

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

NAPI ATTACHMENT "1"
RCVD MARS'07
OIL CONS. DIV.
DIST. 3
FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

Ia. Type of Work: ☒ DRILL ☐ REENTER
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator
Roddy Production Co., Inc.

3a. Address P.O. Box 2221, Farmington, NM 87499
3b. Phone No. (include area code) (505) 326-6813

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 761' FNL x 517' FWL

At proposed prod. zone same

14. Distance in miles and direction from nearest town or post office*
10 miles south of Bloomfield, NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 517'

16. No. of Acres in lease
320

17. Spacing Unit dedicated to this well
80 320 N/2

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 2370'

19. Proposed Depth
1950'

20. BLJIA/BIA Bond No. on file
NM2262

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6116' GL

22. Approximate date work will start*
03/30/05

23. Estimated duration
20 days

24. Attachments drilling plan

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.
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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Robert R. Griffie* Name (Printed/Typed) Robert R. Griffie Date 01/16/06

Title
Operations Manager

Approved by (Signature) *[Signature]* Name (Printed/Typed) Date 3/6/07

Title *AFM* Office *PFO*

Application approval does not warrant or certify the 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)

Submit application for Pit Permit to OGD prior to constructing location

NOTIFY AZTEC OGD 24 hrs
IN TIME TO WITNESS csg & cement HOLD C104 FOR NSL

NMOCD

3/22/07

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, NM 87504-2088

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-345-34149	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 14240	⁵ Property Name YOCKEY	⁶ Well Number 7
⁷ OGRID No. 36845	⁸ Operator Name RODDY PRODUCTION	⁹ Elevation 6116.15

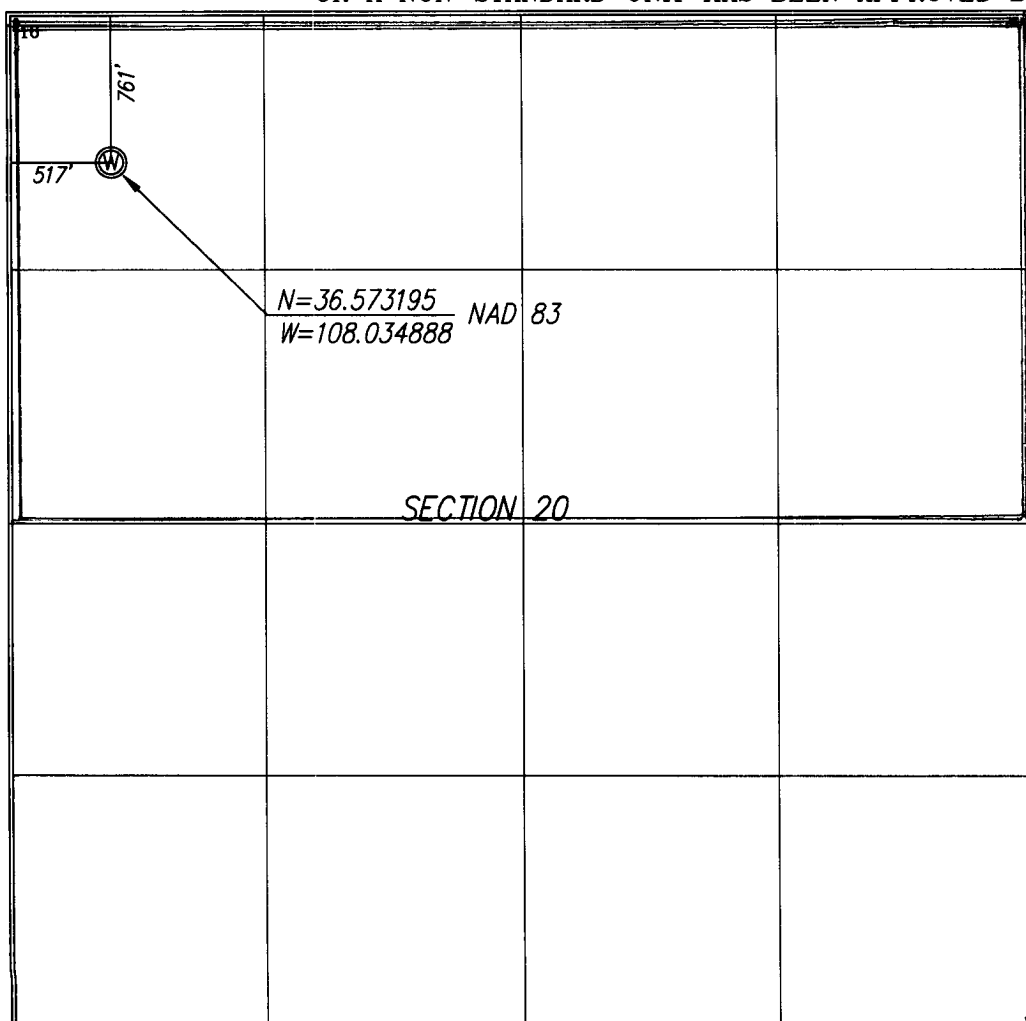
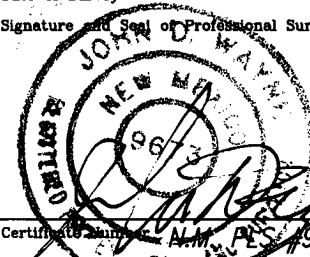
¹⁰ Surface Location

