

Attachment to Form 3200-9
Notice of Intent to Conduct Geothermal Resource Exploration Operations
Geothermal Temperature Gradient Well Drilling – Pinto Hot Springs
June 20, 2012

For drilling temperature gradient wells, describe your drilling and completion procedures, and include, for each well or for several wells you propose to drill in an area of geologic and environmental similarity:

- (1) A detailed description of the equipment, materials, and procedures you will use;
The contractors (Wellsco) have a Schramm 130 available, with a rating of 7,000 ft. Final thermal gradient well only requires 1.5 inches in diameter to allow for temperature measurements, so the hole size noted below is anticipated to be a maximum. Surface casing diameter will be determined on a case-by-case basis depending on anticipated drilling conditions, and the 8.5" size noted below is expected to be a maximum. Drill bits to be used are standard tri-cone bits.

To begin the drilling operations Wellsco will mobilize drilling equipment to the well site and rig up. The cellar, mud pits, and water tanks will be set at the well site. All casing, cement, mud, BOPE, etc. will be located at the location before starting drilling operations.

We plan to drill a 8 1/2" surface hole to +/- 250' with air/mud. A 7" Surface casing will be run to +/- 250'. Surface casing will be set with Class C cement. The well will then be drilled with a 6 1/8" hole to approximately 1,000' with mud/air mud.

- (2) The depth of each well;
Each well completed will be ≤ 1000 ft.
- (3) The casing and cementing program;
The Casing and Cementing Program will be of industry standard design. The standard procedure for welding of the casing head to the casing for all geothermal wells follows the API standard 6A (fourteenth Edition, March 1983). Also, see (1) above.
- (4) The circulation media (mud, air, foam, etc.);
The boreholes will be drilled with a rotary bit with air if possible, and circulating drilling mud if necessary. Steel tanks will store the mud during circulation and drilling.
The mud program, if needed and presented below is a guideline only. Actual well conditions encountered during drilling will dictate the final type and rheological properties of any drilling fluid used. The following rheological conditions should be maintained while using a dispersed mud system:

Dispersed Mud:
Weight 8.7 - 8.9 ppg
pH 9.5 - 10.5
Funnel viscosity 35 - 38 seconds
Plastic viscosity 10 - 15 cp

Yield point 3 - 10 lbs/100 sq. ft.

10 min Gel 10 lbs/100 sq. ft.

If needed, a gel-based mud will be used for drilling, to improve rate of penetration and well cleanup, based on the observed drilling conditions.

(5) A description of the logs that you will run;

Temperature, caliper, EM induction & gamma, Sonic, and the Electric tool (with 16" & 64", temp, gamma, Spontaneous Potential, single point, lateral).

(6) A description and diagram of the blowout prevention equipment you will use during each phase of drilling;

Temperatures and pressures requiring a blowout prevention system are not expected to be encountered. However, if such conditions are warranted, Welsco has blowout prevention equipment (BOP) that is of industry standard and consists of a 3,000 lbs double gate ram preventer, or equivalent design.

(7) The expected depth and thickness of fresh water zones;

Due to the limited information currently available at the areas of interest, and need for the current gradient drilling to obtain such information, the depth of the fresh water zones is unknown, but appropriate surface casings will be cemented in place to isolate shallow water zones.

(8) Anticipated lost circulation zones;

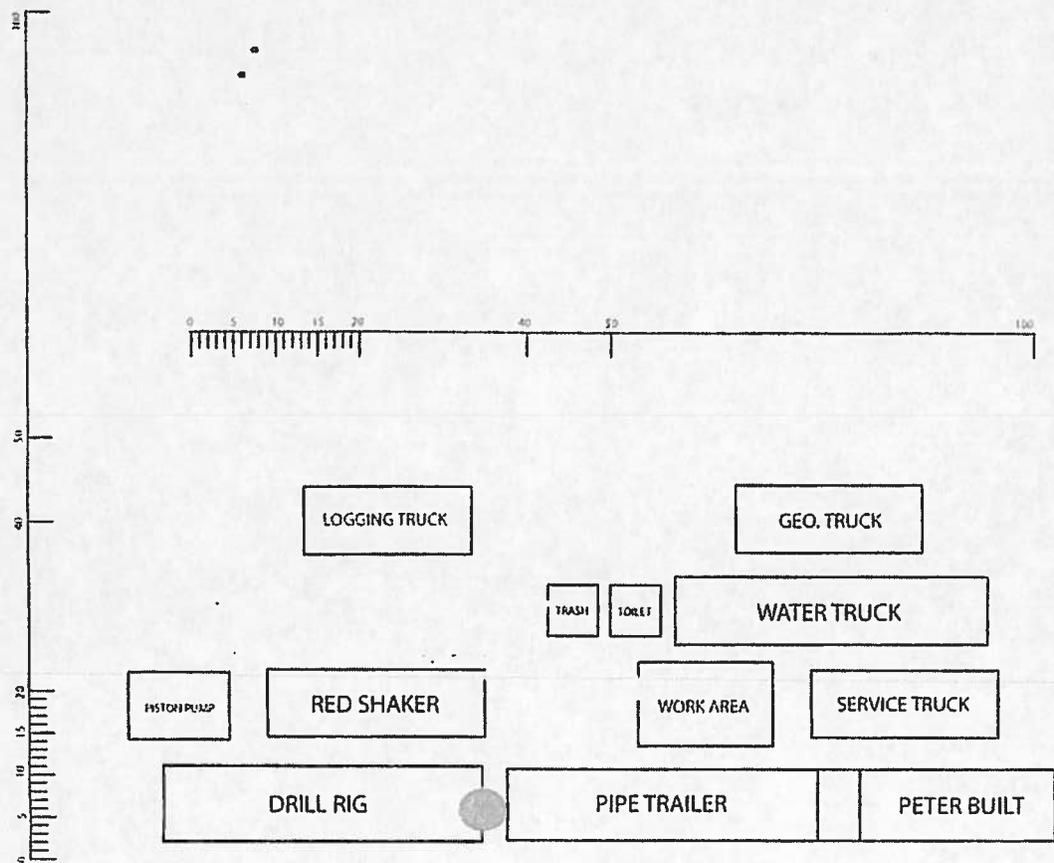
None known. This is a new area with limited previous information. The gradient well(s) proposed are intended to provide this new, in addition to other, information.

(9) Anticipated temperature gradient in the area;

Pinto Hot Springs - $>45^{\circ}\text{C}/\text{km}$ - Estimated gradient based on nearby Pinto Mountains RD-6 gradient hole measured 67.6°C at 41.5m depth. Surface springs at Pinto HS are boiling, and we anticipate lower rates of T increase with depth, but higher overall bottom temperatures.

(10) Well site layout and design;

An example well layout follows. This, or a very similar, footprint will be designed at the site resulting in minimal disturbance as required by BLM.

