

**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****Oil Conservation Division**

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-101

May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address <b>Williams Production Company, LLC c/o New Horizons Consultants</b> P.O. Box 1391 Cortez, CO 81321		<sup>2</sup> OGRID Number <b>120782</b>
<sup>3</sup> Property Code <b>17036</b>	<sup>4</sup> Property Name <b>Cox Canyon Unit</b>	<sup>5</sup> API Number <b>30-045-32693</b>
<sup>9</sup> Proposed Pool 1 <b>Blanco Mesa Verde</b>		<sup>10</sup> Proposed Pool 2

**<sup>7</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
<b>B</b>	<b>16</b>	<b>32N</b>	<b>11W</b>		<b>1025</b>	<b>NORTH</b>	<b>2250</b>	<b>EAST</b>	<b>San Juan</b>

**<sup>8</sup> 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

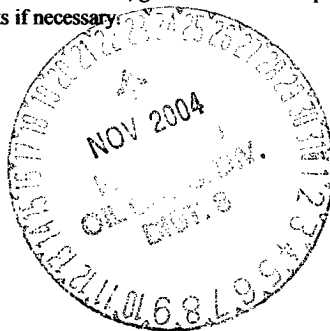
**Additional Well Information**

<sup>11</sup> Work Type Code <b>N</b>	<sup>12</sup> Well Type Code <b>M</b>	<sup>13</sup> Cable/Rotary <b>R</b>	<sup>14</sup> Lease Type Code <b>S</b>	<sup>15</sup> Ground Level Elevation <b>6710</b>
<sup>16</sup> Multiple Yes	<sup>17</sup> Proposed Depth <b>6182</b>	<sup>18</sup> Formation <b>Blanco Mesa Verde</b>	<sup>19</sup> Contractor <b>Aztec Well Services</b>	<sup>20</sup> Spud Date When Approved
Depth to Groundwater <b>&gt; 1000'</b>		Distance from nearest fresh water well <b>&gt;1000'</b>		Distance from nearest surface water <b>&gt;1000'</b>
Pit: Liner: Synthetic X <b>12</b> mils thick Clay <input type="checkbox"/> Pit Volume: <b>10,000</b> bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water X Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
<b>12-1/4"</b>	<b>9-5/8"</b>	<b>36</b>	<b>+/- 300'</b>	<b>150</b>	<b>Surface</b>
<b>8-3/4"</b>	<b>7"</b>	<b>20#</b>	<b>+/- 2,822'</b>	<b>340 / 50</b>	<b>Surface</b>
<b>6-1/4"</b>	<b>4-1/2"</b>	<b>10.5</b>	<b>2,722' - 6,182'</b>	<b>50 / 145</b>	<b>100' into Intermed</b>

<sup>22</sup> 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.

**See Attached Operations Plan****ORIGINAL**

<sup>23</sup> 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 <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan X.		<b>OIL CONSERVATION DIVISION</b>	
Printed name: <b>Don Hamilton</b>		Approved by:	
Title: <b>Agent</b>		Title: <b>DEPUTY OIL &amp; GAS INSPECTOR, DIST. 9</b>	
E-mail Address: <b>starpoinet@etv.net</b>		Approval Date: <b>NOV 22 2004</b> Expiration Date: <b>NOV 22 2005</b>	
Date: <b>11-15-04</b>	Phone: <b>435-637-4075</b>	Conditions of Approval Attached <input type="checkbox"/>	

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

District II  
PO Drawer 00, 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 <b>30045-32693</b>		Pool Code 72319	Pool Name BLANCO MESAVERDE
Property Code <b>17036</b>	Property Name COX CANYON UNIT		Well Number 6B
GRID No. 120782	Operator Name WILLIAMS PRODUCTION COMPANY		Elevation 6710'

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
B	16	32N	11W		1025	NORTH	2250	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
Dedicated Acres 320.0 Acres - (E/2)					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

	<b>16</b>
	<b>16</b>
<b>17 OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature <b>LARRY HIGGINS</b> Printed Name <b>DRILLING COM</b> Title <b>11-30-04</b> Date	
<b>18 SURVEYOR CERTIFICATION</b> 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. Survey Date: <b>OCTOBER 18, 2002</b> Signature and Seal of Professional Surveyor  <b>JASON C. EDWARDS</b> Certificate Number 15269	

Submit 3 Copies To Appropriate District Office  
District I  
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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.

