LIN	ΙE
3. Land included in lease: Enter T., R., Meridian, State an	nd County	
T.0320N, R.0230E, 21 MDM, NV Sec. 013 ALL; 014 NE,N2NW,SENW,E2SW,SE; 016 W2; 017 ALL;	T.0320N, R.0230E, 21 MDM, NV Sec. 018 LOTS 1-4; 018 E2,E2NW,E2SW; 019 LOTS 1-4; 019 E2,E2NW,E2SW;	T.0320N, R.0230E, 21 MDM, NV Sec. 020 ALL; 021 ALL;
		Total Acres in Lease 4666.320
		Rental Retained \$ 9334.00
and dispose of all the geothermal resources in the lands described of the second subsequent extensions thereof in accordance	ribed in Item 3 together with the right to build and with 43 CFR subpart 3207. Rights granted are lations and formal orders in effect as of lease issu	e exclusive right to drill for, extract, produce, remove, utilize, so maintain necessary improvements thereupon, for a primary term subject to: applicable laws; the terms, conditions, and attach ance; and, when not inconsistent with the provisions of this leas HE UNITED STATES OF AMERICA
Noncompetitive	BY JICI	(Sequere Official)

(Printed Name) Chief, Branch of Mineral Resources, Fluids Comments: OCT 1 6 2019 NV-19-09-063 (Title) (Date) NOV 0 1 2019 EFFECTIVE DATE OF LEASE Check if this is a converted lease EFFECTIVE DATE OF LEASE CONVERSION (Continued on page 2)

LESSEE

Kempa K. Anderar

4. (a) The undersigned certifies that:

- (1) The offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States, any State or the District of Columbia; (2) All parties holding an interest in the offer are in compliance with 43 CFR part 3200 and the authorizing Act; (3) The offeror's chargeable interests, direct and indirect, do not exceed those allowed under the Act; and (4) The offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located.
- (b) The undersigned agrees that signing this offer constitutes acceptance of this lease, including all terms, conditions and stipulations of which the offeror has been given notice. The offeror further agrees that this offer cannot be withdrawn, either in whole or part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford the offeror no priority if it is not properly completed and executed in accordance with the regulations or if it is not accompanied by the required payments. Title 18 U.S.C. § 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this day of		
	 (Printed Name of Lessee or Attorney-in-fact)	(Signature of Lessee or Attorney-in-fact)
**************************************		

LEASE TERMS

Sec 1. Rentals—Rentals must be paid to the proper office of the lessor in advance of each lease year. Annual rental rates per acre or fraction thereof, as applicable, are: (a) Noncompetitive lease (includes post-sale parcels not receiving bids, a direct use lease or a lease issued to

a mining claimant). \$1.00 for the first 10 years; thereafter \$5.00; or

(b) Competitive lease: \$2.00 for the first year; \$3.00 for the second through tenth year; thereafter \$5.00. Annual rental is always due by the anniversary date of this lease (43 CFR 3211.13), regardless of whether the lease is in a unit or outside of a unit, the lease is in production or not, or royalties or direct use fees apply to the production.

Rental may only be credited toward royalty under 43 CFR 3211.15 and 30 CFR 218.303. Rental may not be credited against direct use fees. Failure to pay annual rental timely will result in late fees and will make the lease subject to termination in accordance with 43 CFR 3213.14.

Sec. 2. (a) Royalties—Royalties must be paid to the proper office of the lessor. Royalties are due on the last day of the month following the month of production. Royalties will be computed in accordance with applicable regulations and orders. Royalty rates for geothermal resources produced for the commercial generation of electricity but not sold in an arm's length transaction are: 1.75 percent for the first 10 years of production and 3.5 percent after the first 10 years. The royalty rate is to be applied to the gross proceeds derived from the sale of electricity in accordance with 30 CFR part 206 subpart H.

The royalty rate for byproducts derived from geothermal resource production that are minerals specified in section 1 of the Mineral Leasing Act (MLA), as amended (30 U.S.C. 181), is 5 percent, except for sodium compounds, produced between September 29, 2006 and September 29, 2011 (Pub. L. No. 109-338, §102; note to 30 U.S.C. 362) for which the royalty rate is 2 percent. No royalty is due on byproducts that are not specified in 30 U.S.C. §181. (43 CFR 3211.19.)

If this lease or a portion thereof is committed to an approved communitization or unit agreement and the agreement contains a provision for allocation of production, royalties must be paid on the production allocated to this lease.

(b) Arm's length transactions—The royalty rate for geothermal resources sold by you or your affiliate at arm's length to a purchaser is 10 percent of the gross proceeds derived from the arm's-length sale (43 CFR 3211.17, 3211.18).

(c) Advanced royalties —In the absence of a suspension, if you cease production for more than one calendar month on a lease that is subject to royalties and that has achieved commercial production, your lease will remain in effect only if you make advanced royalty payments in accordance with 43 CFR 3212.15(a) and 30 CFR 218.305.

(d) Direct use fees — Direct use fees must be paid in lieu of royalties for geothermal resources that are utilized for commercial, residential, agricultural, or other energy needs other than the commercial production or generation of electricity, but not sold in an arm's length transaction (43 CFR 3211.18; 30 CFR 206.356). This requirement applies to any direct use of federal geothermal resources (unless the resource is exempted as described in 30 CFR 202.351(b) or the lessee is covered by paragraph (e), below) and is not limited to direct use leases. Direct use fees are due on the last day of the month following the month of production. (e) If the lessee is a State, tribal, or local government covered by 43 CFR 3211.18(a)(3) and 30 CFR 206.366, check here: □. A lessee under this paragraph is not subject to paragraph (d), above. In lieu of royalties, the lessee under this paragraph must pay a nominal fee of

See, 3. Bonds-A bond must be filed and maintained for lease operations as required by applicable regulations.

Sec. 4. Work requirements, rate of development, unitization, and drainage--Lessee must perform work requirements in accordance with applicable regulations (43 CFR 3207.11, 3207.12), and must prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves the right to specify rates of development and production and to require lessee to commit to a communitization or unit agreement, within 30 days of notice, if in the public interest. Lessee must drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in the amount determined by lessor. Lessor will exempt lessee from work requirements only where the lease overlies a mining claim that has an approved plan of operations and where BLM determines that the development of the geothermal resource on the lease would interfere with the mining operation (43 CFR 3207.13).

Sec. 5. Documents, evidence, and inspection—Lessee must file with the proper office of the lessor, not later than (30) days after the effective date thereof, any contract or evidence of other arrangement for the sale, use, or disposal of geothermal resources, byproducts produced, or for the sale of electricity generated using geothermal resources produced from the lease. At such times and in such form as lessor may prescribe, lessee must furnish detailed statements and all documents showing (a) amounts and quality of all geothermal resources; produced and used (either for commercial production or generation of electricity generated using such resources; (c) amounts that are unavoidably lost or reinjected before use, used to generate plant parasitic electricity (as defined in 30 CFR 206.351) or electricity for lease operations, or otherwise used for lease operations related to the commercial production or generation deditivity; and (d) amounts and quality of all byproducts produced and proceeds derived from the sale or disposition thereof. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest.

In a format and manner approved by lessor, lessee must: keep a daily drilling record, a log, and complete information on well surveys and tests; keep a record of subsurface investigations; and furnish copies to lessor when required.

Lessee must keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee must maintain copies of all contracts, sales agreements, accounting records, billing records, invoices, gross proceeds and payment data regarding the sale, disposition, or use of geothermal resources, byproducts produced, and the sale of electricity generated using resources produced from the lease, and all other information relevant to determining royalties or direct use fees. All such records must be maintained in lessee's accounting offices for future audit by lessor and produced upon request by lessor or lessor's authorized representative or agent. Lessee must maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

Sec. 6. Conduct of operations —Lessee must conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee must take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with leased rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses will be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee. Prior to disturbing the surface of the leased lands, lessee must contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require lessee to complete minor inventories or short term special studies under guidelines provided by lessor. If, in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee must immediately contact lessor. Lessee must cause quest any operations that are likely to affect or take such species, or result in the modification, damage or destruction of such habitats or objects.

Sec. 7. Production of byproducts — If the production, use, or conversion of geothermal resources from these leased lands is susceptible of producing a valuable byproduct or byproducts, including commercially demineralized water for beneficial uses in accordance with applicable State water laws, lessor may require substantial beneficial production or use thereof by lessee.

Sec. 8. Damages to property—Lessee must pay lessor for damage to lessor's improvements, and must save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

See, 9. Protection of diverse interests and equal opportunity—Lessee must maintain a safe working environment in accordance with applicable regulations and standard industry practices, and take measures necessary to protect public health and safety. Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. Lessee must comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractor may maintain segregated facilities.