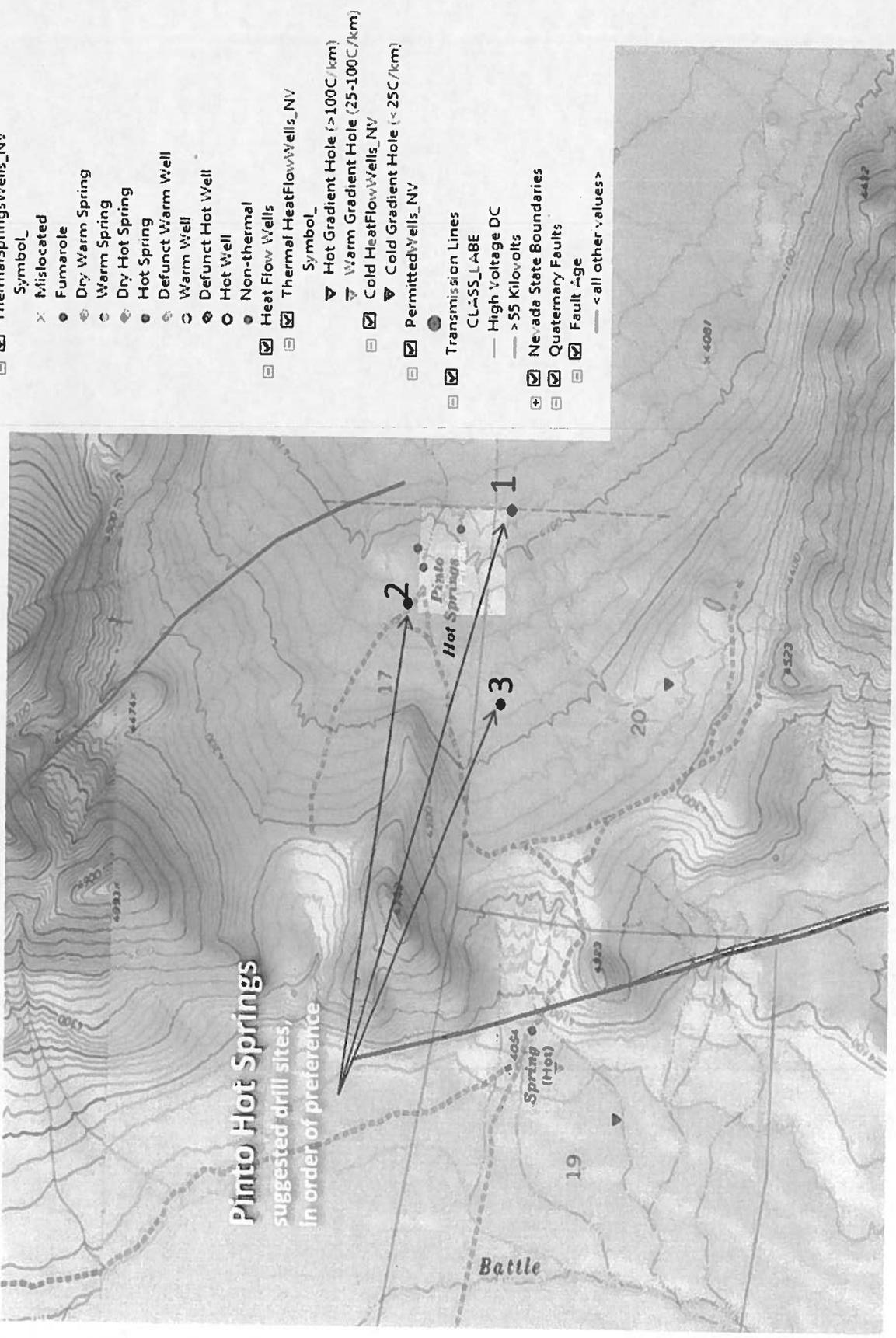


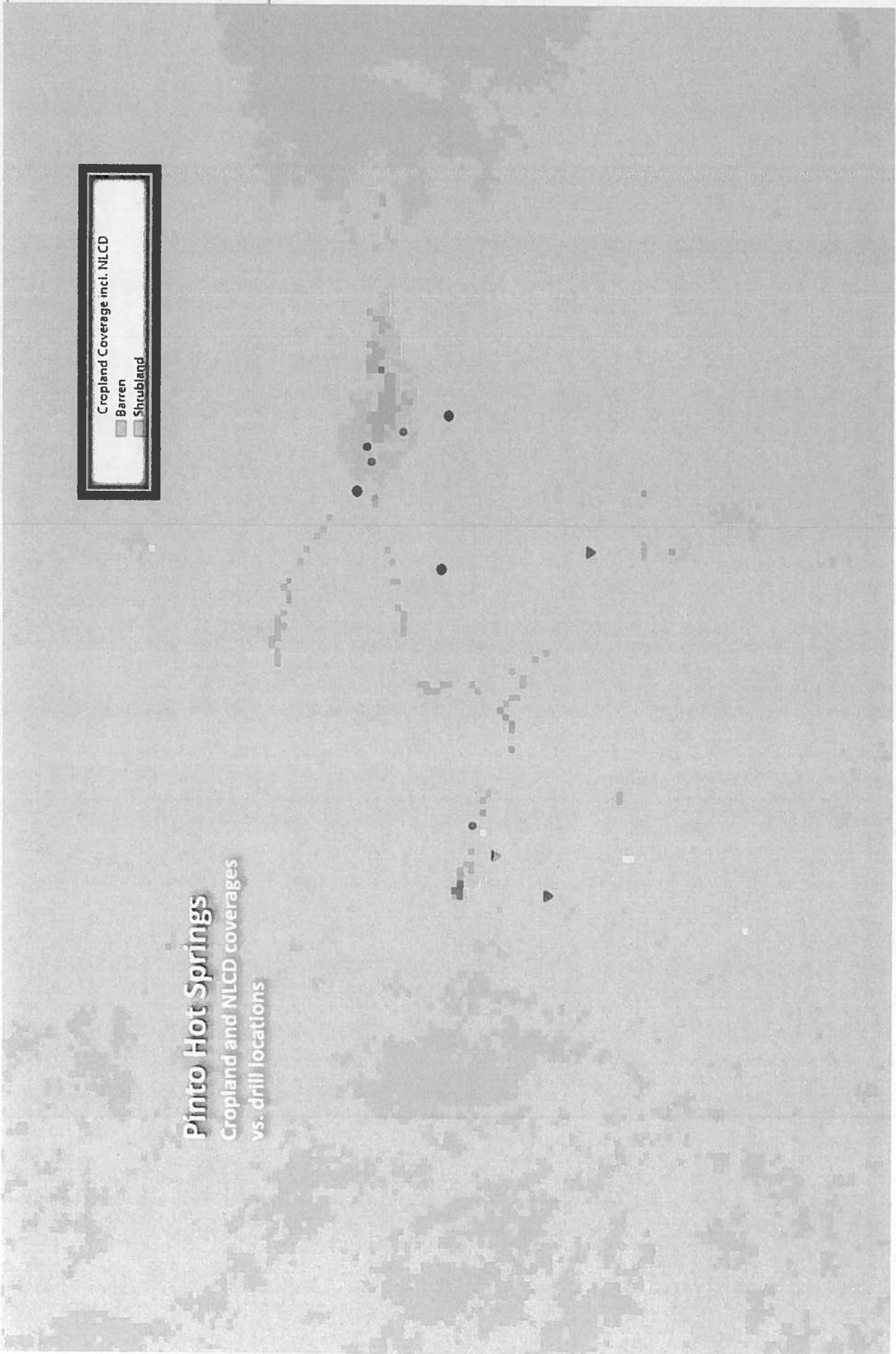
- (11) Existing and planned access roads or ancillary facilities; and
Existing roads will be used and there are no planned new constructions.
- (12) Your source of drill pad and road building material and water supply.
No new material is needed for the well pad or the access roads. Water supply will be determined once final well site locations are approved and selected.
- (d) Show evidence of bond coverage (see §3251.15);
Multiple sites are provided here as options for gradient drilling targets. Only one or two sites will be selected for actual drilling operations (based on approved clearances), and bonds will be posted on those selected sites once approved by BLM.
- (e) Estimate how much surface disturbance your exploration may cause;
100 by 100 ft for the drill pad and ancillary equipment per hole drilled (see previous diagram), resulting in minimal disturbance.
- (f) Describe the proposed measures you will take to protect the environment and other resources;
The following recommended operating procedures will help prevent undue or unnecessary degradation during exploration activities:
1. Springs and seeps will be avoided by maintaining a distance of 400 feet or more.

