



July 15, 2015

Case 15365

Mr. Carl Chavez
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: LIGHTNING DOCK GEOTHERMAL HI-01, LLC APPLICATIONS TO PLACE WELL ON INJECTION-
GEOTHERMAL RESOURCES AREA, WELL NO. 63A-7 IN HIDALGO COUNTY, NEW MEXICO

Dear Carl:

The Oil Conservation Division (OCD) received a G-112 Application to Place Well on Injection-Geothermal Resources Area forms from Lightning Dock Geothermal HI-01, LLC corresponding to proposed well 63A-7.

AmeriCulture, Inc. is a long-standing geothermal lease holder and user in the vicinity of the proposed well and is thus an affected geothermal lease owner. AmeriCulture hereby objects to the aforementioned application and requests that the Oil Conservation Division deny the permit sought by Lightning Dock Geothermal HI-01 LLC for proposed well 63A-7.

Owing partially to the potential for endangerment of the regional geothermal resource, underground water supplies, and businesses that rely upon the regional geothermal resource, we believe that the application should be denied. If the OCD concurred with this position and were to deny all three applications, then there would be no need for AmeriCulture, Inc. to request a corresponding hearing on the matter.

The OCD's Geothermal Rules and Regulations are procedurally ambiguous as to whether an objecting party must also request a hearing according to the application guidelines set forth in Rule G-703. Thus, out of an overabundance of caution, and in conformance with Rule G-703, AmeriCulture, Inc. hereby makes application for hearing by stating (1) Applicant, Lightning Dock Geothermal, HI-01, LLC, (2) Common Source, Lightning Dock Known Geothermal Resource Area, and (3) Order, Rule or Regulation Sought: Denial of G-112 application corresponding to proposed well 63A-7. In the event the OCD were to deny said G-112 applications prior to a hearing, no hearing would be required. Since our recent request for hearing submitted to the OCD via email on June 20, 2015 was accepted as a valid request for hearing, we trust this letter will in like manner constitute a valid request for hearing.

Should the OCD determine that a hearing on the matter is appropriate, and that this letter is deficient in any way as an application for hearing, please notify me immediately by telephone or email with further instructions to insure our regulatory compliance.

Sincerely Yours,

Damon E. Seawright
President

GTHT - ____1____

LDG 63A-7

June 29, 2015

Mr. Jim Griswold
Environmental Bureau Chief
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87505
505.476.3465
Jim.Griswold@state.nm.us

RECEIVED OGD

2015 JUL -1 A 8:19

RE: Forms G-101, G-102, G-104, and G-112 for proposed injection well LDG 63A-7 at Lightning Dock Geothermal HI-01, LLC, Hidalgo County, New Mexico

Dear Mr. Griswold:

On behalf of Lightning Dock Geothermal HI-01, LLC, Geo-Science Solutions, LLC hereby submits the attached G-101, G-102, G-104, and G-112 forms to drill new injection well LDG 63A-7 as an integral part of the development of the Lightning Dock Geothermal project. Attached to the forms are a Drilling Handbook prepared by Capuano Engineering Company which includes a well schematic, a table of all wells within a one-mile radius, and a well location figure.

Mr. Randy Dade in your Artesia office will receive the third copy of these documents. Thank you very much for your assistance in the development of this important energy project. Should you have questions regarding this application package, please do not hesitate to contact me by email at dwanney160@gmail.com or by phone at 505.508.9187. We ask that you treat the items marked "CONFIDENTIAL" as such as long as possible.

Respectfully submitted,



David W. Janney, PG
Agent for Lightning Dock Geothermal HI-01, LLC

Cc: Randy Dade - NMOCD Artesia
Kacie Peterson - Lightning Dock Geothermal HI-01, LLC
Michelle Henrie - Lightning Dock Geothermal HI-01, LLC

Attachments

Two (2) Forms G-101, G-102, G-104, and G-112 with appropriate attachments including a Drilling Handbook, a well schematic, list of wells within one mile, and a location figure

Geo-Science Solutions, LLC
PO Box 3100
Corrales, NM 87048

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 3088
SANTA FE, NEW MEXICO 87501

