

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Bold Energy, LP 415 W. Wall, Suite 500 Midland, Texas 79701		² OGRID Number 233545
³ Property Code 35164	⁵ Property Name Caleb State	⁴ API Number 30 - 025-37497
⁹ Proposed Pool 1 Bar U (Atoka) South		¹⁰ Proposed Pool 2 Bar U (Bough "C")

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
k	36	9 S	32 E		1980	South	1980	West	Lea

Proposed 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

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4253.6
¹⁶ Multiple No	¹⁷ Proposed Depth 11,100'	¹⁸ Formation Atoka	¹⁹ Contractor TBD	²⁰ Spud Date November, 2005
Depth to Groundwater +/- 105"		Distance from nearest fresh water well 200' +		Distance from nearest surface water 200' +
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 15000 bbls Drilling Method: Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Feet of Cement	Estimated TOC
17 1/2"	133/8"	48	400'		Circulated
11"	85/8"	32	3650'	1100'	Circulated
7 7/8"	5 1/2"	17	11,100'	900	3450'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Bold Energy, LP proposes to drill an Atoka test to 11,400' TD. Approximately 400' of surface casing will be set with cement circulated. Intermediate will be set at approx 3650' and cement also circulated to surface. A 3000 psi BOP stack (see attachment) will be installed after setting the 13 3/8" surface casing and the BOP and surface casing will be tested per NMOCD requirements prior to drilling out. BOPE will again be tested prior to drilling out 8 5/8" intermediate shoe. At TD, open hole logs will be evaluated and, if well appears commercial, 5 1/2" production casing will be set at TD. The planned TOC outside the 5 1/2" casing is 3450' = 200' above the 8 5/8" intermediate shoe. Rotary tools will be moved out and the well completed using a well servicing unit.

H₂S gas is not known to be present in this area; therefore, no contingency plan is included with this APD. However, H₂S monitoring equipment will be operational prior to drilling out the 8 5/8" shoe to timely warn personnel should this gas be encountered.

Mud Program: 0' - 400' 8.6 - 9.0 ppg Spud Mud 400' - 3650' 9.0 - 10.0 Brine w/ paper & 4-6% oil

3650' - 7300' Cut Brine 7300' - 11,400' TD Cut Brine w/ SG & Starch

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐

Printed name: Peggy Kerr

Title: VP Land

E-mail Address: Peggy.kerr@boldenergy.com

Date: 10/1/2005

Phone: (432) 686-1100

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval Attached ☐

**Permit Expires 1 Year From Approval
Date Unless Drilling Underway**

DISTRICT I
1625 N. FRENCH DR., BOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 3D-025-37497	Pool Code 76720	Pool Name Flying M Aloha South
Property Code 35164	Property Name CALEB STATE	Well Number 1
OGRID No. 233545	Operator Name BOLD ENERGY, LP	Elevation 4254'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	36	9-S	32-E		1980	SOUTH	1980	WEST	LEA