Sec. 10. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee must file with lessor any assignment or other transfer of an interest in this lease. Subject to the requirements of 43 CFR subpart 3213, lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which will be effective as of the date BLM receives it, subject to the continued obligation of the lessee and surety to be responsible for: paying all accrued rentals and royalties; plugging and abandoning all wells on the relinquished land; restoring and reclaiming the surface and other resources; and complying with 43 CFR 3200.4.

Sec. 11. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee must place all wells in condition for suspension or abandonment, reclaim the land as specified by lessor, and within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells or continued protection of the environment.

Sec. 12. Proceedings in case of default—If lessee fails to comply with any provisions of this lease or other applicable requirements under 43 CFR 3200.4, and the noncompliance continues for 30 days after written notice thereof, this lease will be subject to termination in accordance with the Act and 43 CFR 3213. This provision will not be construed to prevent the exercise by lessor of any other legal and equitable remedy or action, including waiver of the default. Any such remedy, waiver, or action will not prevent later termination for the same default occurring at any other time. Whenever the lesse fails to comply in a timely manner with any of the provisions of the Act, this lease, the regulations, or other applicable requirements under 43 CFR 3200.4, and immediate action is required, the lessor fails and take measures deemed necessary to correct the failure at the lesse's expense.

Sec. 13. Heirs and successors-in-interest—Each obligation of this lease will extend to and be binding upon, and every benefit hereof will inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

#### INSTRUCTIONS

#### A. General

1. Items 1 and 2 need to be completed only by parties filing for a noncompetitive lease. The BLM will complete the front of the form for other types of leases. The BLM may use the "Comments" space under Item 3 to identify when: the lessee has elected to make all lease terms subject to the Energy Policy Act of 2005 under 43 CFR 3200.7(a)(2) or 43 CFR 3200.8(b) (box labeled "converted lease" must also be checked); the lease is being issued noncompetitively to a party who holds a mining claim on the same lands as is covered by the lease under 43 CFR 3204.12; the lease is a direct use lease issued to a State, local, or tribal government (box at section 2(e) under Lease Terms must also be checked); the lease is a competitive lease with direct-use-only stipulations attached; or other special circumstances exist. A lessee who seeks to convert only the royalty rate of a lease under 43 CFR 3212.25 or who qualifies for a case-by-case royalty rate determination under 43 CFR 3211.17(b)(1)(i) should not use this form, but should instead use an addendum to the existing lease.

- An original and two copies of this offer must be prepared and filed in the proper BLM State Office. See regulations at 43 CFR 1821.10 for office locations.
- 4. If more space is needed, additional sheets must be attached to each copy of the form submitted.

B. Specific

Item 1-Enter the offeror's name and billing address.

Item 2—Indicate the agency managing the surface use of the land and the name of the unit or project of which the land is a part. The offeror may also provide other information that will assist in establishing status of the lands. The description of land must conform to 43 CFR 3203.10. Total acres applied for must not exceed that allowed by regulations (43 CFR 3203.10; 43 CFR 3206.12).

Payments: For noncompetitive leases, the amount remitted must include the processing fee for noncompetitive lease applications (43 CFR 3204.10; 43 CFR 3000.12) and the first year's rental at the rate of \$1 per acre or fraction thereof. If the United States owns only a fractional interest in the geothermal resources, you must pay a prorated rental under 43 CFR 3211.11(d). The BLM will retain the processing fee even if the offer is completely rejected or withdrawn. To maintain the offeror's priority, the offeror must submit rental sufficient to cover all the land requested. If the land requested includes lots or irregular quarter-quarter sections, the exact acreage of which is not known to the offeror, rental should be submitted on the assumption that each such lot or quarter-quarter section contains 40 acres. If the offer is withdrawn or rejected in whole or in part before a lease issues, the BLM will return the rental remitted for the parts withdrawn or rejected.

The BLM will fill in the processing fee for competitive lease applications (43 CFR 3203.17; 43 CFR 3000.12) and the first year's rental at the rate of \$2 per acre or fraction thereof.

Item 3-The BLM will complete this space.

#### NOTICES

The Privacy Act of 1974 and the regulation at 43 CFR 2.48(d) provide that you be furnished with the following information in connection with information required by this geothermal lease application.

AUTHORITY: 30 U.S.C. 1000 et seq.

PRINCIPAL PURPOSE—The information is to be used to process geothermal lease applications.

ROUTINE USES: (1) The adjudication of the lessee's rights to the land or resources. (2) Documentation for public information in support of notations made on land status records for the management, disposal, and use of public lands and resources. (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting uses or rights in public lands or resources. (4) Transfer to the appropriate Federal, State, local, or foreign agencies, when relevant to civil, criminal, or regulatory investigations or prosecutions.

<sup>2.</sup> Entries must be typed or printed plainly in ink. The offeror must sign the form (Item 4) in ink.

# BLM Nevada Standard Lease Notices (NV-B,C,E,L,W-00-A-LN)

These stipulations and notices apply to all parcels ALL LANDS and represent standard Best Management Practices for ensuring compliance with extant Federal Laws and resource protection.

### T&E, Sensitive and Special Status Species

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

#### **Migratory Birds**

The Operator is responsible for compliance with provisions of the Migratory Bird Treaty Act by implementing measures to prevent take of migratory birds. Operators should be aware that any ground clearing or other disturbance (such as creating cross-country access to sites, drilling, and/or construction) during the migratory bird (including raptors) nesting season (March 1 -July 31) risks a violation of the Migratory Bird Treaty Act. Disturbance to nesting migratory birds should be avoided by conducting surface disturbing activities outside the migratory bird nesting season.

If surface disturbing activities must be implemented during the nesting season, a preconstruction survey for nesting migratory birds should be performed by a qualified wildlife biologist, during the breeding season (if work is not completed within a specified time frame, then additional surveys may be needed). If active nests are found, an appropriately-sized no surface disturbance buffer determined in coordination with the BLM biologist should be placed on the active nest until the nesting attempt has been completed. If no active nests are found, construction activities must occur within the survey validity time frame specified in the conditions of approval.

#### **Cultural Resources and Tribal Consultation**

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

#### Fossils

This area has low to moderate potential for vertebrate paleontological resources, unless noted to have higher potential in a separate stipulation. This area may contain vertebrate paleontological resources. Inventory and/or on-site monitoring during disturbance or spot checking may be required of the operator. In the event that previously undiscovered paleontological resources are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to

the attention of the authorized officer of the BLM. Operations within 250 feet of any such discovery will not be resumed until written authorization to proceed is issued by the Authorized Officer. The lessee will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

#### Water

The Operator is responsible for compliance with provisions of the Clean Water Act, Safe Drinking Water Act, and applicable State laws and regulations regarding protection of state water resources. Operators should contact Nevada Division of Water Resources and Nevada Division of Environmental Protection regarding necessary permits and compliance measures for any construction or other activities.

#### **Mining Claims**

This parcel may contain existing mining claims and/or mill sites located under the 1872 Mining Law. To the extent it does, the geothermal lessee must conduct its operations, so far as reasonably practicable, to avoid damage to any known deposit of any mineral for which any mining claim on this parcel is located, and should not endanger or unreasonably or materially interfere with the mining claimant's operations, including any existing surface or underground improvements, workings, or facilities which may have been made for the purpose of mining operations. The provisions of the Multiple Mineral Development Act (30 U.S.C. 521 et seq.) shall apply on the leased lands.

#### Fire

The following precautionary measures should be taken to prevent wildland fires. In the event your operations should start a fire, you could be held liable for all suppression costs.

- All vehicles should carry fire extinguishers and a minimum of 10 gallons of water.
- Adequate fire-fighting equipment i.e. shovel, pulaski, extinguisher(s) and a minimum 10 gallons of water should be kept at the drill site(s).
- Vehicle catalytic converters should be inspected often and cleaned of all brush and grass debris.
- When conducting welding operations, they should be conducted in an area free from or mostly free from vegetation. A minimum of 10 gallons water and a shovel should be on hand to extinguish any fires created from the sparks. Extra personnel should be at the welding site to watch for fires created by welding sparks.
- Report wildland fires immediately to the BLM Sierra Front Interagency Dispatch Center (SFIDC) at (775) 883-5995, or to the BLM Central Nevada Interagency Dispatch Center (CNIDC) at (775) 623-3444. Helpful information to reported is location (latitude and longitude if possible), what's burning, time started, who/what is near the fire and direction of fire spread.
- When conducting operations during the months of May through September, the operator must contact the BLM Carson City District Office, Division of Fire and Aviation at (775) 885–6000, BLM Ely District Office, Division of Fire and Aviation at (775 289-1800), BLM Winnemucca District Office, Division of Fire and Aviation at (775) 623-1500, or the BLM Battle Mountain District Office, Division of Fire and Aviation at (775) 635-4000 To find out about any fire restrictions in place for the area of operation and to advise this office of approximate beginning and ending dates for your activities.

