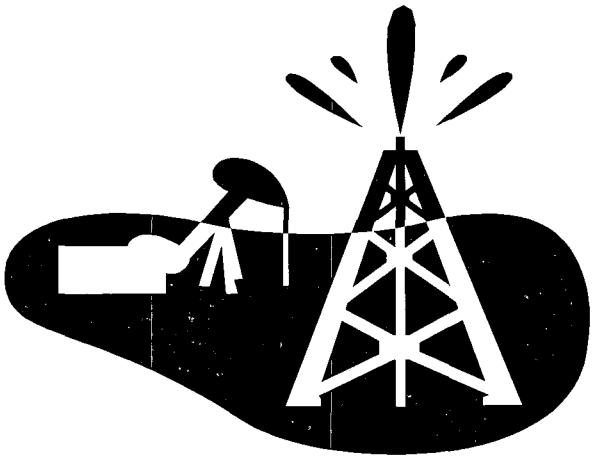


TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Steve Brown, Rosen Powes 801-374-3314

FROM: David Brooks

DATE: 11-13-08

PAGES: 3

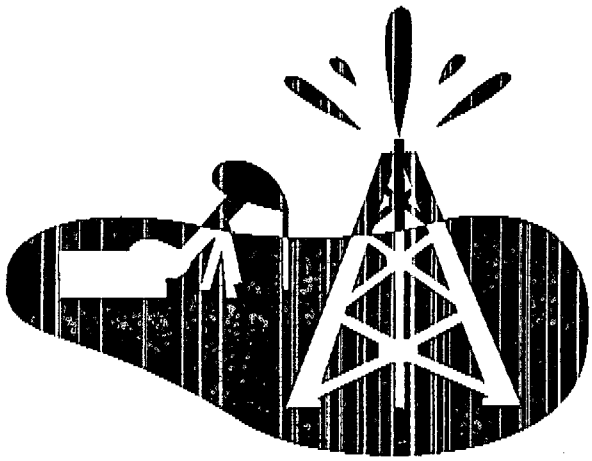
SUBJECT: Lightning Dock Geothermal

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.

TRANSMISSION VERIFICATION REPORT

TIME : 11/13/2008 16:56
NAME : EMNRD SSB
FAX : 5054763274
TEL : 5054763276

DATE,TIME	11/13 16:54
FAX NO./NAME	918013743314
DURATION	00:01:32
PAGE(S)	03
RESULT	OK
MODE	STANDARD



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

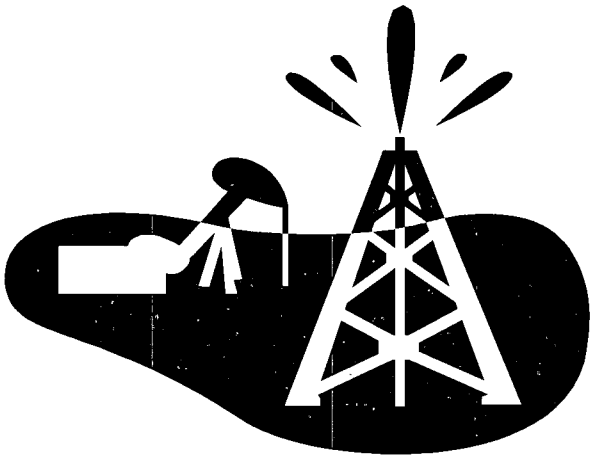
PLEASE DELIVER THIS FAX:

TO: Steve Brown, Raven Powers 801-374-3314

FROM: David Brooks

DATE: 11-13-08

PAGES: 3



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Dr. Damon Seawright, Americulture 575-548-2631

FROM: David Brooks

DATE: 11-13-08

PAGES: 3

SUBJECT: Lightning Dock Geothermal

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.

AmeriCulture

July 11, 2008

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
Attn: Carl Chavez
1220 S. Saint Francis Drive
Santa Fe, NM 87505

Subject: Request for Public Hearing, pursuant to Notice of Publication by Los Lobos Geothermal, LLC for application GT-001 Lightning Dock Geothermal No. 1

Dear Carl,

We have reviewed the information found on the OCD website pertaining to the above notice. Based on this review, and in response to the Notice of Publication, we hereby request a public hearing that will allow AmeriCulture and other concerned parties to discuss Los Lobos Geothermal, LLC's proposed geothermal power generation project in Animas, New Mexico before the Oil Conservation Commission. We do not believe that the proposed injection scheme and wells comply with the intent or requirements of the rules and statutes of the State of New Mexico that govern water rights, geothermal operations, and geothermal well construction practices:

1. Burgett Geothermal and AmeriCulture utilize a shallow geothermal reservoir contained within a highly silicified Gila Conglomerate host within the outflow plume of the Lightning Dock geothermal system. Isotope and geochemical studies on production water shows the shallow geothermal fluids are dominated by outflow of deep-seated geothermal fluids with hardly any mixing with shallow cold ground water. The deeper geothermal reservoir is the presumptive target of Los Lobos Geothermal (LLG). Overproduction of this reservoir will result in the rapid thermal depletion of the shallower reservoir that both longstanding businesses rely upon, threaten the State's water interest and impair existing water rights and geothermal users.
2. Over production of the shallow reservoir will create a pressure gradient between the shallow geothermal reservoir and cold groundwater aquifer and induce mixing. Because the small geothermal reservoir is confined, pressure or head changes are transmitted more quickly across the reservoir at all depth intervals and locations compared to unconfined or semi-confined groundwater aquifers. Injection south and southeast will force cold geothermal and ground water to flow in and mix in the current geothermal production area. Planned production and injection by LLG will "quench" the shallow outflow plume reservoir with cold injection at the bottom and induced cold ground water inflow at the top. Thermal break through of cold water

25 Tilapia Trail, Animas, NM 88020 • Ph: 505.548.2328 Fax: 505.548.2631
e-mail: damon@americulture.com • www.americulture.com

into the LLG production wells in the deep reservoir will occur also from over production and poorly cited injection wells.

