

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
Jicarilla Apache Contract #61

6. IF INDIAN, ALUTOTTEE OR TRIBE NAME
Jicarilla Apache Nation

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Indian "I" #1A

9. API WELL NO.
30039 29242

10. FIELD AND POOL OR WILDCAT
Blanco Mesa Verde

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
Sec. 27, T28N, R3W (L)

12. COUNTY OR PARISH
Rio Arriba ✓

13. STATE
NM

17. NO. OF ACRES ASSIGNED TO THIS WELL
320.00 - (W/2)

20. ROTARY OR CABLE TOOLS
Rotary

22. APPROX. DATE WORK WILL START*
October 16, 2004

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
<i>12-1/4"</i>	<i>9-5/8"</i>	<i>36.0#</i>	<i>~250 ft</i>	<i>~205 cu.ft. Type III with 2% CaCl₂</i>
<i>8-3/4"</i>	<i>7"</i>	<i>20.0#</i>	<i>~ 4332 ft</i>	<i>~1000 cu.ft. 65/35 poz & ~139 cu.ft. Type III</i>
<i>6-1/4"</i>	<i>4-1/2"</i>	<i>10.5#</i>	<i>~ 4232-6188 ft</i>	<i>~274 cu.ft. Premium Light w/ additives</i>

Williams Production Company proposes to drill a vertical well to develop the Mesa Verde formation at the above described location in accordance with the attached drilling and surface use plans.

This location has been archaeologically surveyed by Velarde Energy Service. Copies of their report have been submitted directly to your office.

This APD also is serving as an application to obtain BLM road and pipeline right-of-ways. This well will require 2300 ft of new road. This new road will tie into an existing road in the NW qtr of sec 34, T28N, R3W. This road then proceeds southwest through the W/2 sec 33.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on 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 *Larry Higgins* TITLE *Larry Higgins, Drlg COM* DATE *9/21/2004*

(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 *[Signature]* TITLE *ATM* DATE *2-17-05*

*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 of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

NMOCD

FARMINGTON

District I
PO Box 4980, 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

2004 SEP 22 PM 3 48

☐ AMENDED REPORT

RECEIVED
WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29242	*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 17031	*Property Name INDIAN I	*Well Number 1A
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY	*Elevation 7046'

10 Surface Location

UL or lot no. L	Section 27	Township 28N	Range 3W	Lot Idn	Feet from the 2060	North/South line SOUTH	Feet from the 1280	East/West line WEST	County RIO ARriba
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11 Bottom Hole Location If Different From Surface

