

# LOS LOBOS EXHIBIT A-1

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

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

Form 6-172  
Adopted 10-1-74  
Revised 10-1-78

## APPLICATION TO PLACE WELL ON INJECTION-GEOTHERMAL RESOURCES AREA

Operator Los Lobos Renewable Power, LLC		Address 136 S. Main Street, Salt Lake City, UT 84101	
Lease Name Federal Lease No. NM 34790	Well No. LDG-55-7	Field	County Hidalgo
Location Unit Letter <u>J</u>   Well is Located <u>2329</u> Feet From The <u>South</u> Line And <u>2412</u> Feet From The <u>East</u> Line, Section <u>7</u> Township <u>25 S</u> Range <u>19 W</u> NMPM.			

### CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Conductor Pipe	30"	30'	6 sx mix 4 CY	GL	flow to surface
Surface Casing	20"	360'	530	GL	flow to surface
Long String	13.375"	1050'	714	GL	flow to surface
Tubing	NA	NA	Name, Model and Depth of Tubing Packer NA		
Name of Proposed Injection Formation Horquilla Fm.			Top of Formation ~ 1590'	Bottom of Formation 3800'	
Is Injection Through Tubing, Casing, or Annulus? Production Casing 13.375"		Perforations or Open Hole? Open Hole	Proposed Interval(s) of Injection 1590' - 2349'		
Is This a New Well Drilled For Injection? No	If Answer is No, For What Purpose was Well Originally Drilled? Geothermal Production		Has Well Ever Been Performed in Any Zone Other Than the Proposed Injection Zone? Not Applicable - Open Hole		
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 Unknown		Is This Injection for Purpose of Pressure Maintenance Re-injection of produced geothermal fluids or Water Disposal? (See Rules 503 and 502)			
Anticipated Daily Injection Volume Gallons	Minimum 1,440,000	Maximum 3,000,000	Open or Closed Type System Open System	Is Injection to be by Gravity or Pressure? Gravity	Approx. Pressure (psi) < 100
Answer Yes or No Whether the Following Water are Mineralized to such a Degree as to be Unfit for Domestic, Stock, Irrigation, or Other General Use		Water to be Injected No		Natural Water in Injection Zone No	Are Water Analyses Attached? Yes (Well LDG 55-7)
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					
Rosette, Inc., P.O. Box 1618, Roswell, NM 88202-1618					
Americulture, Inc., 25 Tilapia Trail, Animas, NM 88020					
Timothy McCants, 120 N. Arkansas Street, Alice, Texas 78332					
Have Copies of this Application Been Sent to Each Operator Within One-Half Mile of this Well? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Are the Following Items Attached to this Application (see Rule 503)		Plat of Area Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Electrical Log Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Diagrammatic Sketch of Well Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

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

*David Johnson, PS*  
(Signature)

Agent for Los Lobos Renewable Power, LLC  
(Title)

12/14/2012  
(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.

# LOS LOBOS EXHIBIT A-1

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION  
N. O. BOX 1098  
SANTA FE, NEW MEXICO 87501