2. Drill holes are to be backfilled and plugged according to State of Nevada Regulations NAC 534.360 to 534.450 (NRS 534.020, 534.110) once testing operations have ceased.
 3. Existing main roads used as access to project area that are substantially damaged by operations will be repaired to the condition existing prior to operations.
 4. Pursuant to 43 CFR 8365. 1-1 (b)(3), draining of sewage or petroleum products, or dumping of refuse or waste other than wash water from any trailer or other vehicle, except in places or receptacles provided for that purpose, is prohibited.
 5. Operations shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains; or any historical or archaeological sites, structure, building or object, or cave related site on public lands. When the operator discovers any previously unidentified cultural, paleontological, or cave related resource that might be altered or destroyed by the operations, the discovery shall be left intact and reported to the appropriate BLM Field Office (BLM Authorized Officer), which shall evaluate the discoveries, and take action to protect, remove or preserve the resource within 30 working days (43 CFR 3809.420).
 6. Pursuant to 43 CFR 10.4(g), the operator shall notify the BLM Authorized Officer, by telephone with written continuation, immediately upon the discovery of human remains, funeral objects, sacred objects, or objects of cultural patrimony (as defined in 43 CFR 10.2). Further pursuant to 43 CFR 10.4(c) and (d), the operator shall immediately stop all activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the BLM Authorized Officer.
13. Operators are responsible for the spread of noxious weeds caused by operations on the public lands. Operators are advised to be familiar with noxious weeds in the operating area and to take measures to avoid contributing to the spread of noxious weeds.
- (g) Describe methods to reclaim the surface.
The contractor will reclaim the surface per specifications noted in the permit Conditions of Approval.
- (h) Include all other information BLM may require.
Available upon request.
14. Maps showing the locations of wells, land use, land ownership, roads, aerial view, etc. of the proposed drill sites for consideration at the Pinto Hot Spring site in the Winnemucca BLM District Office's area of responsibility are located in the attached excel file: Note, at most one or two wells will be drilled at the site subject to approval by the Winnemucca District Office. In the Excel sheet (and printed on signed document), three maps appear for the general area (with more than one proposed gradient well location for consideration) and are presented below as noted in A, B, C.
- A. shows roads, transmission, faults (if present), thermal features, land use (pink is BLM) and proposed well locations.
 - B. Shows crop land/vegetation distribution relative to drill hole locations.
 - C. Shows aerial photo view of the site with blow-up images of each proposed drill site.

Three maps appear (page down):

- A. shows roads, transmission, faults (if present), thermal features, land use (pink is BLM) and proposed well locations.
- B. Shows crop land/vegetation distribution relative to drill hole locations.
- C. Shows aerial photo view of the overall site plus blow-up images of each drill site.