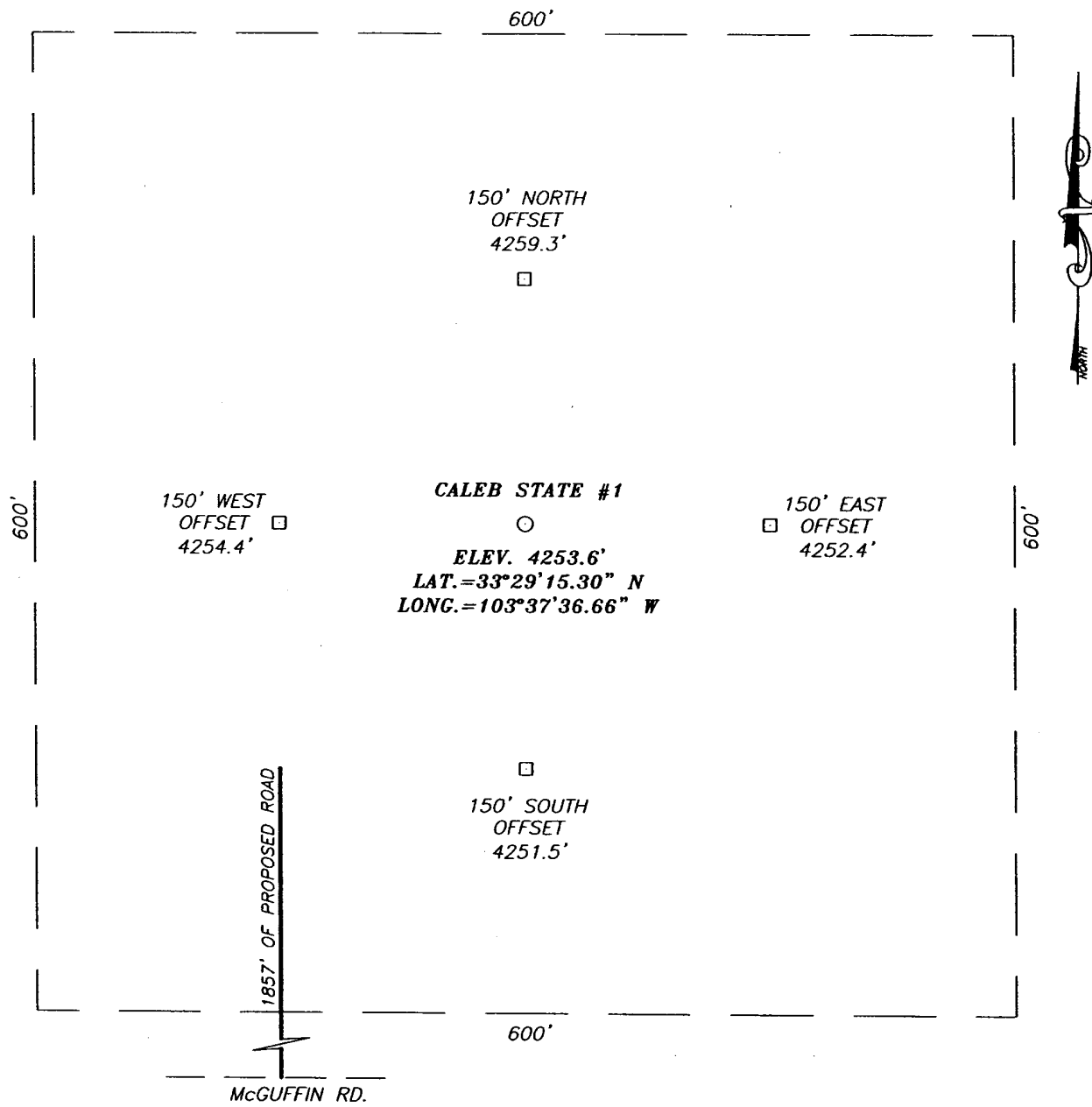
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 3.02	Joint or Infill	Consolidation Code	Order No.						

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

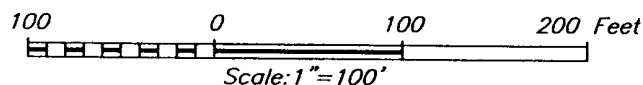
<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=905643.0 N X=715398.8 E</p> <p>LAT.=33°29'15.30" N LONG.=103°37'36.66" W</p> <p>1980'</p> <p>1980'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature PEBBY KERR Printed Name VP Land Title 10-1-05 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>SEPTEMBER 15, 2005</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>[Signature]</i> Certificate No. GARY EIDSON 12641</p>
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SECTION 36, TOWNSHIP 9 SOUTH, RANGE 32 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



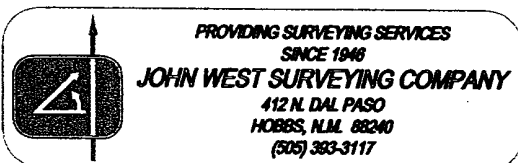
DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. #T-156
 (BUTTON MESA RD.) AND CO. RD. #T-156
 (McGUFFIN RD.) GO EAST ON McGUFFIN RD.
 APPROX. 1.42 MILES TO A PROPOSED ROAD
 SURVEY ON THE LEFT. FOLLOW PROPOSED ROAD
 SURVEY NORTH APPROX. 2000' NORTH TO THIS
 LOCATION.



