

**Bureau of Land Management
Winnemucca District Office
Categorical Exclusion**

<input checked="" type="checkbox"/> HRFO (1000)	<input type="checkbox"/> BRFO (3000)	<input type="checkbox"/> District ()
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LLNV-WO1000-2009-0034-CX	Date: July 1, 2009
Project Title: 2-meter temperature gradient wells	Project Lead: Sheila Mallory
Applicant: TGP Dixie Development Company, LLC (TGP)	File Code (43 CFR) :3250
Location: T. 25 N., R. 35 E., sections 1, 2, 10, 12, 22, 28, and 32; T. 25 N., R. 36 E., section 2, 4, and 6; T. 26 N., R. 35 E., Section 24, 27, 32, and 36; T. 26 N., R. 36 E., section 10, 22, 26, 28, 34, and 36	Lease/ Case File/ Serial #: NVN-087792

Description of Proposed Action: TGP is proposing to map temperature variations below the earth's surface by installing 2-meter temperature gradient probes placed on a ¼ mile grid out a ¾ mile distance (see attached map). The surveyors would implant 2.2 m long, ¼ inch diameter steel probes into the ground surface at depths of up to 2 meters. The probes would be driven into the ground using a handheld ¾ inch demolition hammer. Power for the hand held hammer would be supplied by a 2.4 kW generator. The probe would remain in the ground for approximately one hour to ensure temperature stabilization. Upon stabilization, a thermocouple would be inserted into the probe and readings would be taken. Some thermocouples would remain in the ground for up to 24 hours. A GPS will be used to record the coordinates of all temperature measurement locations. A car jack would be used to remove the rod from the ground if it cannot be removed by hand. The probes, thermocouple, data loggers, demolition hammer, generator, and other equipment would fit into an ATV, and the tailgate of the ATV would serve as a working platform for hammering the probes into the ground.

No new roads or pads would be constructed for this project. ATVs would use existing roads where possible; however over land travel would also be required. ATVs would not pass over the same area more than twice. In addition, the ATVs would be equipped with balloon tires to prevent rutting and minimize erosional and vegetation impacts. All holes would be filled in.

It is anticipated that the survey would take approximately two weeks. The proponent would like to begin the project between June 22 and July 31, 2009.

Because the project is proposed during migratory bird nesting season (March 15-July 15), a biologist would conduct a nest survey around each well site, approximately 50 feet by 50 feet no sooner than two weeks prior to exploration. In the event that a occupied nest is identified in a area in which the survey is proposed, the site would be avoided and alternative route will be used. In the event that the survey is delayed until after the Migratory bird season, no survey would be conducted.

For all geophysical exploration activities, TGP will adhere to BLM Standard Terms and Conditions for geophysical exploration as outlined in H-3150-1-Onshore Oil and Gas Geophysical Exploration Surface Management Requirements, which are included as Attachment 1, as well as additional Conditions of Approval developed by the Humboldt River Field Office.

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 has been reviewed for conformance with this plan (43 CFR 1610.5, BLM Manual 1617.3).

Part II: NEPA Review

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

Bureau of Land Management
Winnemucca District Office

Field Office(s): HRFO BRFO



Categorical Exclusion
Team Review

Applicant: TGP Dixie Development Company,
LLC (TGP)
Proposal: 2-meter temperature gradient wells
CX#: LLNV-W01000-2008-34-CX

Prepared By: Sheila Mallory

Date: July 1, 2009

Name/Title Signature Date

Celeste Mimnaugh, Wildlife, T&E		7/2/09
Patrick Haynal, Archaeology Peggy McGuckian		7-7-09

43 CFR 46.215
Categorical Exclusions: Extraordinary Circumstances

LLNV-WO 1022-2009-34-CX

- | <u>Yes</u> | <u>No</u> | |
|------------|-----------|--|
| [] | [X] | (a) Have significant impacts on public health or safety |
| [] | [X] | (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. |
| [] | [X] | (c) Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)]. |
| [] | [X] | (d) Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. |
| [] | [X] | (e) Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects. |
| [] | [X] | (f) Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. |
| [] | [X] | (g) Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau. |
| [] | [X] | (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. |
| [] | [X] | (i) Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment. |
| [] | [X] | (j) Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898). |
| [] | [X] | (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). |
| [] | [X] | (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: Sheila Mallory Date July 1, 2009

[X] 516 DM11.9, (BLM) B(6) "Approval of Notices of Intent to conduct geophysical exploration of oil, gas, or geothermal, pursuant to 43 CFR 3150 or 3250, when no temporary or new road construction is proposed."

