Form 3160-3
(September 2001)

FORM APPROVED
OMB No 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

2006 JUL 1 AM 9 17

070 FARMINGTON NM

RECEIVED

RCVD JUL 15 '08
OIL CONS. DIV.
DIST. 3

| | |
|---|---|
| 5 Lease Serial No. | Jicarilla Apache Contract #92 |
| 6 If Indian, Allottee or Tribe Name | Jicarilla Apache Nation |
| 7 If Unit or CA Agreement, Name and No | |
| 8 Lease Name and Well No | Jicarilla 92 #2A |
| 9 API Well No | 30-039-29944 |
| 10 Field and Pool, or Exploratory | Blanco MV |
| 11. Sec., T , R , M., or Blk and Survey or Area | D Section 29, T27N R3W |
| 12 County or Parish | Rio Arriba |
| 13 State | NM |

1a Type of Work ☒ DRILL ☐ REENTER

1b Type of Well ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2 Name of Operator: Williams Production Company, LLC

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

3b Phone No *(include area code)*: (505) 634-4208

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

At surface: 1095' FNL & 1175' FWL

At proposed prod zone: same

14 Distance in miles and direction from nearest town or post office*: 16 miles from Lindrith,NM

| 15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) | 16 No of Acres in lease | 17. Spacing Unit dedicated to this well |
|---|---|---|
| 1095' | 320 | 320 (W/2) |
| **18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft** | **19 Proposed Depth** | **20 BLM/BIA Bond No on file** |
| 350' | 6,707' | B001576 |
| **21 Elevations (Show whether DF, KDB, RT, GL, etc )** | **22 Approximate date work will start*** | **23 Estimated duration** |
| 7,323' GR | August 1, 2005 | 1 month |

## 24. Attachments

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 | Name *(Printed/Typed)* | Date |
|---|---|---|
| Larry Higgins | Larry Higgins | 5-31-06 |
| Title: Drilling COM | | |
| Approved by *(Signature)* | Name *(Printed/Typed)* | Date |
| Title: Acting AFM Minerals | Office | 7/14/08 |

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 vertical well to develop the Blanco Mesa Verde formation at the above described location in accordance with the attached drilling and surface use plans.

The surface is located on Jicarilla Apache Nation lands

This location has been archaeologically surveyed by Velarde Energy

A 5802 3 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

2000' of new access road will be needed to access this well.

**NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT**

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

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

NMOCD

JUL 17 2008

This action is subject to technical and procedural review pursuant to 43 CFR 3165 3 and appeal pursuant to 43 CFR 3165 4

RCVD JUL 17 '08

OIL CONS. DIV.

DIST. 3

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| 1 API Number | 2 Pool Code | 3 Pool Name |
|---|---|---|
| 30-039-29944 | 72319 | BLANCO MESA VERDE |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| 17028 | JICARILLA 92 | 2A |

| 7 OGRID No. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 120782 | WILLIAMS PRODUCTION COMPANY | 7323 |