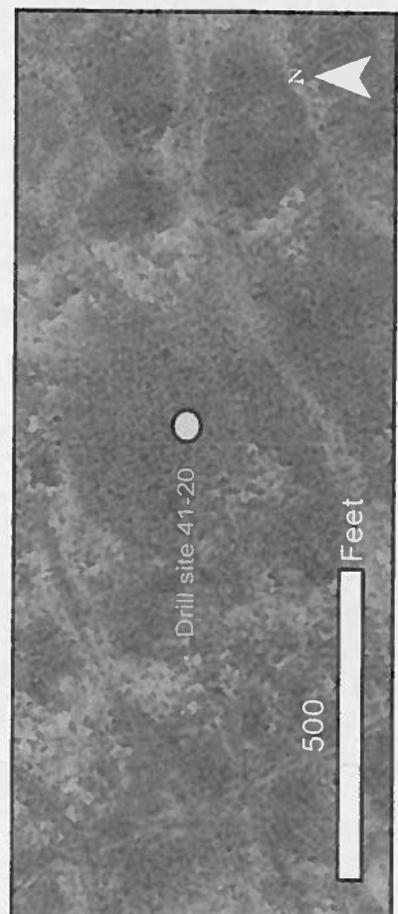
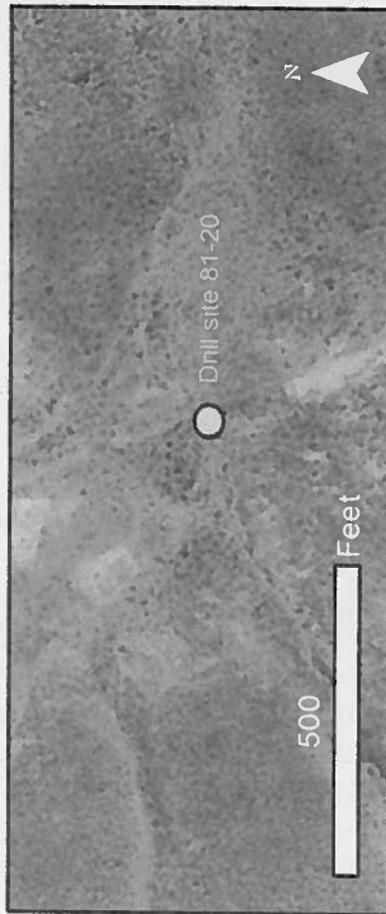
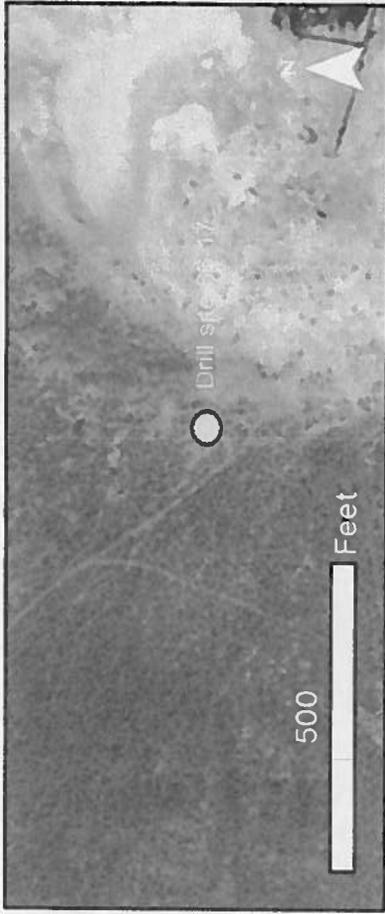
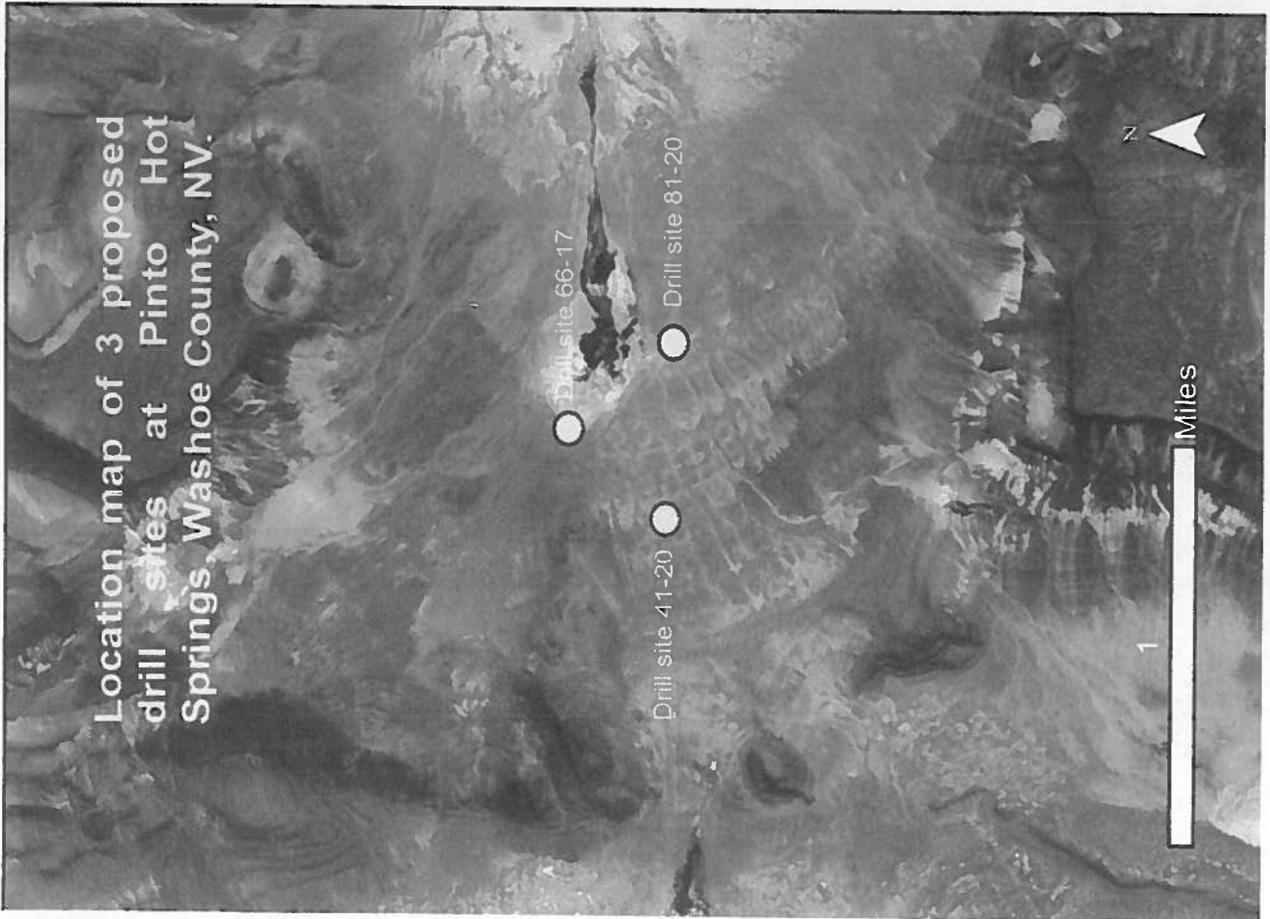


Cropland Coverage incl. NLCD
■ Barren
■ Shrubland

Pinto Hot Springs
Cropland and NLCD coverages
vs. drill locations

B.

C:



**Conditions of Approval
Winnemucca District (WD) Black Rock Field Office (BRFO)
NBMG, Geothermal Temperature Gradient Well Drilling Project**

- A. Terms and conditions derived from H-3150-1 – Onshore oil and Gas Geophysical Exploration Surface Management Requirements.
1. The operator shall contact the Field/District Office at least 48 hours prior to the start of the project to schedule a pre-work conference. The crew supervisor and additional crew chiefs (if needed) will attend the pre-work conference to discuss the terms and conditions for this operation.
 2. The operator's representative will attend a meeting with the BLM to discuss cultural artifacts and potential penalties for tampering with cultural artifacts. The meeting can be held as part of the pre-work conference.
 3. Existing routes and trails will be used to the maximum extent possible... Attempts to traverse irregular, soft, or steep slopes and terrain by all vehicles and equipment shall be kept to a minimum to avoid excessive rutting, soil erosion, excessive crushing of vegetation, and excessive visual impacts. Vehicular travel... will be kept to a minimum and be in a zigzag pattern between source points to reduce straight line disturbances. This procedure does not apply to vehicles following trails or roads.
 4. Vehicular travel shall be suspended when ground conditions are wet enough to cause rutting or other noticeable surface deformation and severe compaction. As a general rule, if vehicles or other project equipment create ruts in excess of four inches deep when traveling cross-country over wet soils, the soil shall be deemed too wet for vehicular use.
 5. The staging area(s) shall be kept clean and free of litter. Appropriate human waste facilities will be provided and properly maintained. Such waste facilities shall be removed from the site upon completion of the project.
 6. Roads will NOT be constructed for geophysical projects authorized under a categorical exclusion.
 7. Operators of vehicles and equipment shall be responsible for not damaging fences and keeping gates as found. As a last resort, should a fence be cut for access, that fence must be repaired to former or better condition, after equipment has passed through.
 8. Shot holes will be backfilled and plugged... Any cuttings resulting from shot hole drilling and not used in backfilling the shot hole will be scattered about the immediate area to blend with natural terrain and reduce visual impacts.
 9. Geophysical equipment may encounter congested areas with trees requiring one or more trees to be removed and or limbed. If such action is needed then the tree(s)

17. All flagging, lath, pin flags, and similar materials used in the seismic project will be removed from public land and disposed of at an authorized landfill.
18. All Applicant-Committed Environmental Protection Measures documented in the applicant's NOI in addition to the NOI terms and conditions will be complied with, and in addition to, these Standard Terms and Conditions as well any additional Conditions of Approval Identified by the BLM Field Office.

