

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMSF-078765
6. If Indian, Allottee or Tribe Name

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

7. If Unit or CA Agreement, Name and No.
Rosa Unit **NMM-6784070-FC**

2. Name of Operator
Williams Production Company, LLC

8. Lease Name and Well No.
208Y

3a. Address
P.O. Box 640 Aztec, NM 87410

3b. Phone No. (include area code)
(505) 634-4203

9. API Well No.
30-045-33854

4. Location of Well (Report location clearly and in accordance with any State requirements. *)
At surface 605' FNL & 440' FEL, Lot A, Sec. 16, T31N, R6W
At proposed prod. zone 660' FNL & 660' FWL, Lot D, Sec. 15, T31N, R6W

10. Field and Pool, or Exploratory
Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Area
A Sec 16 T31N, R6W

14. Distance in miles and direction from nearest town or post office*
Approx. 20 miles northeast of Blanco, New Mexico

12. County or Parish
San Juan

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1500'

16. No. of Acres in lease
2,460.23

17. Spacing Unit dedicated to this well
335.19 W/2 **Sec 16**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, or this lease, ft. 50'

19. Proposed Depth
3,543'

20. BLM/BIA Bond No. on file
WTO899 WT3000178

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6,326 GR

22. Approximate date work will start*
Done

23. Estimated duration

24. Attachments

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

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

25. Signature *Larry Higgins* Name (Printed/Typed) Larry Higgins Date 7-17-06

Title Drilling COM
Approved by (Signature) *[Signature]* Name (Printed/Typed) **Spud 6-14-06** Date 7/24/06
Title AFD Office PFO

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)

Williams Production Company, LLC, proposes to drill a directional well to develop the Basin Fruitland Coal formation at the above described location in accordance with the attached drilling and surface use plans.

The surface is under jurisdiction of the Bureau of Reclamation, with minerals administered by the Bureau of Land Management, Farmington Field Office.

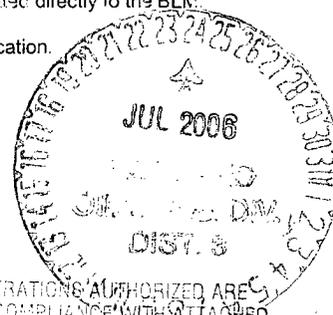
This location has been archaeologically surveyed by La Plata Archaeological Consultants. Copies of their report have been submitted directly to the BLM.

This APD is also serving as an application to obtain a pipeline right-of-way. A 160 20 foot pipeline tie would be required for this location.

THIS APD IS TO REPLACE ROSA UNIT # 208A

PK

HOLD OVER FOR directional survey



DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

NMOCD

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

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

District II
PO Drawer DD, 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 C-102
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

¹ API Number 30-045-33854		² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 17033	⁵ Property Name ROSA UNIT		⁶ Well Number 208Y
⁷ OGRID No. 120782	⁸ Operator Name WILLIAMS PRODUCTION COMPANY		⁹ Elevation 6324'

¹⁰ Surface Location

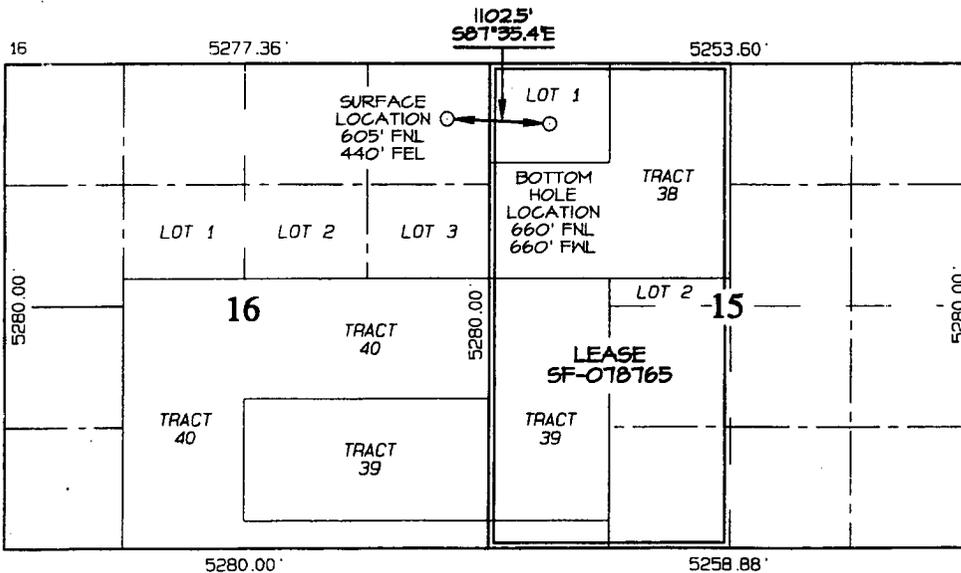
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	16	31N	6W		605	NORTH	440	EAST	SAN JUAN