## 10 Surface Location

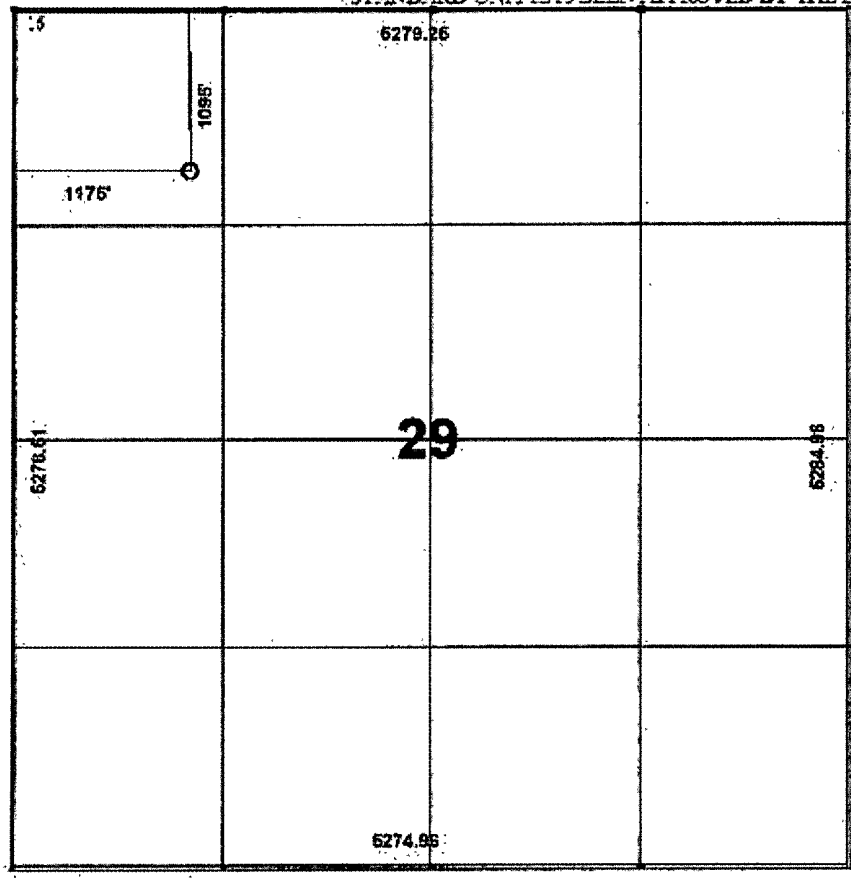
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| D | 29 | 27N | 3W | | 1095 | NORTH | 1175 | WEST | RIO ARRIBA |

## 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 | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| 320 AC (W2) | | | |

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.

Signature: Heather Riley

Printed Name: Heather Riley

Title and E-mail Address: Regulatory Specialist

Date: 7/17/08

## 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.

JANUARY 5, 2006

Date of Survey

Signature & Seal of Professional Surveyor

NEIL B. TULLY
NEW MEXICO
15962
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. 8072

# WILLIAMS PRODUCTION COMPANY

## *Operations Plan*

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

| | | | |
|---|---|---|---|
| **DATE:** | 5/30/2006 | **FIELD:** | Blanco MV |
| **WELL NAME:** | Jicarilla 92 #2A | **SURFACE:** | BOIA |
| **BH LOCATION:** | NWNW Sec 29-27N-3W<br>Rio Arriba, NM | **MINERALS:** | Jicarilla #92 |
| **ELEVATION:** | 7,323' GR | **LEASE #** | Jicarilla #92 |
| **MEASURED DEPTH:** | **6,707'** | | |

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

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

| Name | | MD | | Name | | MD |
|---|---|---|---|---|---|---|
| Ojo Alamo | | 3,642 | | Cliff House | | 5,887 |
| Kirtland | | 3,822 | | Menefee | | 5,957 |
| Fruitland | | 3,877 | | Point Lookout | | 6,257 |
| Picture Cliffs | | 4,112 | | Mancos | | 6,527 |
| Lewis | | 4,312 | | **TD** | | **6,707** |

B. **MUD LOGGING PROGRAM:** Mudlogger on location at 3,500' to intermediate casing TD and intermediate casing to TD.

C. **LOGGING PROGRAM:** High Resolution Induction/ GR and Density/ Neutron log from surface casing to intermediate casing and 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 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:

| CASING TYPE | HOLE SIZE | DEPTH (MD) | CASING SIZE | WT. & GRADE |
|---|---|---|---|---|
| Surface | 12-1/4" | +/- 300' | 9-5/8" | 36# K-55 |
| Intermediate | 8-3/4" | +/- 4,492' | 7" | 20# K-55 |
| Prod. Liner | 6-1/4" | +/- 4,392-6,707' | 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 (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 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.