B. Additional Conditions of Approval Identified by the BLM Field Office

1. A Class III Cultural Survey is needed prior to any permitted activities to occur.
2. Consultation letters must be sent by authorized officer at WDO HRFO BLM to the affected tribes prior to any permitted activities.
3. It is the responsibility of the Applicant to notify the BLM project lead (Philip D'Amo, 775-623-1567, pdamo@blm.gov) and the biologist (Nancy Spencer-Morris, 775-623-1563, nmorris@blm.gov) of the proposed disturbance and survey dates.
4. Land Clearing or other surface disturbance associated with the proposed action would be conducted outside of the migratory avian breeding season, (March 1- August 31) whenever feasible, to avoid potential destruction of active bird nests. Nests are considered active if they contain eggs or young or if evidence of reproductive behavior (i.e. mated pairs, courtship displays, territorial defense, carrying nesting materials, transporting food, etc.) is observed (Migratory Bird Treaty Act 1918). When surface disturbance must be created during the migratory avian breeding season (March 1- August 31), **a survey performed by a BLM approved biologist following BLM approved methodologies** would be conducted for active nests. This survey would be conducted no more than ten (10) days prior to and no less than three (3) days prior to proposed disturbance activities. The results of the survey must be submitted to and approved by the BLM biologist prior to any surface disturbance. If active nests are located, disturbance activities may be postponed, a protective buffer may be established, or other appropriate protective measures would be instituted to avoid disturbance to the nest or reproductive behaviors until the nests are no longer active. The start and end dates of the seasonal restriction may be based upon site specific information such as species, elevation and weather patterns which affect breeding chronology. The Applicant must notify the BLM biologist a minimum of five (5) working days prior to the proposed survey date to allow time for survey coordination.
5. Vehicular traffic should be restricted to currently established roads or two-tracks.

Bureau of Land Management
Winnemucca District Office

Field Office(s) : [] HRFO [X] BRFO

Categorical Exclusion
Team Review

Applicant: NV Bureau of Mines and Geology
Proposal: Pinto Hot Springs Geothermal Gradient Well N091277
CX#: DOI-BLM-NV-W030-2012-0020-CX

Prepared By: Phil D'Amo

Date: 9/25/12

Name /Title	Resource/Agency Represented	Signature/Date	Comments (Attach if more room is needed)
Mark Hall	Cultural Resources	<i>Mark & Hall</i>	<i>Class III survey needed</i>
Mark Hall	Native American Consultation	<i>Mark & Hall 10/13/12</i>	<i>Draft consultation letter to SAFT.</i>
Nancy Spencer-Morris	T&E (plants and animals)	<i>Nancy Spencer-Morris</i>	<i>10/19/12</i>
Phil D'Amo	Minerals	<i>[Signature]</i>	<i>10/19/12</i>

Continue the list of specialties as necessary

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43 CFR 46.215
Categorical Exclusions: Extraordinary Circumstances

DOI-BLM-NV-WO30-2012-0020-CX

- | <u>Yes</u> | <u>No</u> | | |
|--------------------------|-------------------------------------|-----|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (a) | Have significant impacts on public health or safety |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (b) | Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (c) | Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)]. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (d) | Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (e) | Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (f) | Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (g) | Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (h) | Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (i) | Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (j) | Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898). |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (k) | Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007). |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | (l) | Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112). |

All of the above questions must be answered negatively before the Categorical Exclusion may be approved. This checklist is taken from 43 CFR 46.215

Prepared By: Philip Lorimer D'Amo Date September 25, 2012

Bureau of Land Management
Winnemucca District Office
BRFO (W030)

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Categorical Exclusion

CX#: DOI-BLM-NV-W030-2012-0020-CX

Date: 8/15/2012

Lease / Case File / Serial #: N091277

Regulatory Authority (CFR or Law): 43 CFR Subpart 3250

BLM Manual: N/A

Subject Function Code: 43 CFR Part 3250

Is the project located within a Preliminary Priority Habitat? Yes No

Is the project located within a Preliminary General Priority Habitat? Yes No

Is the project located within a National Landscape Conservation System feature (NCA, Wilderness, WSA, ISA, Scenic or Historic Trails)? Yes No

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1. BLM District Office: Winnemucca District Office
 2. Name of Project Lead: Philip Lorimer D'Amo
 3. Project Title: Pinto Hot Springs Geothermal Gradient Well Drilling
 4. Applicant: Nevada Bureau of Mines and Geology
 5. Project Description: (briefly describe who, what, when, where, why, how)

NBMG has submitted a NOI for geothermal exploration to conduct Geothermal Gradient Well Drilling in the Pinto Hot Springs area on Public lands intended to gather information with the intent on improving the methods and accuracy of geothermal exploratory operations. Exploration activities would be performed in a time frame between approval of the NOI and 12/30/13. The geothermal gradient well drilling would include no more than 2 total wells out of a proposed 7 wells. Three of these proposed well locations are in this Black Rock jurisdiction at Pinto Hot Springs while the other 4 are being proposed under the Humboldt River jurisdiction at Desert Queen. These wells are proposed to be drilled to a total depth of 1000 feet. The first portion of the hole is planned to be drilled to 250 feet at a diameter of 8.5 inches. A 7 inch surface casing would be cemented in place with class C cement. A 6 1/8 inch drill bit would then be used to drill the remaining 750 feet.

NBMG proposed to have surveyed the route to, and the area of, the proposed drilling by the use of a qualified archeologist. If resources are identified in the proposed test route, the path of the equipment would be rerouted to avoid archeological resource occurrences. If sites cannot be

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avoided, the drilling location would be eliminated.

Project dimensions (length, width, height, depth): 100 feet by 100 feet for each of the two possible locations.

Total Acres: 0.46 acres

BLM Acres: 0.46 acres

Will the project result in new surface disturbance? Yes No

Has the project area been previously disturbed? Yes No N/A

If yes, what percent of the project area has been disturbed? 0% . If only part of the project area has been disturbed, indicate disturbed area on map. Describe disturbance (and attach photo of disturbed area if you have one):

6. Legal Description: T. 40 N., R. 28 E., sec. 17, S 1/2 SE 1/4
T. 40 N., R. 28 E., sec. 20, NW 1/4 NE 1/4
T. 40 N., R. 28 E., sec. 20, SE 1/4 NE 1/4

USGS 24k Quad name: Battle Creek Ranch

100k map name: Jackson Mountains

Land Status: BLM Private Other _____

Part I: Plan Conformance Review

The Proposed Action is subject to the:

- Paradise-Denio Management Framework Plan
- Sonoma-Gerlach Management Framework Plan
- Black Rock Desert-High Rock Canyon Emigrant Trails NCA and Associated Wilderness and Other Contiguous Lands in Nevada RMP

The proposed action is in conformance with the applicable Land Use Plan (LUP) because it is specifically provided for in the following LUP decision(s):

Objective M 5 of the Paradise-Denio MFP states "Make energy resources available on all public lands and other lands containing federally owned minerals." The MFP III provides for the development of geothermal resources in noncompetitive areas and all Known Geothermal Resource Areas (KGRAs) except those which are areas of significant environmental conflict or have historical and/or cultural significance.

Part II: NEPA Review

Categorical Exclusion Review: This Proposed Action qualifies as a categorical exclusion under:

43 CFR 46.210 DOI Implementation of NEPA of 1969, Listing of Departmental Categorical Exclusions (*formerly 516 DM2 Appendix 1*)

516 DM 11.9, (BLM) B.6. Approval of Notices of Intent to conduct geophysical

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Applicant: Nevada Bureau of Mines and Geology

Project Title: Pinto Hot Springs Geothermal Gradient Well Drilling

exploration of oil, gas, or geothermal, pursuant to 43 CFR 3150 or 3200, when no temporary or new road construction is proposed.