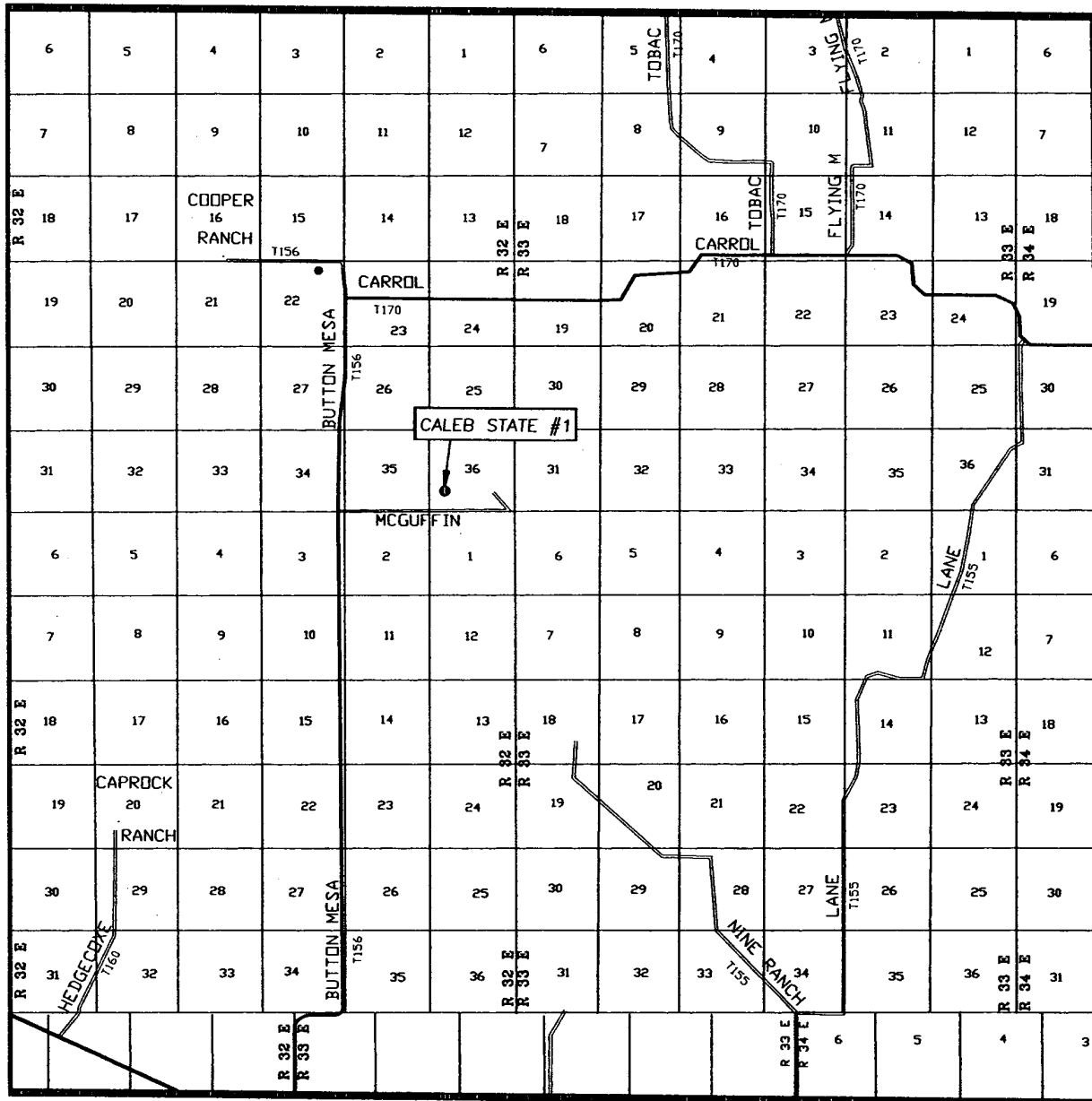
BOLD ENERGY, LP

CALEB STATE #1 WELL
 LOCATED 1980 FEET FROM THE SOUTH LINE
 AND 1980 FEET FROM THE WEST LINE OF SECTION 36,
 TOWNSHIP 9 SOUTH, RANGE 32 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.



Survey Date: 09/15/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.1405	Dr By: J.R.
Date: 09/21/05	Rev 1: N/A
Disk: CD#5	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 36 TWP. 9-S RGE. 32-E

SURVEY N.M.P.M.