Form 6-102  
Adopted 10-1-76  
Revised 10-1-78

## GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

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

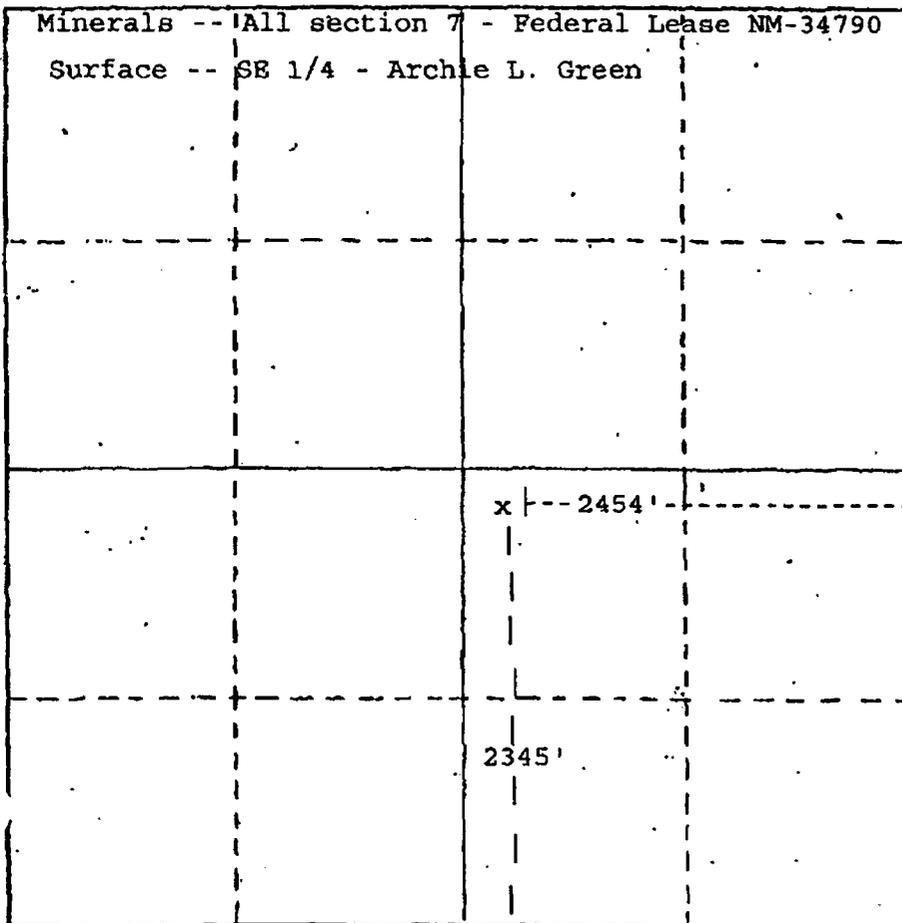
Operator <b>Lightning Dock Geothermal HI-01, LLC</b>		Lease <b>Federal NM-34790</b>		Well No. <b>TFD 55-7</b>	
Unit Letter <b>N/A</b>	Section <b>7</b>	Township <b>25S</b>	Range <b>19W</b>	County <b>Hidalgo</b>	
Actual Footage Location of Well: <b>2454</b> feet from the <b>East</b> line and <b>2345</b> feet from the <b>South</b> line					
Ground Level Elev. <b>4201'</b>	Producing Formation <b>open hole</b>		Pool <b>wildcat</b>	Dedicated Acreage: <b>N/A</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or fracture 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  
**Benjamin J. Barker**

Position  
**V.P. Resource Dev.**

Company  
**Raser Technologies**

Date  
**April 12, 2010**

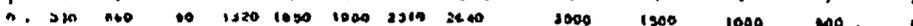
*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.*  
see attached certified survey plat