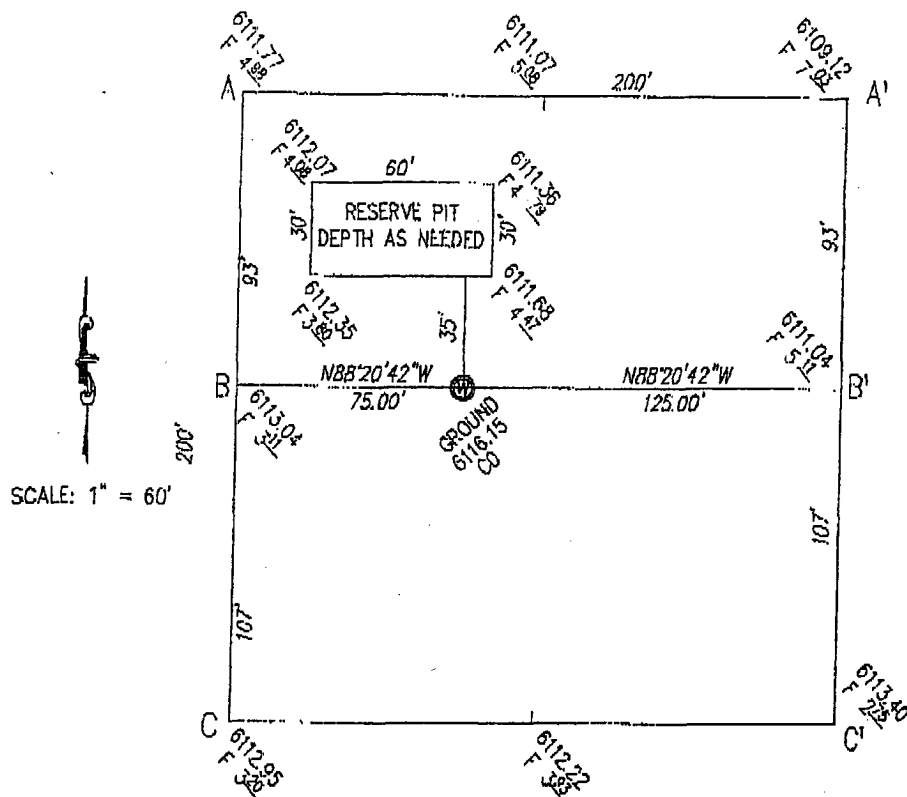
UL or lot no. D	Section 20	Township 27N	Range 11W	Lot Idn 320 N1/2	Feet from the 761.00'	North/South line NORTH	Feet from the 517.00'	East/West line WEST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Robert R. Griffie</i> Signature Robert R. Griffie Printed Name Operations Manager Title 3/20/07 Date</p> <p>¹⁸ 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>FEBRUARY 1, 2005 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number: N.M. PES 9673</p>
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Roddy Production
OPERATOR