5. Indicate Type of Lease  
State

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name  
**Cox Canyon Unit**

8. Well Number **#6B**

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 ☒ Other

2. Name of Operator  
Williams Production Company

3. Address of Operator  
P.O. Box 316, Ignacio, CO 81137

4. Well Location  
Unit Letter **B** **1025** feet from the **North** line and **2250** feet from the **East** line  
Section **16** Township **32N** Range **11W** NMPM County **San Juan**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**6710' GR**

Pit or Below-grade Tank Application ☒ or Closure

Pit type Drilling Depth to Groundwater >50' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000'

Pit Liner Thickness 12 mil Below-Grade Tank: Volume 10,971 bbls; Construction Material

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.



ORIGINAL

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 X, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

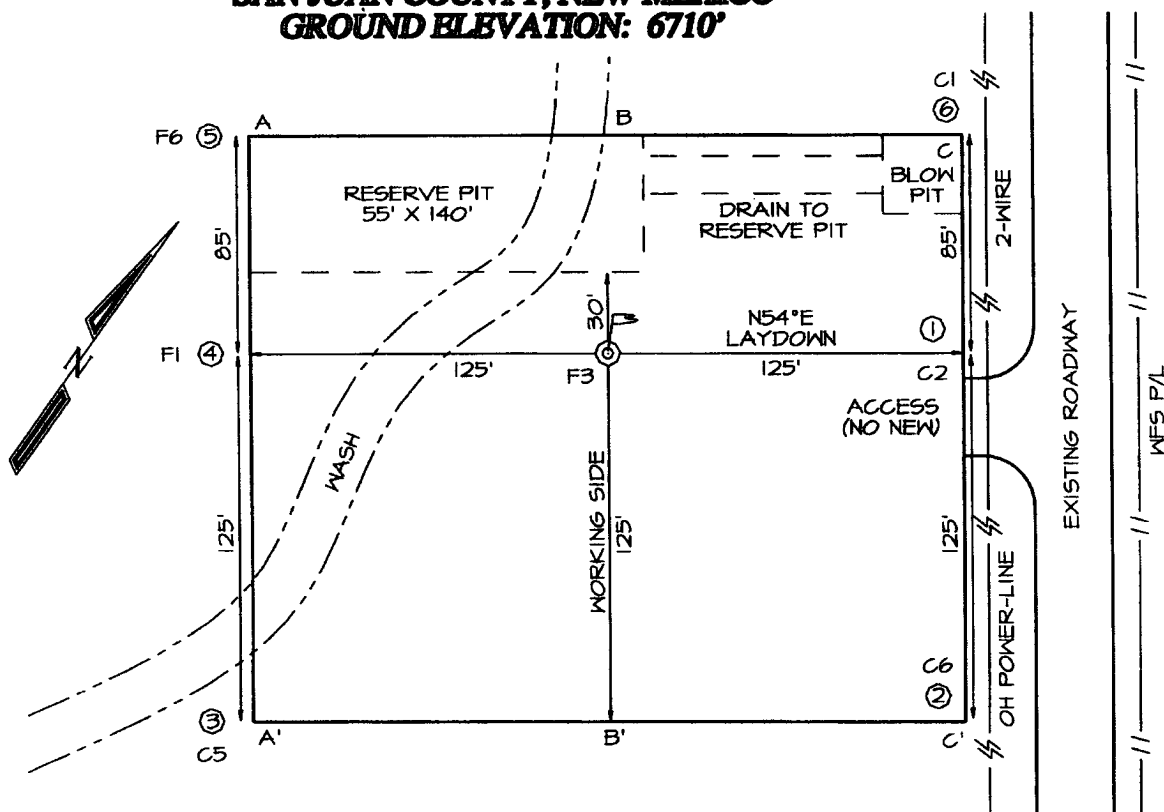
SIGNATURE Don Hamilton TITLE Agent DATE November 15, 2004

Type or print name Don Hamilton E-mail address: starpoin@etv.net Telephone No. (435) 637-4075