Date Surveyed  
**April 9, 2010**

Registered Professional Engineer  
and/or Land Surveyor

**John F. Esquibel**

Certificate No.  
**5949**



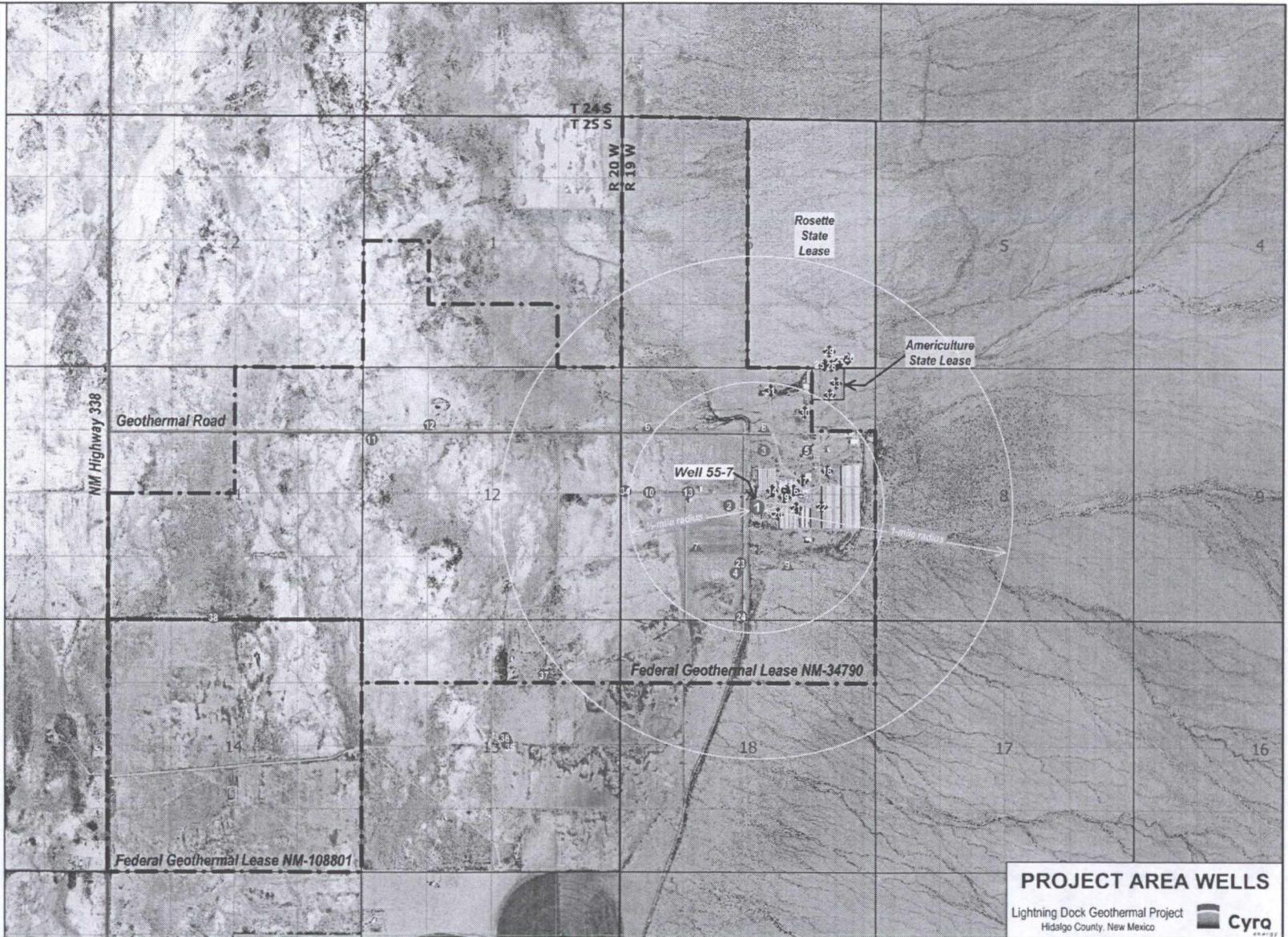
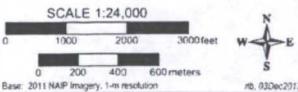
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**Figure 1. Wells Near LDG 55-7**

Map Ref	Well ID	Owner	Type/Use
1	55-7	LDG	Production
2	45-7	LDG	Production
3	53-7	LDG	Production
4	47-7	LDG	Production
5	63-7	LDG	Injection
6	TG12-7	McCants	TG Hole
7	TG36-7	Rosette	TG Hole
8	TG52-7	LDG	TG Hole
9	TG57-7	Rosette	TG Hole
10	B1	Rosette	Water well
11	B14	Rosette	Water well
12	Amer	Americulture	Water well
13	B2	Rosette	Water well
14	B3	Rosette	Greenhouse
15	B4	Rosette	Greenhouse
16	B5	Rosette	Greenhouse
17	B6	Rosette	Discovery hot well
18	B7	Rosette	Heat pump
19	B8	Rosette	Heat pump
20	B9	Rosette	Greenhouse
21	B10	Rosette	Greenhouse
22	B11	Rosette	Greenhouse
23	B12	Rosette	Irrigation
24	B13	Rosette	Irrigation (abd)
25	State 1	Rosette	Hot well
26	State 3	Rosette	Hot well
27	State 4	Rosette	Hot well
28	State 5	Rosette	Hot well
29	State 7	Rosette	TG Hole
30	#1	McCants	Heat pump
31	Fed #1	Americulture	Hot well
32	State #1	Americulture	Hot well
33	State #2	Americulture	Hot well
34	14-7	LDG	Water well
35	A00269	Rudiger	Water well
36	A0059A	Rudiger	Water well
37	A00304	Wright	Water well
38	A0013	Rosette	Water well

**Wells by Type**

- ◆ Shallow production
- LDG production well
- ▲ LDG TG hole
- ▲ LDG injection well
- Water well



**PROJECT AREA WELLS**

Lightning Dock Geothermal Project  
Hidalgo County, New Mexico