Yockey #7

WELL NAME and NUMBER

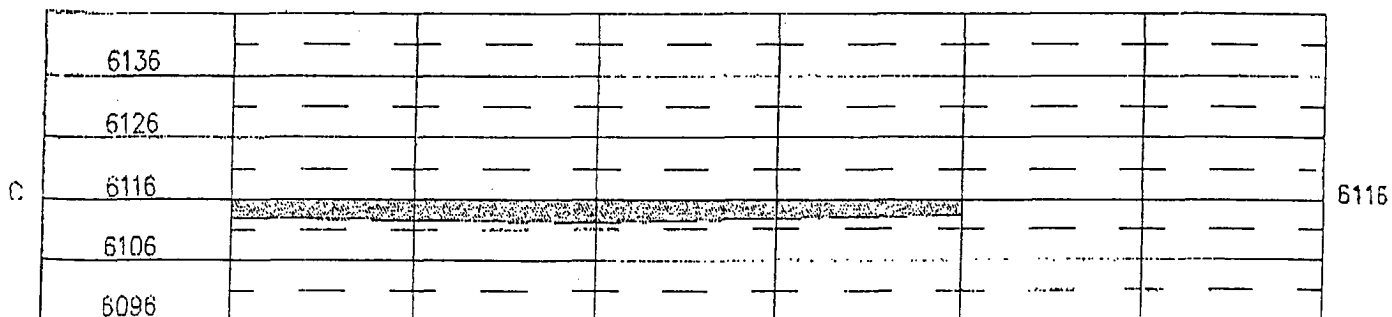
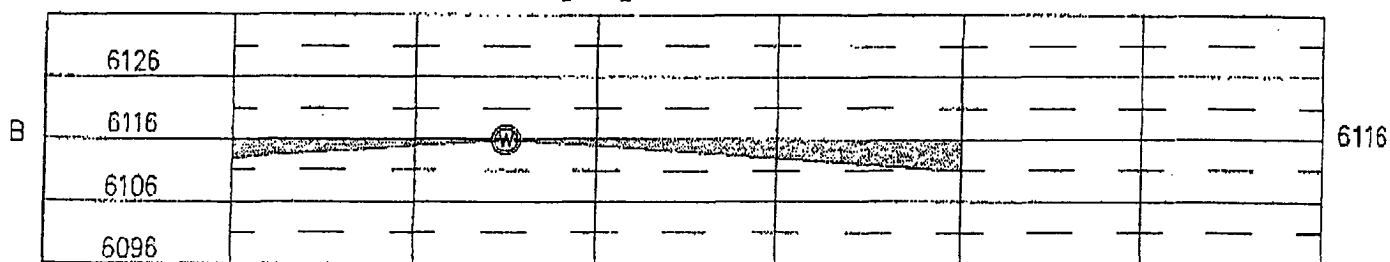
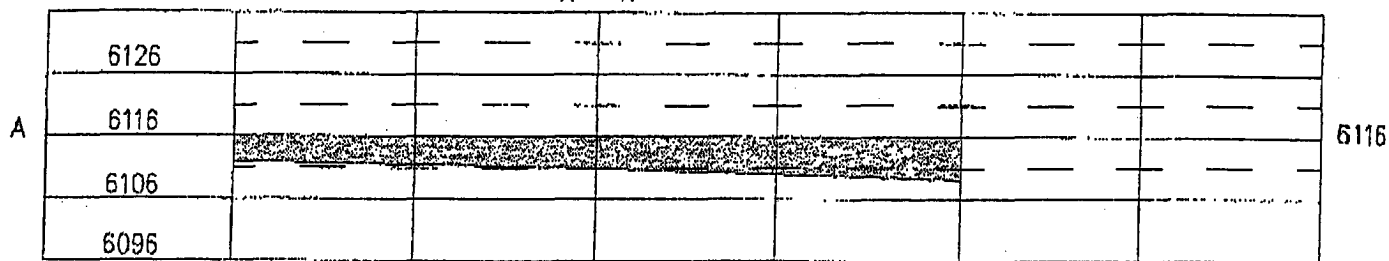
751.00' F/NL 517.00' F/WL
FOOTAGES

20	27N	11W
SEC.	TWP.	RGE.