Form O-101
Adopted 10-1-10
Revised 10-1-10

| | |
|------------------------|--|
| NO. OF COPIES RECEIVED | |
| DISTRIBUTION | |
| File | |
| N.M.S.M. | |
| U.S.C.S. | |
| Operator | |
| Land Office | |

APPLICATION FOR PERMIT TO DRILL, DEEPEN,
OR PLUG BACK—GEOTHERMAL RESOURCES WELL

3. Indicate Type of Lease
STATE ☐ FEDERAL ☒
4. State Lease No.

1a. Type of Work: Drill ☒ Deepen ☐ Plug Back ☐
1b. Type of Well: Geothermal Producer ☐ Temp Observation ☐
Low-Temp Thermal ☐ Injection/Disposal ☒

7. Unit Agreement Name: None
8. Form or Lease Name: Fed. NM-34790

2. Name of Operator: Lightning Dock Geothermal HI-01, LLC

9. Well No.: LDG 63A-7

3. Address of Operator: 136 S. Main Street, Ste. 600, Salt Lake City, UT 84104

10. Field and Prod. or Whsept: Lightning Dock KGRA

4. Location of Well: UNIT LETTER "G" LOCATED 1403 FEET FROM THE East LINE
AND 1934 FEET FROM THE North LINE OF SEC. 7 T10P, 25 South R02, 19 West R00W

11. County: Hidalgo

| | | |
|--|---|--|
| 15. Proposed Depth: 1,500 feet | 15A. Formation: Quaternary alluvium Tertiary volcanic | 16. Rotary or C.L.: Mud Rotary |
| 21. Direction (Show whether DP, RT, etc.): 4208 GR | 21A. Kind & Status Prop. Bond | 21B. Drilling Contractor: TBD |
| | | 22. Approx. Date Work will start: 9/1/2015 |

PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|--------------|----------------|-----------------|---------------|-----------------|----------|
| 12.25" | 9.625" | 36# | 90' | 6 | GR |
| 8.5" | 7" | 23# | 150' | 20 | GR |
| 6.125" | 5" | 11.5# | 1,500' | None | 1400' |

Drill a geothermal injection well on Federal lease NM-34790.

Please see attached location plat Form G-102.

Please see attached drilling handbook prepared by Capuano Engineering Company.

ON ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposed to be deepen or plug back, give data on current production zone and proposed new production zone. Give cement program, if any.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

By: David H. Lawrence, Jr. Title: Agent for Lightning Dock Geothermal HI-01, LLC Date: 6/29/2015
(Print Name for Signatory)

APPROVED BY: _____ TITLE: _____ DATE: _____
CONDITIONS OF APPROVAL, IF ANY:

