FORM APPROVED Form 3160-3 OMB No. 1004-0136 (August 1999) Expires November 30, 2000 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT () SF-077382 If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTE 7. If Unit or CA Agreement, Name and No. la. Type of Work: X REENTER 8. Lease Name and Well No. b. Type of Well: Oil Well Gas Well Other Multiple Zone X Single Zone Angel Peak 16 #19S 2. Name of Operator API Well No. 30045 **Kukui Operating Company** 3A. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory c/o Walsh Engineering,7415 E. Main, Farmington, NM 87402 (505) 327-4892 **Basin Fruitland Coal** 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T., R., M., or Blk, and Survey or Area 2600\* FSL and 1975' FEL At surface At proposed prod. Zone Sec. 16, T27N, R10W 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* 10 miles southeast of Bloomfield, NM San Juan Distance from proposed location to nearest 17. Spacing Unit dedicated to this well 16. No. of Acres in lease 660' property or lease line, ft. (Also to nearest drig. unit line, if any) 320+ 320 acres E/2 Distance from proposed location\* to nearest well, drilling, completed, 20. BLM/BIA Bond No. on file 19. Proposed Depth 1400' 1990' +/applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 6028' GL July 15, 2004 1 week 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. Bond to cover the operations unless covered by an existing bond on file (see

- 2. A Drilling Plan.
- 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.
- Item 20 above).
- 5. Operator certification.
- Such other site specific information and/or plans as may be required by the authorized office

	authorized office.	
25. Signature Wall Warher	Name (Printed/Typed) Robert J. Voorhees	Date 5/29/04
Vice President of Ensine	ering and Dovelopment	
Approved by (Signature)	Name (Printed/Typed) Wayne Townsend	Date 10/26/04
Acting AFM	Office FFO	

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 1001and 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 OD, 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 Depa

OIL CONSERVATION DIVISION

Revised February 21, 1994 Instructions on back Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