## IV. CEMENTING:

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

1. SURFACE: Slurry: 150sx (205 cu.ft.) of "Type III" + 2% $CaCl_2$ + 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 - 580 sx (1,210 cu.ft.) of "Premium Light" with 8% gel, 1% $CaCl_2$ 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 (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 = ~~1,160~~ 1282 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$^3$) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE. ( Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Tail: 100 sx (215 ft$^3$) 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 ft$^3$/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 ~~308~~ 345 ft$^3$. WOC 12 hours

## V. 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 9,300# of 14/30 LiteProp™ 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 9,300# of 14/30 LiteProp™ sand in slick water.
6. Test each zone before removing bridge plugs.

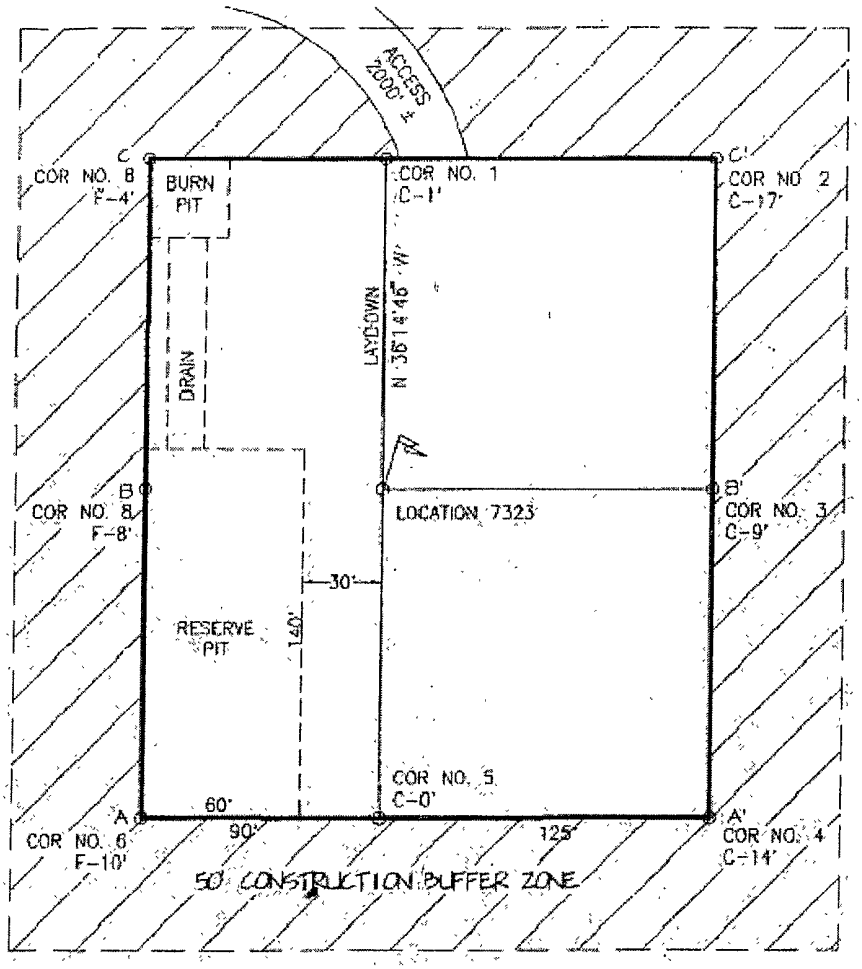
## D. RUNNING TUBING

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.

