

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Williams Production Company, LLC

3. ADDRESS AND TELEPHONE NO.

P.O. Box 316— Ignacio, Colorado 81137-0316

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. \*)

At surface

1,980' FNL, 2,010' FEL

SW/4 NE/4 (G)

At proposed prod. zone

1,980' FNL, 2,010' FEL

SW/4 NE/4 (G)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

8.14 miles NW of Cedar Hill, NM

15. DISTANCE FROM PROPOSED  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

+/- 660'

16. NO. OF ACRES IN LEASE

600

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320 acres

18. DISTANCE FROM PROPOSED  
LOCATION TO NEAREST WELL,  
DRILLING, COMPLETED, OR  
APPLIED FOR, ON THIS LEASE, FT.

+/- 400

19. PROPOSED DEPTH

+/- 5,993'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6,581' GR

22. APPROX. DATE WORK WILL START\*

March 15, 2005

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" K-55	36#	+/- 300'	150 sacks Type III cement + 2% CaCl <sub>2</sub> + 1/4 #/sk. Cello-Flakes
8-3/4"	7" K-55	20#	+/- 2,653'	315 sacks Lead and 50 sacks Tail (see Drilling Plan)
6-1/4"	4-1/2" K-55	10.5#	+/- 2,553-5993'	50 sacks Lead and 145 sacks Tail (see Drilling Plan)

Other Information:

Drilling Plan, Surface Use Plan and Fee Surface Use Agreement are attached.



2005 MAY 12 PM 3 21  
RECEIVED  
OIL CONSERVATION DIV.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Don Hamilton Don Hamilton TITLE Agent for Williams

DATE May 5, 2005

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

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:

APPROVED BY Wayne Townsend TITLE Acting A.F.M.

DATE 9/8/05

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency or the

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

*API Number		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 17040	*Property Name NEW MEXICO 32-11 COM		*Well Number 2C
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6581'

<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
G	19	32N	11W		1980	NORTH	2010	EAST	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 - (E/2)	<sup>13</sup> Joint or Infill	<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><sup>16</sup> 1280.40' 1347.72' 2695.44'</p> <p>LOT 1</p> <p>2622.18'</p> <p>LOT 2</p> <p>660' 1980' 2010'</p> <p>5283.96'</p> <p>2639.34'</p> <p>LOT 4</p> <p>1246.74' 1322.64' 2645.28'</p> <p>19</p> <p>SEP 2005 RECEIVED OIL CONS. DIV. DIST. 3</p> <p>LEASE USA NM-03189</p>	<p><sup>17</sup> 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><u>Don Hamilton</u> Signature</p> <p><u>Don Hamilton</u> Printed Name</p> <p><u>Agent</u> Title</p> <p><u>5-5-05</u> Date</p> <p><sup>18</sup> 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>Survey Date: NOVEMBER 9, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <p><u>JASON C. EDWARDS</u> Certificate Number 15269</p>
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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. 30-045-32888
5. Indicate Type of Lease Federal
6. State Oil & Gas Lease No. NM-010910
7. Lease Name or Unit Agreement Name New Mexico 32-11 Com
8. Well Number 2C
9. OGRID Number 120782
10. Pool name or Wildcat Blanco MV

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 <input checked="" type="checkbox"/> Other	
2. Name of Operator Williams Production Company	
3. Address of Operator P.O. Box 316, Ignacio, CO 81137	
4. Well Location Unit Letter <u>G</u> <u>1,980</u> feet from the <u>North</u> line and <u>2,010</u> feet from the <u>East</u> line Section <u>19</u> Township <u>32N</u> Range <u>11W</u> NMPM      County <u>San Juan</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>6,581' GR</u>	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure	
Pit type <u>Drilling</u> Depth to Groundwater <u>137'</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&gt;1000'</u>	
Pit Liner Thickness <u>12</u> mil    Below-Grade Tank: Volume <u>10,971</u> bbls;    Construction Material: <u>Native</u>	

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐    PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐    CHANGE PLANS ☐  
PULL OR ALTER CASING ☐    MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐    ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐    P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

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.



