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MAY 29 2008

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Bureau of Land Management
Farmington Field Office

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7 If Unit or CA Agreement, Name and No Rosa Unit
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		8. Lease Name and Well No 360A
2 Name of Operator Williams Production Company, LLC		9. API Well No. 30-039-30556
3a Address P O Box 640 Aztec, NM 87410	3b Phone No. (include area code) (505) 634-4208	10 Field and Pool, or Exploratory Basin Fruitland Coal
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface Lot G 1470 FNL & 2095' FEL G At proposed prod zone Lot C. 990' FNL & 2310' FWL C		11. Sec, T, R, M., or Blk and Survey or Area G Section 9, 31N, 5W
14. Distance in miles and direction from nearest town or post office* approximately 36 miles northeast of Blanco, New Mexico		12 County or Parish Rio Arriba
15 Distance from proposed* - location to nearest property or lease line, ft. (Also to nearest drng unit line, if any) 990'		13- State NM
16. No. of Acres in lease 2,544.64	17 Spacing Unit dedicated to this well 320.0 acres W/2	
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1980'	19. Proposed Depth 3,949	20 BLM/BIA Bond No on file UT0847
21. Elevations (Show whether DF, KDB, RT, GL, etc) 6,814 GR	22 Approximate date work will start* April 1, 2008	23 Estimated duration 1 month
24. Attachments		DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

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 5-29-08
Title Drilling COM		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 7/14/08
Title Acting ARM Manager	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 Exploration and Production Company, LLC, proposes to drill a directional well to develop the Basin Fruitland Coal formation at the above described location in accordance with the attached drilling and surface use plans

The well pad surface is under jurisdiction of the USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

This location has been archaeologically surveyed by La Plata Archaeological Consultants. Copies of their report have been submitted directly to the BLM.

This APD is also serving as an application to obtain a pipeline right-of-way. An associated pipeline tie of 1,577.70 feet would be required for this location.

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.

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

JUL 17 2008

NMOC

Hold C104

for Directional Survey
and "As Drilled" plat

Target BHL is NSL
5869

RCVD JUL 15 08
OIL CON. DIV.
FARMINGTON

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

RECEIVED
MAY 20 2006
Bureau of Land Management
Farmington Field Office

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

1 API Number 30-039-30556		2 Pool Code 71629		3 Pool Name BASIN FRUITLAND COAL	
4 Property Code 17033		5 Property Name ROSA UNIT			6 Well Number 360A
7 OGRID No. 120782		8 Operator Name WILLIAMS' PRODUCTION COMPANY			9 Elevation 6814'

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
G	9	31N	5W		1470	NORTH	2095	EAST	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
C	9	31N	5W		990	NORTH	2310	WEST	RIO ARriba

12 Dedicated Acres 320.0 Acres - (W/2)					13 Joint or Infill	14 Consolidation Code	15 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

<div>16</div> <p>2641.32'</p> <p>BOTTOM-HOLE LAT: 36.91853°N LONG: 107.36884°W DATUM: NAD1983</p> <p>2310'</p> <p>996.5' N61°26.0'W</p> <p>1470'</p> <p>2095'</p> <p>5280.00'</p> <p>9</p> <p>5283.96'</p> <p>LEASE SF-078763</p>	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Larry Higgins</i> Signature</p> <p>LARRY HIGGINS Printed Name</p> <p>DALE COM Title</p> <p>5-29-08 Date</p>
	<div>18 SURVEYOR CERTIFICATION</div> <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>Date of Survey: JUNE 9, 2005</p> <p>Signature and Seal of Professional Surveyor</p> <div><p>JASON C. EDWARDS Certificate Number 15269</p></div>



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 5/29/2008

WELLNAME: Rosa Unit #360A **FIELD:** Basin Fruitland Coal

BH LOCATION: NENW Sec 09-31N-5W **SURFACE:** USFS
Rio Arriba, NM

SURF. LOCATION: SWNE Sec 09-31N-5W

ELEVATION: 6,814' GR **MINERALS:** BLM

TOTAL DEPTH: 3,949' **LEASE #** SF-078763

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

NAME	TVD	MD	NAME	TVD	MD
San Jose	Surface	Surface	Top Coal	3,508	3,712
Nacimiento	1,643	N/A	Bottom Coal	3,643	3,847
Ojo Alamo	2,898	3,097	Pictured Cliffs	3,643	3,847
Kirtland	3,013	3,214	TD	3,743	3,943
Fruitland	3,383	3,587			

B. LOGGING PROGRAM: None

C. 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. Treat for lost circulation as necessary. Expect 100% returns prior to cementing. Notify Engineering of any mud losses. If coal is detected before 3,696' (MD) DO NOT drill deeper until Engineering is contacted.
- B. Drilling Fluid:** Coal section will be drilled with Fruitland Coal water. Mud logger will pick TD.
- C. MUD LOGGING PRORAM:** Mud logger will be on location at drill out below 7" casing to TD.