San Juan, New Mexico
COUNTY STATE

February 1, 2005
DATE:

SCALE
 Horiz. 1" = 50'
 Vert. 1" = 30'



RODDY PRODUCTION COMPANY, INC.

P.O. BOX 2221 • Farmington, New Mexico 87499
Telephone: (505) 325-5750 • Fax (505) 326-6814

Drilling Plan

Well Name: Yockey No. 7
Operator: Roddy Production Company, Inc.
Location: 761' FNL x 517' FWL, Section 20, T27N, R11W
San Juan County, NM
Target Formation: Fruitland Coal
Elevation: 6116' GL
Geology:

Formation	Top	Probable Content
Nacimiento	Surface	
Ojo Alamo	780'	Corrosive water
Kirtland	820'	water
Fruitland	1378'	gas/water
Basal Fruitland Coal	1766'	gas/water
Pictured Cliffs	1828'	gas/water
TD	1950'	

Logging Program: Spectral Density, epithermal Neutron, Induction Log from TD to surface casing shoe.

Drilling Fluid Program:

Interval	Fluid Type	Density	Viscosity	Fluid Loss
0 – 250'	fresh wtr spud mud	8.4 – 9.0 ppg	30-50 sec	No cntrl
250' – 1950'	fresh water polymer	8.4 – 9.0 ppg	30-50 sec	8 – 10

ADDY PRODUCTION COMPANY, INC.

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Telephone: (505) 325-5750 • Fax (505) 326-6814

Casing Program:

Interval	Hole Diameter	Casing O.D.	Wt, Grade, Thread
0 - 250'	8 3/4"	7"	20 ppf, J55, STC
250' - 1950'	8 3/4" 6 1/4"	4 1/2"	10.5 ppf, J55, STC

Tubing Program: 0 - 1900' of 2 3/8", 4.7 ppf, J55, EUE

BOPE and Wellhead Specifications and Testing:

From surface casing shoe to TD: 7 1/16", 2000 psi threaded casing head with two 2" outlets. 7 1/16", 2000 psi double gate BOP and 2000 psi choke manifold (see figures 1 and 2). Pressure test BOPE and casing head to 2000 psi and surface casing to 600 psi prior to drilling surface hole.

For completion operations: 7" x 2 3/8" tubing head and tree assembly. 7 1/16", 2000 psi double gate BOP (see figures 3 and 4).

General Operation:

- Actuate pipe rams once each day during drilling operations. Actuate blind rams once each trip.
- An upper Kelly-cock valve, with handle, will be available on the rig floor to fit each drilling string.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in the daily drilling report.
- Blind and pipe rams will be equipped with extension hand wheels.

Casing and Cementing Program:

7" Surface Casing String: Run casing with saw-tooth pattern guide shoe on bottom, insert float valve one joint from bottom, and install bow spring centralizers with one centralizer in the middle of the first joint and one every collar thereafter. Land casing in full tension. Cement to surface with 60 sks class 'G' + 2% CaCl₂ (yield = 1.16 cf sk, density = 15.8 ppg).

4 1/2" Production Casing String: Run casing with swirl-pattern guide shoe on bottom and float collar one joint from bottom. Centralize with one centralizer in the middle of the first joint and one centralizer every other collar to 1000'. Install one centralizer at 512' and one inside the surface casing at 240'. Cement to surface with 80 sks class 'G' + .25 lbs/sk D29 + 3.0% D-79 extender + 2.0% S1 + 0.2% D46 (yield = 2.66 cf/sk, density =

LDY PRODUCTION COMPANY, L

P.O. BOX 2221 • Farmington, New Mexico 87499
Telephone: (505) 325-5750 • Fax (505) 326-6814

11.7 ppg) followed by 60 sks class 'G' 50/50 poz + 5 lbs/sk D24 + 0.25 lbs/sk D29 + 2.0% D20 + 2.0% S1 + 0.1% D46 (yield = 1.28 cf/sk, density = 13.5 ppg). All additives are Schlumberger products. Precise slurry volume to be calculated from open hole log caliper volume plus 30% excess.