3. A 48 hr pump test of the AmeriCulture State 1 well shows that the deeper reservoir (encountered in Steam Reserve 55-7) is in hydraulic connection with the shallow outflow reservoir. This is the only pump test ever conducted at Lightning Dock to assess reservoir transmissivity, reservoir boundaries, and storage. A total or aggregate continuous production on the reservoir approaching or exceeding 2,000 gpm may result in significant long-term drawdown and affect adjacent shallow ground water rights in the Animas basin. The reservoir is already produced in excess of 1,000 gpm for at least the colder months and days of a year. More reservoir tests and geochemistry are required to understand sustainability of the resource for power production in excess of 1 to 2 MWe.
4. Heat flow information indicates that the total natural heat out put is less than 10 MWt (megawatt thermal). This is a very small geothermal system in terms of area and reservoir volume. The natural heat output is driven by a very intense (and almost point source) of thermal upflow. Injection and thermal sweep may be feasible with a larger system with the same thermal output. However, mining heat in this system is not sustainable for any reasonable period of time and will adversely affect current direct-use operations that are more important to the economy of the area than small-scale commercial electrical power generation.
5. The subsurface geology and hydrogeology relating to proposed injection wells 42-18, 62-18 and 82-18 are unknown. Furthermore, there is no mention of confining or cap rock and reservoir units and their depth ranges or thicknesses. As a result, the drilling program is grossly generic and not specific to the subsurface conditions at Lightning Dock. Accordingly, these wells should only be permitted as exploratory test holes until testing and the Class V injection well permitting process is complete within the Water Quality Control Commission (WQCC) procedures.
6. The thickness and depth of the freshwater zones stated in the permit are incorrect. Furthermore, the permit conductor casing (63 ft) does not agree with the casing program in the Drilling Plan (minimum 90 ft and a maximum 200 ft). It is uncertain whether 200 feet is long enough to protect shallow fresh ground water while drilling the surface 13 3/8 inch string to 1,500 ft. Justification for this important aspect of the well design should be included with the permit application.
7. All well applications have the same design even though the wells are in located in different locations from a subsurface geology standpoint. A discussion of the formation or criteria used to select the casing points should be included in the permit application.
8. There has been no well testing in the area of the well permits and therefore reservoir properties are unknown. This is especially critical for the injection wells in order to avoid destruction of the resource and thermal breakthrough on existing production wells.
9. It is inappropriate to simultaneously permit the 3 injection wells with the 5 production wells because there is no requirement to consider geohydrologic data gathered during an initial drilling effort in the location and construction of the injection wells.

surface facilities, and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges in order to protect fresh water.

The division will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in requesting further information, submitting comments or requesting to be on a facility-specific mailing list for future notices may contact Wayne Price, Environmental Bureau Chief of the Oil Conservation Division, at 1220 S. St. Francis Drive, Santa Fe, NM 87505, (505) 476-3490. The discharge permit application and draft permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. The discharge permit application and draft permit are also posted on the division's web site: http://www.emnrd.state.nm.us/ocd/ENV-DraftPublicEtc.htm.

The rule governing public participation at the hearing is 20.6.2.3110 NMAC. Any person who wishes to present technical evidence at the hearing must, at least 10 days before the hearing, file with the division and serve on the applicant a statement of intent to present evidence. The filing may be mailed to the division at the above address, or faxed to the division at (505) 476-3462, attention Wayne Price. The statement must include the name of the person filing the statement; indicate whether the person supports or opposes the proposed discharge plan proposal; give the name of each witness; estimate of the length of the direct testimony of each witness; provide a list of exhibits, if any, to be offered into evidence at the hearing; and provide a summary or outline of the anticipated direct testimony of each witness. A person who does not file a statement of intent to present evidence may present a general non-technical statement in support of or in opposition to the proposed discharge plan. At the hearing, all persons shall be given a reasonable chance to submit data, views or arguments orally or in writing and to examine witnesses testifying at the hearing.

Unless otherwise allowed by the hearing officer, testimony shall be presented in the following order: testimony by and examination of the applicant supporting the facts relied upon to justify the proposed discharge plan and demonstrate that it meets the requirements of the regulations; testimony by and examination of technical witnesses supporting or opposing approval, or supporting or opposing conditional approval, in any reasonable order; testimony by the general public; and rebuttal testimony, if appropriate.

The hearing officer shall issue a report within thirty days after the close of the hearing record. The report shall be served on the applicant, the division, and all persons who

request copies in advance in writing. The report will also be available for public inspection at the division's office in Santa Fe and at the Artesia district office, 1301 West Grand Ave., Artesia, NM 88210. The director shall issue a decision in the matter no later than thirty days after receipt of the hearing report. The decision shall be served on the applicant, the division, and all persons who request copies in writing. The decision will also be available for public inspection at the division's office in Santa Fe and at the Artesia district office and on the division's website.

If you are a person with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing, please contact Mr. Wayne Price at (505) 476-3490 or through the New Mexico Relay Network (1-800-659-1779) at least ten days prior to the hearing, so the division can make reasonable accommodations.

Para obtener más información sobre esta solicitud en español, sirvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México), Oil Conservation Division (Depto. Conservacio´n Del Petróleo), 1220 South St. Francis Drive, Santa Fe, New México 87505 (Contacto: Dorothy Phillips, 505-476-3461).

GIVEN under the Seal of New Mexico Oil Conservation Division at Santa Fe, New Mexico, on this 1st Day of October 2008.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

S E A L

Mark Fesmire, Director