- D. **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. & GRADE</u>
Surface	12-1/4"	+/- 300'	9-5/8"	36# K-55
Intermediate	8-3/4"	+/- 3,696'	7"	20# K-55
Prod. Liner	6-1/4"	+/- 3,596' 3,643' 3943'	5-1/2"	15.5# 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 centralizers as needed across selected production intervals.

C. CEMENTING:

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

1. SURFACE: Use 190 sx (264 cu.ft.) of "Type III" with 2% CaCl₂ and 1/4# of cello-flake/sk (Yield = 1.41 cu.ft./sk, Weight = 14.5 #/gal.). **Use 100% excess** to circulate the surface. WOC 12 hours. Total volume = 264 cu.ft. Test to 1500#.
2. INTERMEDIATE: Lead - 510 sx (1068 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 - 50 sx (70cu.ft.) of "Type III" with 1/4# cello-flake/sk, and 1% CaCl₂ (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). **Use 120% excess in Lead Slurry** to circulate to surface. **No excess in Tail Slurry.** Total volume = 1,138 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
- 3 PRODUCTION LINER: Open hole completion. No cement.

IV COMPLETION

A. PRESSURE TEST

Pressure test 7" casing to ~~2300#~~ for 15 minutes.

1500psi

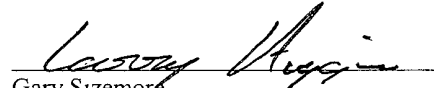
B. STIMULATION

Cavitate Well with reciprocation and rotation. Surge wells with water and air and then flow back to pit.

Cavitate for 2 to 3 weeks. Maximum pressure not expected to exceed 2,000 psi.

C. RUNNING TUBING

1. Fruitland Coal. Run 2-7/8", 4.7#, J-55, EUE tubing with a SN (1.375" ID) on top of bottom joint. Land tubing approximately 50' above TD.

for 
Gary Sizemore
Sr. Drilling Engineer

GENERAL ROSA DRILLING PLAN

Rosa Unit boundaries:

T31N, R4W: all except sections 32-36

T31N, R5W: all except sections 1 & 2

T31N, R6W: all except sections 6,7,18,20, & 27-36

T32N, R6W: sections 32-36

FORMATION	LITHOLOGY	WATER	GAS	OIL/COND	OVER-PRES	LOST CIRC
Nacimiento	Interbedded shales, siltstones and sandstones	Possible	Possible	No	No	No
Ojo Alamo	Sandstone and conglomerates with lenses of shale	Fresh	No	No	No	No
Kirtland	Shale W/interbedded sandstones	No	Possible	No	No	No
Fruitland	Inter, SS, SiltSt, SH & Coals w/carb, SS, SiltSt, SH	Yes	Yes	No	Possible	Possible
Pictured Cliffs	Massive Sandstone w/thin interbedded shales	Possible	Yes	Possible	No	Possible
Lewis	Shale w/thin interbedded sandstones and siltstones	No	Possible	No	No	No
Cliff House	Transgressive sandstones	Possible	Yes	No	No	No
Menefee	Sandstones, carb shales and coal	Possible	Yes	No	No	No
Point Lookout	Regressive coastal barrier sandstone	Possible	Yes	Possible	No	Yes
Mancos	Marine shale and interbedded sandstone	No	Possible	Possible	No	Possible
Upr Dakota	Marine sand and shales	No	Yes	Possible	No	Possible
Lwr Dakota	Fluvial sands, shales, & coal	Possible	Yes	Possible	No	Possible