### Pronghorn Antelope Seasonal Habitat (NV-W-01-A-TL)

Stipulation: Timing Limitation (TL) -No surface activity within Pronghorn Antelope Crucial Winter Habitat from November 15 through April 30.

**Objective** [Purpose]: To protect Pronghorn Antelope Crucial Winter Habitat necessary to maintaining the critical life stages of Pronghorn wildlife populations.

**Exception**: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Pronghorn Antelope and its habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Pronghorn Antelope and its habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

**Modification**: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the crucial winter pronghorn habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold.

**Waiver**: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable pronghorn habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #	Legal Land Description
NV-19-09-062	T. 32 N., R 23 E., 21 MDM, NV
	Sec. 05 LOTS 1-4
	Sec. 05 S2N2, SE, E2SW, NWSW
	Sec. 08 NE, E2SE
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, N
	Sec. 16 NW
NV-19-09-064	T. 33 N., R 23 E., 21 MDM, NV
	Sec. 24 SW
	Sec. 31 SE
	Sec. 32 SW
NV-19-09-065	T. 33 N., R 24 E., 21 MDM, NV
	Sec. 18 NW

T. 45 N., R 27 E., 21 MDM, NV Sec. 34 NENE, S2NE, SE Sec. 35 ALL
T. 44 N., R 27 E., 21 MDM, NV Sec. 01 LOTS 6-10, 16 Sec. 02 ALL Sec. 03 LOTS 1-4 Sec. 03 S2N2, S2 Sec. 04 SE

NV-19-09-079

# T. 45 N., R 27 E., 21 MDM, NV Sec. 14 ALL Sec. 15 NE E2SE Sec. 23 ALL Sec. 26 ALL

NV-W-01-A-TL

### Sites Eligible for National Register of Historic Places (NV-W-07-C-NSO)

**Stipulation:** No surface occupancy (NSO) in areas containing NRHP eligible, listed and unevaluated sites and TCPs. To accomplish this, any quarter-quarter-quarter section (10-acre parcel) within or intersected by the site would be subject to NSO. For development and production phases, surface occupancy may be limited to a specific distance or precluded at hot springs, pending conclusion of the National Historic Preservation Act (NHPA) requirements and Native American consultation process. Additional lands outside of the designated boundaries of sites may be added to the NSO restriction to the extent necessary to protect values where the setting and integrity is critical to their designation or eligibility (see WD RMP Action D-MR 4.1.3).

**Objective:** Protection of National Register of Historic Places Sites

**Exception:** The Authorized Officer may grant an exception if through the NHPA requirements, it is determined that the action, as proposed, does not adversely affect the long-term integrity or use of the TCP or the integrity of the site, or if the adverse effect can be mitigated. For TCPs, an exception may also be granted if the proponent, BLM, and the affected Tribe or tribal members negotiate mitigation that would satisfactorily offset the anticipated negative impacts.

**Modification:** The Authorized Officer may modify the size and shape of the restricted area is the NHPA requirements and/or Native American consultation indicate the site differs from that described in the original stipulation. Modifications may be made to allow for an increasing level of environmental protection when changing circumstances warrant stronger measures to meet goals, objectives, and outcomes identified in this RMP and any future amendments (se WO IM- 2010-117 [Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews]).

**Waiver:** The restriction may be waived if it is determined that the described lands are not, in fact, part of a National Register of Historic Places eligible or listed site. This determination would be made as a part of the NHPA requirements and in consultation with the affected tribes.

Parcel #	Legal Land Description
NV-19-09-028	T. 26 N., R 38 E., 21 MDM, NV
	Sec. 32 L1, L2, L7, L8, N2SE, SESE
NV-19-09-029	T. 26 N., R 38 E., 21 MDM, NV
	Sec. 28 W2SW, NWSE
	Sec. 29 L1, SWSW
NV-19-09-037	T. 25 N., R 38 E., 21 MDM, NV
	Sec. 14 SWSW
	Sec. 15 SESE
	Sec. 16 W2SE
NV-19-09-040	T. 25 N., R 38 E., 21 MDM, NV
	Sec. 22 NENE

Sec. 23 NENE

NV-19-09-051	T. 36 N., R 34 E., 21 MDM, NV Sec. 28 S2S2
NV-19-09-054	T. 22 N., R 28 E., 21 MDM, NV Sec. 1 L1, L2, L4, SWSW Sec. 2 L1-L3, E2SW, SWNE, SENW Sec. 10 E2NE, NESE Sec. 12 S2SW
NV-19-09-055	T. 22 N., R 28 E., 21 MDM, NV Sec. 24 W2SW, NWSW Sec. 28 NESW
NV-19-09-056	T. 29 N., R 23 E., 21 MDM, NV Sec. 4 L1-L3 Sec. 8 L4 Sec. 9 L2, L4
NV-19-09-059	T. 30 N., R 23 E., 21 MDM, NV Sec. 7 SESW, SWSE
NV-19-09-060	T. 32 N., R 23 E., 21 MDM, NV Sec. 22 SWNW Sec. 23 NWNW Sec. 29 S2NW, NENW, NWSW, N2NE, SWNE Sec. 30 L4, SESW, SE, NWNE Sec. 31 E2NW
NV-19-09-061	T. 32 N., R 23 E., 21 MDM, NV Sec. 32 SENW, SWNE Sec. 34 NENW
NV-19-09-062	T. 321 N., R 23 E., 21 MDM, NV Sec. 11 SESE Sec. 12 N2SW, SWSW, NWSE, S2NE, NENE
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, NV Sec. 14 SENW, NESW, W2NE, NENE Sec. 16 W2W2, E2SW Sec. 17 NENW, SWNW, E2SE, SESW Sec. 18 L3, L4, SESW, W2SE, SWNE Sec. 19 SE, SENE Sec. 20 W2SW, SESE, SENW, W2NE, NENE Sec. 21 NE, NWSE, E2SW, SWSW
NV-19-09-064	T. 33 N., R 23 E., 21 MDM, NV Sec. 31 L7

NV-19-09-066	T. 21 N., R 26 E., 21 MDM, NV Sec. 24 E2SE
NV-19-09-073	T. 27 N., R 27 E., 21 MDM, NV Sec. 21 S2SW
NV-19-09-075	T. 27 N., R 27 E., 21 MDM, NV Sec. 28 N2NW, SENW
NV-19-09-078	T. 44 N., R 27 E., 21 MDM, NV Sec. 1 L5, L19
NV-19-09-081	T. 21 N., R 28 E., 21 MDM, NV Sec. 16 S2SE
NV-19-09-084	Sec. 18 L1, NENW T. 22 N., R 28 E., 21 MDM, NV Sec. 28 NESW Sec. 32 SWSE
NV-19-09-118	T. 21 N., R 25 E., 21 MDM, NV Sec. 22 NWNW
NV-19-09-121	T. 21 N., R 27 E., 21 MDM, NV Sec. 24 NWNW
NV-19-09-122	T. 21 N., R 27 E., 21 MDM, NV Sec. 2 L5, NWSE, SENW, SWNE
NV-19-09-123	T. 22 N., R 27 E., 21 MDM, NV Sec. 10 S2SE, E2SW
NV-19-09-124	T. 31 N., R 33 E., 21 MDM, NV Sec. 32 SESW
NV-19-09-125	T. 32 N., R 33 E., 21 MDM, NV Sec. 30 L2
NV-19-09-126	T. 23 N., R 27 E., 21 MDM, NV Sec. 21 S2NW, N2SW, SWSW, SWNE Sec. 24 SE, NENE
NV-19-09-130	T. 30 N., R 33 E., 21 MDM, NV Sec. 8 SENE, N2SE, SWSE Sec. 10 NWSW, SWSE
NV-19-09-131	T. 31 N., R 32 E., 21 MDM, NV Sec. 12 ALL Sec. 24 W2NW

# T. 21 N., R 27 E., 21 MDM, NV Sec. 12 E2SE, SENE Sec. 14 NW, NWSW, SESE

NV-19-09-150

# T. 31 N., R 33 E., 21 MDM, NV Sec. L2, SENE Sec. 14 L2, L2 Sec. 22 L10

### Trails (NV-W-07-D-NSO)

**Stipulation**: No Surface Occupancy (NSO) will be applied directly on National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation and within National Trail Management Corridors. NSO may be applied to additional bordering lands; the extent will be dependent upon the topography and integrity of the setting surrounding individual trail segments along the designated NHT and National Historic Trail Corridor. Prior to the establishment of a National Trail Management Corridor, at a minimum, NSO will be applied 1/8-mile on either side of the center line of the trail (for a total of a 1/4-mile wide corridor). The center line will be established either through the GIS-based line provided by the Trail Administering Agency (NPS or BLM) or through GPS-based inventories uploaded on the Nevada Cultural Resource Inventory System (NVCRIS).