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
D	15	31N	6W		660	NORTH	660	WEST	SAN JUAN

¹² Dedicated Acreage 320.0 Acres - (W/2) 335.19	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

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

Larry Higgins
Signature
LARRY HIGGINS
Printed Name
DRILLING COM
Title
7-17-06
Date

¹⁸ 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: **JULY 9, 2006**
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 88240
 District II
 1301 W. Grand Ave., Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., 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-103
 May 27, 2004

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO. 30-045-33854
5. Indicate Type of Lease FEDERAL <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NMSF-078765
7. Lease Name or Unit Agreement Name Rosa
8. Well Number 208X
9. OGRID Number 120782
10. Pool name or Wildcat Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well Gas Well Other

2. Name of Operator
Williams Production Company, LLC

3. Address of Operator
P.O. Box 640, Aztec, NM

4. Well Location
 Unit Letter **A** : **605** feet from the **N** line and **440** feet from the **E** line
 Section **15** Township **31N** Range **06W** NMPM County **Rio Arriba**

11. Elevation: (Show whether DR, RKB, RT, GR, etc.)
6326' GR

Pit or Below-grade Tank Application or Closure

Pit type Drig/Completion Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >500'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls: Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Drilling/Completion pit to be located approximately 50 to 75 feet from well head. Pit multi-use drilling and completion to avoid additional site disturbance and pit will be considered out of service once production tubing set. Pit to be constructed, operated and closed in accordance with NMOCD guidelines and Williams procedures.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit or an (attached) alternative OCD-approved plan .

SIGNATURE Laurey Higgins TITLE EH&S Specialist DATE 3/15/06

Type or print name ^{For} Michael K. Lane E-mail address: myke.lane@williams.com Telephone No. 505-634-4219

For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 63 DATE JUL 24 2006
 Conditions of Approval (if any): _____

- D. **BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

III. MATERIALS

A. CASING PROGRAM:

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH (MD)</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 3,313'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 3,213'-3,433'	5-1/2"	15.5# K-55

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Run (1) Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) Turbulent centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. (NLT-FRA 90-1).
3. PRODUCTION LINER/ CASING: 4-1/2" & 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place centralizers as needed across selected production intervals.

C. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. SURFACE: Use 190 sx (268 cu.ft.) of "Type III" with 2% CaCl₂ and 1/4# of cello-flake/sk (Yield = 1.41 cu.ft./sk, Weight = 14.5 #/gal.). Use 100% excess to circulate the surface. WOC 12 hours. Total volume = 268 cu.ft. Test to 1500#.
2. INTERMEDIATE: Lead - 450 sx (941 cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl₂ and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 50 sx (70cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl₂ (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use 120% excess in Lead Slurry to circulate to surface. No excess in Tail Slurry. Total volume = 1,011 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. PRODUCTION LINER: Open hole completion. No cement.

IV COMPLETION

A. PRESSURE TEST

Pressure test 7" casing to 3300# for 15 minutes.

B. STIMULATION

Cavitate Well with reciprocation and rotation. Surge wells with water and air and then flow back to pit.
Cavitate for 2 to 3 weeks. Maximum pressure not expected to exceed 2,000 psi.