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Applicant: Nevada Bureau of Mines and Geology
Project Title: Pinto Hot Springs Geothermal Gradient Well Drilling

ESA and BLM Sensitive Status Species

Evaluation Criteria	Yes	No
1. Are species listed under the Endangered Species Act likely to occur in the project area? If yes, list the species in Table 1 below. Verify with USFWS or use approved list.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are BLM NV Sensitive Species, based upon the current IM, likely to occur in the project area? If yes, list the species in the Table 1 below.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Could the proposed action result in "take" under the Migratory Bird Treaty Act? If yes, attach appropriate mitigation measures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Table 1. Special Status Species that may occur in the project area:

ESA	BLM	Common (Scientific) Name	May Be Affected?	Mitigation for BLM Sensitive Species (Attach ESA Section 7 Compliance to Form)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Brewer's blackbird (<i>Euphagus cyanocephalus</i>)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See mitigations for migratory birds
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Loggerhead shrike (<i>Lanius ludovicianus</i>)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	See mitigations for migratory birds
<input type="checkbox"/>	<input type="checkbox"/>	Ferruginous hawk (<i>Buteo regalis</i>) Golden eagle (<i>Aquila chrysaetos</i>)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	may use the area for foraging

Table 2 Migratory Bird Treaty Act Consideration

Potential MBTA Species w/in the Project Area Common (Scientific) Name	May Be Affected ?	Recommended Mitigation

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<p>Species listed in this document are representative, but not exclusive of migratory birds typically associated with this habitat.</p> <p>Black-throated sparrow (<i>Amphispiza bilineata</i>) Brewer's sparrow (<i>Spizella breweri</i>) Canyon wren (<i>Catherpes mexicanus</i>) Common poorwill (<i>Phalenoptilus nuttalli</i>) Gray flycatcher (<i>Epidonax wrightii</i>) Green-tailed towhee (<i>Pipilo chlorurus</i>) Horned lark (<i>Eremophila alpestris</i>) Prairie falcon (<i>Falco mexicanus</i>) Rock wren (<i>Salpinctes obsoletus</i>) Sage sparrow (<i>Amphispiza belli</i>) Sage thrasher (<i>Oreoscoptes montanus</i>) Vesper sparrow (<i>Poocetes gramineus</i>) Western Burrowing owl (<i>Athene cucularia</i>) Western meadowlark (<i>Sturnella neglecta</i>)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>By implementing the following mitigations the proposed project should not negatively affect these species.</p> <p>It is the responsibility of the Applicant to notify the BLM project lead and biologist of the proposed disturbance and survey dates.</p> <p>Land clearing or other surface disturbance associated with the proposed action would be conducted outside of the migratory avian breeding season, (March 1-August 31) whenever feasible, to avoid potential destruction of active bird nests. Nests are considered active if they contain eggs or young or if evidence of reproductive behavior (i.e. mated pairs, courtship displays, territorial defense, carrying nesting materials, transporting food, etc.) is observed (MBTA 1918). When surface disturbance must be created during the migratory avian breeding season (March 1 – August 31), a survey performed by a BLM approved biologist following BLM approved methodologies would be conducted for active nests. This survey would be conducted no more than ten (10) days prior to and no less than three (3) days prior to proposed disturbance activities. The results of the survey must be submitted to and approved by the BLM biologist prior to any surface disturbance. If active nests are located, disturbance activities may be postponed, a protective buffer may be established, or other appropriate protective measures would be instituted to avoid disturbance to the nest or reproductive behaviors until the nests are no longer active. The start and end dates of the seasonal restriction may be based upon site-specific information such as species,</p>
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		<p>elevation, and weather patterns which affect breeding chronology. The Applicant must notify the BLM biologist a <i>minimum</i> of five (7) work days prior to the proposed survey date to allow time for survey coordination.</p> <p>Vehicular traffic should be restricted to currently established roads or two-tracks.</p>
	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Mitigation Measures/Remarks: If the ID team identifies mitigation, include here and copy into any applicable standard stipulations, conditions of approval, terms of conditions, etc. that would be attached to the permit. State "See Attached" and attach a copy to the CX. If there are none, **DELETE** this text.)

The Proposed Action has been reviewed to determine if any exceptions described in 43 CFR 46.215 Categorical Exclusions: Extraordinary Circumstances apply. (See attached page)

Part III: DECISION:

I have reviewed this plan conformance and NEPA compliance record and have determined that the proposed project is in conformance with the approved land use plan and that no other environmental analysis is required.

Project authorization is subject to mitigation measures identified above. (This is a NEPA Decision. A separate program implementation decision is necessary.)

It is my decision to allow for implementation of the project, as described, with the mitigation measures identified above and attached as stipulations, conditions of approval, terms of conditions, etc. This is a combined NEPA and program implementation decision.

Authorized Official


(Signature)

Date: 10-26-12

Administrative Review or Appeal Opportunities

A person who wishes to appeal to the Interior Board of Land Appeals must do so under 43 CFR 4.411 and must file in the office of the officer who made the decision (not the board), in writing to Gerald Dixon, Field Office Manager, Black Rock Field Office, 5100 East Winnemucca Boulevard, Winnemucca, Nevada 89445. A person served with the decision being appealed must transmit the notice of appeal in time to be filed in the office where it is required to be filed within thirty (30) days after the date of service.

The notice of appeal must give the serial number or other identification of the case and may include a statement of reasons for the appeal, a statement of standing if required by § 4.412(b), and any arguments the appellant wishes to make. Form 1842-1 provides additional information regarding filing an appeal.

No extension of time will be granted for filing a notice of appeal. If a notice of appeal is filed after the grace period provided in §4.401(a), the notice of appeal will not be considered and the case will be closed by the officer from whose decision the appeal is taken. If the appeal is filed during the grace period provided in §4.401(a) and the delay in filing is not waived, as provided in that section, the notice of appeal will not be considered and the appeal will be dismissed by the Board.

The appellant shall serve a copy of the notice of appeal and any statements of reason, written arguments, or briefs under §4.413 on each adverse party named in the decision from which the appeal is taken and on the Office of the Solicitor, Pacific Southwest Regional Solicitor, U.S. Department of the Interior, 2800 Cottage Way, Room E-2753, Sacramento, California 95825-1890. Service must be accompanied by personally serving a copy to the party or by sending the document by registered or certified mail, return receipt requested, to the address of record in the bureau, no later than 15 days after filing the document.

In addition, within thirty (30) days of receipt of this decision you have the right to file a petition for a stay together with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the same parties specified above.

CX#: DOI-BLM-NV-W0-2012-0020-CX
Applicant: Nevada Bureau of Mines and Geology
Project Title: Pinto Hot Springs Geothermal Gradient Well Drilling

In addition, within thirty (30) days of receipt of this decision you have the right to file a petition for a stay together with your appeal in accordance with the regulations at 43 CFR 4.21. The petition must be served upon the same parties specified above.