**Objective** [Purpose]: To protect the National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation, and National Trail Management Corridor resources, qualities, values, and associated settings.

**Exception**: The Authorized Officer may grant an exception if, through the National Historic Preservation Act (NHPA) and Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements, it is determined that the action, as proposed or otherwise restricted, does not adversely affect the resource. An exception may be granted for actions designed to enhance the long-term utility or availability of the trail.

**Modification**: The Authorized Officer may modify the size and shape of the restricted area if the NHPA and Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements indicate the proposed action does not adversely impact the resource.

**Waiver**: The restriction may be waived if the NHPA and Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements determine that the described lands are not contributing elements to the resource. This determination can only come after consultation with the National Park Service, Nevada State Historic Preservation Office and other interested publics.

#### Parcel

### **Legal Land Description**

NV-19-09-054

T. 22 N., R 28 E., 21 MDM, NV Sec. 1 ALL Sec. 2 ALL Sec. 10 E2 Sec. 12 ALL Sec. 14 E2, NW, NESW

NV-19-09-055

T. 22 N., R 28 E., 21 MDM, NV Sec. 24 ALL

NV-19-09-062

NV-19-09-063

NV-19-09-064

NV-19-09-065

NV-19-09-084

NV-19-09-118

NV-19-09-125

- T. 32 N., R 23 E., 21 MDM, NV Sec. 22 SWNW
- T. 32 N., R 23 E., 21 MDM, NV Sec. 5 ALL Sec. 6 ALL Sec. 7 LOTS 1-2 Sec. 7 E2NW, E2 Sec. 8 ALL

T. 32 N., R 23 E., 21 MDM, NV Sec. 16 W2 Sec. 17 E2, NW, E2SW Sec. 18 NENE Sec. 20 N2NE Sec. 21 N2

T. 33 N., R 23 E., 21 MDM, NV Sec. 24 SW Sec. 25 NWNW Sec. 26 S2SW Sec. 31 LOTS 6-10, Sec. 31 SE Sec. 32 NWSW, S2SW Sec. 35 NW

T. 33 N., R 24 E., 21 MDM, NV Sec. 18 NW

> T. 22 N., R 28 E., 21 MDM, NV Sec. 26 E2, NW, E2SW

T. 21 N., R 25 E., 21 MDM, NV Sec. 22 E2, SW, SENW Sec. 32 E2, SW, SENW

T. 32 N., R 33 E., 21 MDM, NV Sec. 20 NWNW, NENE Sec. 24 W2NW, NWNE Sec. 26 W2, W2NE

NV-19-09-126

T. 23 N., R 27 E., 21 MDM, NV Sec. 21 NW, W2SW, NESW, W2NE, NENE Sec. 22 S2 Sec. 24 ALL Sec. 26 N2N2, W2NE, NENE Sec. 32 LOTS 5-7 Sec. 32 NESW, S2NE, NWSE

NV-19-09-127	T. 23 N., R 28 E., 21 MDM, NV Sec. 20 NW, N2SW Sec. 30 LOT 1
NV-19-09-129	T. 30 N., R 32 E., 21 MDM, NV Sec. 12 ALL Sec. 24 N2
NV-19-09-130	T. 30 N., R 30 E., 21 MDM, NV Sec. 4 LOTS 1, 4 Sec. 4 SW Sec. 8 E2 Sec. 16 SWNE
NV-19-09-131	T. 31 N., R 32 E., 21 MDM, NV Sec. 12 ALL Sec. 24 ALL Sec. 36 W2, SE, E2NE
NV-19-09-150	T. 31 N., R 33 E., 21 MDM, NV Sec. 2 LOTS 1-2, 20-21 Sec. 18 LOTS 6-7, 16-17

# NV-W-07-D-NSO

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### Soil Slopes 15 - 50 percent (NV-W-11-C-CSU)

**Stipulation**: Controlled Surface Use (CSU) Controlled Surface Use will be applied to lands with slopes greater than 15% and less than 50% (As mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM). Prior to surface disturbance on slopes greater than 15% a site –specific construction, stabilization, and reclamation plan must be submitted to the BLM by the applicant as a component of the Geothermal Drilling/Application for Permit to Drill – Plan of Operations. The operator may not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan or approved it with conditions.

The plan must demonstrate to the Authorized Officer's satisfaction how the operator will meet the following performance standards:

- Soil stability is maintained preventing slope failure and wind or water erosion
- The site will be stable with no evidence of accelerated erosion features
- The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.
- Sufficient topsoil is maintained for ensuring successful final reclamation. At locations where interim reclamation will be completed, this will be accomplished by re-spreading the topsoil over the areas of interim reclamation.
- The original landform and site productivity will be partially restored during interim reclamation and fully restored as a result of final reclamation.

**Objective** [Purpose]: To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems, and to ensure successful interim and final reclamation.

**Exception**: The BLM authorized officer may grant an exception of a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope does not exceed 15%, so that the proposed action would not result in a failure to meet the performance standards listed above.

**Modification**: The authorized officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.

Waiver: The restriction may be waived if it is determined that the described lands do no do not include lands with slopes greater than 15%. This determination shall be based upon USGS mapping and a BLM evaluation of the area.

Parcel #	Legal Land Description
NV-19-09-002	T. 27 N., R 28 E., 21 MDM, NV Sec. 2 ALL Sec. 26 SENE, N2SE Sec. 34 NESE. SESE
NV-19-09-028	T. 26 N., R 38 E., 21 MDM, NV Sec. 30 LOTS 1-3 Sec. 30 NENW, SENW
NV-19-09-029	T. 26 N., R 38 E., 21 MDM, NV Sec. 19 SE Sec. 20 ALL Sec. 21 ALL Sec. 22 W2, NE, NWSE Sec. 23 W2SW Sec. 27 NW Sec. 28 N2, SW, N2SE Sec. 29 LOTS 1-2, Sec. 29 N2, N2SW Sec. 30 N2NE
NV-19-09-054	T. 22 N., R 28 E., 21 MDM, NV Sec. 10 SW, S2NW, NENW, W2NE, W2SE, SESE Sec. 14 W2, SE, W2NE, SENE
NV-19-09-055	T. 22 N., R 28 E., 21 MDM, NV Sec. 22 W2NW, NENW Sec. 24 W2, NE, NWSE Sec. 28 E2, NW, N2SW, SESW
NV-19-09-058	T. 32 N., R 22 E., 21 MDM, NV Sec. 24 ALL Sec. 25 ALL
NV-19-09-060	T. 32 N., R 23 E., 21 MDM, NV Sec. 30 LOTS 1-2 Sec. 30 NENW
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, NV Sec. 18 SESW, SWSE, SESE Sec. 19 LOTS 2-4 Sec. 19 E2W2, NE, NWSE
NV-19-09-067	T. 21 N., R 26 E., 21 MDM, NV Sec. 2 ALL Sec. 3 SENW Sec. 10 N2, N2SE Sec. 16 SWNE
NV-19-09-068	T. 22 N., R 26 E., 21 MDM, NV Sec. 20 E2E2, S2S2;
	NV-W-11-C-CSU

NV-19-09-070	
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NV-19-09-078

NV-19-09-079

NV-19-09-083

NV-19-09-084

NV-19-09-085

NV-19-09-086

NV-19-09-118

T. 21 N., R 25 E., 21 MDM, NV Sec. 10 N2SE Sec. 22 ALL

NV-19-09-119

NV-19-09-122

Sec. 12 E2NE T. 45 N., R 27 E., 21 MDM, NV Sec. 34 ALL Sec. 35 ALL T. 44 N., R 27 E., 21 MDM, NV Sec. 3 LOTS 1-4 Sec. 3 S2NW Sec. 4 ALL T. 45 N., R 27 E., 21 MDM, NV Sec. 14 ALL Sec. 15 ALL Sec. 22 ALL Sec. 23 ALL Sec. 26 ALL Sec. 27 ALL Sec. 33 ALL T. 40 N., R 27 E., 21 MDM, NV

T. 22 N., R 27 E., 21 MDM, NV Sec. 2 ALL

T. 27 N., R 27 E., 21 MDM, NV

Sec. 15 ALL Sec. 22 ALL Sec. 23 SWNW, NWSW Sec. 27 ALL

- T. 22 N., R 28 E., 21 MDM, NV Sec. 32 NW, N2SW, SWSW
- T. 28 N., R 28 E., 21 MDM, NV Sec. 22 ALL Sec. 26 ALL Sec. 34 S2, NW