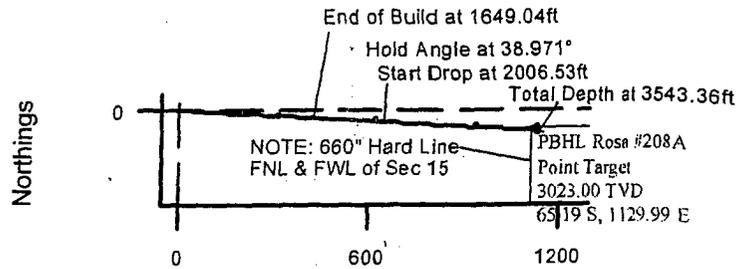
C. RUNNING TUBING

1. Fruitland Coal: Run 2-7/8", 4.7#, J-55, EUE tubing with a SN (1.375" ID) on top of bottom joint. Land tubing approximately 50' above TD.

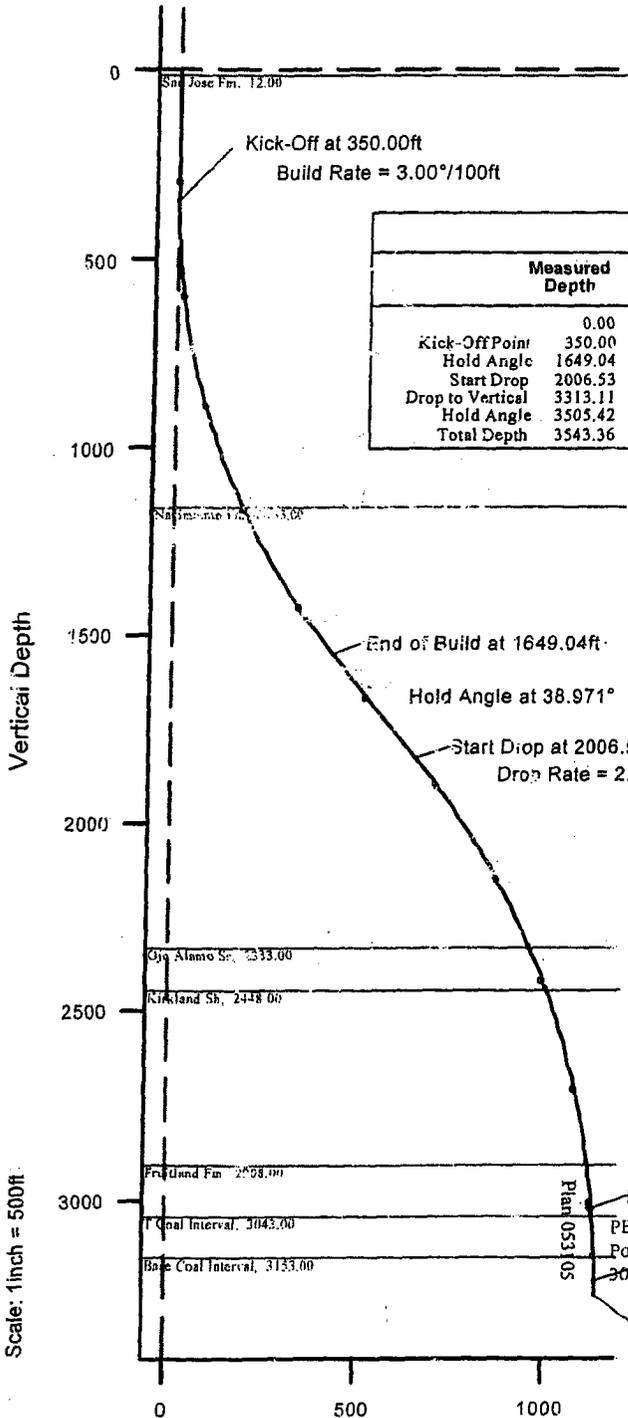


Gary Sizemore
Sr. Drilling Engineer

New Mexico
San Juan County
Sec. 16-T31N-R06W
Rosa Unit #208A 208Y
Plan 053105



Scale: 1 inch = 600ft Reference is True North Eastings



Plan 053105 Proposal Data							
	Measured Depth	Incl.	Azim.	Vertical Depth	Northings	Eastings	Vertical Section Dogleg Rate
	0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00
Kick-Off Point	350.00	0.000	0.000	350.00	0.00 N	0.00 E	0.00
Hold Angle	1649.04	38.971	93.302	1551.16	24.48 S	424.31 E	424.96 3.00
Start Drop	2006.53	38.971	93.302	1829.10	37.43 S	648.77 E	649.77 0.00
Drop to Vertical	3313.11	5.000	93.302	3023.00	65.19 S	1129.99 E	1131.72 2.60
Hold Angle	3505.42	0.000	0.000	3215.06	65.68 S	1138.36 E	1140.19 2.60
Total Depth	3543.36	0.000	0.000	3253.00	65.68 S	1138.36 E	1140.19 0.00

Rosa Unit #208A Surface Location	
RKB Elevation:	6338.00ft above Mean Sea Level
Ref. NE Corner of Sec. 16:	605.00 S, 4817.36 E
Ref. Global Coordinates:	2149005.23 N 609136.61 E
Ref. Geographical Coordinates:	36° 54' 19.0633" N, 107° 27' 36.2177" W

Plan 053105 Bottom Hole Location	
Ref. RKB(6326'+12'KB):	3253.00ft
Ref. Ground Level:	3374.00ft
Ref. Mean Sea Level:	-3085.00ft
Ref. Wellhead:	65.68 S, 1138.36 E (True North)