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

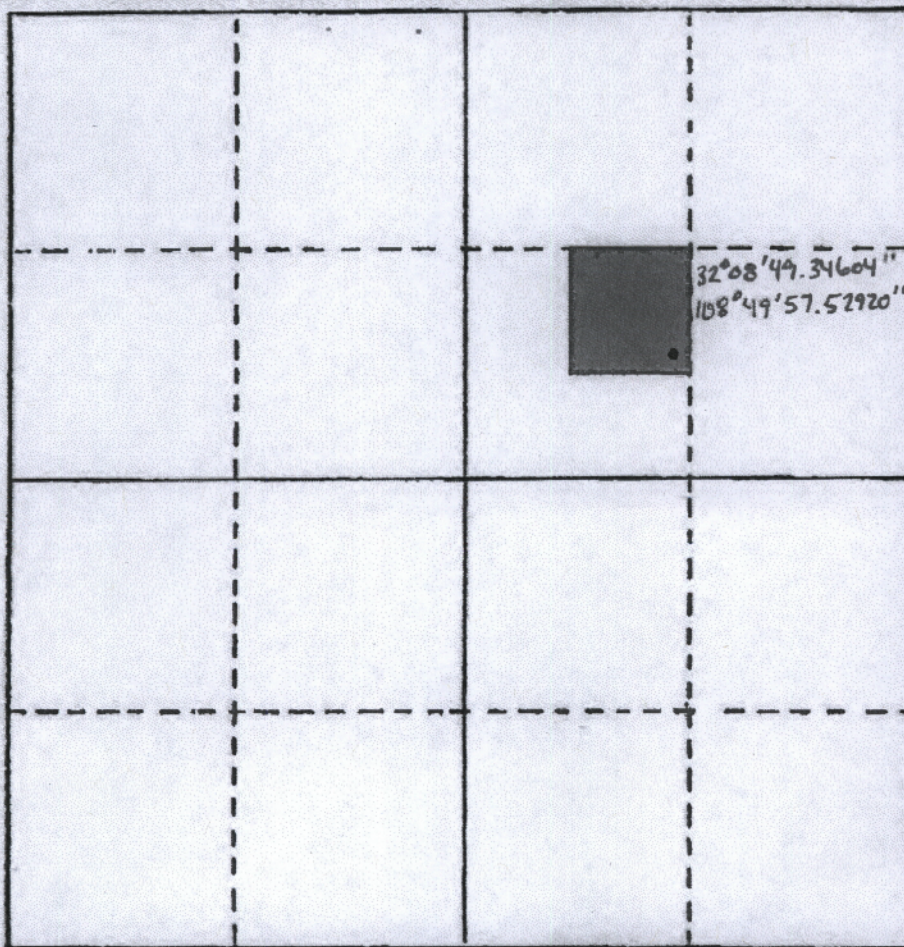
| | | | | | |
|--|---------------------------|----------------------|-----------------------------------|-------------------|-----------------------|
| Operator Lightning Dock Geothermal HI-01, LLC | | | Lease Fed. Geothermal NM-34790 | | Well No. LDG 63A-7 |
| Unit Letter G | Section 7 | Township 25 South | Range 19 West | County Hidalgo | |
| Actual Footage Location of Well: 1403 feet from the East line and 1934 feet from the North line | | | | | |
| Ground Level Elev. 4208 | Producing Formation NA | Pool NA | Dedicated Acreage: Acres | | |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name David Janney, PG

Position
Agent for Lightning Dock Geothermal HI-01, LLCCompany
Geo-Science Solutions, LLCDate
May 29, 2015

I hereby certify that the well location shown on this plat was plotted from field notes or actual survey made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

5/29/15
Registered Professional Engineer
and/or Land Surveyor

Certificate No.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form G-104
Adopted 10-1-74
Revised 10-1-78

CERTIFICATE OF COMPLIANCE
AND AUTHORIZATION TO PRODUCE
GEOTHERMAL RESOURCES

OWNER OR OPERATOR

Name Lightning Dock Geothermal HI-01, LLC

Address 136 S. Main Street, Ste. 600, Salt Lake City, UT 84101

TYPE OF WELL

Geothermal Producer ☐

Low-Temperature Thermal ☐

Injection/Disposal ☒

REASON FOR FILING

New Well ☒

Recompletion ☐

Change in Ownership ☐

Designation of Purchaser ☐

Other (Please Explain) ☐

DESCRIPTION OF WELL

Lease Name Not Applicable

Well No. LDG-63A-7

Name of Reservoir Lightning Dock

Kind of Lease
(Fee, Fed. or State) Federal

Lease Number NM-34790

LOCATION

Unit Letter G ; 1934 feet from the North line and
1403 feet from the East line of
Section 7 Township 25S Range 19W
County Hildago

TYPE OF PRODUCT

Dry _____
Steam _____

Steam and
Water _____

Low Temp.
Thermal Water _____

DESIGNATION OF PURCHASER OF PRODUCT

Name of Purchaser Public Service Company of New Mexico

Address of Purchaser 414 Silver Ave. Suite 4 Albuquerque, NM 87102

Product Will Be Used For Residential and commercial power

CERTIFICATE OF COMPLIANCE

I hereby certify that all rules and regulations concerning geothermal resources wells in the State of New Mexico, as promulgated by the Oil Conservation Division of New Mexico, have been complied with, with respect to the subject well, and that the information given above is true and complete to the best of my knowledge and belief.