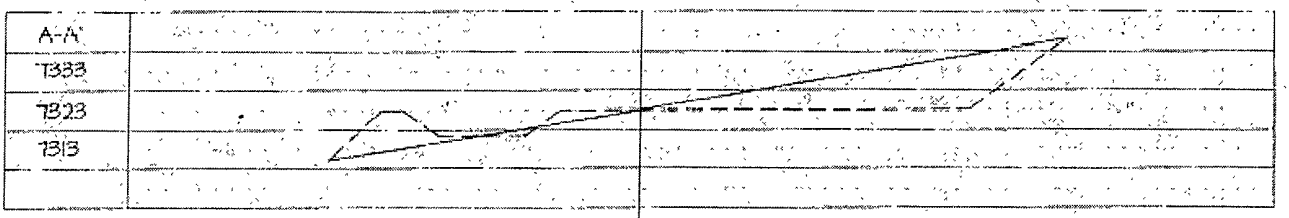
for Gary Sizemore
Sr. Drilling Engineer

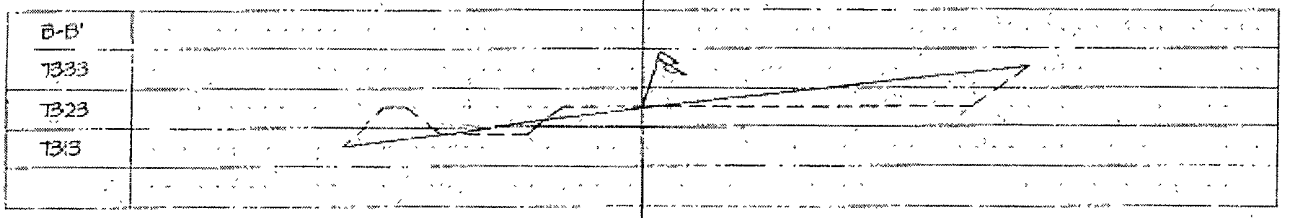
Jicarilla 92 #2A Ops Plan.doc

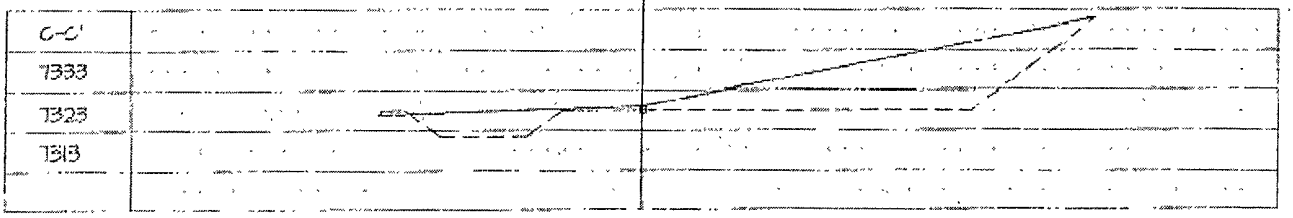
WILLIAMS PRODUCTION COMPANY
JICARILLA 92 #2A
1095 FNL & 1175 FWL
SECTION 29 T27N R3W NMPM
RIO ARRIBA COUNTY, NEW MEXICO
ELEVATION: 7323