Ref. NE Corner of Sec. 16:	670.48 S, 5955.73 E (True North)
Ref. Global Coordinates:	2148944.01 N, 610275.22 E
Ref. Geographical Coordinates:	36° 54' 18.4136" N, 107° 27' 22.2015" W

Section Azimuth: 92.365° (True North)

Vertical Section

Prepared by:
Dennis Cook

Date/Time:
1 June, 2005 - 10:24

Checked:

Approved:

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
				N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
Base Coal Interval										
3443.35	1.614	93.302	3153.00	65.43 S	1137.50 E	2.60	670.43 FNL	5954.86 FWL	2148944.05 N	610274.34 E
3500.00	0.141	93.302	3209.64	65.48 S	1138.37 E	2.60	670.48 FNL	5955.73 FWL	2148944.01 N	610275.21 E
End of Drop at 3505.42ft										
3505.42	0.000	0.000	3215.06	65.48 S	1138.37 E	2.60	670.48 FNL	5955.73 FWL	2148944.01 N	610275.22 E
Total Depth at 3543.36ft										
3543.36	0.000	0.000	3253.00	65.48 S	1138.37 E	0.00	670.48 FNL	5955.73 FWL	2148944.01 N	610275.22 E

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North. Vertical depths are relative to RKB(6326 +12' KB). Northings and Eastings are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 3543.36ft., The Bottom Hole Displacement is 1140.25ft., in the Direction of 93.302° (True).

GENERAL ROSA DRILLING PLAN

Rosa Unit boundaries:

- T31N, R4W: all except sections 32-36
- T31N, R5W: all except sections 1 & 2
- T31N, R6W: all except sections 6,7,18,20, & 27-36
- T32N, R6W: sections 32-36