T. 40 N., R 28 E., 21 MDM, NV Sec. 17 SWSE Sec. 19 SENE, N2NE Sec. 20 N2NW, SWNE

T. 22 N., R 25 E., 21 MDM, NV Sec. 36 W2NW, SESE T. 21 N., R 27 E., 21 MDM, NV Sec. 2 N2 Sec. 4 ALL Sec. 6 LOTS 16-18, 21-23 Sec. 8 ALL Sec. 10 LOTS 2-3

NV-W-11-C-CSU

NV-19-09-124

NV-19-09-125

NV-19-09-126

NV-19-09-127

NV-19-09-141

NV-19-09-150

T. 22 N., R 27 E., 21 MDM, NV Sec. 4 ALL Sec. 10 N2, SW, W2SE Sec. 12 N2. N2S2, SWSW Sec. 24 LOTS 1-4 Sec. 24 SW, W2E2, S2NW Sec. 34 LOTS 1-3 Sec. 34 NESW, NWSEN2NW, NENE

T. 31 N., R 33 E., 21 MDM, NV Sec. 34 E2NE

T. 32N., R 33 E., 21 MDM, NV Sec. 24 LOTS 3-4 Sec. 25 SWSW Sec. 26 E2E2, SWSE Sec. 36 NW

T. 23 N., R 27 E., 21 MDM, NV Sec. 22 SESE Sec. 24 W2W2, NENW Sec. 25 E2, E2W2, SWNW, SWSW Sec. 32 LOTS 5-7, 9-10 Sec. 32 NESW, NWSE, S2NE, NWNE Sec. 34 S2, SENE Sec. 36 ALL

T. 23 N., R 28 E., 21 MDM, NV Sec. 20 W2SW, SESW, SWNW Sec. 30 ALL

T. 21 N., R 27 E., 21 MDM, NV Sec. 8 ALL Sec. 10 LOTS 2-3 Sec. 14 SE, NESW, SENE Sec. 18 LOTS 1-2, 7 Sec. 18 NE, E2NW

T. 31 N., R 33 E., 21 MDM, NV Sec. 1 ALL Sec. 2 LOTS 17, 21-33 Sec. 14 W2 Sec. 22 LOTS 1, 8-12

NV-W-11-C-CSU

### Soil Slopes >50 percent (NV-W-11-D-NSO)

**Stipulation**: No Surface Occupancy (NSO) will be applied to slopes greater than 50% (as mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM evaluation of the area).

**Objective** [Purpose]: To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems.

**Exception**: The Authorized Officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to meet BLM's reclamation standards.

**Modification**: The Authorized Officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.

Waiver: The restriction may be waived if it is determined that the described lands do not include lands with slopes greater than 50 percent. This determination shall be based upon USGS mapping and a BLM evaluation of the area.

Parcel #	Legal Land Description
NV-19-09-063	T. 32 N., R 23 E., 21 MDM, NV Sec. 16 N2NW
NV-19-09-064	T. 33 N., R 23 E., 21 MDM, NV Sec. 24 N2SW Sec. 26 S2SW Sec. 33 SE Sec. 34 S2, NE
NV-19-09-065	T. 32 N., R 24 E., 21 MDM, NV Sec. 18 ALL
NV-19-09-086	T. 40 N., R 28 E., 21 MDM, NV Sec. 17 S2SE Sec. 19 E2NE Sec. 20 N2
NV-19-09-118	T. 21 N., R 25 E., 21 MDM, NV Sec. 10 SE Sec. 22 NW, N2SW
NV-19-09-119	T. 22 N., R 25 E., 21 MDM, NV Sec. 36 NW, NWSW

NV-19-09-124	T. 31 N., R 33 E., 21 MDM, NV Sec. 32 E2SW, SENW
NV-19-09-125	T. 32 N., R 33 E., 21 MDM, NV Sec. 30 LOTS 1-2
NV-19-09-129	T. 30 N., R 32 E., 21 MDM, NV Sec. 12 NE, N2SE, SESE
NV-19-09-131	T. 31 N., R 32 E., 21 MDM, NV Sec. 36 E2E2, NENW
NV-19-09-150	T. 31 N., R 33 E., 21 MDM, NV Sec. 18 LOT 7

# NV-W-11-D-NSO

# Resource: Raptor Nest Sites (NV-W-06-B-TL)

**Stipulation:** Timing Limitation. Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA). The following timing restrictions apply.

Species	Location	Distance of Spatial Buffer Zone/Type of Restriction	Restriction Dates
Bald eagle	Nests	1/4 mile non-los and 1/2 mile los and 1 mile blasting	Jan 1 - Aug 31
	Winter roosts	1/2 mile	Dec. 1 - April 1
Northern goshawk	Nests (occupied)	1/4 mile	Feb 1 - Aug 31
	Previous Years Nests	1/2 mile los	Feb 1 - Aug 31
Golden eagle	Nests	1/4 mile non-los, 1/2 mile los	Feb 1 - Aug 31
Ferruginous hawk	Nests	1/4 mile non-los, 1/2 mile los	Mar. 1 - August 31
Red-tailed hawk	Nests	1/4 mile	Mar 1 - August 31
Swainson's hawk	Nests	1/4 mile non-los, 1/2 mile lose	Mar. 1 - August 31
Prarie falcon	Nests	1/4 mile	Mar. 1 - August 31
Burrowing owl	Nests	1/4 mile- Permanent disturbance or occupancy, 260 feet temporary disturbance	Mar. 1 - August 31
Flammulated owl	Nests	1/4 mile	April 1 0 Sept. 30.

**Objective** [Purpose]: To protect raptor nesting activities necessary to maintaining the critical life stages of existing raptor populations.

**Exception:** The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect raptor nest sites being protected by the restriction. An exception may also be granted if the proponent, BLM, and other affected interests, in consultation with Nevada Department of Wildlife, negotiate mitigation that would satisfactorily offset the anticipated impacts. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

**Modification:** The boundaries of the stipulated area may be modified if the Authorized Officer, in consultation with Nevada Department of Wildlife, determines that portions of the area can be occupied without adversely affecting raptor nesting activity. The dates for the timing restriction may be modified if new information indicates the dates are not valid for the leasehold.

Waiver: The stipulation may be waived if the authorized officer, in consultation with Nevada

Department of Wildlife determines that the entire leasehold no longer contains raptor nest sites.

<u>Parcel #</u>	Legal Land Description
NV-19-09-001	ALL LANDS
NV-19-09-002	ALL LANDS
NV-19-09-028	ALL LANDS
NV-19-09-029	ALL LANDS
NV-19-09-037 THRU NV-19-09-040	ALL LANDS
NV-19-09-051	ALL LANDS
NV-19-09-053 THRU NV-19-09-070	ALL LANDS
NV-19-09-073 THRU NV-19-09-081	ALL LANDS
NV-19-09-083 THRU NV-19-09-086	ALL LANDS
NV-19-09-109	ALL LANDS
NV-19-09-118 THRU NV-19-09-127	ALL LANDS
NV-19-09-129 THRU NV-19-09-131	ALL LANDS

NV-W-06-B-TL

UNITED STATES Form 3200-24a Serial No. (September 2008) DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT NVN100029 OFFER TO LEASE AND LEASE FOR GEOTHERMAL RESOURCES (For New Leases Issued Under the Energy Policy Act of 2005 [August 5, 2005]) The undersigned (see page 2) offers to lease all or any of the lands in item 2 that are available for lease pursuant to the Geothermal Steam Act of 1970, as amended (30 U.S.C. 1001-1025). **READ INSTRUCTIONS BEFORE COMPLETING** 1. Name 1a. Street Ormat Nevada Inc. 6140 Plumas Street 1b. City 1c. State 1d. Zip Code Reno NV 89519 Unit/Project: 2. Surface managing agency if other than BLM: \_ Legal description of land requested (segregate by public domain and acquired lands): Enter T., R., Meridian, State and County Future rental payments must be made on or before the anniversary date to: Office of Natural Resources Revenue (ONRR) http://www.onrr.gov/ReportPay/payments.htm Total Acres Applied for \_\_\_\_\_ Percent U.S. interest Amount remitted: Processing Fee \$ \_ Rental Fee \$ \_ Total \$ DO NOT WRITE BELOW THIS LINE 3. Land included in lease: Enter T., R., Meridian, State and County T.0320N., R.0230E., 21 MDM, NV Sec. 015 LOTS 6-7; 016 LOTS 2-6; 016 NWNE: Total Acres in Lease 250.450 Rental Retained \$ 502.00 In accordance with the above offer, or the previously submitted competitive bid, this lease is issued granting the exclusive right to drill for, extract, produce, remove, utilize, sell, and dispose of all the geothermal resources in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon, for a primary term of 10 years and subsequent extensions thereof in accordance with 43 CFR subpart 3207. Rights granted are subject to: applicable laws; the terms, conditions, and attached stipulations of this lease; the Secretary of the Interior's regulations and formal orders in effect as of lease issuance; and, when not inconsistent with the provisions of this lease, regulations and formal orders hereafter promulgated. THE UNITED STATES OF AMERICA Type of Lease: Competitive Noncompetitive (Signing Official) Noncompetitive direct use (43 CFR subpart 3205) Kemba K. Anderson (Printed Name) Comments: 11/12/2020 Chief, Branch of Mineral Resources, Fluids NV-20-10-001 (Title) (Date) 12/01/2020 EFFECTIVE DATE OF LEASE Check if this is a converted lease EFFECTIVE DATE OF LEASE CONVERSION (Continued on page 2)