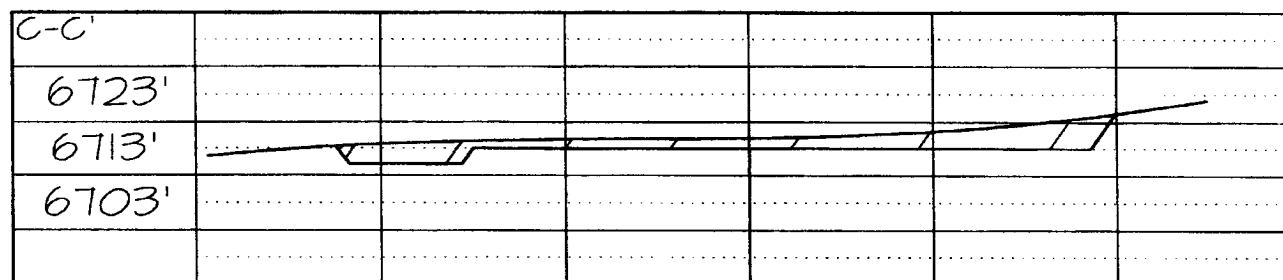
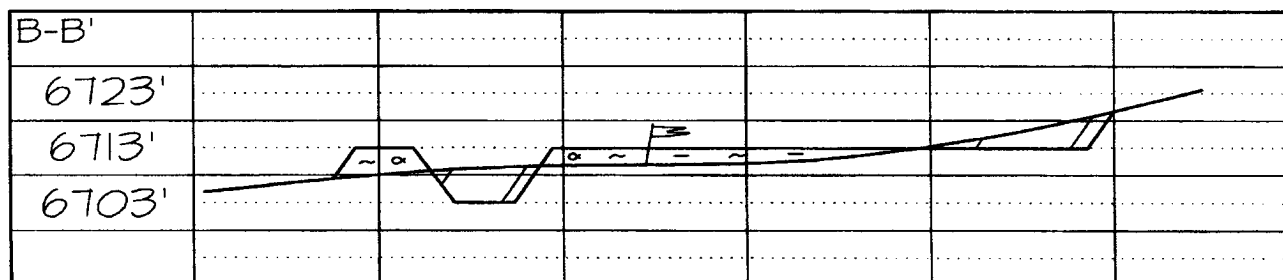
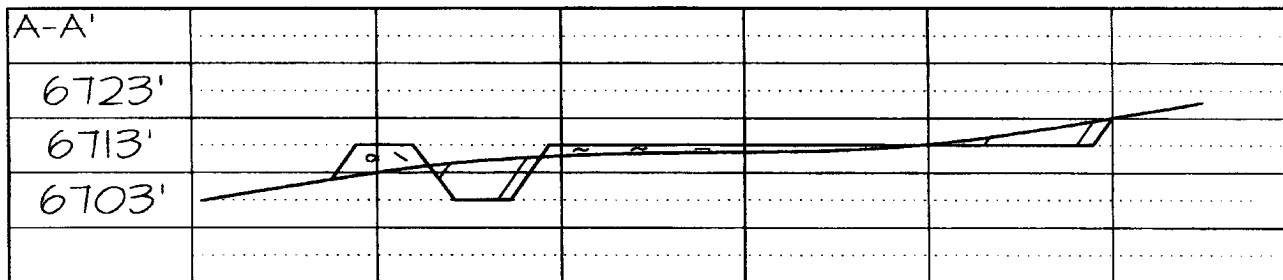
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE NOV 22 2004

**WILLIAMS PRODUCTION COMPANY COX CANYON UNIT #6B**  
**1025' FNL & 2250' FEL, SECTION 16, T32N, R11W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 6710'**



**LATITUDE: 36°59'22"**  
**LONGITUDE: 107°59'33"**  
 DATUM: NAD1927





## **WILLIAMS PRODUCTION COMPANY**

### **Operations Plan**

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

<b><u>DATE:</u></b>	11/12/2004	<b><u>FIELD:</u></b>	Blanco MV
<b><u>WELL NAME:</u></b>	Cox Canyon Unit #6B	<b><u>SURFACE:</u></b>	STATE
<b><u>LOCATION:</u></b>	NWNE Sec 16-32N-11W San Juan, NM	<b><u>MINERALS:</u></b>	STATE
<b><u>ELEVATION:</u></b>	6,710' GR	<b><u>LEASE #</u></b>	E-5387
<b><u>MEASURED DEPTH:</u></b>	6,182'		