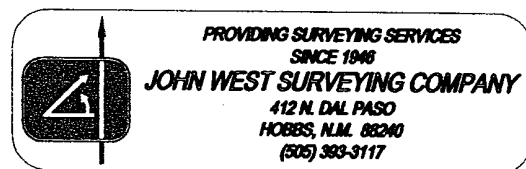
COUNTY LEA

DESCRIPTION 1980' FSL & 1980' FWL

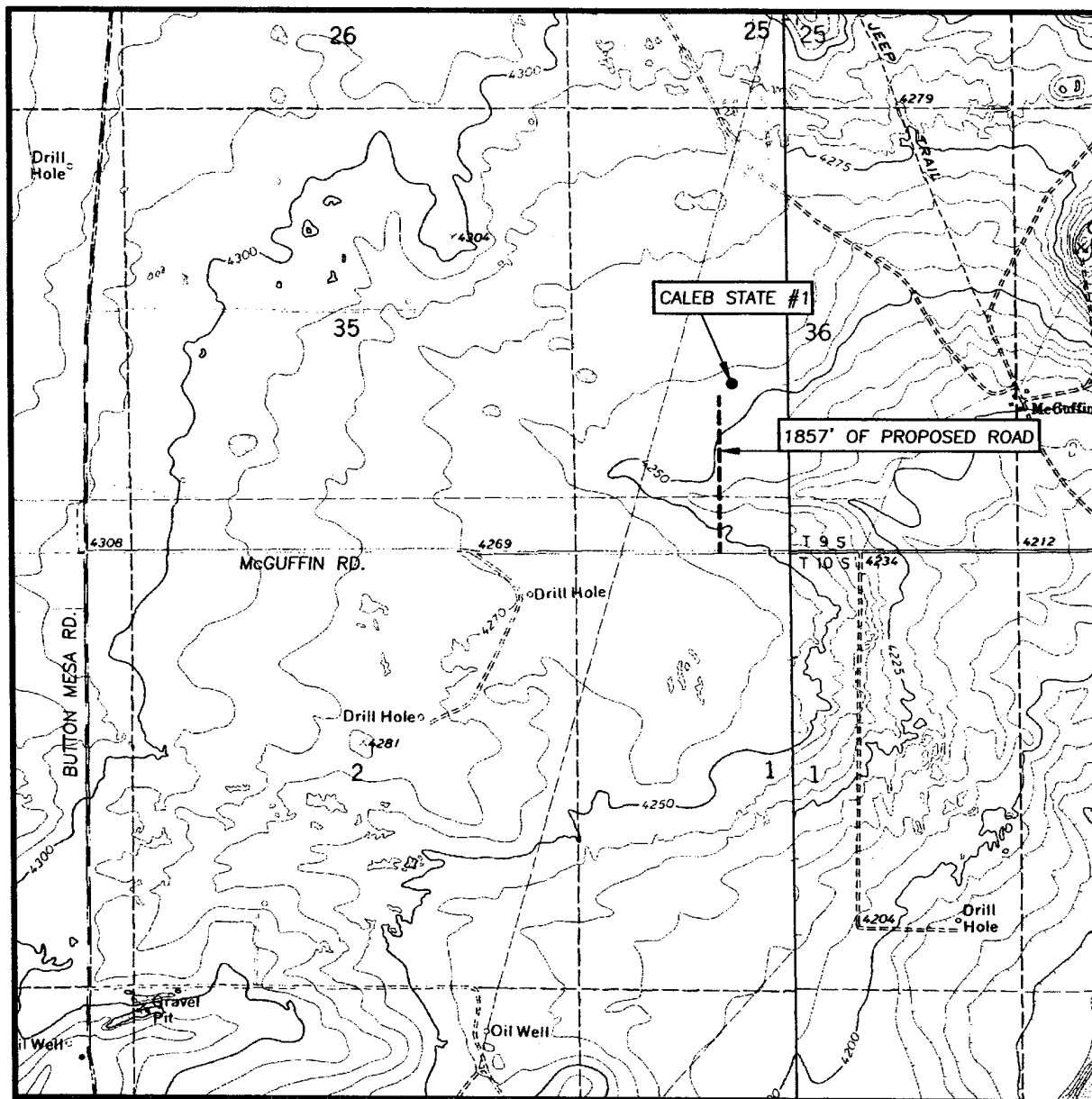
ELEVATION 4254'

OPERATOR MARBOB ENERGY
BOLD ENERGY, LP

LEASE CALEB STATE



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CAPROCK, N.M. - 10'
LANE SALT LAKE, N.M. - 10'

SEC. 36 TWP. 9-S RGE. 32-E

SURVEY _____ N.M.P.M.