DRILLING

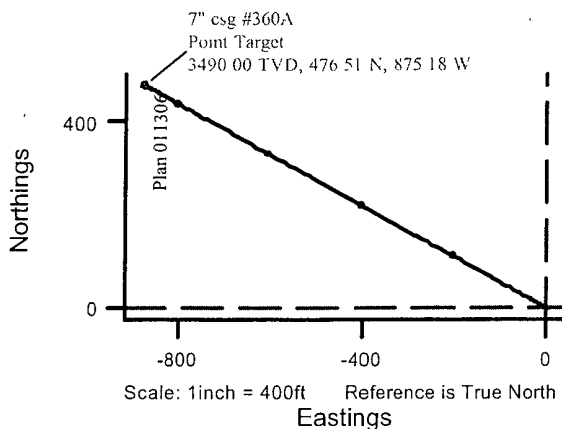
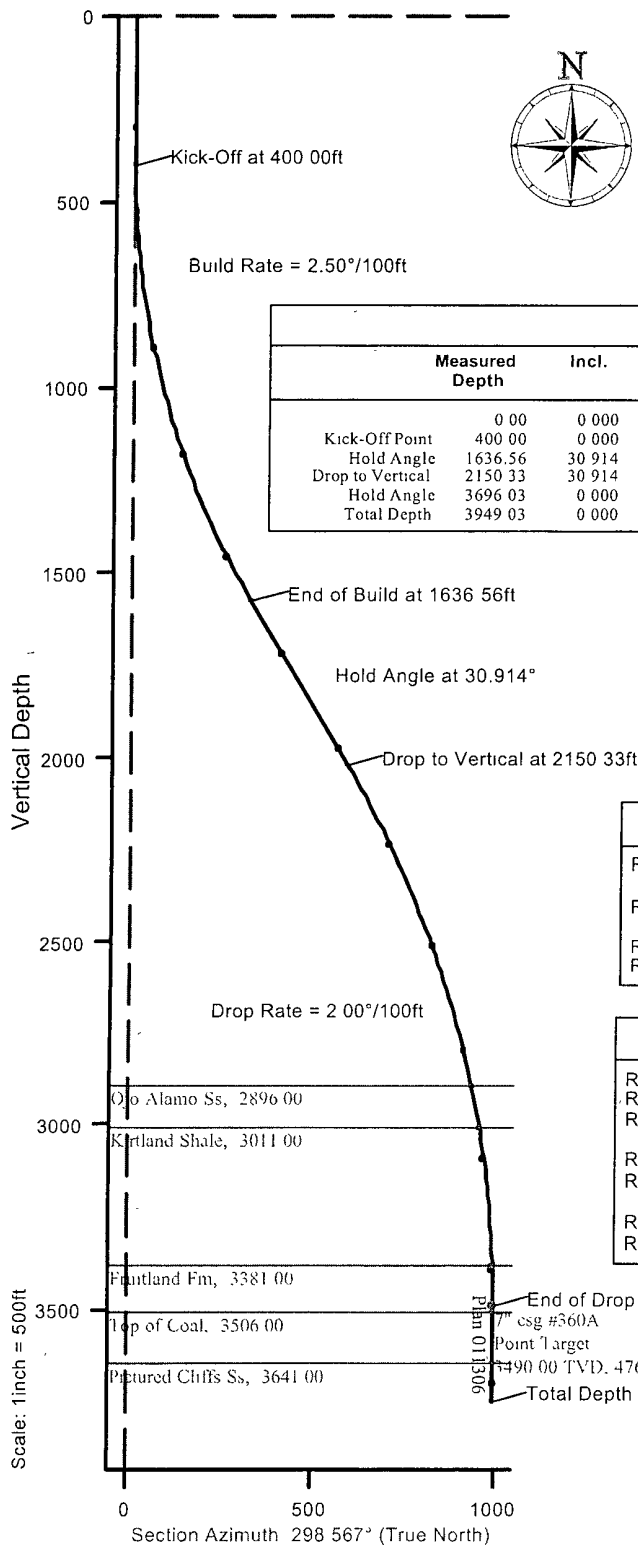
Potential Hazards:

1. There are no overpressured zones expected in this well.
2. No H₂S zones will be penetrated while drilling this well

Mud System:

1. Surface - The surface hole will be drilled with a low-solids, non-dispersed system with starch and lost circulation material as needed. Expected mud weights will be in the 8.4 to 9.0 lb per gal range. Viscosities will be in the 30 to 60 sec/qrt range as needed to remove drill cuttings.
2. Intermediate - The intermediate hole will be drilled with clear water and Benex to TD where the well will be mudded up to log and run casing. The mud system will be low-solids, non-dispersed with mud weights in the 9 to 10 lb per gal range as needed to control the well. Viscosities will be in the 45 to 55 range as needed to support any weight material. The weight material will consist of Barite.
3. Production - The well will be drilled using air from the intermediate casing point to TD. For Fruitland Coal wells, the coal section will be drilled with air/mist.