Special Drilling Operations:

- Mud materials, equipment, and water will be available on location to maintain control of the well during all operations.
- Adequate lost circulation material will be available on location to maintain circulation throughout drilling operations.

Additional Information:

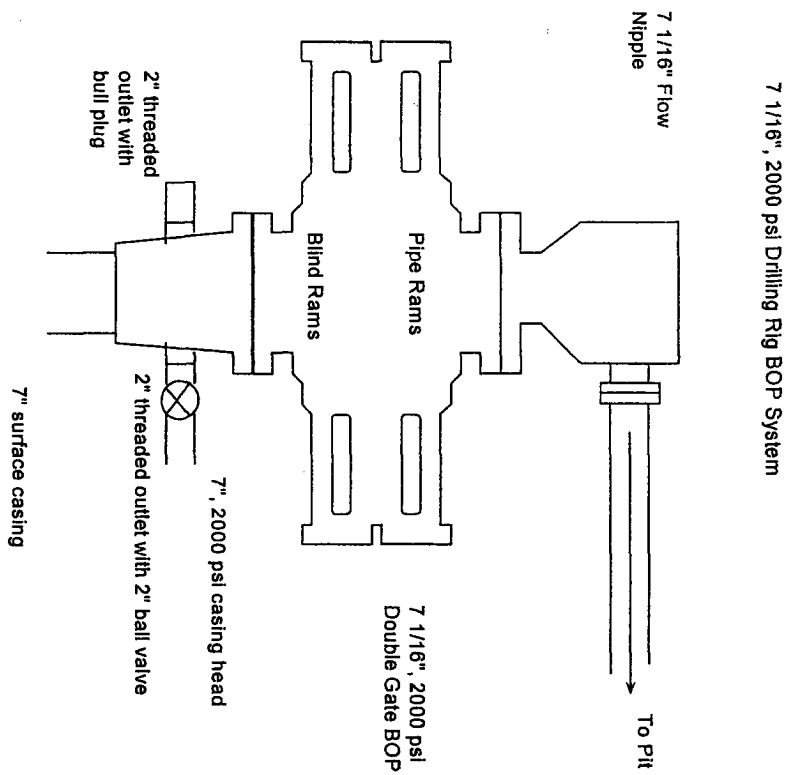
- This well is to be completed in the Fruitland Coal formation.
- No abnormal temperature or pressure, or other hazards are anticipated.
- LCM will be added to the mud system to maintain circulation as needed.
- Estimated formation pressures:
 - Fruitland Coal – 740 psi

Completion Information:

The completion procedure will be prepared after open hole logs are analyzed. The well will probably be completed by hydraulic frac in one stage.

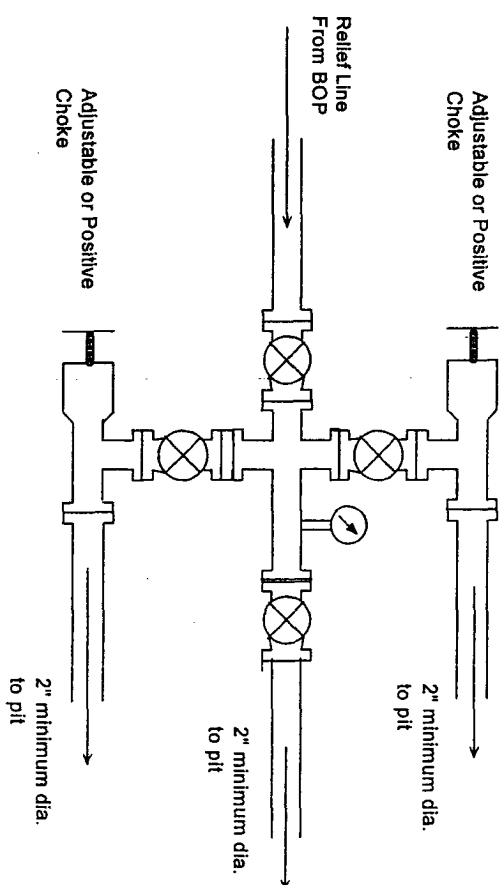
Prepared by: Robert R. Griffiee
Operations Manager
Date: 1/16/06

Figure 1



BOP Installation for Drilling operations. 7 1/16", 2000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 2000 psi or greater working pressure.