FORMATION	LITHOLOGY	WATER	GAS	OIL/COND	OVER-PRES	LOST CIRC
Nacimiento	Interbedded shales, siltstones and sandstones	Possible	Possible	No	No	No
Ojo Alamo	Sandstone and conglomerates with lenses of shale	Fresh	No	No	No	No
Kirtland	Shale W/interbedded sandstones	No	Possible	No	No	No
Fruitland	Inter. SS, SiltSt, SH & Coals w/carb, SS, SiltSt, SH	Yes	Yes	No	Possible	Possible
Pictured Cliffs	Massive Sandstone w/thin interbedded shales	Possible	Yes	Possible	No	Possible
Lewis	Shale w/thin interbedded sandstones and siltstones	No	Possible	No	No	No
Cliff House	Transgressive sandstones	Possible	Yes	No	No	No
Menefee	Sandstones, carb shales and coal	Possible	Yes	No	No	No
Point Lookout	Regressive coastal barrier sandstone	Possible	Yes	Possible	No	Yes
Mancos	Marine shale and interbedded sandstone	No	Possible	Possible	No	Possible
Upr Dakota	Marine sand and shales	No	Yes	Possible	No	Possible
Lwr Dakota	Fluvial sands, shales, & coal	Possible	Yes	Possible	No	Possible

DRILLING

Potential Hazards:

1. There are no overpressured zones expected in this well.
2. No H2S zones will be penetrated while drilling this well.

Mud System:

1. Surface - The surface hole will be drilled with a low-solids, non-dispersed system with starch and lost circulation material as needed. Expected mud weights will be in the 8.4 to 9.0 lb per gal range. Viscosities will be in the 30 to 60 sec/qrt range as needed to remove drill cuttings.
2. Intermediate - The intermediate hole will be drilled with clear water and Benex to TD where the well will be mudded up to log and run casing. The mud system will be low-solids, non-dispersed with mud weights in the 9 to 10 lb per gal range as needed to control the well. Viscosities will be in the 45 to 55 range as needed to support any weight material. The weight material will consist of Barite.
3. Production - The well will be drilled using air from the intermediate casing point to TD. For Fruitland Coal wells, the coal section will be drilled with air/mist.