4. (a) The undersigned certifies that:

- (1) The offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States, any State or the District of Columbia; (2) All parties holding an (i) Interest in the offer are in compliance with 43 CFR part 3200 and the authorizing Act; (3) The offeror's chargeable interests, direct and indirect, do not exceed those allowed under the Act; and (4) The offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located.
- a minute taxes of the state in which the many covered by this offer are located. (b) The undersigned agrees that signing this offer constitutes acceptance of this lease, including all terms, conditions and stipulations of which the offeror has been given notice. The offeror further agrees that this offer cannot be withdrawn, either in whole or part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford the offeror no priority if it is not properly completed and executed in accordance with the regulations or if it is not accompanied by the required payments. Title 18 U.S.C. § 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this day of 20 (Printed Name	of Lessee or Attorney-in-fact)	(Signature of Lessee or Attorney-in-fact)
LEASE	TERMS	
<ul> <li>Sec. 1. Rentals—Rentals must be paid to the proper office of the lessor in advance of each lease year. Annual rental rates per acre or fraction thereof, as applicable, are:</li> <li>(a) Noncompetitive lease (includes post-sale parcels not receiving bids, a direct use lease or a lease issued to a mining claimant). S1.00 for the first 10 years; thereafter \$5.00, or</li> <li>(b) Competitive lease: \$2.00 for the first year; \$3.00 for the second through tenth year; thereafter \$5.00. Annual rental is always due by the anniversary date of this lease (43 CFR 3211.13), regardless of whether the lease is in a unit or outside of a unit, the lease is in production or not, or royalties or direct use fees apply to the production.</li> <li>Rental may only be credited toward royalty under 43 CFR 3211.15 and 30 CFR 218.303. Rental may not be credited against direct use fees. Failure to pay annual rental timely will result in late fees and will make the lease to termination in accordance with 43 CFR 321.14.</li> </ul>	premises and all wells, improvements, records relative to operations, surveys, or all contracts, sales agreements, accounti regarding the sale, disposition, or use of generated using resources produced fron direct use fees. All such records must be produced upon request by lessor or less	le times for inspection by any authorized officer of lessor, the leased machinery, and fixtures thereon, and all books, accounts, maps, and investigations on or in the leased lands. Lessee must maintain copies of ing records, billing records, invoices, gross proceeds and payment data geothermal resources, byproducts produced, and the sale of electricity in the lease, and all other information relevant to determining royalties or maintained in lessee's accounting offices for future audit by lessor and or's authorized representative or agent. Lessee must maintain required rated or, if an audit or investigation is underway, until released of the essor.
Sec. 2. (a) Royalties—Royalties must be paid to the proper office of the lessor. Royalties are due on the last day of the month following the month of production. Royalties will be computed in accordance with applicable regulations and orders. Royalty rates for geothermal resources produced for the commercial	the land, air, and water, to cultural, biolo must take reasonable measures deemed	must conduct operations in a manner that minimizes adverse impacts to gical, visual, and other resources, and to other land uses or users. Lessee necessary by lessor to accomplish the intent of this section. To the extent ch measures may include, but are not limited to, modification to siting or

generation of electricity but not sold in an arm's length transaction are: 1.75 percent for the first 10 years of production and 3.5 percent after the first 10 years. The royalty rate is to be applied to the gross proceeds derived from the sale of electricity in accordance with 30 CFR part 206 subpart H. The royalty rate for byproducts derived from geothermal resource production that are minerals specified in section 1 of the Mineral Leasing Act (MLA), as amended (30 U.S.C. 181), is 5 percent, except for sodium

compounds, produced between September 29, 2006 and September 29, 2011 (Pub. L. No. 109-338, §102; note to 30 U.S.C. 362) for which the royalty rate is 2 percent. No royalty is due on byproducts that are not specified in 30 U.S.C. § 181. (43 CFR 3211.19.) If this lease or a portion thereof is committed to an approved communitization or unit agreement and the

agreement contains a provision for allocation of production, royalties must be paid on the production allocated to this lease.

(b) Arm's length transactions—The royalty rate for geothermal resources sold by you or your affiliate at arm's length to a purchaser is 10 percent of the gross proceeds derived from the arm's-length sale (43 CFR 3211.17, 3211.18)

(c) Advanced royalties-In the absence of a suspension, if you cease production for more than one calendar month on a lease that is subject to royalties and that has achieved commercial production, your lease will remain in effect only if you make advanced royalty payments in accordance with 43 CFR 3212.15(a) and 30 CFR 218 305

(d) Direct use fees-Direct use fees must be paid in lieu of royalties for geothermal resources that are utilized for commercial, residential, agricultural, or other energy needs other than the commercial production or generation of electricity, but not sold in an arm's length transaction (43 CFR 3211.18; 30 CFR 206.356). This requirement applies to any direct use of federal geothermal resources (unless the resource is exempted) as described in 30 CFR 202.351(b) or the lessee is covered by paragraph (e), below) and is not limited to direct use leases. Direct use fees are due on the last day of the month following the month of production. (e) If the lessee is a State, tribal, or local government covered by 43 CFR 3211.18(a)(3) and 30 CFR 206.366, check here: D. A lessee under this paragraph is not subject to paragraph (d), above. In lieu of royalties, the lessee under this paragraph must pay a nominal fee of

Sec. 3. Bonds-A bond must be filed and maintained for lease operations as required by applicable regulations.

Sec. 4. Work requirements, rate of development, unitization, and drainage--Lessee must perform work requirements in accordance with applicable regulations (43 CFR 3207.11, 3207.12), and must prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves the right to specify rates of development and production and to require lessee to commit to a communitization or unit agreement, within 30 days of notice, if in the public interest. Lessee must drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in the amount determined by lessor. Lessor will exempt lessee from work requirements only where the lease overlies a mining claim that has an approved plan of operations and where BLM determines that the development of the geothermal resource on the lease would interfere with the mining operation (43 CFR 3207.13).

Sec. 5. Documents, evidence, and inspection-Lessee must file with the proper office of the lessor, not later than (30) days after the effective date thereof, any contract or evidence of other arrangement for the sale, use, or disposal of geothermal resources, byproducts produced, or for the sale of electricity generated using geothermal resources produced from the lease. At such times and in such form as lessor may prescribe, lessee must furnish detailed statements and all documents showing (a) amounts and quality of all geothermal resources produced and used (either for commercial production or generation of electricity, or in a direct use operation) or sold; (b) proceeds derived therefrom or from the sale of electricity generated using such resources; (c) amounts that are unavoidably lost or reinjected before use, used to generate plant parasitic electricity (as defined in 30 CFR 206.351) or electricity for lease operations, or otherwise used for lease operations related to the commercial production or generation of electricity; and (d) amounts and quality of all byproducts produced and proceeds derived from the sale or disposition thereof. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest.

In a format and manner approved by lessor, lessee must: keep a daily drilling record, a log, and complete information on well surveys and tests; keep a record of subsurface investigations; and furnish copies to lessor when required.

design of facilities, timing of operations, and specification of interim and final reclamation measures. Lesson reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses will be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee. Prior to disturbing the surface of the leased lands, lessee must contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessor may require lessee to complete minor inventories or short term special studies under guidelines provided by lessor. If, in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee must immediately contact lessor. Lessee must cease any operations that are likely to affect or take such species, or result in the modification, damage or destruction of such habitats or objects

Sec. 7. Production of byproducts-If the production, use, or conversion of geothermal resources from these leased lands is susceptible of producing a valuable byproduct or byproducts, including commercially demineralized water for beneficial uses in accordance with applicable State water laws, lessor may require substantial beneficial production or use thereof by lessee.

Sec. 8. Damages to property-Lessee must pay lessor for damage to lessor's improvements, and must save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 9. Protection of diverse interests and equal opportunity—Lessee must maintain a safe working environment in accordance with applicable regulations and standard industry practices, and take measures necessary to protect public health and safety. Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. Lessee must comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractor may maintain segregated facilities.