New Mexico
Rio Arriba County
Sec. 09-T31N-R05W
Rosa Unit #360A
Plan 011306



Plan 011306 Proposal Data								
	Measured Depth	Incl.	Azim.	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate
Kick-Off Point	0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	0.00
Hold Angle	1636.56	30.914	298.567	1577.43	155.69 N	285.94 W	325.58	2.50
Drop to Vertical	2150.33	30.914	298.567	2018.22	281.90 N	517.76 W	589.53	0.00
Hold Angle	3696.03	0.000	0.000	3490.00	476.51 N	875.18 W	996.50	2.00
Total Depth	3949.03	0.000	0.000	3743.00	476.51 N	875.18 W	996.50	0.00



Rosa Unit #360A Surface Location	
RKB Elevation	6826.00ft above Mean Sea Level
Ref NE Corner of Sec. 09	1470.00 S, 2095.00 W
Ref Global Coordinates	2153469.48 N, 636827.80 E
Ref Geographical Coordinates	36° 55' 02.0000" N, 107° 21' 55.0000" W

Plan 011306 Bottom Hole Location	
Ref. RKB(6814'+12'KB).	3743.00ft
Ref. Ground Level	3731.00ft
Ref. Mean Sea Level.	-3083.00ft
Ref. Wellhead.	476.51 N, 875.18 W (True North)
Ref. NE Corner of Sec. 09:	993.42 S, 2970.15 W (True North)
Ref. Global Coordinates	2153941.70 N, 635950.29 E
Ref. Geographical Coordinates	36° 55' 06.7118" N, 107° 22' 05.7777" W

End of Drop at 3696.03ft
7" csg #360A
Point Target
3490.00 TVD, 476.51 N, 875.18 W
Total Depth at 3949.03ft

Vertical Section

Prepared by
Dennis Cook

Date/Time
13 January, 2006 - 10 58

Checked

Approved

North Reference Sheet for Sec. 09-T31N-R05W - Rosa Unit #360A

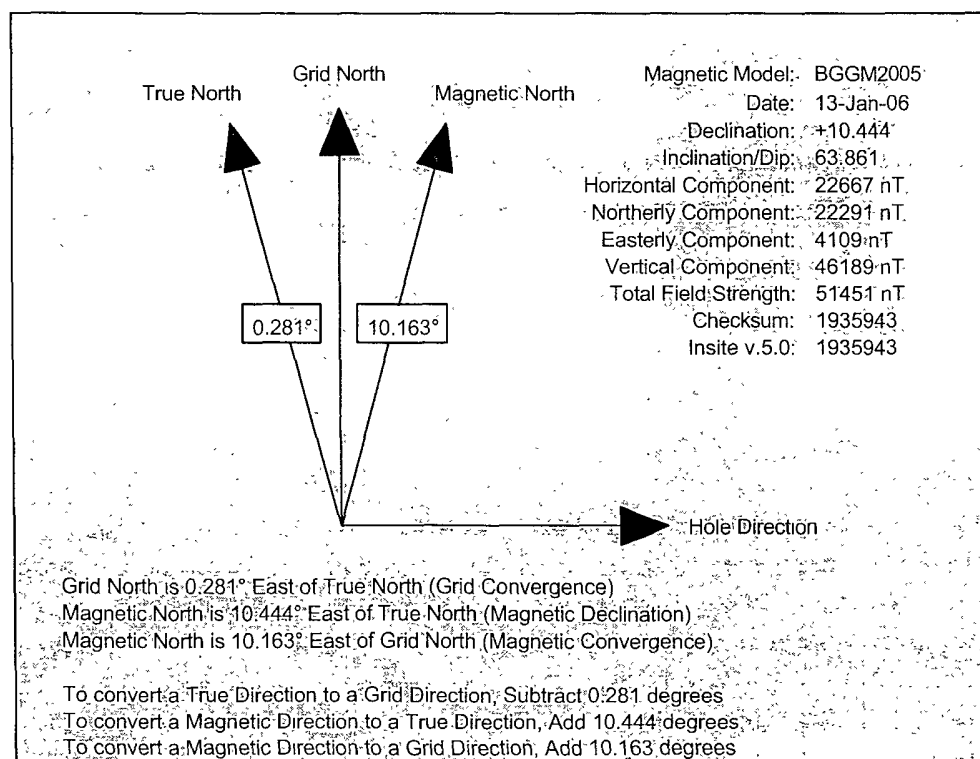
Coordinate System is NAD27 New Mexico State Planes, Western Zone, US Foot
Source: Snyder, J.P., 1987, Map Projections - A Working Manual