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

Mitigation Measures/Remarks: See Attached

Reviewer (Environmental Coordinator)

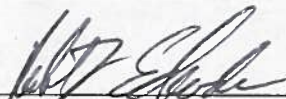

(Signature)

9/10/09
(Date)

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. It is my decision to implement the project, as described, with the mitigation measures identified above.

Remarks reserved for authorized officer:

Authorized Official


(Signature)

Date:

7/16/2009

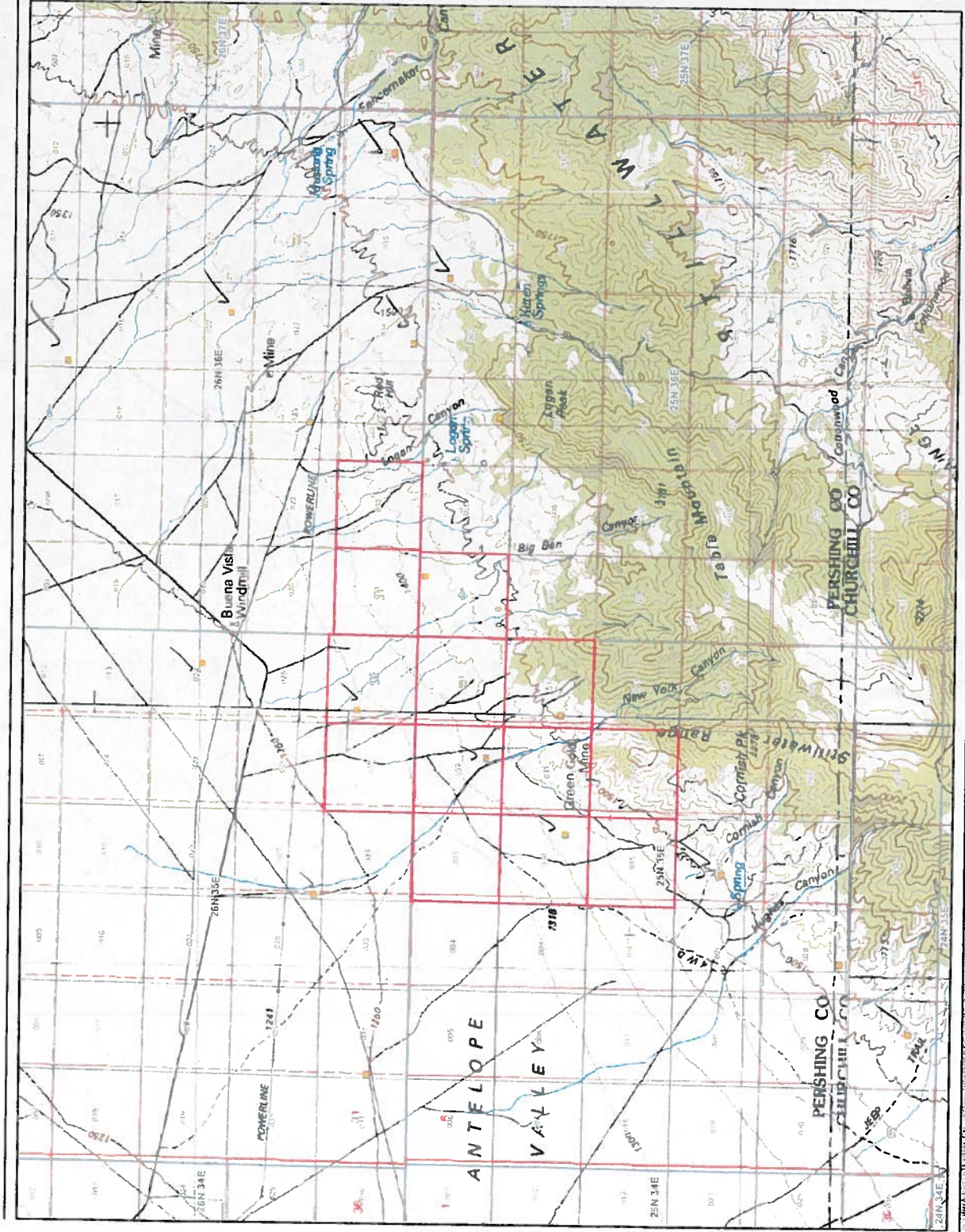
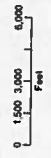
Administrative Review or Appeal Opportunities

See 43 CFR 4.401(a) Part 4 for general rules relating to procedures and practice involving appeals.



- ▭ New York Canyon Lease
- ▭ 2 M Temperature Gradient Well (40'x40')
- ▭ Township/Range Boundary
- ▭ Section Boundary

Lease Numbers:
 N-74854
 N-76298
 N-76299
 N-76300
 N-76301



Terra-Gen Power, LLC
 Northern Nevada Geothermal Project
 Two Meter Temperature Gradient Wells