COUNTY _____ LEA

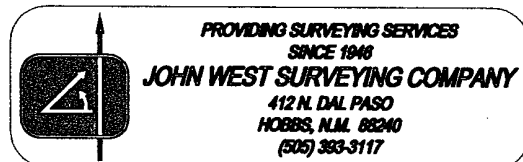
DESCRIPTION 1980' FSL & 1980' FWL

ELEVATION _____ 4254'

OPERATOR _____ BOLD ENERGY, LP

LEASE _____ CALEB STATE

U.S.G.S. TOPOGRAPHIC MAP
CAPROCK, N.M.



[illegible]

EXHIBIT "C"

BOP EQUIPMENT

Bold Energy, LP
Caleb State # 1
1980' FSL & 1980' FWL
Section 36 - T9S - R32E
LEA County, New Mexico

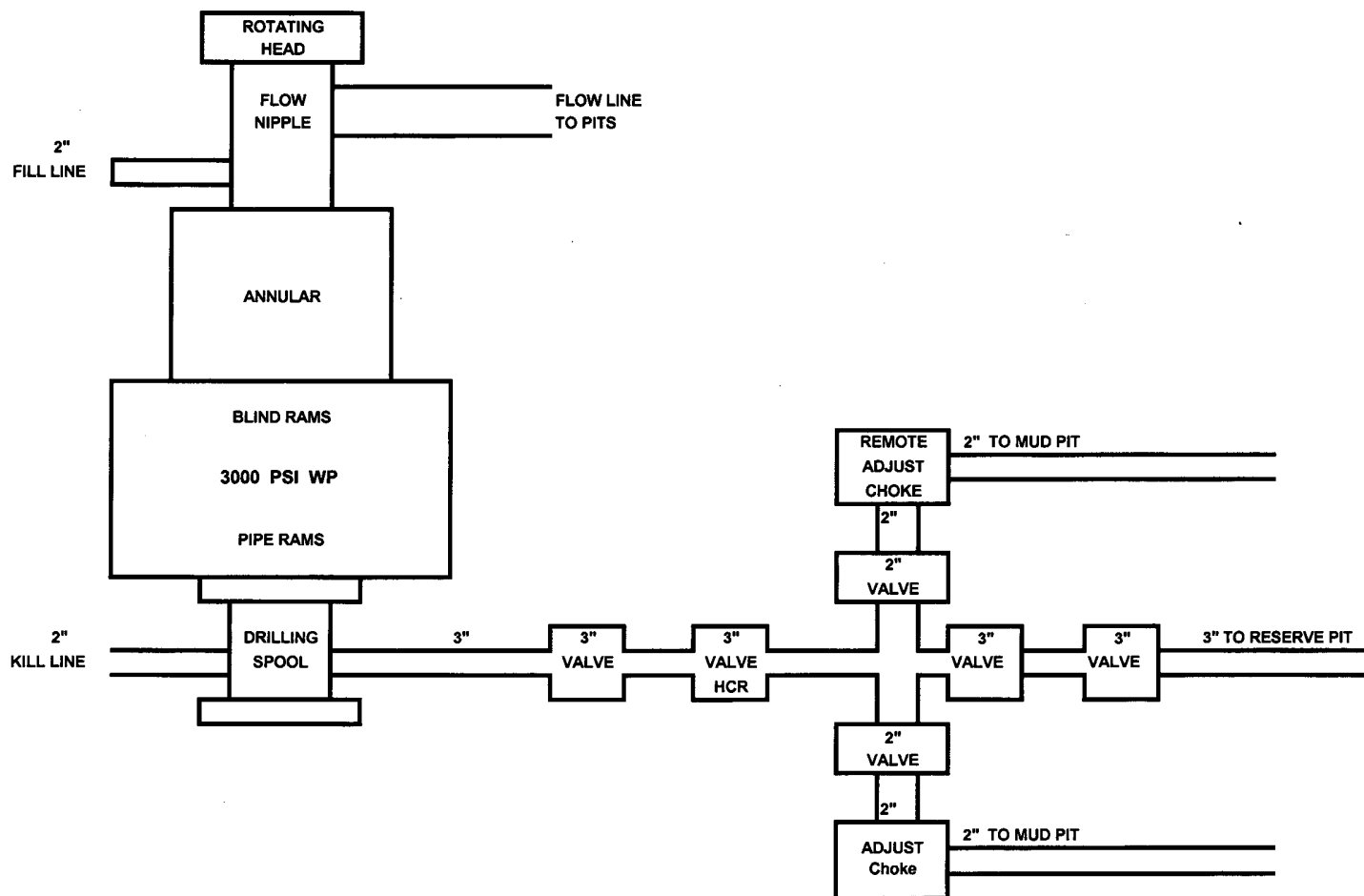


EXHIBIT "D"
LOCATION DIAGRAM

Bold Energy, LP
Caleb State # 1
1980' FSL & 1980' FWL
Section 36 - T9S - R32E
LEA County, New Mexico