Form C-102

PO Box 2088 Santa Fe, NM 87504-2088

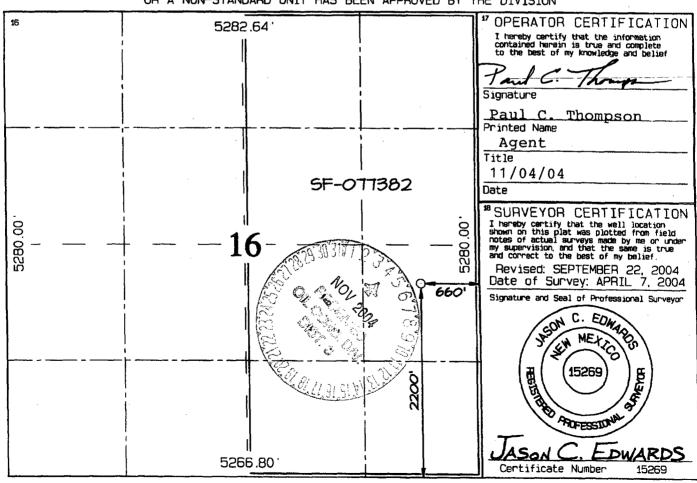
AMENDED REPORT

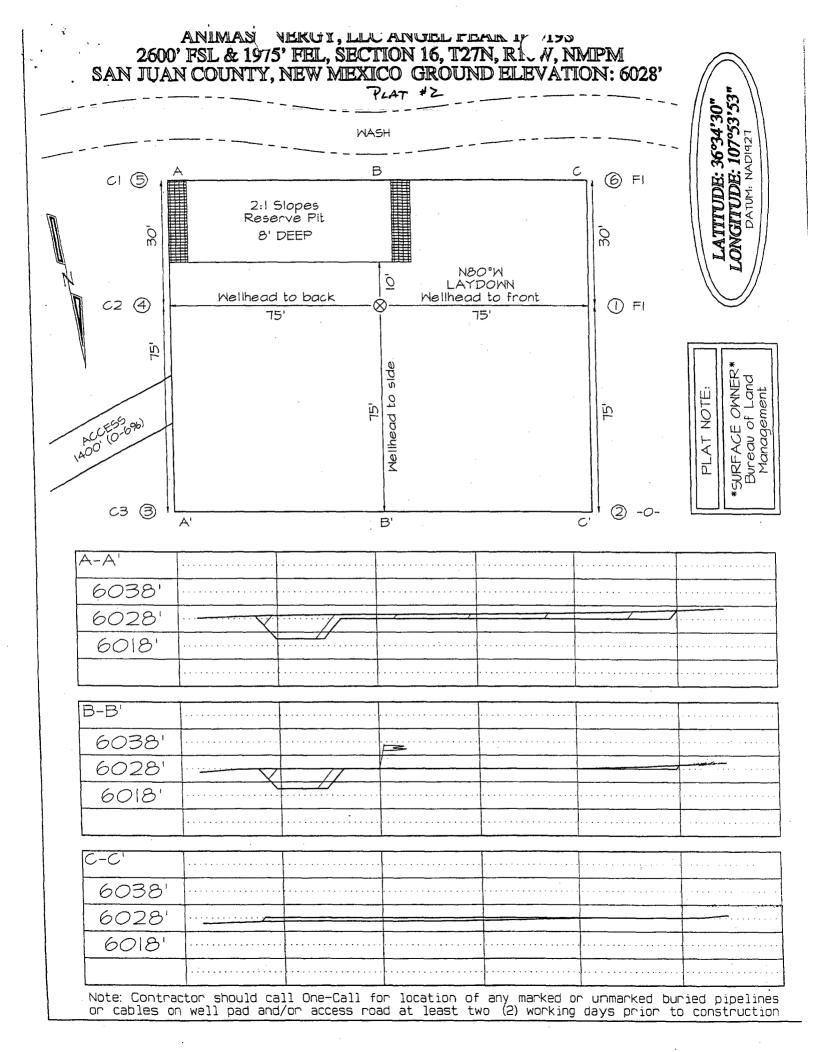
### WELL LOCATION AND ACREAGE DEDICATION PLAT

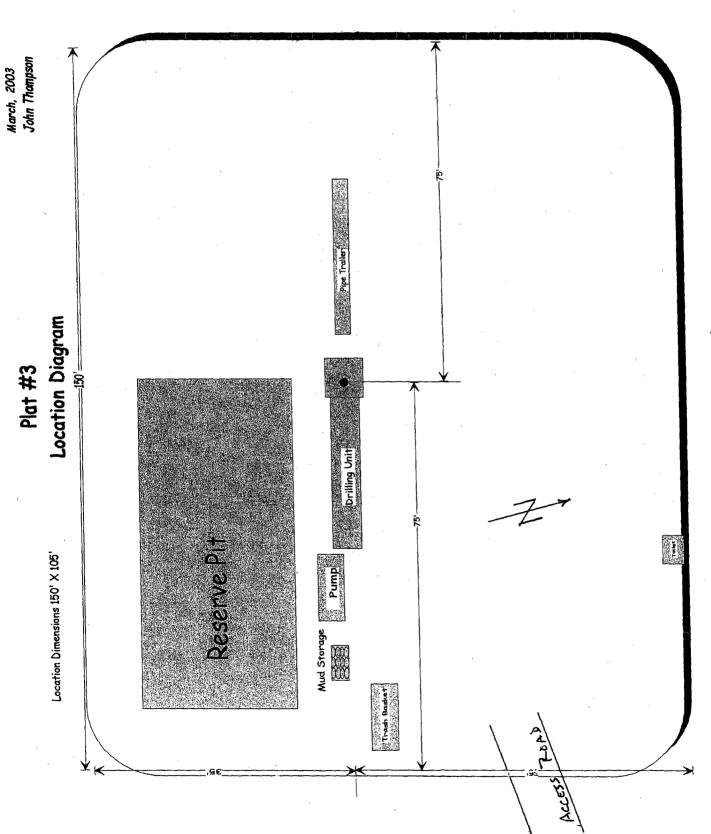
30-045-32	387 Pool Code 71629	BASIN FRUITLAND	COAL
32690		*Property Name ANGEL PEAK 16	
'0GRID No. 149678		*Operator Name KUKUI OPERATING COMPANY	
L	10 F 6	ince I continu	