Datum is North American Datum of 1927 (US48, AK, HI, and Canada)

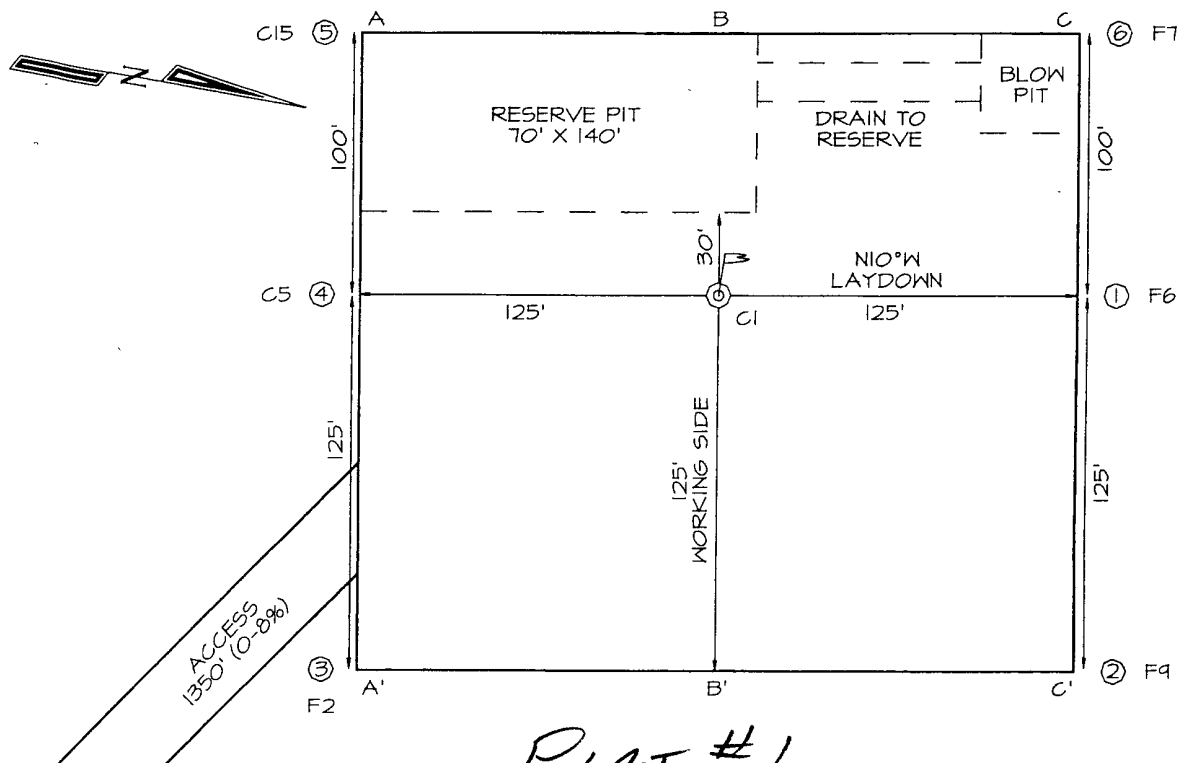
Spheroid is Clarke - 1866
Equatorial Radius: 6378206.400m.
Polar Radius 6356583.800m.
Inverse Flattening: 294 978698213901

Projection method is Transverse Mercator or Gauss Kruger Projection
Central Meridian is -107.833°
Longitude Origin: 0.000°
Latitude Origin 31.000°
False Easting: 152400.00m
False Northing: 0.00m
Scale Reduction: 0.99991667

