

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No. Jicarilla Apache Contract #92	
1b Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name Jicarilla Apache Nation	
2 Name of Operator Williams Production Company, LLC		7 If Unit or CA Agreement, Name and No	
3a Address P.O. Box 640 Aztec, NM 87410		8 Lease Name and Well No Jicarilla 92 #8A	
3b Phone No (include area code) (505) 634-4208		9 API Well No 30-039-29917	
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface 825' FNL & 735' FWL At proposed prod zone same		10 Field and Pool, or Exploratory Blanco MV	
11 Sec., T., R., M , or Blk and Survey or Area Lot 1 / Section 31, T27N R3W		12 County or Parish Rio Arriba	
13 State NM		14 Distance in miles and direction from nearest town or post office* 16 miles from Lindrieth, NM	
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 735'		16 No. of Acres in lease 320	
17 Spacing Unit dedicated to this well 285.82 (W/2)		18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 100'	
19 Proposed Depth 6,571'		20 BLM/BIA Bond No on file B001576	
21 Elevations (Show whether DF, KDB, RT, GL, etc ) 7,152' GR		22 Approximate date work will start* August 1, 2005	
23 Estimated duration 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.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2 A Drilling Plan   | 5. Operator certification   |
| 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) | 6. Such other site specific information and/or plans as may be required by the authorized officer |

25 Signature <i>Larry Higgins</i>	Name (Printed/Typed) Larry Higgins	Date 5-15-06
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Title Drilling COM	Name (Printed/Typed)	Date 7/10/08
Approved by (Signature) <i>Adrian M. Minerals</i>	Office	

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 164 4 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

No 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 NMOC FOR A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

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

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

JUL 17 2008

NMOC

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

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

MAY 16 AM 8 42  
RECEIVED  
070 FARMINGTON NM

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29917		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 17028	*Property Name JICARILLA 92		*Well Number 8A
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 7152'

<sup>10</sup> Surface Location

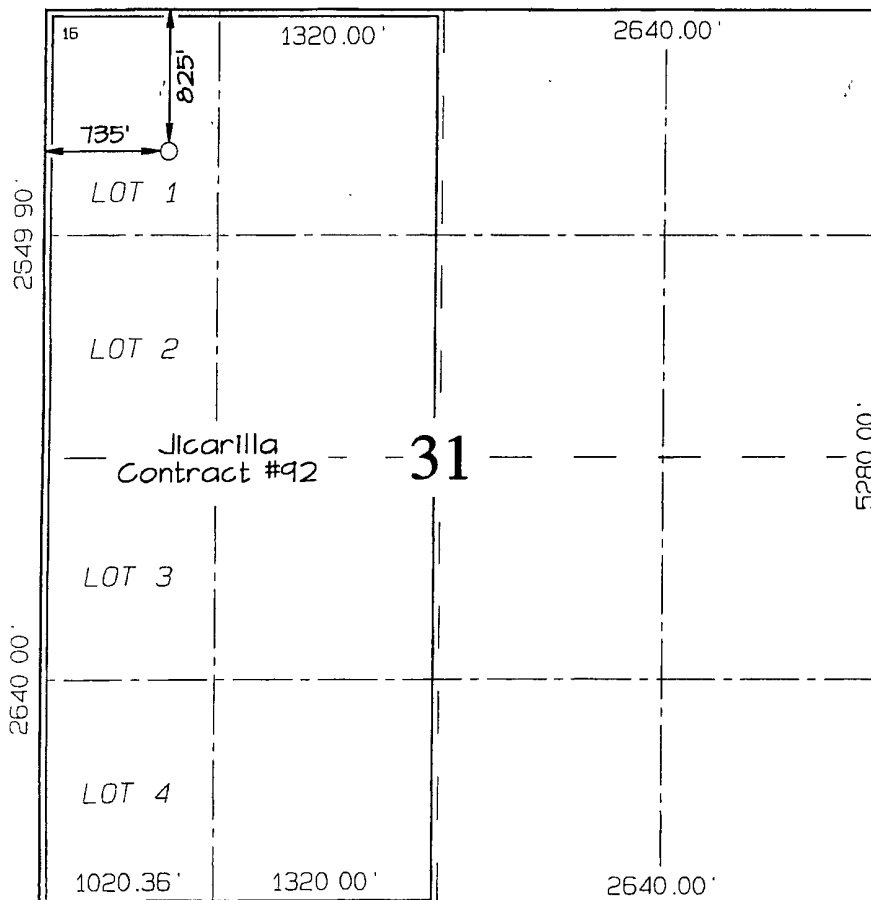
UL or lot no D	Section 31	Township 27N	Range 3W	Lot Idn	Feet from the 825	North/South line NORTH	Feet from the 735	East/West line WEST	County RIO ARriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 285.82 Acres - (W/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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1037.52' 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