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 will be constructed and closed according to NMOCD guidelines ☒ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

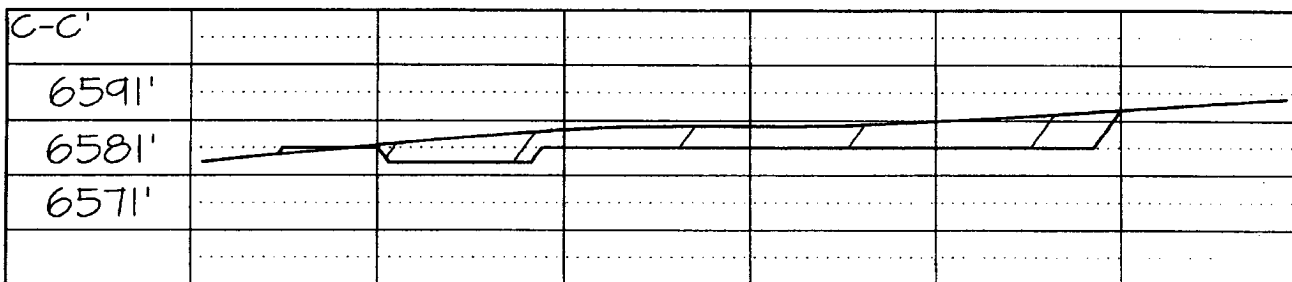
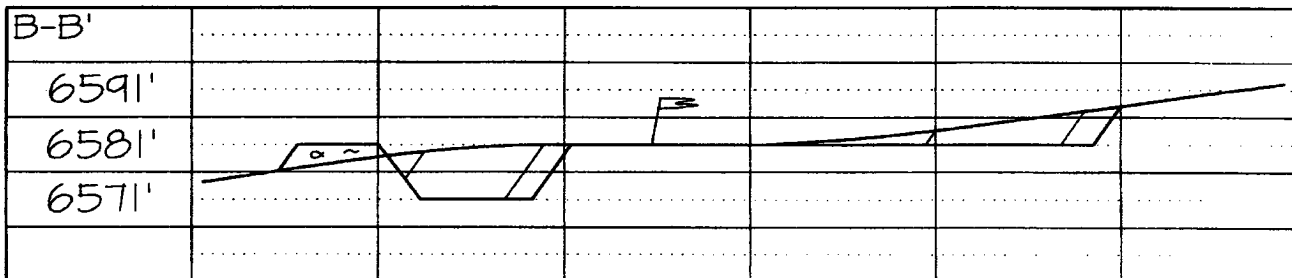
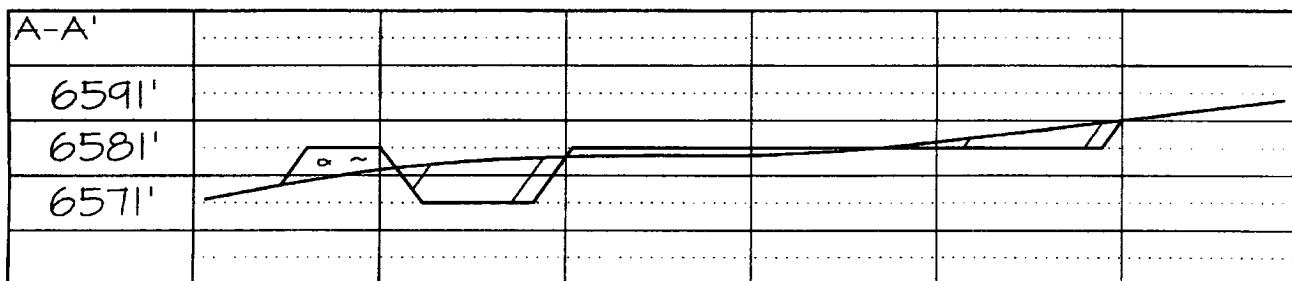
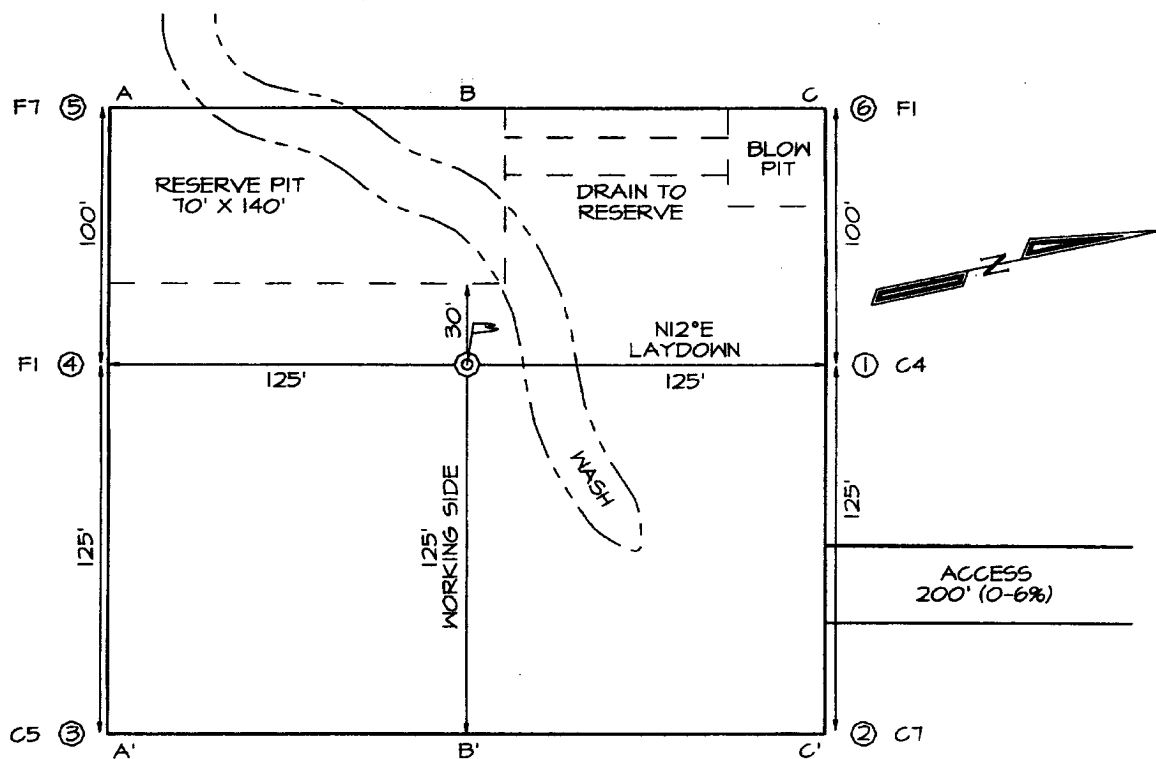
SIGNATURE Don Hamilton      TITLE Agent for Williams      DATE May 5, 2005