LATITUDE: 36°32'55" N
LONGITUDE: 107°10'23" W
NGS 84'
VERT. DATUM: NAD 1927

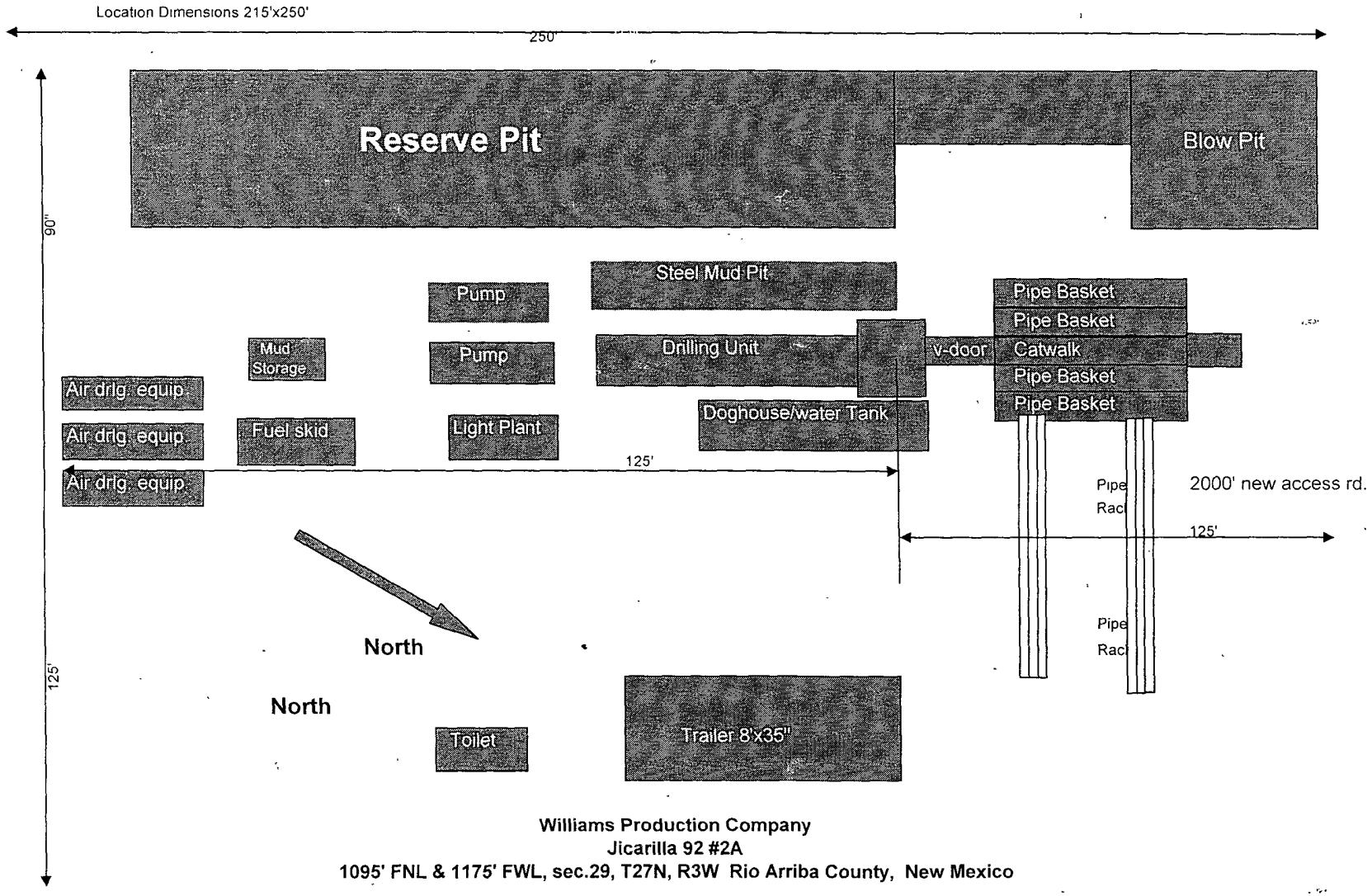



| FILENAME: PNBLAKE | SHEET 2 OF 3 | High Country Surveys | DRAWN BY: CRT | CHECKED BY: CBT |
|---|---|---|---|---|

## Plat #3 Location Diagram




**Williams Production Company**
**Jicarilla 92 #2A**
**1095' FNL & 1175' FWL, sec.29, T27N, R3W Rio Arriba County, New Mexico**