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

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

Ojo Alamo	1,492	Cliff House	5,232
Kirtland	1,532	Menefee	5,317
Fruitland	2,872	Point Lookout	5,682
Picture Cliffs	3,407	Mancos	6,007
Lewis	3,897	TD	6,182

##### **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 on both logging runs.

**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"	+/- 2,822'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 2,722'-6,182'	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 - 340 sx (708) 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 = 778 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

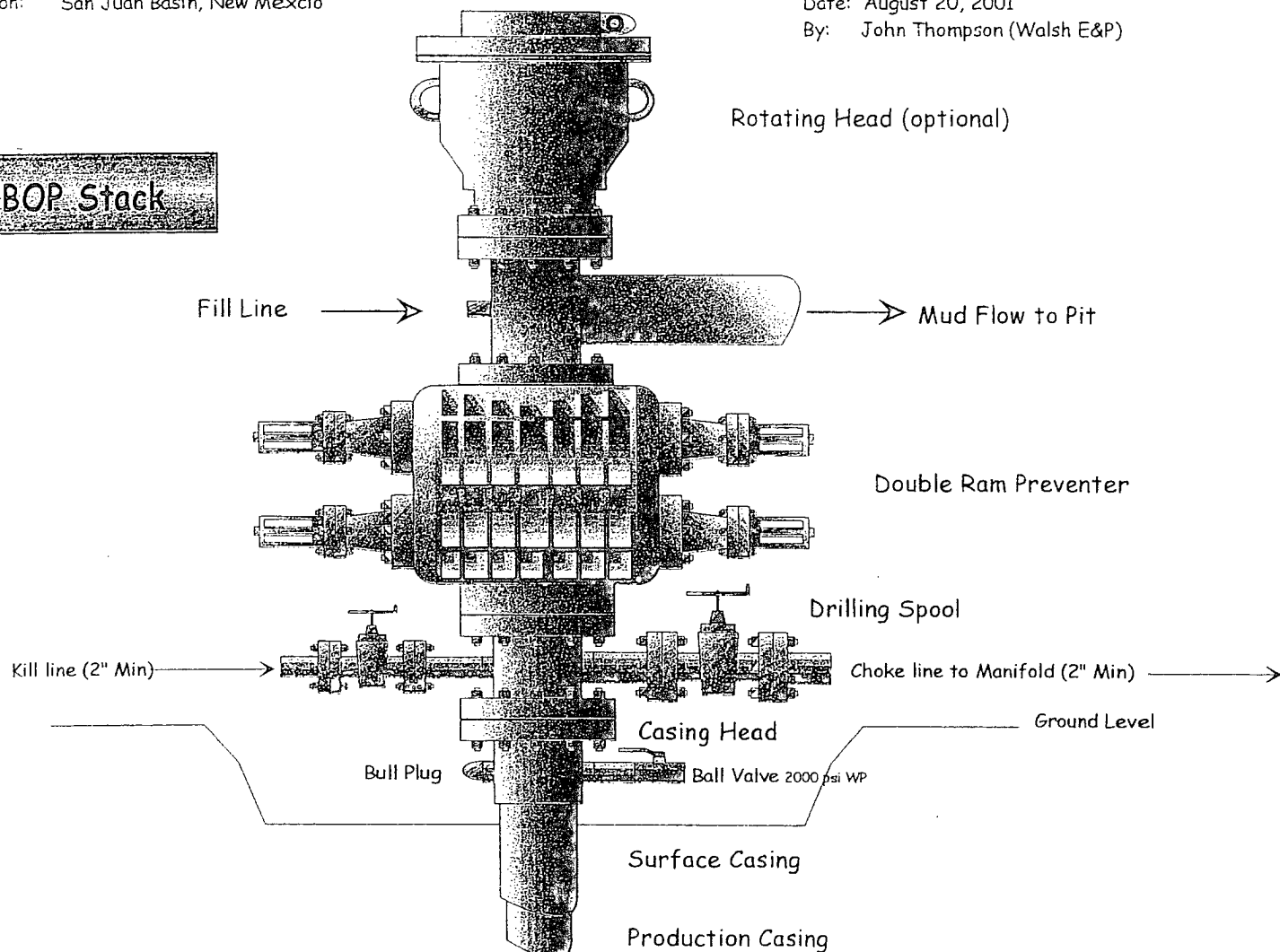
### Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

**BOP Stack**



**Choke & Kill Manifold**