Sec. 10. Transfer of lease interests and relinquishment of lease-As required by regulations, lessee must file with lessor any assignment or other transfer of an interest in this lease. Subject to the requirements of 43 CFR subpart 3213, lesse may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which will be effective as of the date BLM receives it, subject to the continued obligation of the lessee and surety to be responsible for: paying all accrued rentals and royalties; plugging and abandoning all wells on the relinquished land; restoring and reclaiming the surface and other resources; and complying with 43 CFR 3200.4

Sec. 11. Delivery of premises-At such time as all or portions of this lease are returned to lessor, lessee must place all wells in condition for suspension or abandonment, reclaim the land as specified by lessor, and within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells or continued protection of the environment.

Sec. 12. Proceedings in case of default-If lessee fails to comply with any provisions of this lease or other applicable requirements under 43 CFR 3200.4, and the noncompliance continues for 30 days after written notice thereof, this lease will be subject to termination in accordance with the Act and 43 CFR 3213. This provision will not be construed to prevent the exercise by lessor of any other legal and equitable remedy or action, including waiver of the default. Any such remedy, waiver, or action will not prevent later termination for the same default occurring at any other time. Whenever the lessee fails to comply in a timely manner with any of the provisions of the Act, this lease, the regulations, or other applicable requirements under 43 CFR 3200.4, and immediate action is required, the lessor may enter on the leased lands and take measures deemed necessary to correct the failure at the lessee's expense

Sec. 13. Heirs and successors-in-interest-Each obligation of this lease will extend to and be binding upon, and every benefit hereof will inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto

#### INSTRUCTIONS

#### A. General

- 1. Items 1 and 2 need to be completed only by parties filing for a noncompetitive lease. The BLM will complete the front of the form for other types of leases. The BLM may use the "Comments" space under Item 3 to identify when: the lesse has elected to make all lease terms subject to the Energy Policy Act of 2005 under 43 CFR 3200.7(a)(2) or 43 CFR 3200.8(b) (box labeled "converted lease" must also be checked); the lease is being issued noncompetitively to a party who holds a mining claim on the same lands as is covered by the lease under 43 CFR 3204.12; the lease is a direct use lease issued to a State, local, or tribal government (box at section 2(e) under Lease Terms must also be checked); the lease is a competitive lease with direct-use-only stipulations attached; or other special circumstances exist. A lessee who seeks to convert only the royalty rate of a lease under 43 CFR 3212.25 or who qualifies for a case-by-case royalty rate determination under 43 CFR 3211.17(b)(1)(i) should not use this form, but should instead use an addendum to the existing lease.
- 2. Entries must be typed or printed plainly in ink. The offeror must sign the form (Item 4) in ink.
- 3. An original and two copies of this offer must be prepared and filed in the proper BLM State Office. See regulations at 43 CFR 1821.10 for office locations.
- 4. If more space is needed, additional sheets must be attached to each copy of the form submitted.

B. Specific

Item 1-Enter the offeror's name and billing address.

Item 2—Indicate the agency managing the surface use of the land and the name of the unit or project of which the land is a part. The offeror may also provide other information that will assist in establishing status of the lands. The description of land must conform to 43 CFR 3203.10. Total acres applied for must not exceed that allowed by regulations (43 CFR 3203.10; 43 CFR 3206.12).

Payments: For noncompetitive leases, the amount remitted must include the processing fee for noncompetitive lease applications (43 CFR 3204.10; 43 CFR 3000.12) and the first year's rental at the rate of \$1 per acre or fraction thereof. If the United States owns only a fractional interest in the geothermal resources, you must pay a prorated rental under 43 CFR 3211.11(d). The BLM will retain the processing fee even if the offer is completely rejected or withdrawn. To maintain the offeror's priority, the offeror must submit rental sufficient to cover all the land requested. If the land requested includes lots or irregular quarter-quarter sections, the exact acreage of which is not known to the offeror, rental should be submitted on the assumption that each such lot or quarter-quarter section contains 40 acres. If the offer is withdrawn or rejected in whole or in part before a lease issues, the BLM will return the rental remitted for the parts withdrawn or rejected.

The BLM will fill in the processing fee for competitive lease applications (43 CFR 3203.17; 43 CFR 3000.12) and the first year's rental at the rate of \$2 per acre or fraction thereof.

Item 3-The BLM will complete this space.

#### NOTICES

The Privacy Act of 1974 and the regulation at 43 CFR 2.48(d) provide that you be furnished with the following information in connection with information required by this geothermal lease application.

AUTHORITY: 30 U.S.C. 1000 et seq.

PRINCIPAL PURPOSE-The information is to be used to process geothermal lease applications.

ROUTINE USES: (1) The adjudication of the lessee's rights to the land or resources. (2) Documentation for public information in support of notations made on land status records for the management, disposal, and use of public lands and resources. (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting uses or rights in public lands or resources. (4) Transfer to the appropriate Federal, State, local, or foreign agencies, when relevant to civil, criminal, or regulatory investigations or prosecutions.

# BLM Nevada Standard Lease Notices (NV-B,C,W-00-A-LN)

These lease notices apply to all parcels all lands and represent standard Best Management Practices for ensuring compliance with extant Federal Laws and resource protection.

### **T&E**, Sensitive and Special Status Species

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

### **Migratory Birds**

The Operator is responsible for compliance with provisions of the Migratory Bird Treaty Act by implementing measures to prevent take of migratory birds. Operators should be aware that any ground clearing or other disturbance (such as creating cross-country access to sites, drilling, and/or construction) during the migratory bird (including raptors) nesting season (March 1 - July 31) risks a violation of the Migratory Bird Treaty Act. Disturbance to nesting migratory birds should be avoided by conducting surface disturbing activities outside the migratory bird nesting season.

If surface disturbing activities must be implemented during the nesting season, a preconstruction survey for nesting migratory birds should be performed by a qualified wildlife biologist, during the breeding season (if work is not completed within a specified time frame, then additional surveys may be needed). If active nests are found, an appropriately-sized no surface disturbance buffer determined in coordination with the BLM biologist should be placed on the active nest until the nesting attempt has been completed. If no active nests are found, construction activities must occur within the survey validity time frame specified in the conditions of approval.

### **Cultural Resources and Tribal Consultation**

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, Executive Order 13007, or other statutes and executive orders. The BLM will not approve any ground-disturbing activities that may affect any such properties or resources until it completes its obligations (e.g., State Historic Preservation Officer (SHPO) and tribal consultation) under applicable requirements of the NHPA and other authorities. The BLM may require modification to

exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized, or mitigated.

### Fossils

This area has low to moderate potential for vertebrate paleontological resources, unless noted to have higher potential in a separate stipulation. This area may contain vertebrate paleontological resources. Inventory and/or on-site monitoring during disturbance or spot checking may be required of the operator. In the event that previously undiscovered paleontological resources are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to the attention of the authorized officer of the BLM. Operations within 250 feet of any such discovery will not be resumed until written authorization to proceed is issued by the Authorized Officer. The lessee will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

#### Water

The Operator is responsible for compliance with provisions of the Clean Water Act, Safe Drinking Water Act, and applicable State laws and regulations regarding protection of state water resources. Operators should contact Nevada Division of Water Resources and Nevada Division of Environmental Protection regarding necessary permits and compliance measures for any construction or other activities.

### **Mining Claims**

This parcel may contain existing mining claims and/or mill sites located under the 1872 Mining Law. To the extent it does, the geothermal lessee must conduct its operations, so far as reasonably practicable, to avoid damage to any known deposit of any mineral for which any mining claim on this parcel is located, and should not endanger or unreasonably or materially interfere with the mining claimant's operations, including any existing surface or underground improvements, workings, or facilities which may have been made for the purpose of mining operations. The provisions of the Multiple Mineral Development Act (30 U.S.C. 521 et seq.) shall apply on the leased lands.

### Fire

The following precautionary measures should be taken to prevent wildland fires. In the event your operations should start a fire, you could be held liable for all suppression costs.

- All vehicles should carry fire extinguishers and a minimum of 10 gallons of water.
- Adequate fire-fighting equipment i.e. shovel, pulaski, extinguisher(s) and a minimum 10 gallons of water should be kept at the drill site(s).
- Vehicle catalytic converters should be inspected often and cleaned of all brush and grass debris.
- When conducting welding operations, they should be conducted in an area free from or mostly free from vegetation. A minimum of 10 gallons water and a shovel should be on hand to extinguish any fires created from the sparks. Extra personnel should be at the welding site to watch for fires created by welding sparks.

- Report wildland fires immediately to the BLM Central Nevada Interagency Dispatch Center (CNIDC) at (775) 623-3444. Helpful information to reported is location (latitude and longitude if possible), what's burning, time started, who/what is near the fire and direction of fire spread.
- When conducting operations during the months of May through September, the operator must contact the BLM Battle Mountain District Office, Division of Fire and Aviation at (775) 635-4000 to find out about any fire restrictions in place for the area of operation and to advise this office of approximate beginning and ending dates for your activities.