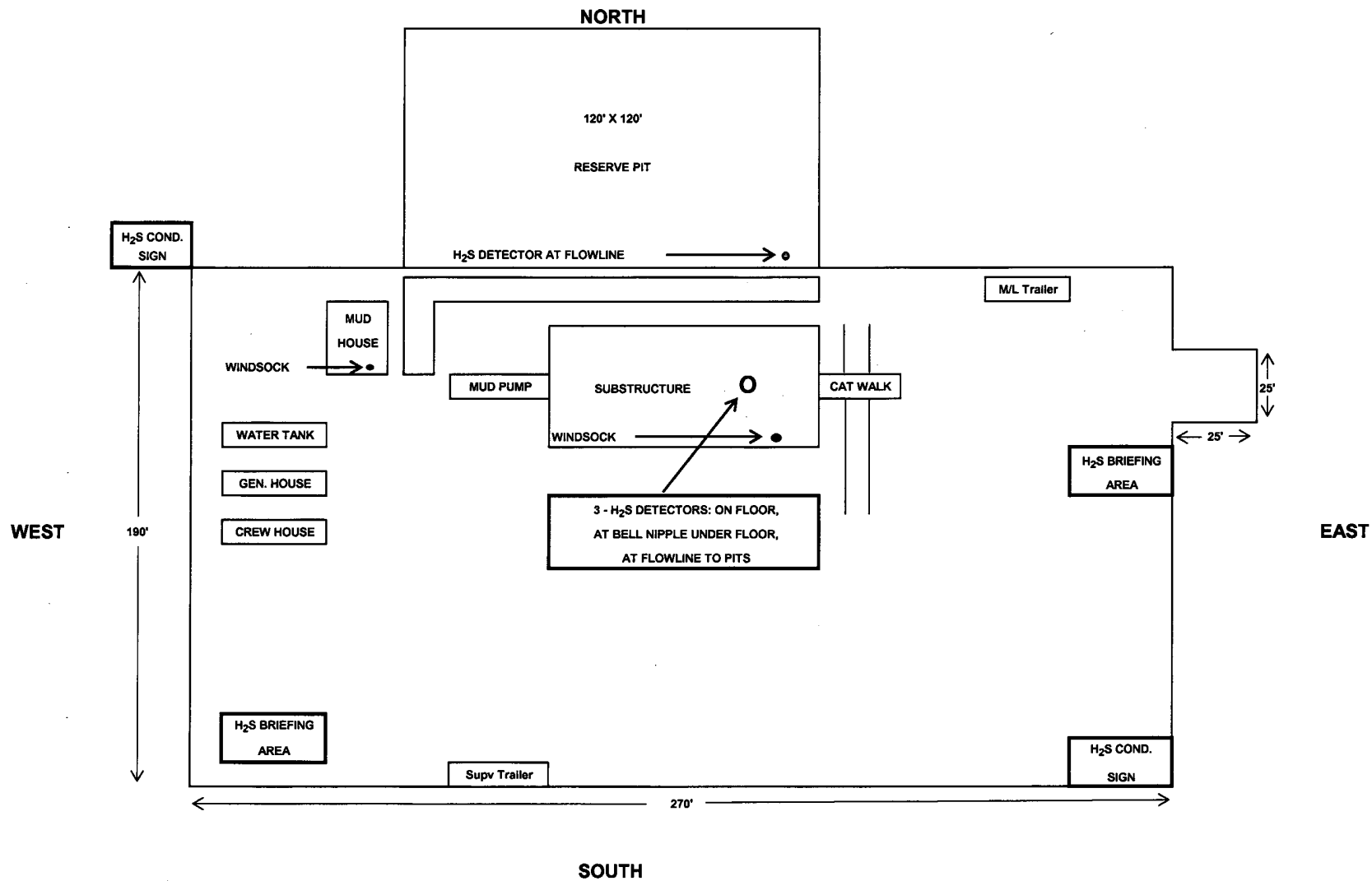
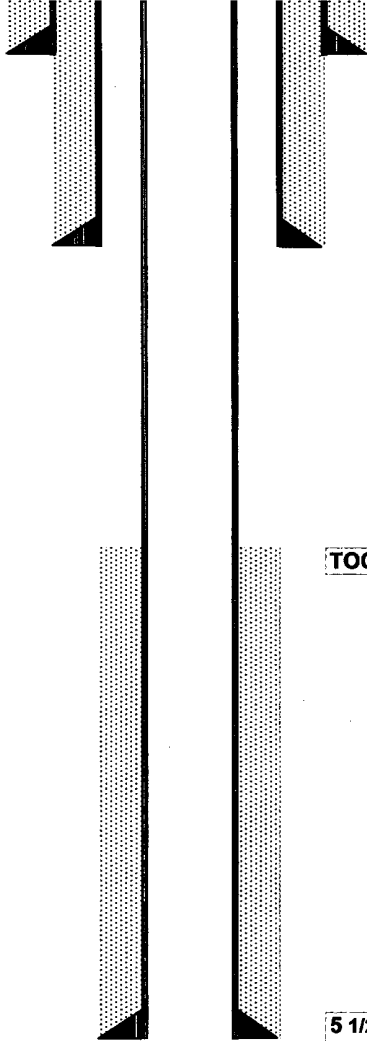