<sup>17</sup> OPERATOR CERTIFICATION

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

Signature *Larry Higgins*

Printed Name *LARRY HIGGINS*

Title *DRILLING COM*

Date *5-15-06*

<sup>18</sup> 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.

Survey Date: *OCTOBER 25, 2005*

Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*

Certificate Number 15269



## WILLIAMS PRODUCTION COMPANY

### Operations Plan

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

**DATE:** 5/10/2006 **FIELD:** Blanco MV  
**WELL NAME:** Jicarilla 92 #8A **SURFACE:** BOIA  
**BH LOCATION:** NWNW Sec 31-27N-3W **MINERALS:** Jicarilla #92  
Rio Arriba, NM  
**ELEVATION:** 7,152' GR **LEASE #** Jicarilla #92  
**MEASURED DEPTH:** 6,571'

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

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

Name	MD	Name	MD
Ojo Alamo	3,436	Cliff House	5,661
Kirtland	3,636	Menefee	5,781
Fruitland	3,726	Point Lookout	6,096
Picture Cliffs	3,961	Mancos	6,451
Lewis	4,186	TD	6,571

**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 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. &amp; GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 4,336'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 4,236-6,571'	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 <sup>209</sup> ~~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 - 560 sx <sup>1170</sup> ~~1163~~ cu.ft.) of "Premium Light" 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 <sup>1240</sup> ~~70~~ cu.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 = 1,233 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 <sup>345</sup> ~~130~~ ft<sup>3</sup> 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 <sup>345</sup> ~~215~~ 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 300 <sup>345</sup> ~~300~~ ft<sup>3</sup>. 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**

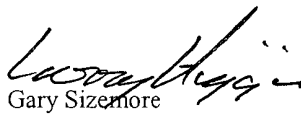
1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

**C. STIMULATION**

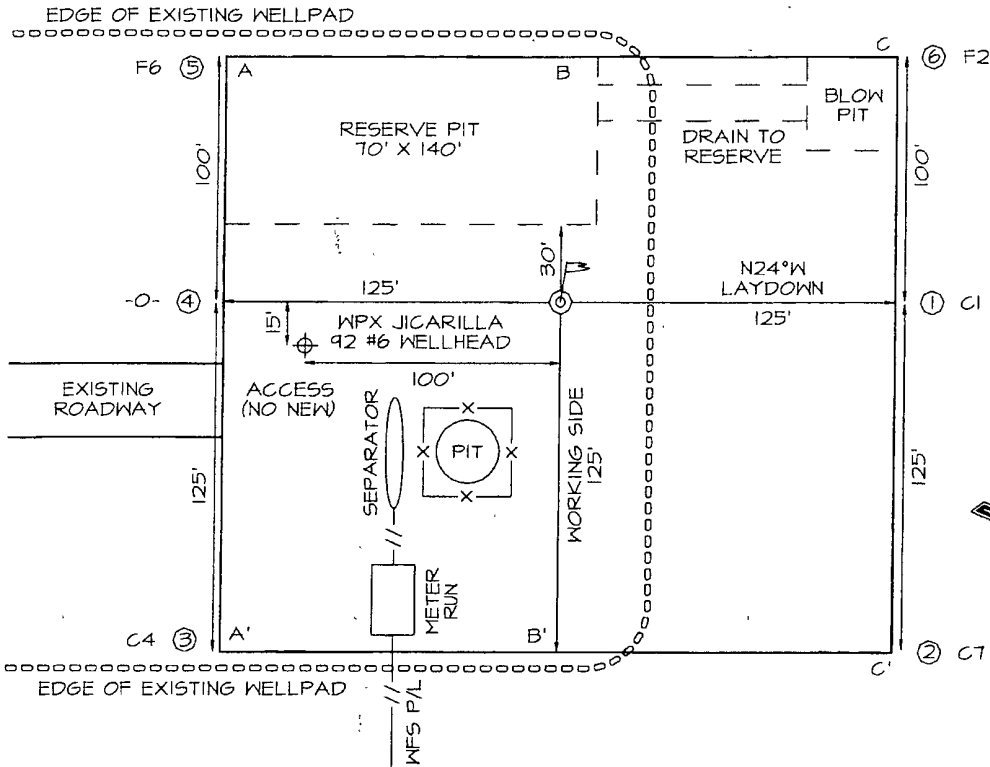
1. Perforate the Point Lookout as determined from the open hole logs.
2. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
3. Isolate Point Lookout with a CIBP.
4. Perforate the Menefee/Cliff House as determined from the open hole logs.
5. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
6. Test each zone before removing bridge plugs.