Signed David M. Hume, Jr. Position Agent for Lightning Dock Geothermal HI-01, LLC Date June 29, 2015
Approved _____ Position _____ Date _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form G-112
Adopted 10-1-74
Revised 10-1-78

APPLICATION TO PLACE WELL ON INJECTION-GEOTHERMAL RESOURCES AREA

| | | | |
|---|------------------------------|--|--------------------------|
| Operator Lightning Dock Geothermal HI-01, LLC | | Address 136 S. Main Street, Suite 600 Salt Lake City, UT 84101 | |
| Lease Name Federal NM-34790 | Well No. LDG 63A-7 | Field Lightning Dock | County Hidalgo |
| Location Unit Letter <u>G</u> Well is Located <u>1934</u> Feet From The <u>North</u> Line And <u>1403</u> Feet From The <u>East</u> Line, Section <u>7</u> Township <u>25S</u> Range <u>19W</u> NMPM. | | | |

CASING AND TUBING DATA

| NAME OF STRING | SIZE | SETTING DEPTH | SACKS CEMENT | TOP OF CEMENT | TOP DETERMINED BY |
|---|----------------|--|--|---|--------------------------------------|
| Conductor Pipe | 9.625" | 90' | 6 cy | GR | flow to surface |
| Surface Casing | 7" | 150' | 20 | GR | flow to surface |
| Long String | 5" liner | 1,500' | None | None | NA |
| Tubing | | | Name, Model and Depth of Tubing Packer NA | | |
| Name of Proposed Injection Formation Quaternary alluvium/Tertiary volcanic rocks | | | Top of Formation 150' | | Bottom of Formation 1,500' |
| Is Injection Through Tubing, Casing, or Annulus? | | Perforations or Open Hole? | | Proposed Interval(s) of Injection | |
| 5" liner | | slotted liner | | 150'-1,500' | |
| Is This a New Well Drilled For Injection? | | If Answer is No, For What Purpose was Well Originally Drilled? | | Has Well Ever Been Perforated in Any Zone Other Than the Proposed Injection Zone? | |
| yes | | | | NA | |
| List All Such Perforated Intervals and Sacks of Cement used to Seal Off or Squeeze Each | | | | | |
| Not Applicable | | | | | |
| Depth of Bottom of Deepest Fresh Water Zone in This Area | | Is This Injection for Purpose of Pressure Maintenance or Water Disposal? (See Rules 501 and 502) | | | |
| Unknown | | No, for injection of spent geothermal water | | | |
| Anticipated Daily Injection Volume | Minimum | Maximum | Open or Closed Type System | Is Injection to be by Gravity or Pressure? | Approx. Pressure (psi) |
| 4400+ | 720,000 | 1,000,000 | Open | Gravity | <100 |
| Answer Yes or No Whether the Following Waters are Mineralized to such a Degree as to be Unfit for Domestic, Stock, Irrigation, or Other Domestic Use | | | Water to be Injected | Natural Water in Injection Zone | Are Water Analyses Attached? |
| No | | | No | No | Summary on file with OCD |
| Name and Address of Surface Owner (or Lessee, if State or Federal Land) | | | | | |
| Rosette, Inc. P.O. Box 1618 Roswell, NM 88202-1618 | | | | | |
| List Names and Addresses of all Operators Within One-Half (1/2) Mile of This Injection Well | | | | | |
| Americulture 25 Tilapia Trail Animas, NM 88020 | | | | | |
| Rosette Inc. PO Box 1618 Roswell, NM 88202-1618 | | | | | |
| Have Copies of this Application Been Sent to Each Operator Within One-Half Mile of This Well? | | | | | |
| Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | not applicable | | | |
| Are the Following Items Attached to this Application (see Rule 503) | | Plot of Area | | Electrical Log | |
| Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> See G-102 | | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| | | | | Diagrammatic Sketch of Well | |
| | | | | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| | | | | See drilling handbook | |

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

David W. Janning, P.E.
(Signature)

Agent for Lightning Dock Geothermal HI-01, LLC
(Title)

June 29, 2015
(Date)

NOTE: Should waivers from all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Division will hold the application for a period of 30 days from the date of receipt by the Division's Santa Fe office. If at the end of the 30-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing. If the applicant so requests. SEE RULE 503.