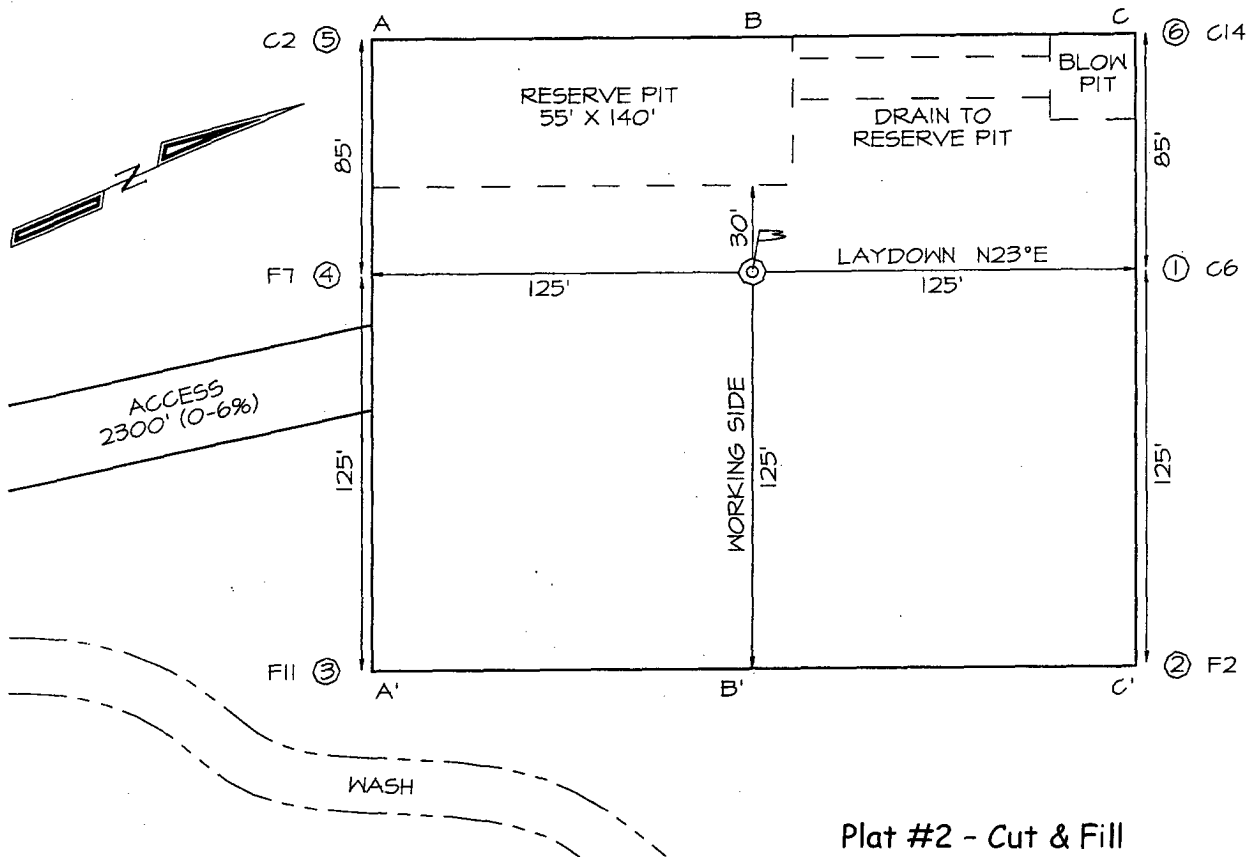
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 320.0 Acres - (W/2)	13 Joint or Infill	14 Consolidation Code	15 Order No.
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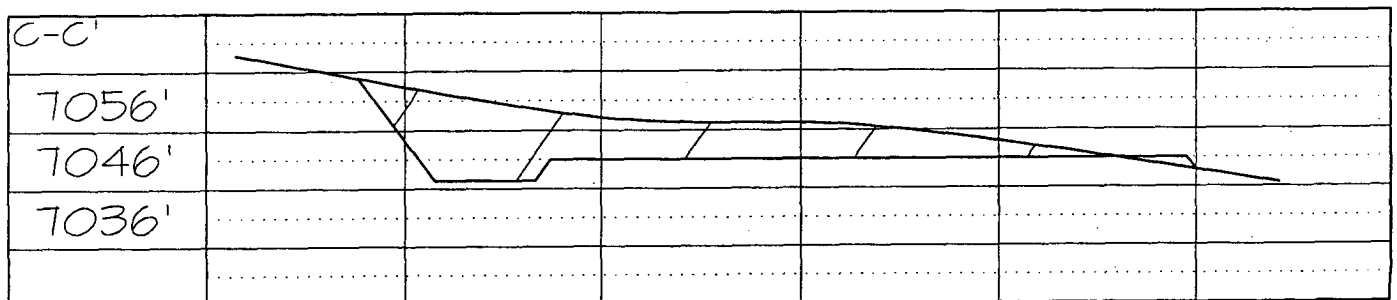
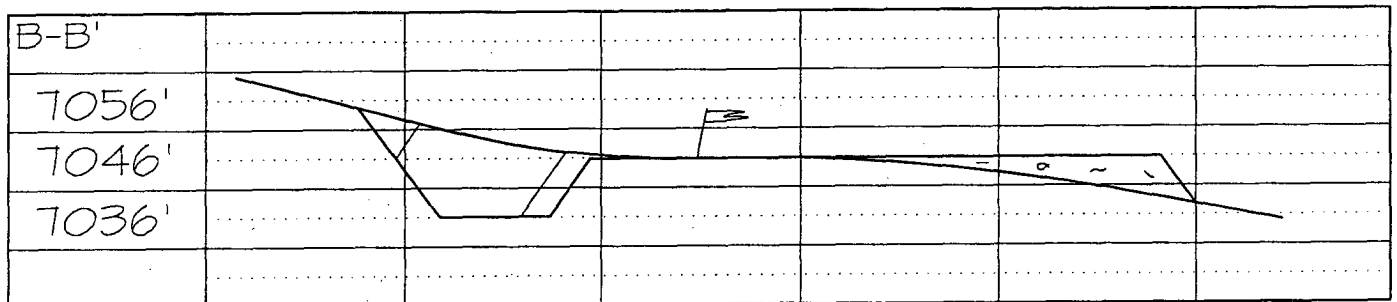
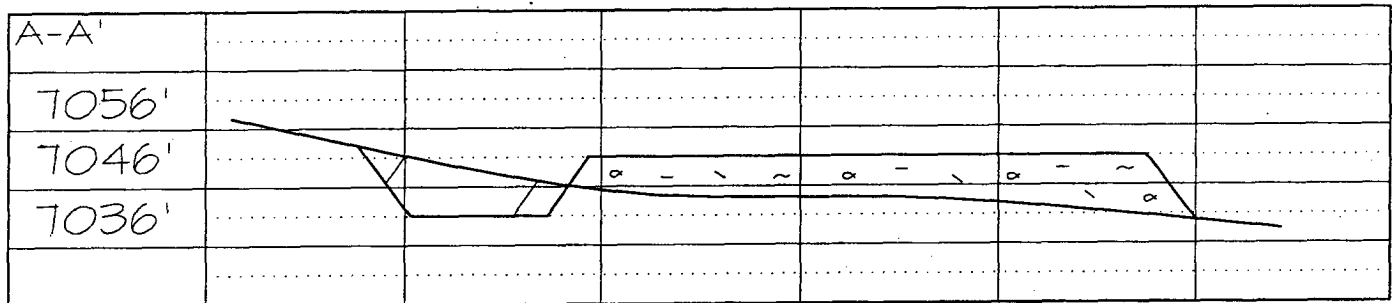
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	5265.48'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Larry Higgins</i> Signature LARRY HIGGINS Printed Name DRILLING CO. INC. Title 9-21-04 Date
5280.00'	27	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: APRIL 29, 2004 Signature and Seal of Professional Surveyor JASON C. EDWARDS 15269 REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO Certificate Number 15269
1280'	2060'	