EXHIBIT "E"

Wellbore Plan

Bold Energy, LP
Caleb State # 1
1980' FSL & 1980' FWL
Section 36 - T9S - R32E
LEA County, New Mexico



13 3/8" 48# H-40 STC casing @ 400'
Cement circulated to surface

8 5/8" 28# M-55 STC casing set @ 1800'
Cement circulated to surface

TOC = +/- 3600'

5 1/2" 17# K-55 LTC casing set @ approx 8700'
Cemented w/ sufficient volumes for TOC = 3600'

8/3/05

EXHIBIT "F"

**Bold Energy, LP
Caleb State # 1
1980' FSL & 1980' FWL
Section 36 - T9S - R32E
LEA County, New Mexico**

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis will show proof of training from a qualified instructor in the following areas before commencing any work on the above named well.

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning signs, briefing areas, and evacuation procedures.
4. The proper technique for first aid and rescues.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan.

The well site is not within 3000' of any public roadway or dwelling; therefore an H₂S Contingency Plan is not necessary.

There will be an initial safety meeting just prior to commencing operations on the well, which shall include a review of the site-specific H₂S Drilling Operations Plan. This plan will be available at the well site. All personnel will be required to carry documentation that they have received the proper H₂S training.

II H₂ S Safety Equipment and Systems

All H₂S safety equipment and systems will be installed upon setting 8 5/8" casing at 1800'.

1. Well Control Equipment
 - A. Choke manifold with a minimum of two adjustable chokes, one remotely operated.
 - B. Blind and pipe rams to accommodate all pipe in use.
 - C. Auxiliary equipment to include annular preventer and rotating head.
2. Protective Equipment for Essential Personnel
 - A. Four - 5 minute escape units in top dog house.
 - B. One - 30 minute SCBA at each briefing area.

II H₂S Safety Equipment and Systems - cont'd

3. H₂S Detection and Monitoring Equipment

- A. Three-channel monitor located on floor, with detectors located on floor, on flow nipple and on flow line on mud pit.
- B. The mud logging unit shall have H₂S monitoring equipment.

4. Visual Warning Systems

- A. Windsock located on floor and mud pits.
- B. Briefing area signs located on NE & SW corners of pad.
- C. H₂S Condition sign located at entrance to location.

5. Mud Program

The mud program has been designed to minimize the volume of possible H₂S circulated to surface. Proper weight, safe drilling practices, and the use of H₂S scavengers will minimize hazards when penetrating possible H₂S bearing zones.

6. Metallurgy

All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifolds, and associated lines and valves shall be suitable for an H₂S environment.

7. Communications

Drilling rig and company vehicles will be equipped with two way radios or cellular telephones.

8. Well Testing

At least One Drill Stem Test is planned for this well.

EXHIBIT "G"

**Bold Energy, LP
Caleb State # 1
1980' FSL & 1980' FWL
Section 36 - T9S - R32E
LEA County, New Mexico**

Temporary Condition of Approval:

Drilling Fluids, Casing and Cementing Requirements for Most of LEA County:

Casing and Cementing

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

Drilling Fluid

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation, fresh water spud mud may be used to drill down to the first salt in the Rustler formation, after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.