

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
070 Farmington, NM

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>080181</b> <b>SF-077329</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>32692</b>
2. Name of Operator <b>Kukui Operating Company</b>		7. If Unit or CA Agreement, Name and No. <b>nm nm 84065</b>
3A. Address <b>c/o Walsh Engineering, 7415 E. Main, Farmington, NM 87402</b>		8. Lease Name and Well No. <b>Angel Peak 13 #1S</b>
3b. Phone No. (include area code) <b>(505) 327-4892</b>		9. API Well No. <b>30045 31644</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>660' FNL and 1420' FWL</b> At proposed prod. Zone		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
14. Distance in miles and direction from nearest town or post office* <b>10 miles southeast of Bloomfield, NM</b>		11. Sec., T., R., M., or Blk, and Survey or Area <b>C Sec. 13, T27N, R10W</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>	16. No. of Acres in lease <b>320+</b>	17. Spacing Unit dedicated to this well <b>320 acres W/2</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1150'</b>	19. Proposed Depth <b>2100'</b>	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6078' GL</b>	22. Approximate date work will start* <b>May 15, 2003</b>	23. Estimated duration <b>1 week</b>

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan.   | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature <b>Paul C. Thompson</b>	Name (Printed/Typed) <b>Paul C. Thompson, P.E.</b>	Date <b>4/24/03</b>
Title <b>Agent</b>		
Approved by <b>David J. Markiewicz</b>	Name (Printed/Typed)	Date <b>AUG - 4 2003</b>
Title <b>Office</b>		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer QD, Artesia, NM 88211-0719

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form O-100  
Revised February 21, 1994

Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-045-31644</b>		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code <b>32692</b>	*Property Name ANGEL PEAK 13		*Well Number 1S
*GRID No. 149678	*Operator Name KUKUI OPERATING COMPANY		*Elevation 6078

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	13	27N	10W		660	NORTH	1420	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 320.0 Acres - (W/2)	<sup>13</sup> Joint or Infill Y	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>16</p> <p>2540.00'</p> <p>1420'</p> <p>660'</p> <p>SF-077329</p> <p>13</p> <p>1320.00'</p> <p>1274.46'</p> <p>LOT 1</p> <p>LOT 2</p> <p>LOT 3</p> <p>LOT 4</p> <p>070 Farmington, NM</p> <p>10-8 WY 11-8 AM 2003</p> <p>2640.00'</p> <p>5280.00'</p> <p>2642.64'</p> <p>1218.36'</p> <p>1320.00'</p>	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  <u>Paul C. Thompson</u> Signature <u>PAUL C. THOMPSON</u> Printed Name <u>AGENT</u> Title <u>4/18/03</u> Date
	<sup>18</sup> SURVEYOR CERTIFICATION 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 belief.  Date of Survey: MARCH 11, 2003  Signature and Seal of Professional Surveyor   <u>JASON C. EDWARDS</u> Certificate Number 15269

Kukui Operating Company  
OPERATIONS PLAN  
Angel Peak 13 #1S

I. Location: 1780' FSL & 1915' FEL  
Sec 13 T27N R10W  
San Juan County, NM

Date: April 18, 2003

Field: Basin Fruitland Coal  
Surface: BLM  
Minerals: SF - 077329

Elev: GL 6078'

II. Geology: Surface formation \_ Nacimiento

A. Formation Tops	Depths
Ojo Alamo	1065'
Kirtland	1120'
Fruitland	1710'
Pictured Cliffs	1950'
Total Depth	2100'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 1710' and 1950'.

B. Logging Program: Induction/GR and neutron/density logs at TD.

C. No over pressured zones are expected in this well. No H<sub>2</sub>S zones will be penetrated in this well. Max. BHP = 500 psig.

III. Drilling

A. Contractor:

B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The production hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.5 ppg.

C. Minimum Blowout Control Specifications:

Double ram type or annular type 2000 psi working pressure BOP with a rotating head. See the attached exhibits (#1 and #2) for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

C. Cont.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

#### IV. Materials

##### A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
8-3/4"	120'	7"	20# K-55
6-1/4"	2100'	4-1/2"	10.5# K-55

##### B. Float Equipment:

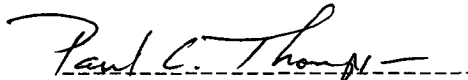
a) Surface Casing: None

b) Production Casing: 4-1/2" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Five centralizers spaced every other joint above shoe and five turbolizers every other joint from the top of the well.

#### V. Cementing:

Surface casing: 7" - Use 30 sx (36 cu. ft.) of Cl "B" with 2%  $\text{CaCl}_2$  (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 600 psi for 30 min.

Production Casing: 4-1/2" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 30 bbls of fresh water. Lead with 155x (319 cu.ft) of Cl "B" with 2% SMS, 1/4#/sk. celloflake. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 PPG). Tail with 100 sx (118 cu.ft.) of Cl "B" with 2%  $\text{CaCl}_2$ , and 1/4#/sk. celloflake/sk. (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG) Total cement volume is 437 cu.ft. (100% excess to circulate cement to surface).

  
Paul C. Thompson, P.E.