**D. RUNNING TUBING**

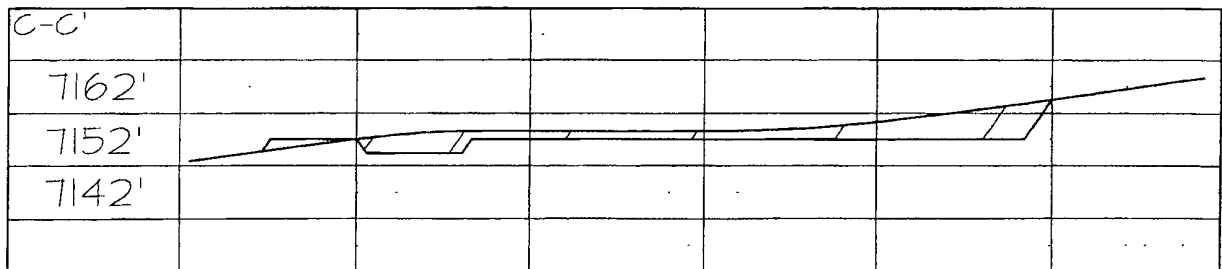
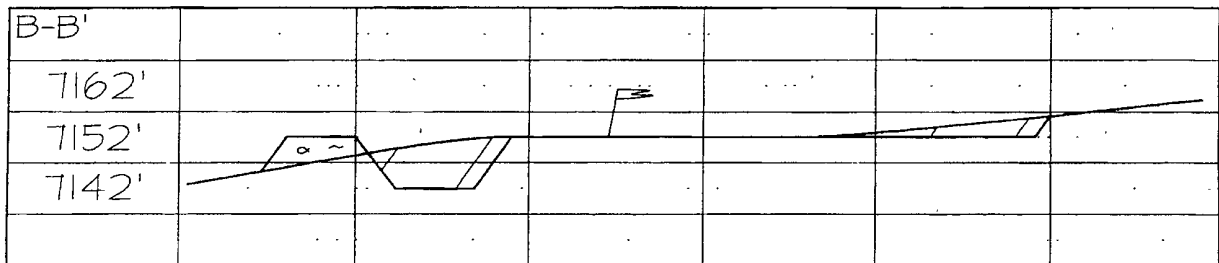
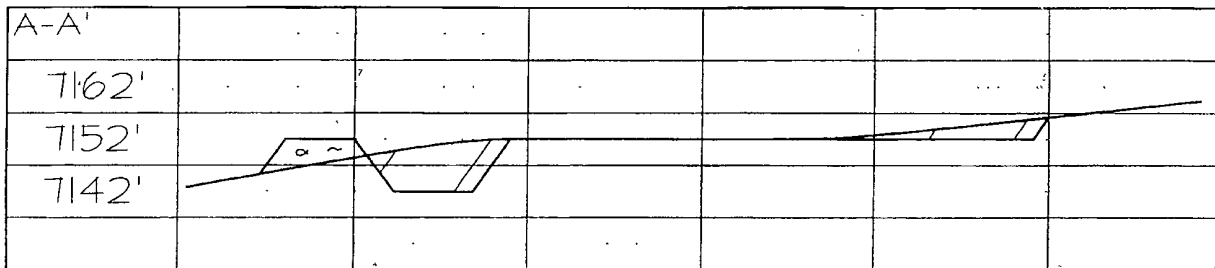
1. Mesa Verde: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

  
for Gary Sizemore  
Sr. Drilling Engineer

**WILLIAMS PRODUCTION COMPANY JICARILLA 92 #8A**  
**825' FNL & 735' FWL, SECTION 31, T27N, R3W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO ELEVATION: 7152'**