Williams Production Company, LLC

Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

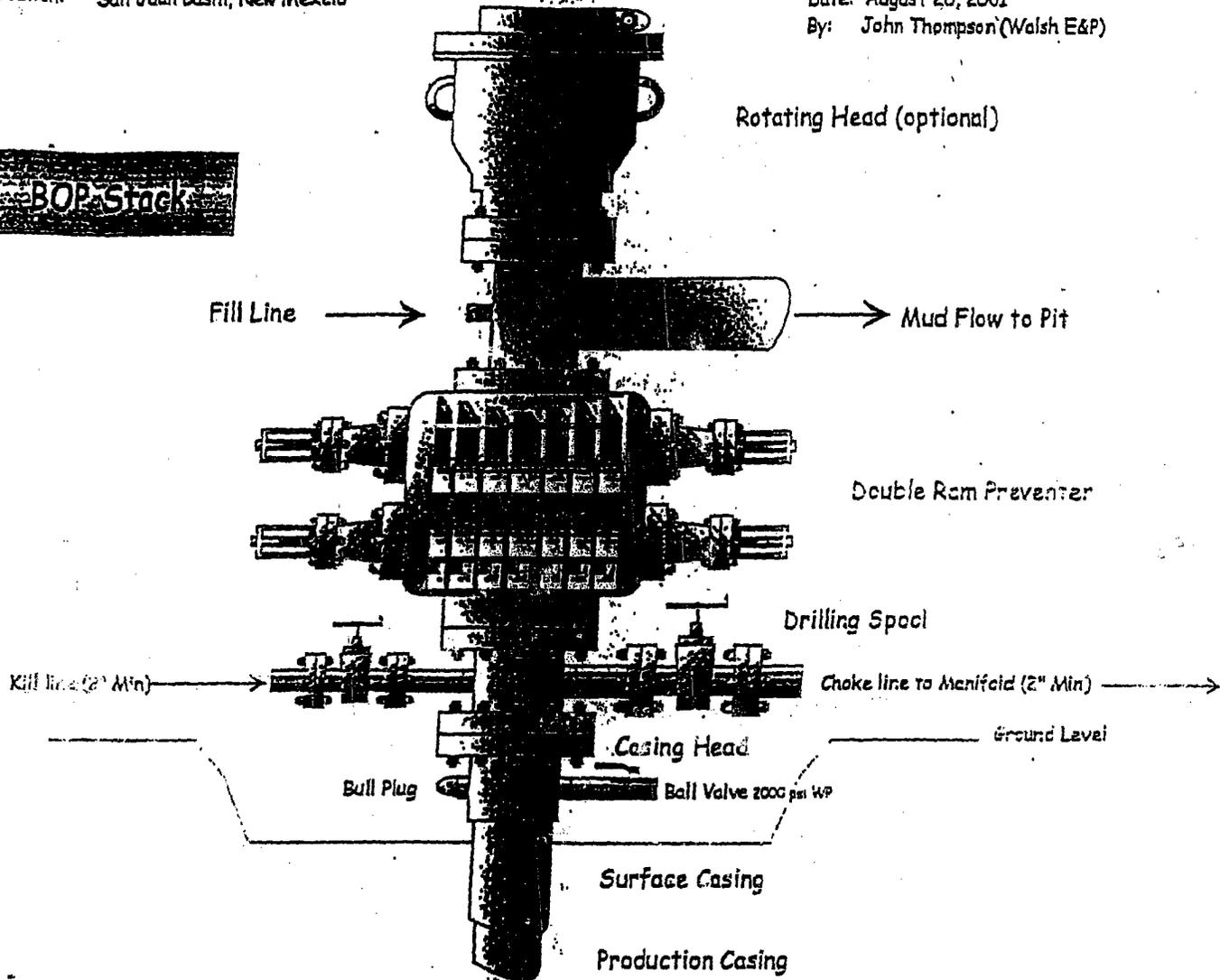
Typical BOP setup

Location: San Juan Basin, New Mexico

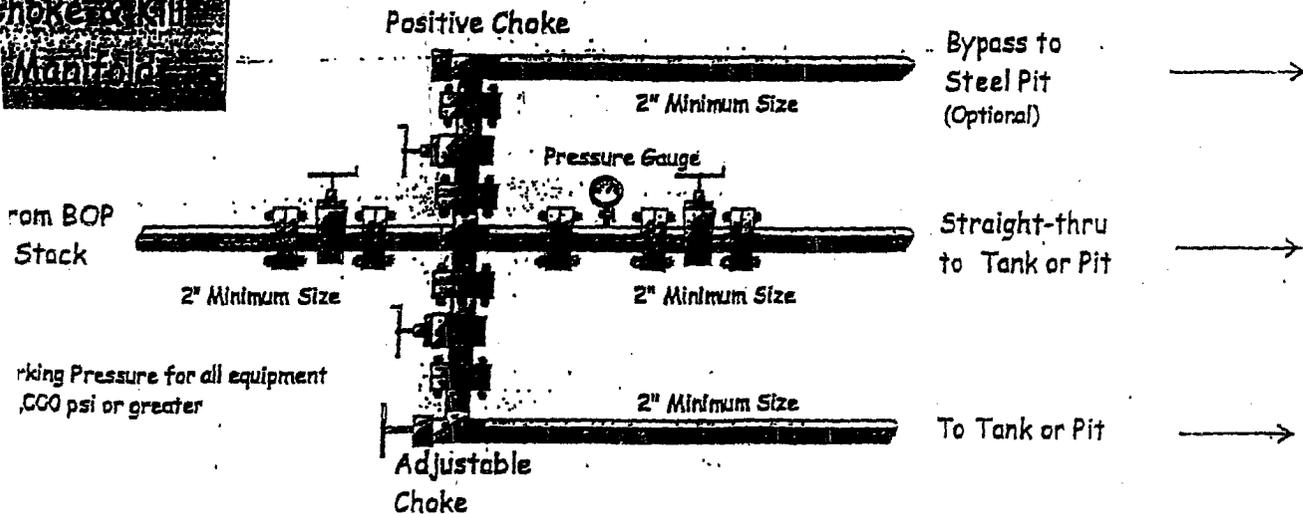
Date: August 20, 2001

By: John Thompson (Walsh E&P)

BOP Stack



Choke & Kill Manifold



Working Pressure for all equipment
5000 psi or greater