Pursuant to 43 CFR 4.47I(c), a petition for stay, if filed, must show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied;
- (2) The likelihood of the appellant's success on the merits;
- (3) The likelihood of immediate and irreparable harm if the stay is not granted; and,
- (4) Whether the public interest favors granting the stay.

43 CFR 4.471 (d) provides that the appellant requesting a stay bears the burden of proof to demonstrate that a stay should be granted.

At the conclusion of any document that a party must serve, the party or its representative must sign a written statement certifying that service has been or will be made in accordance with the applicable rules and specifying the date and manner of such service (43 CFR 4.422(c)(2)).

Bureau of Land Management
Winnemucca District Office
BRFO (W030)

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Categorical Exclusion/Cultural Resources Inventory Needs Assessment Form

CX#: DOI-BLM-NV-W030-2012-0020-CX

Date: 8/15/2012

Lease / Case File / Serial #: N091277

Regulatory Authority (CFR or Law): 43 CFR Subpart 3250

BLM Manual: N/A

Subject Function Code: 3250

Is the project located within a Preliminary Priority Habitat? Yes No

Is the project located within a Preliminary General Priority Habitat? Yes No

Is the project located within a National Landscape Conservation System feature (NCA, Wilderness, WSA, ISA, Scenic or Historic Trails)? Yes No

1. BLM District Office: Winnemucca District Office

2. Name of Project Lead: Philip Lorimer D'Amo

3. Project Title: Pinto Hot Springs Geothermal Gradient Well Drilling

4. Applicant: Nevada Bureau of Mines and Geology

5. Project Description: (briefly describe who, what, when, where, why, how)

NBMG has submitted a NOI for geothermal exploration to conduct Geothermal Gradient Well Drilling in the Pinto Hot Springs area on Public lands intended to gather information with the intent on improving the methods and accuracy of geothermal exploratory operations.

Exploration activities would be performed in a time frame between approval of the NOI and 12/30/13. The geothermal gradient well drilling would include no more than 2 total wells out of a proposed 7 wells. Three of these proposed well locations are in the Black Rock jurisdiction at Pinto Hot Springs while the other 4 are being proposed under the Humboldt River jurisdiction at Desert Queen. These wells are proposed to be drilled to a total depth of 1000 feet. The first portion of the hole is planned to be drilled to 250 feet at a diameter of 8.5 inches. A 7 inch surface casing would be cemented in place with class C cement. A 6 1/8 inch drill bit would then to be used to drill the remaining 750 feet.

NBMG proposed to have surveyed the route to, and the area of, the proposed drilling by the use of a qualified archeologist. If resources are identified in the proposed test route, the path of the equipment would be rerouted to avoid archeological resource occurrences. If sites cannot be

CX#: DOI-BLM-NV-W030-2012-0020-CX

Applicant: Nevada Bureau of Mines and Geology

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avoided, the drilling location would be eliminated.

Project dimensions (length, width, height, depth): 100 feet by 100 feet for each of the two possible locations.

Total Acres: 0.46 acres

BLM Acres: 0.46 acres

Will the project result in new surface disturbance? Yes No

Has the project area been previously disturbed? Yes No N/A

If yes, what percent of the project area has been disturbed? 0% . If only part of the project area has been disturbed, indicate disturbed area on map. Describe disturbance (and attach photo of disturbed area if you have one):

- 6. Legal Description: T. 40 N., R. 28 E., sec. 17, S 1/2 SE 1/4
- T. 40 N., R. 28 E., sec. 20, NW 1/4 NE 1/4
- T. 40 N., R. 28 E., sec. 20, SE 1/4 NE 1/4

USGS 24k Quad name: Battle Creek Ranch

100k map name: Jackson Mountains

Land Status: BLM Private Other _____.

7. Maps located at:

T:\WV\GIS Work\WMDO\Projec\Minerals\Leaseable\Geotherma\NBGM Geothermal
or PDFs:

S:\Needs Assessment\NBMG\Pinto Springs

CX#: DOI-BLM-NV-W030-2012-0020-CX

Applicant: Nevada Bureau of Mines and Geology

Project Title: Pinto Hot Springs Geothermal Gradient Well Drilling

8. To be completed by Cultural Resource Specialist (CR):

Area of Potential Effect:

APE Acreage: 0.46 acres

Records Check:

Records Examined: BLM and NVCRIS databases

Results: Site CrNV-22-7653 is within 1 mile of the proposed well pad locations. This site is reported in CR2-2869.

Inventory Type Needed:

- None _____
- Categorical Exemption (Number _____)
- Reconnaissance _____
- Class I _____
- Class II _____
- Class III X
- Architectural _____

Rationale for Inventory Type determination: No Class III surveys have been performed at any of the wellpad locations nor routes to the well pads.

Tribal Notification/Consultation Needs: Yes

Rationale: In the traditional area of the Summit Lake Paiute Tribe and the Fort McDermitt Paiute and Shoshone tribe.

Tribe(s) to be contacted: Fort McDermitt Paiute and Shoshone tribe, and the Summit Lake Paiute Tribe

Public Notification Needs: none

Rationale: Temporary disturbance; will be reclaimed afterwards.

Person(s), group(s) to be contacted: none.