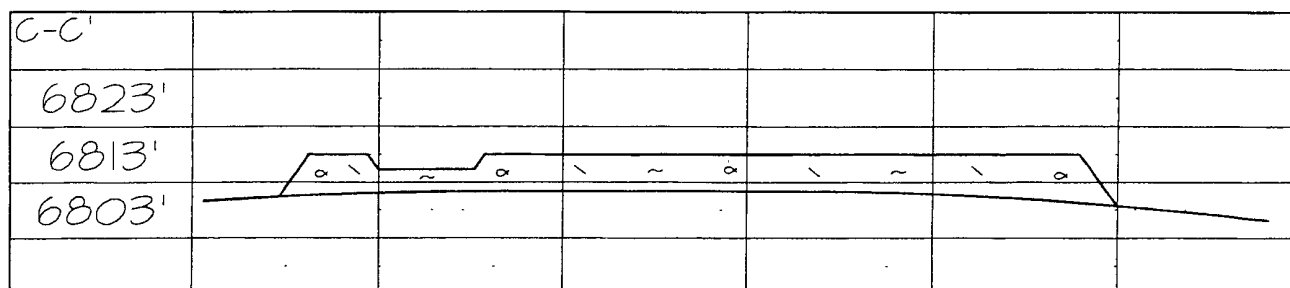
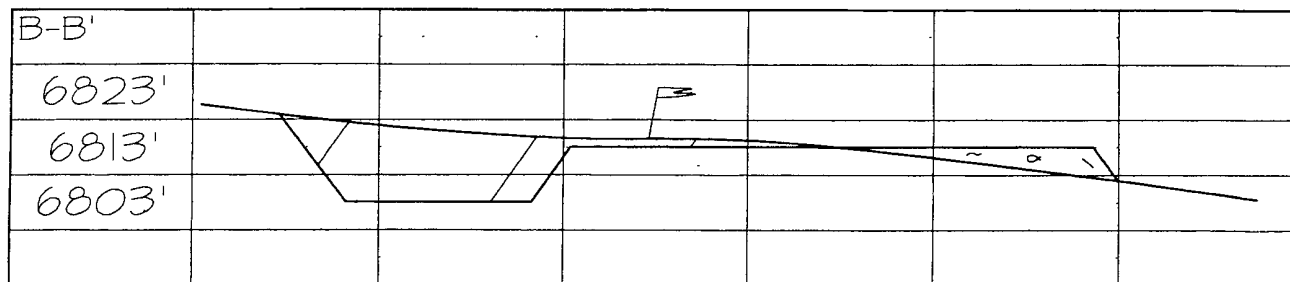
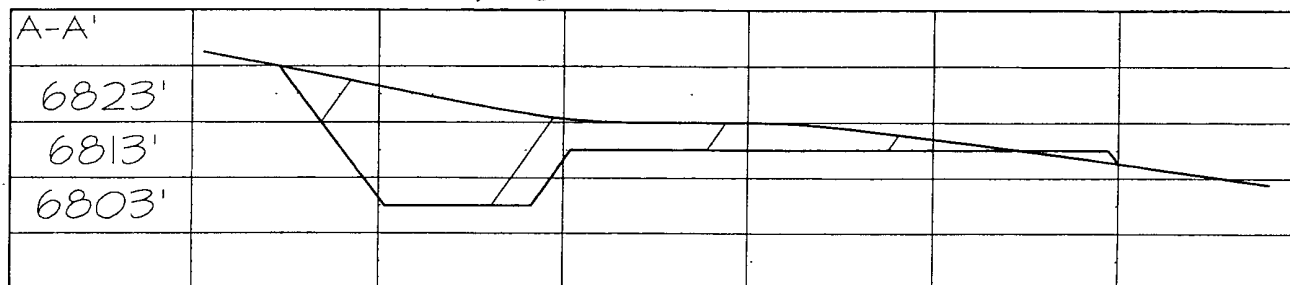
Grid Coordinates of Well: 2153469.48 N, 636827.80 E
Geographical Coordinates of Well: 36° 55' 02 0000" N, 107° 21' 55 0000" W
Surface Elevation of Well: 6826.00ft
Grid Convergence at Surface is +0.281°
Magnetic Declination at Surface is +10.444° (13 January, 2006)



WILLIAMS PRODUCTION COMPANY ROSA UNIT #360A
1470' FNL & 2095' FEL, SECTION 9, T31N, R5W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6814'



PLAT #1



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)