### Pronghorn Antelope Seasonal Habitat (#NV-W-01-A-TL)

**Stipulation**: Timing Limitation (TL) -No surface activity within Pronghorn Antelope Crucial Winter Habitat from November 15 through April 30.

**Objective** [Purpose]: To protect Pronghorn Antelope Crucial Winter Habitat necessary to maintaining the critical life stages of Pronghorn wildlife populations.

**Exception**: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect the Pronghorn Antelope and its habitat. An exception may also be granted if the proponent, BLM, and other affected interests negotiate mitigation that would satisfactorily offset the anticipated impacts to Pronghorn Antelope and its habitat. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

**Modification**: The boundaries of the stipulated area may be modified if the authorized officer, in consultation with Nevada Department of Wildlife, determines that portions of the area no longer contain the crucial winter pronghorn habitat or that the proposed action would not affect the species and habitat. The dates for the timing restriction may also be modified by the Authorized Officer if new information indicates the dates are not valid for the leasehold.

**Waiver**: The restriction may be waived by the Authorized Officer if it is determined that the described lands do not contain suitable pronghorn habitat, or are otherwise incapable of serving the requirements of for the species and therefore no longer warrant consideration as a component necessary for their protection.

Parcel #

Legal Land Description

NV-20-10-001

T.0320N, R.0230E, 21 MDM, NV Sec. 016 LOT 2; 016 NWNE;

### Resource: Raptor Nest Sites (NV-W-06-B-TL)

**Stipulation:** Timing Limitation. Bald or Golden eagles or other raptors or their habitat may be present in the lease area or within the vicinity of the lease area. These species will be managed in accordance with FLPMA, the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Action (MBTA). The following timing restrictions apply.

Species	Location	Distance of Spatial Buffer Zone/Type of Restriction	Restriction Dates
Bald eagle	Nests	1/4 mile non-los and 1/2 mile los and 1 mile blasting	Jan 1 - Aug 31
	Winter roosts	1/2 mile	Dec. 1 - April 1
Northern goshawk	Nests (occupied)	1/4 mile	Feb 1 - Aug 31
	Previous Years Nests	1/2 mile los	Feb 1 - Aug 31
Golden eagle	Nests	1/4 mile non-los, 1/2 mile los	Feb 1 - Aug 31
Ferruginous hawk	Nests	1/4 mile non-los, 1/2 mile los	Mar. 1 - August 31
Red-tailed hawk	Nests	1/4 mile	Mar 1 - August 31
Swainson's hawk	Nests	1/4 mile non-los, 1/2 mile lose	Mar. 1 - August 31
Prarie falcon	Nests	1/4 mile	Mar. 1 - August 31
Burrowing owl	Nests	1/4 mile- Permanent disturbance or occupancy, 260 feet temporary disturbance	Mar. 1 - August 31
Flammulated owl	Nests	1/4 mile	April 1 0 Sept. 30.

**Objective** [Purpose]: To protect raptor nesting activities necessary to maintaining the critical life stages of existing raptor populations.

**Exception:** The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not adversely affect raptor nest sites being protected by the restriction. An exception may also be granted if the proponent, BLM, and other affected interests, in consultation with Nevada Department of Wildlife, negotiate mitigation that would satisfactorily offset the anticipated impacts. An exception may be granted for actions designed to enhance the long-term utility or availability of the habitat.

**Modification:** The boundaries of the stipulated area may be modified if the Authorized Officer, in consultation with Nevada Department of Wildlife, determines that portions of the area can be occupied without adversely affecting raptor nesting activity. The dates for the timing restriction may be modified if new information indicates the dates are not valid for the leasehold.

**Waiver:** The stipulation may be waived if the authorized officer, in consultation with Nevada Department of Wildlife determines that the entire leasehold no longer contains raptor nest sites.

Parcel #	Legal Land Description
NV-20-10-001	ALL LANDS
NV-20-10-004	ALL LANDS
NV-20-10-022	ALL LANDS
NV-20-10-024	ALL LANDS
NV-20-10-029	ALL LANDS
NV-20-10-030	ALL LANDS

## Trails (#NV-W-07-D-NSO)

**Stipulation**: No Surface Occupancy (NSO) will be applied directly on National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation and within National Trail Management Corridors. NSO may be applied to additional bordering lands; the extent will be dependent upon the topography and integrity of the setting surrounding individual trail segments along the designated NHT and National Historic Trail Corridor. Prior to the establishment of a National Trail Management Corridor, at a minimum, NSO will be applied 1/8-mile on either side of the center line of the trail (for a total of a 1/4-mile wide corridor). The center line will be established either through the GIS-based line provided by the Trail Administering Agency (NPS or BLM) or through GPS-based inventories uploaded on the Nevada Cultural Resource Inventory System (NVCRIS).

**Objective** [Purpose]: To protect the National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation, and National Trail Management Corridor resources, qualities, values, and associated settings.

**Exception**: The Authorized Officer may grant an exception if, through the National Historic Preservation Act (NHPA) and Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements, it is determined that the action, as proposed or otherwise restricted, does not adversely affect the resource. An exception may be granted for actions designed to enhance the long-term utility or availability of the trail.

**Modification**: The Authorized Officer may modify the size and shape of the restricted area if the NHPA and Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements indicate the proposed action does not adversely impact the resource.

**Waiver**: The restriction may be waived if the NHPA and Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation Manual 6280 requirements determine that the described lands are not contributing elements to the resource. This determination can only come after consultation with the National Park Service, Nevada State Historic Preservation Office and other interested publics.

Parcel #	Legal Land Description
NV-20-10-001	T.0320N, R.0230E, 21 MDM, NV Sec. 015 LOTS 6-7; 016 LOTS 2-6; 016 NWNE;
NV-20-10-004	T.0210N, R.0250E, 21 MDM, NV Sec. 002 LOTS 1-2; 002 S2NE,SE;
NV-20-10-029	T.0350N, R.0430E, 21 MDM, NV

Sec. 020 ALL; 028 NWNE, N2NW, SWNW, W2SW; 032 E2NE;

NV-20-10-030

T.0350N, R.0430E, 21 MDM, NV Sec. 022 ALL; 028 NENE, S2NE, SENW, E2SW, SE; 032 W2NE, N2NW;

# Soil Slopes 15 - 50 percent (#NV-W-11-C-CSU)

**Stipulation**: Controlled Surface Use (CSU) Controlled Surface Use will be applied to lands with slopes greater than 15% and less than 50% (As mapped by the USGS 1:24,000 scale topographic maps or as determined by a BLM). Prior to surface disturbance on slopes greater than 15% a site –specific construction, stabilization, and reclamation plan must be submitted to the BLM by the applicant as a component of the Geothermal Drilling/Application for Permit to Drill – Plan of Operations. The operator may not initiate surface disturbing activities unless the BLM Authorized Officer has approved the Plan or approved it with conditions.

The plan must demonstrate to the Authorized Officer's satisfaction how the operator will meet the following performance standards:

- Soil stability is maintained preventing slope failure and wind or water erosion
- The site will be stable with no evidence of accelerated erosion features
- The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.
- Sufficient topsoil is maintained for ensuring successful final reclamation. At locations where interim reclamation will be completed, this will be accomplished by re-spreading the topsoil over the areas of interim reclamation.
- The original landform and site productivity will be partially restored during interim reclamation and fully restored as a result of final reclamation.

**Objective** [Purpose]: To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems, and to ensure successful interim and final reclamation.

**Exception**: The BLM authorized officer may grant an exception of a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope does not exceed 15%, so that the proposed action would not result in a failure to meet the performance standards listed above.

**Modification**: The authorized officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.

**Waiver**: The restriction may be waived if it is determined that the described lands do no do not include lands with slopes greater than 15%. This determination shall be based upon USGS mapping and a BLM evaluation of the area.

Parcel #

**Legal Land Description** 

NV-20-10-001

T.0320N, R.0230E, 21 MDM, NV Sec. 016 LOT 2; 016 NWNE;

NV-20-10-024	T.0260N, R.0370E, 21 MDM, NV Sec. 025 S2; 34 SE; 35 ALL; 36 ALL;
NV-20-10-004	T.0210N, R.0250E, 21 MDM, NV Sec. 002 LOTS 1-2; 002 S2NE,SE;
NV-20-10-022	T.0360N, R.0330E, 21 MDM, NV Sec. 014 NENE; SWNE; NENW; SENE 022 NENW; 026 SWNE; NESW; NESW;

NENW; WNE; NESW; NESW;

NV-20-10-030

T.0350N, R.0430E, 21 MDM, NV Sec. 032 W2NE, N2NW;