CRS Approval: S/Mark E. Hall *Mark E. Hall*

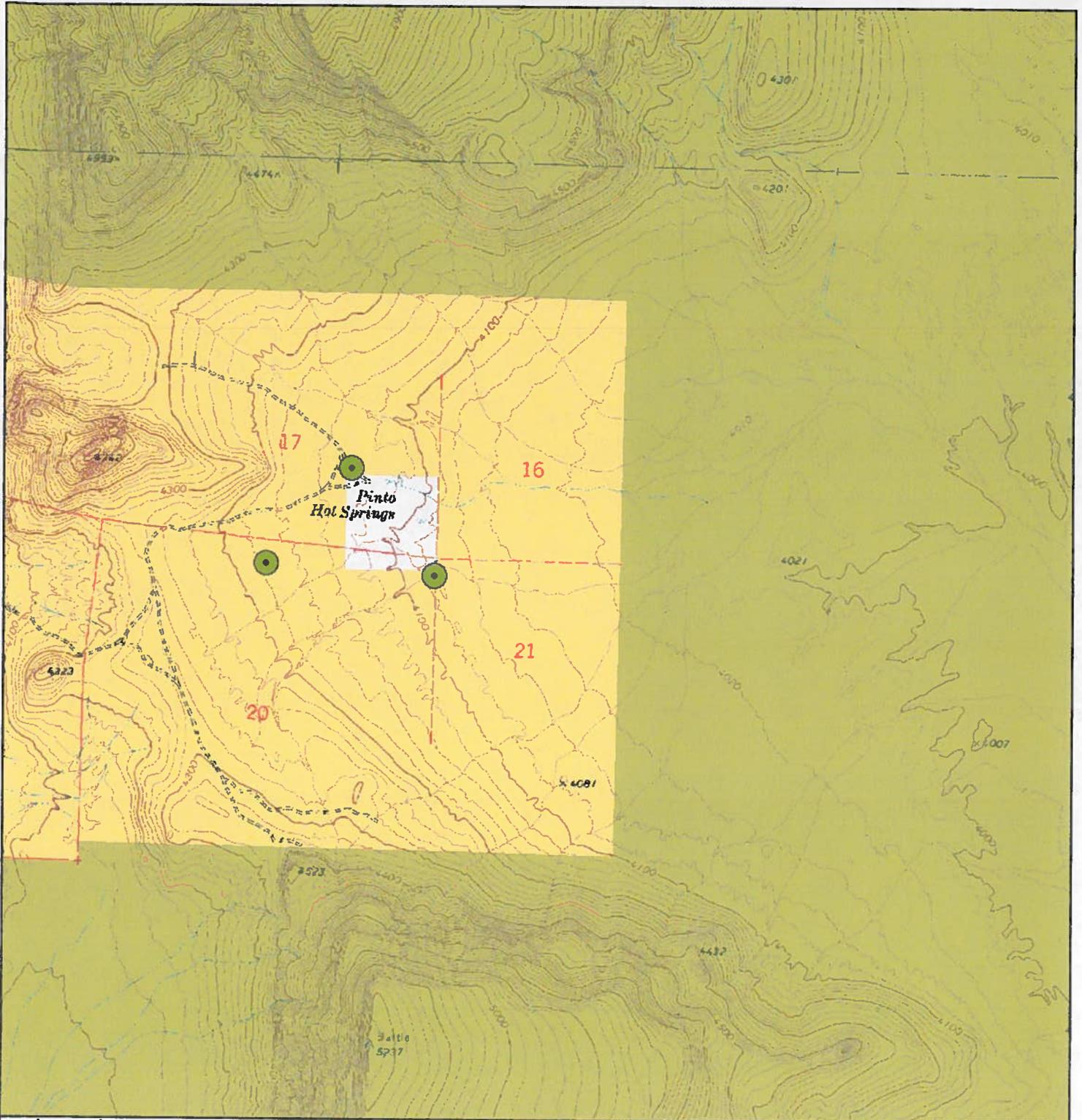
Date: 9/9/2012

Field or other appropriate Manager Concurrence: *David E. [Signature]*

Date: 10-5-12

Pinto Hot Springs CV, Proposed Temperature Well Drill Sites

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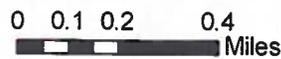


Legend

- | | |
|------------------------------|-------------------|
| BLM Wilderness | NDOT Roads |
| BLM NCA | TYPE |
| Land Status | Interstate |
| Agency | US Highway |
| Bureau of Land Management | State Route |
| Private | NEPA Point |
| BLM Sage Grouse Class | |
| Preliminary Priority Habitat | |
| Preliminary General Habitat | |
| Areas to be completed | |

Battle Creek Ranch, NV
USGS 7.5' Quadrangles
T.40 N., R.28 E., sec. 17, 20, 21

Winnemucca District Office
Humboldt River Field Office
5100 E. Winnemucca Blvd
Winnemucca, NV 89445



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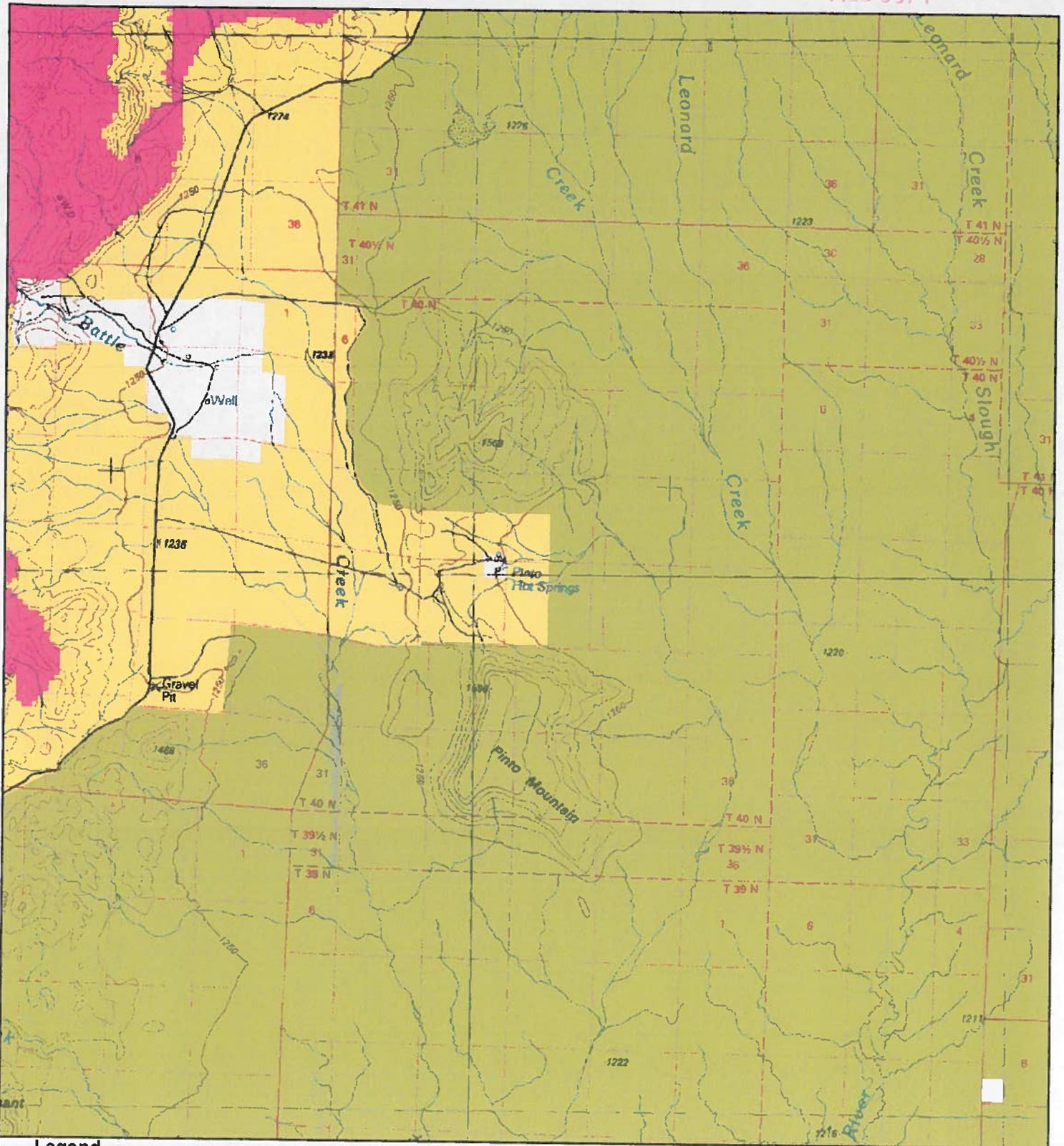
4/17/2012



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Pinto Hot Springs Proposed Drill Sites

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Legend

- | | |
|------------------------------|-------------------|
| BLM Wilderness | NDOT Roads |
| BLM NCA | TYPE |
| Land Status | Interstate |
| Agency | US Highway |
| Bureau of Land Management | State Route |
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Battle Creek Ranch, NV
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4/17/2012



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