Type or print name Don Hamilton    E-mail address: starpoin@etv.net    Telephone No. (970) 564-9220  
**For State Use Only**

APPROVED BY: [Signature]      TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3      DATE SEP 12 2005

**LATITUDE: 36°58'21"**  
**LONGITUDE: 108°01'35"**

DATUM: NAD1927





## **WILLIAMS PRODUCTION COMPANY**

### **Operations Plan**

*(Note: This procedure will be adjusted on site based upon actual conditions)*

<b><u>DATE:</u></b>	5/6/2005	<b><u>FIELD:</u></b>	Blanco MV
<b><u>WELL NAME:</u></b>	New Mexico 32-11 #2C	<b><u>SURFACE:</u></b>	FED
<b><u>LOCATION:</u></b>	SWNE Sec 19-32N-11W San Juan, NM	<b><u>MINERALS:</u></b>	FED
<b><u>ELEVATION:</u></b>	6,581' GR	<b><u>LEASE #</u></b>	NM-010910
<b><u>MEASURED DEPTH:</u></b>	5,993'		

#### **I. GEOLOGY:** Surface formation - San Jose

##### **A. FORMATION TOPS:** ( KB)

Ojo Alamo	1,353	Cliff House	4,978
Kirtland	1,398	Menefee	5,133
Fruitland	2,703	Point Lookout	5,493
Picture Cliffs	3,183	Mancos	5,818
Lewis	3,363	TD	5,993
Huerfanito Bentonite	3,883		

##### **B. MUD LOGGING PROGRAM:** None

##### **C. LOGGING PROGRAM:** High Resolution Induction/ GR and Density/ Neutron log from intermediate shoe to TD. Onsite geologist will pick Density/ Neutron log intervals.

##### **D. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

#### **II. DRILLING**

##### **A. MUD PROGRAM:** Clear water with benex to 7" casing point. Convert to a LSND mud to log and run pipe. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer from 7 in. csg.to TD.

##### **B. 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 rams will be tested to 1500 psi. The surface and intermediate casing strings will be pressure tested to 1500 psi in conjunction with the BOP test before drilling out cement. The drum brakes will be inspected and tested each tour. All tests, inspections and SPR's 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. &amp; GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 2,653'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 2,553'-5,993'	4-1/2"	10.5# 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. Install (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. (NTL-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 marker joint above 5,400'. Place centralizers as needed across selected production intervals.

#### C. CEMENTING:

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

1. SURFACE: Slurry: 150sx (205 cu.ft.) of "Type III" + 2% CaCl<sub>2</sub> + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. INTERMEDIATE: Lead - 315 sx (657) cu.ft.) of "Type III" 65/35 poz with 8% gel, 1% CaCl<sub>2</sub> 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% CaCl<sub>2</sub> (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use 100% excess in Lead Slurry to circulate to surface. No excess in Tail Slurry. Total volume = 727 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. PRODUCTION LINER: 10 bbl Gelled Water space. Lead: 50sx (130ft<sup>3</sup>) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/sk cello flake. (Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Tail: 145 sx (308 ft<sup>3</sup>) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft<sup>3</sup>/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess in lead and tail should cover 100 ft into intermediate casing. Total volume 438 ft<sup>3</sup>. WOC 12 hours

#### **IV COMPLETION**

##### **A. CBL**

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings if cement is not circulated to surface.