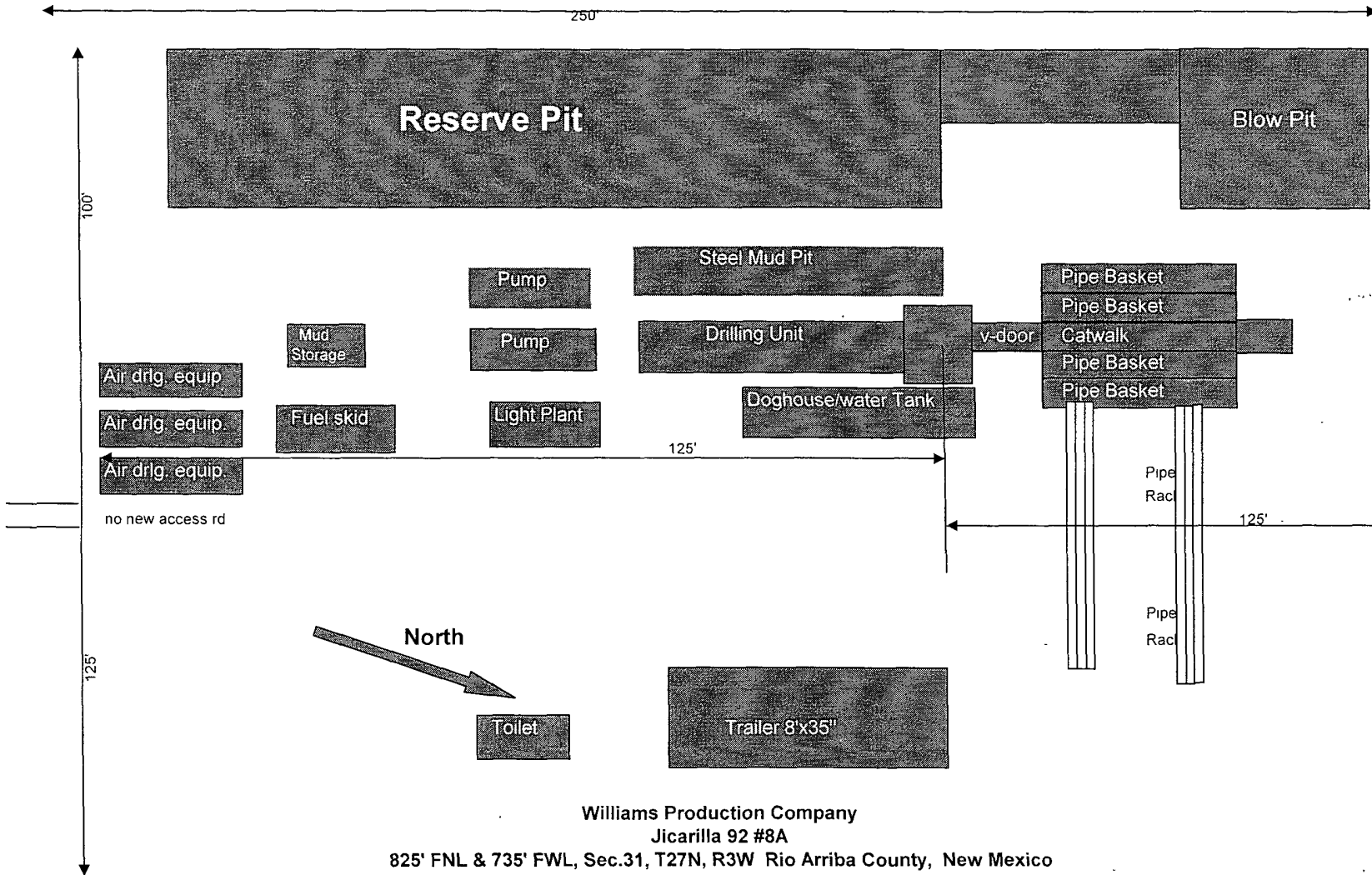


**LATITUDE: 36°32'06"**  
**LONGITUDE: 107°11'27"**  
 DATUM: NAD1927



# Plat #3 Location Diagram

Location Dimensions 225' X 250'



# Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

## Exhibit #1 Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