Figure 2

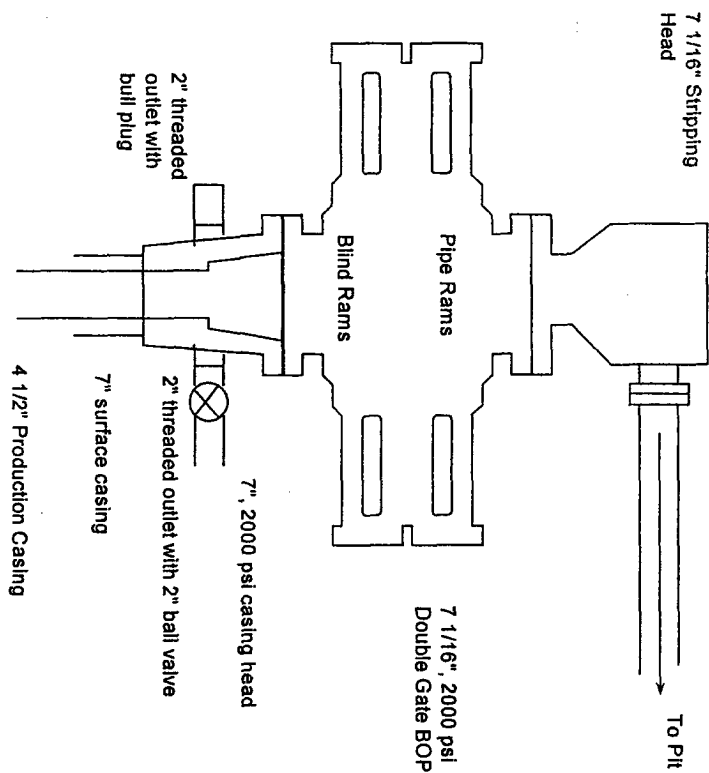


Choke manifold for BOP system shown in Figure 1. All equipment to be rated at 2000 psi or greater.

10/10/10

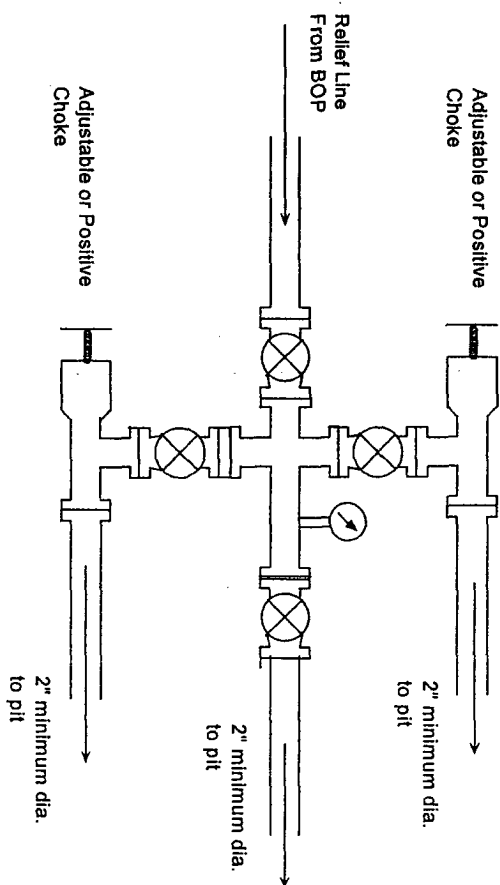
Figure 3

7 1/16", 2000 psi Completion Rig BOP System



BOP Installation for Completion operations. 7 1/16", 2000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 2000 psi or greater working pressure.