WILLIAMS PRODUCTION COMPANY INDIAN I #1A
2060' FSL & 1280' FWL, SECTION 27, T28N, R3W, NMPM
RIO ARriba COUNTY, NEW MEXICO GROUND ELEVATION: 7046'



Plat #2 - Cut & Fill



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
March 4, 2004

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

WELL API NO. 3003929293
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Jicarilla Apache Contract #61
8. Well Number Indian I #1A
9. UGRID Number 120782
9. Pool name or Wildcat Blanco MV

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
7251' GR

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL L Sect 27 Twp 28N Rng 3W Pit type Drilling Depth to Groundwater >50 feet Distance from nearest fresh water >1000 ft
Distance from nearest surface water <500 feet Below-grade Tank Location UL _____ Sect _____ Twp _____ Rng _____;
GPS: Long: - Lat

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
PO BOX 3102 Tulsa, OK 74101

4. Well Location
Unit Letter L : 2060 feet from the S line and 1280 feet from the West line

Section 27 Township 28N Range 3W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
7251' GR

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL L Sect 27 Twp 28N Rng 3W Pit type Drilling Depth to Groundwater >50 feet Distance from nearest fresh water >1000 ft
Distance from nearest surface water <500 feet Below-grade Tank Location UL _____ Sect _____ Twp _____ Rng _____;
GPS: Long: - Lat

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"/>	REMEDIAL WORK <input type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
CHANGE PLANS <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
MULTIPLE COMPLETION <input type="checkbox"/>	OTHER: <input type="checkbox"/>
OTHER: <u>New Drill Pit</u> <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 pit to be located approximately 50 feet from well head. Pit to be lined, 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 X, a general permit X or an (attached) alternative OCD-approved plan ☐.

SIGNATURE _____ TITLE EH&S Specialist DATE _____
Type or print name Michael K. Lane E-mail address: myke.lane@williams.com Telephone No. 970-563-3319

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE FEB 22 2005
Conditions of approval, if any:



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

<u>DATE:</u>	9/8/2004	<u>FIELD:</u>	Blanco MV
<u>WELL NAME:</u>	Indian I #1A	<u>SURFACE:</u>	Jicarilla
<u>LOCATION:</u>	SESW Sec 27-28N-3W Rio Arriba, NM	<u>MINERALS:</u>	Jicarilla
<u>ELEVATION:</u>	7046' GR	<u>LEASE #</u>	Jicarilla Apache Contract #61
<u>MEASURED DEPTH:</u>	6,188'		

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Ojo Alamo	3,357	Cliff House	5,703
Kirtland	3,461	Menefee	5,712
Fruitland	3,461	Point Lookout	5,998
Picture Cliffs	3,757	TD	6,188
Lewis	4,057		

B. MUD LOGGING PROGRAM: Mud logger on location from approximately 3,000' to intermediate casing point.

C. LOGGING PROGRAM: High Resolution Induction/ GR and Density/ Neutron log from surface to intermediate casing point and 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. & GRADE</u>
Surface	12-1/4"	+/- 250'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 4,332'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 4,232'-6,188'	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 (3) 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 one Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (4) joints to the surface casing. Total centralizers = (26) regular and (3) turbulent.
3. PRODUCTION CASING: 4-1/2" whirler type cement nose guide shoe with a latch collar on top of 20" bottom joint. Place marker joint above 5630'. Place one positive standoff turbolizer every other joint. Total turbolizers is 34.

C. CEMENTING:

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

1. SURFACE: Slurry: 150sx (205 cu.ft.) of "Type III" + 2% CaCl₂ + ¼ # 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 - 480 sx (1000) 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 - 100 sx (139cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl₂ (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 = 1139 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 (130ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/sk cello flake. (Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Tail: 80 sx (167 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft³/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 274 ft³. 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

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

Rotating Head (optional)

Fill Line

Mud Flow to Pit

Double Ram Preventer

Drilling Spool

Kill line (2" Min)

Choke line to Manifold (2" Min)

Ground Level

Casing Head

Bull Plug

Ball Valve 2000 psi WP

Surface Casing

Production Casing

Choke & Kill Manifold

Positive Choke

Bypass to
Steel Pit
(Optional)

2" Minimum Size

Pressure Gauge

From BOP
Stack

Straight-thru
to Tank or Pit

2" Minimum Size

2" Minimum Size

Working Pressure for all equipment
is 2,000 psi or greater

2" Minimum Size

To Tank or Pit

Adjustable
Choke