##### **B. PRESSURE TEST**

1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

##### **C. STIMULATION**

1. Perforate the Point Lookout as determined from the open hole logs.
2. Stimulate with approximately 80,000# of 20/40 sand in slick water.
3. Isolate Point Lookout with a CIBP.
4. Perforate the Menefee/Cliff House as determined from the open hole logs.
5. Stimulate with approximately 80,000# of 20/40 sand in slick water.
6. Test each zone before removing bridge plugs.

##### **D. RUNNING TUBING**

1. Mesa Verde: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

Gary Sizemore  
Sr. Drilling Engineer

## Well Control Equipment Schematic for 2M Service

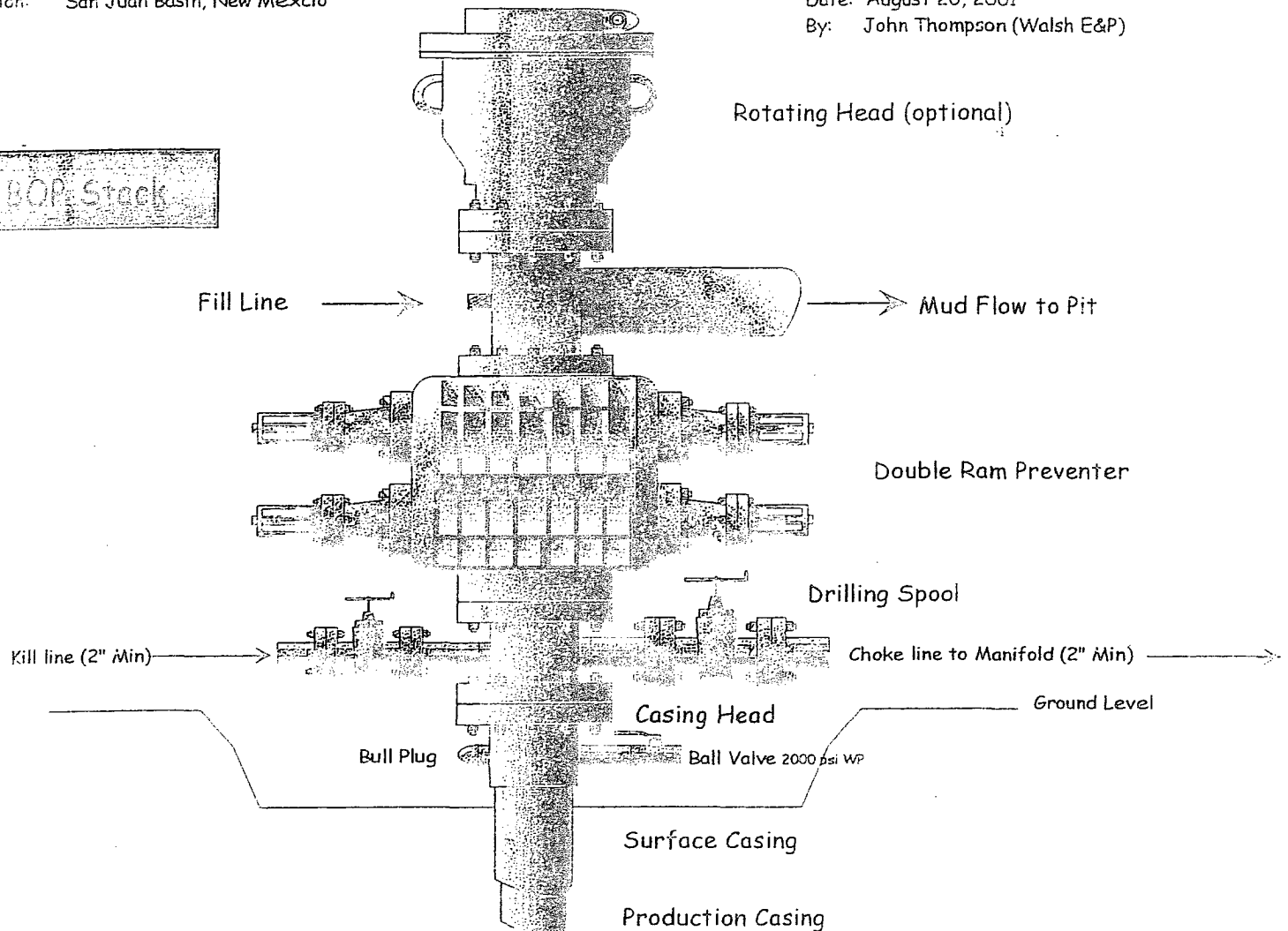
### Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

BOP Stack



Choke & Kill Manifold