Figure 4



Choke manifold for BOP system shown in Figure 3.
All equipment to be rated at 2000 psi or greater.

January 16, 2006

Yockey No. 7
NW ¼, Section 20, T27N, R11W
San Juan County, NM
Fruitland Coal

Prepared by: Robert R. Griffiee
Operations Manager

Geology:

Base of Ojo Alamo (top of Kirtland)	820'
Fruitland	1378'
Basal Coal	1766'
Pictured Cliffs	1828'
TD	1950'

Drilling Procedure:

1. Construct location and access road. Build and line reserve pit. Install and test rig anchors.
2. MIRU rotary rig. Notify BLM of spud and running surface casing 24 hours in advance.
3. Spud well with an 8 ¾" bit. Drill 8 ¾" Surface hole to 250' +/- using fresh water, gel/lime, spud mud (drill hole to fit casing). Maintain well bore deviation at 2 degrees or less with maximum deviation change of 1 degree/100 ft or less.
4. Circulate hole clean. Short trip and clean hole as necessary prior to running casing.
5. Run 7", 20 ppf, J55, STC casing with Texas-pattern (saw-tooth) guide shoe on bottom and insert float one joint from bottom. Centralize with one centralizer in the middle of the first joint and one every collar thereafter. Land casing in full tension at 250' +/-.
6. Cement to surface with 60 sks class 'G' neat + 2% CaCl₂. Slurry volume is calculated at 50% excess over open hole volume. WOC a minimum of 8 hours prior to cutting off casing.
7. Cut off casing. Weld on 7 1/16", 2000 psi braden head with two 2" outlets.
8. Nu 7 1/16", 2000 psi, double ram BOPE and choke manifold. Pressure test BOPE to 2000 psi and surface casing to 600 psi.
9. Drill out of surface casing with a 6 ¼" bit. Drill to TD of 1950' using Basin Fluid's fresh water polymer mud system, circulating the reserve pit. Maintain well bore deviation at 3 degrees or less with maximum deviation changes at 1 degree/100 ft or less.

R. DDDY PRODUCTION COMPANY, L.P.

P.O. BOX 2221 • Farmington, New Mexico 87499
Telephone: (505) 325-5750 • Fax (505) 326-6814

10. Circulate hole clean. Short trip and clean hole as necessary prior to logging.
11. Log open hole into surface casing. Run Platform express log suite including CNL/FDC and Induction log.
12. If hole conditions warrant, TIH to TD and clean hole as necessary prior to running production casing.
13. Run 4 ½", 10.5 ppf, J55, STC Production casing with swirl pattern guide shoe on bottom and float collar one joint from bottom. Centralize with one centralizer in the middle of the first joint and one every other collar to 1000'. Install one centralizer at 512' and one inside the surface casing at 240'.
14. Cement to surface with 75 sks Class 'G' plus D79 extender mixed at 11.7 ppg (2.61 cf/sk) followed with 95 sks 50/50 poz mixed at 13.5 ppg (1.24 cf/sk).
Adjust slurry volumes base on open hole log caliper measurements.
15. Land casing in slips in full tension.
16. ND BOPE and NU 2000 psi casing head.
17. Release rotary tools.

Completion Procedure

1. MIRU well service rig package.
2. PU bit, casing scraper, and 2 3/8" tubing. Round trip to PBTD.
3. Run CBL/GR correlation log.
4. TIH open ended and spot 250 gals 7 ½% HCL across Fruitland Coal perforation interval. TOH.
5. Perforate Fruitland Coal (perforations to be determined after obtaining open hole logs).
6. Break down perforations with 1500 gals 15% HCL and bio-ball sealers (bull-head down casing).
7. Frac Fruitland Coal with 100,000 lbs 16/30 Brady sand in 65Q ClearFrac N2 foam, with last 30% of sand containing Prop-net.
8. Flow back N2 until well dies.
9. TIH with bit and 2 3/8" tubing. Clean out sand using air/mist. Clean out to PBTD. Clean out until well does not make sand. TOH.
10. Land 2 3/8" tubing in perforations with SN one joint from bottom.
11. Release well service rig and place well on production.