<sup>10</sup> Surface Location UL or lot no Section Lot Idn Feet from the North/South line Feet from the East/West line County 16 27N 10W 2200 SOUTH Ι 660 **EAST** SAN JUAN <sup>11</sup>Bottom Hole Location If Different From Surface UL or lot no. Lot Idn Feet from the Fast/West line County <sup>12</sup> Dedicated Acres Soint or Infill <sup>14</sup> Consolidation Code <sup>95</sup> Orotec No. 320.0 Acres - (E/2)

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







Kukui Operating Company
Typical Location Layout

### Kukui Operating Company OPERATIONS PLAN Angel Peak 16 #19S

I. Location: 2600' FSL & 1975' FEL

Date: May 11, 2004

Sec 5 T27N R10W San Juan County, NM

Field: Basin Fruitland Coal

Elev: GL 6028'

Surface: BLM

Minerals: SF - 077382

II. Geology: Surface formation Nacimiento

Α.	Formation Tops	Depths
	Ojo Alamo	1220'
	Kirtland	1300′
	Fruitland Coal	1640'
Pictured Cliffs		1792'
	Total Depth	1990'

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

Water and gas - 1640'and 1792'.

- B. Logging Program: Induction/GR and neutron/density logs at TD.
- C. No over pressured zones are expected in this well. No  $\rm H_2S$  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 600 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 floor safety valve and choke manifold all rated to 2000 psi. The length of the Kelly does not allow enough room for a Kelly cock.

### IV. Materials

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
8-3/4"	120'	7 11	20# K-55
6-1/4"	1990′	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 fifth joint from the top of the well.

### V. Cementing:

Surface casing: 7" - Use 30 sx (36 cu. ft.) of Cl "B" with 2% 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 145 sx (299 cu.ft) of Cl "B" with 2% SMS, ¼#/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% CaCl<sub>2</sub>, and ¼#/sk. celloflake/sk. (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG) Total cement volume is 417 cu.ft. (100% excess to circulate cement to surface).

Paul C. Thompson, P.E.

# Kukui Operating Company

## Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

# Typical BOP setup

EXHIBIT #1

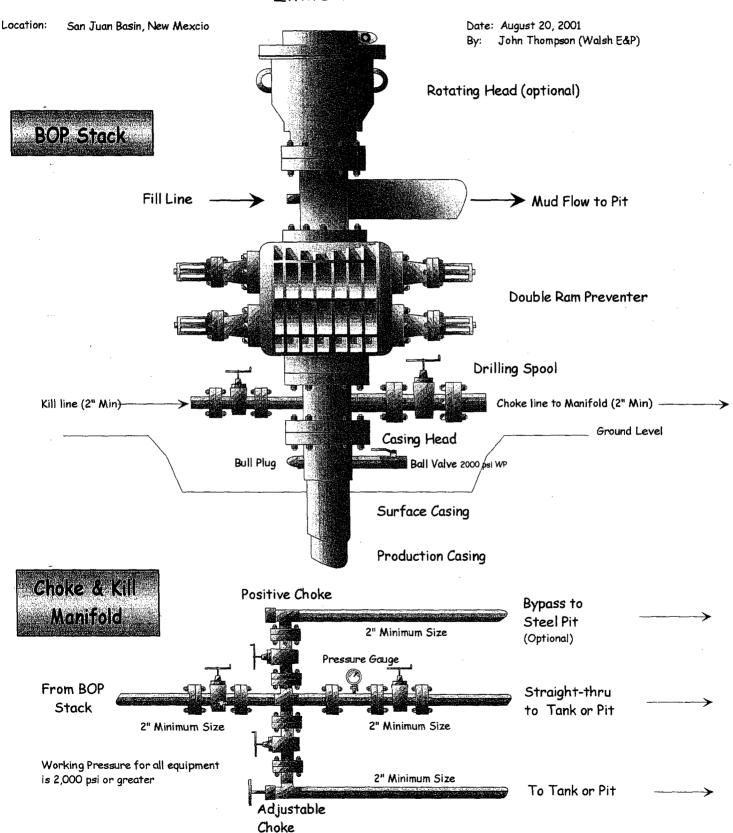


EXHIBIT #2

# BLOW OUT PREVENTER (B.O.P.)