# Well Control Equipment Schematic for 2M Service

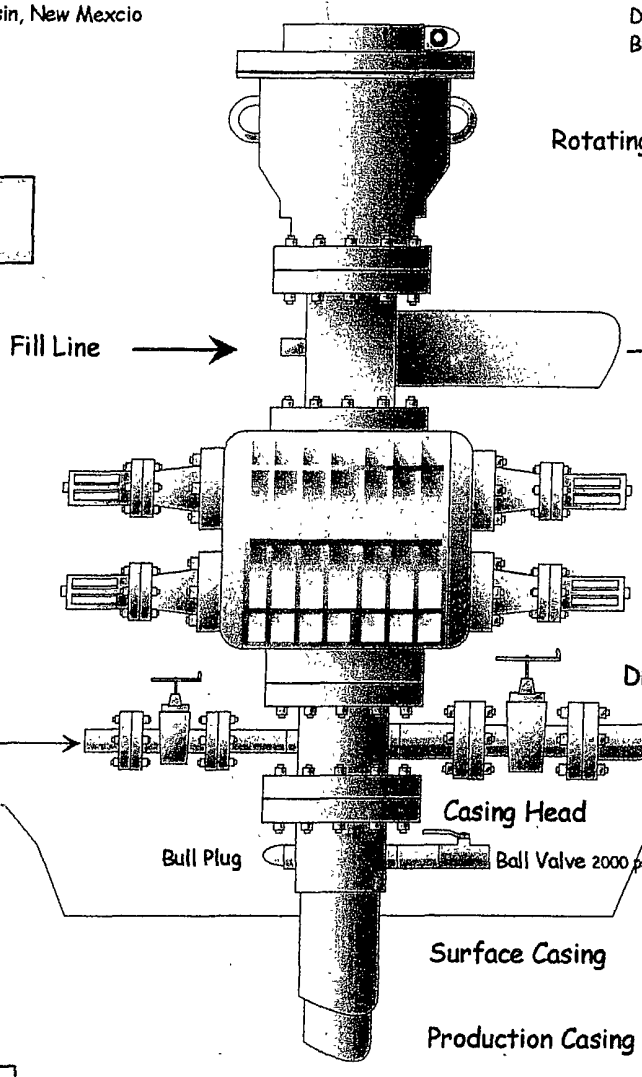
Attachment to Drilling Technical Program

## Exhibit #1
## Typical BOP setup

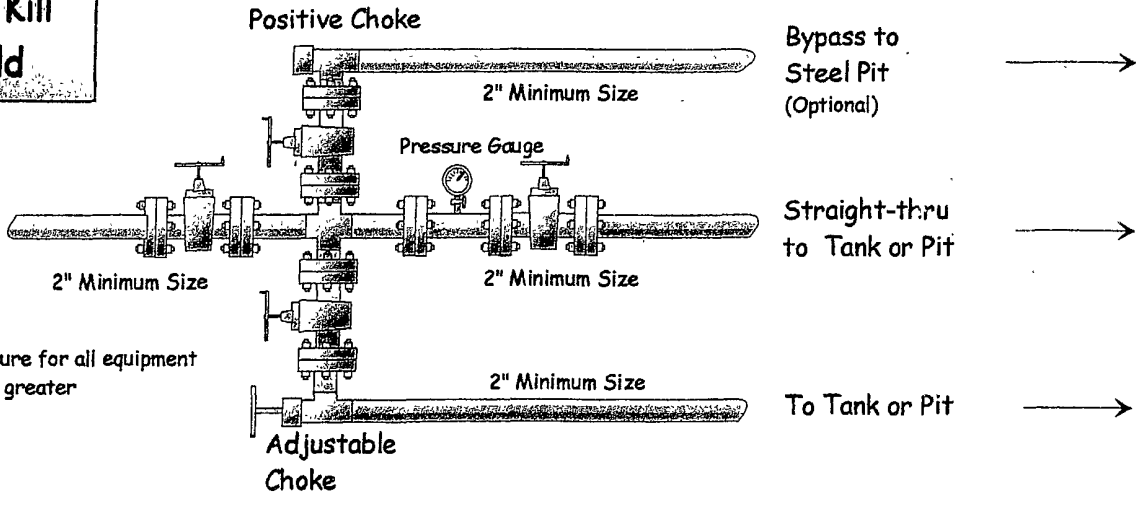
Location: San Juan Basin, New Mexcio

Date: August 20, 2001
By: John Thompson (Walsh E&P)

**BOP Stack**




**Choke & Kill Manifold**




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