

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RCVD MAR16'07  
OIL CONS. DIV.  
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2006 NOV 15 PM 4:50 RECEIVED 070 FARMINGTON NM	5. Lease Number Jicarilla Contract #100 Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator ConocoPhillips		7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name Jicarilla D 9. Well Number #21
4. Location of Well Unit N (SESW), 1030' NSL, 1865' FWL,  Latitude 36° 45302'N Longitude 107° 18803'W	112' F&L 1580' N	10. Field, Pool, Wildcat Blanco Mesaverde  11. Sec., Twn, Rge, Mer. (NMPM) Sec. 30, T26N, R03W, NMPM API # 30-039- 30116
14. Distance in Miles from Nearest Town	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 550'		
16. Acres in Lease	17. Acres Assigned to Well 294.24 Ac. W/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease		
19. Proposed Depth 6373'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 7258' GL 7250	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Peter Christman</u> Sr. Regulatory Analyst	Date <u>11/14/06</u>	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY [Signature] TITLE Acting AFM DATE 3/14/07  
Minerals

Archaeological Report & Environmental Assessment submitted separately.

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

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 presentations as to any matter within its jurisdiction.

NMOC

3/22/07

NOTIFY AZTEC OCD 24hrs  
IN TIME TO WITNESS CS9 & cement

submitted in lieu of Form 3160-5  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RCVD MAR16'07  
OIL CONS. DIV.  
DIST. 3

Sundry Notices and Reports on Wells

2007 JAN 29 PM 2:35

1. Type of Well  
GAS

2. Name of Operator  
**ConocoPhillips**

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

Unit N (SESW), 1170' FSL & 1590' FWL, Section 30, T26N, R3W, NMPM

5. Lease Number  
Jicarilla Contract #100  
6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number

Jicarilla D #21  
9. API Well No.

30-039-30116

10. Field and Pool

Blanco Mesaverde

11. County and State  
Rio Arriba Co., NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment

Type of Action

☐ Abandonment

☐ Plugging

☐ Casing Repair

☐ Altering Casing

☐ Change of Plans

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

☒ Other - Change APD location

13. Describe Proposed or Completed Operations

Attached is the revised C-102, Multi-Point Surface Use Plan, Pipeline Plat, Cut and Fill and directions for the APD filed 11/14/06.

14. I hereby certify that the foregoing is true and correct.

Signed Rhonda Rogers Title Regulatory Technician Date 1/29/07

(This space for Federal or State Office use)

APPROVED BY [Signature] Title Acting AFM Minerals Date 3/14/07

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

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  
RCVD MAR16'07

WELL LOCATION AND ACREAGE DEDICATION PLAT OIL CONS. DIV.

APN Number 30-039-30116		Pool Code 72319 / 71599		Pool Name BLANCO MESAVERDE / BASIN DAKOTA	
Property Code 31763		Property Name JICARILLA D			Well Number 21
OGAID No. 217817		Operator Name ConocoPhillips Company			Elevation 7250

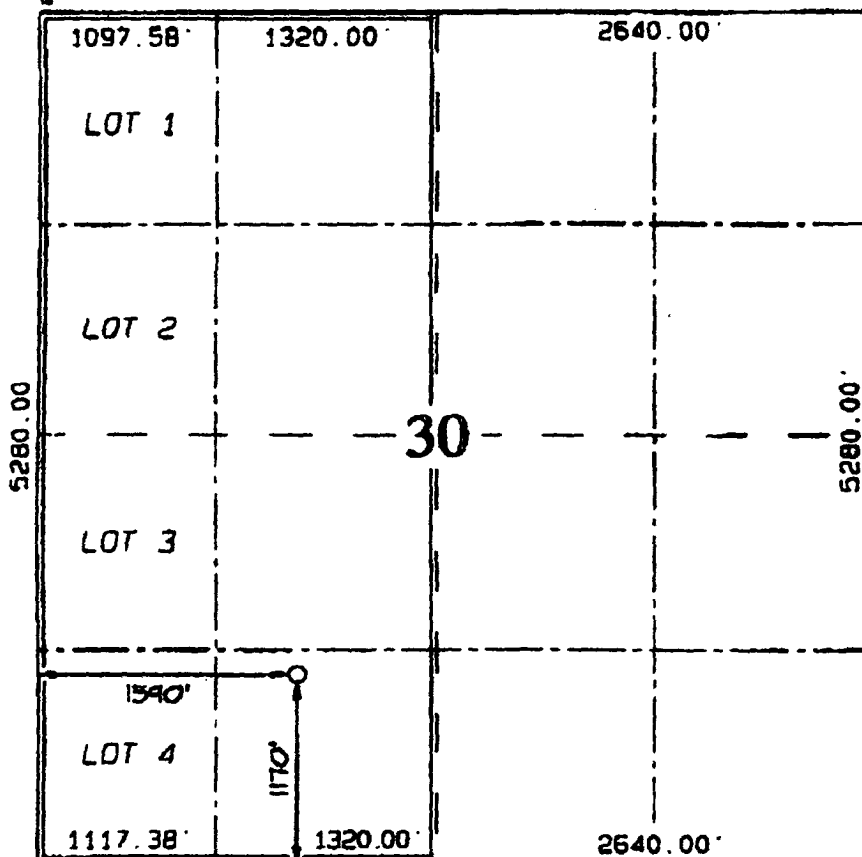
10 Surface Location

U. of lat. no. N	Section 30	Township 26N	Range 3W	Lot 1st	Feet from the 1170	North/South line SOUTH	Feet from the 1590	East/West line WEST	County RIO ARriba
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11 Bottom Hole Location If Different From Surface

U. of lat. no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
Observed acres 294.24 Acres (W/2)					Joint or Drift	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



12 OPERATOR CERTIFICATION  
I hereby certify that the information contained herein is true and correct to the best of my knowledge and belief.

Signature  
Rhonda Rogers  
Printed Name  
Regulatory Technician  
Title  
1/26/07  
Date

13 SURVEYOR CERTIFICATION  
I hereby certify that the well location shown on this plat was obtained 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.

MAY 9, 2001  
Date of Survey  
Signature of Surveyor  
HEALE G. EDWARDS  
NEW MEXICO  
6867  
Certificate No. 5857

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

Form C-103  
May 27, 2004

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)		WELL API NO. 30-039- <b>30116</b>
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator ConocoPhillips Company		6. State Oil & Gas Lease No. Jicarilla Contract #100
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402		7. Lease Name or Unit Agreement Name Jicarilla D
4. Well Location Unit Letter <u>N</u> : <u>1030</u> feet from the <u>South</u> line and <u>1865</u> feet from the <u>West</u> line Section <u>30</u> Township <u>26N</u> Rng <u>3W</u> NMPM County <u>Rio Arriba</u>		8. Well Number #21
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 7258' GL		9. OGRID Number 217817
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Blanco Mesaverde
Pit type <u>new drill</u> Depth to Groundwater <u>&gt;100'</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&lt;1000'</u> Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>440</u> bbls; Construction Material <u>Synthetic</u>		

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: new drill ☒

**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.

New Drill, Lined:

ConocoPhillips proposes to construct a new drilling pit, an associated vent/flare pit and a pre-set mud pit (if required). Based on ConocoPhillips' interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and pre-set mud pit will be lined pits as detailed in ConocoPhillips' General Plan dated June 2005 on file at the NMOCD office. A portion of the vent/flare pit will be designed to manage fluids and that portion will be lined as per the risk ranking criteria. ConocoPhillips anticipates closing these pits according to the November 1, 2004 Guidelines.

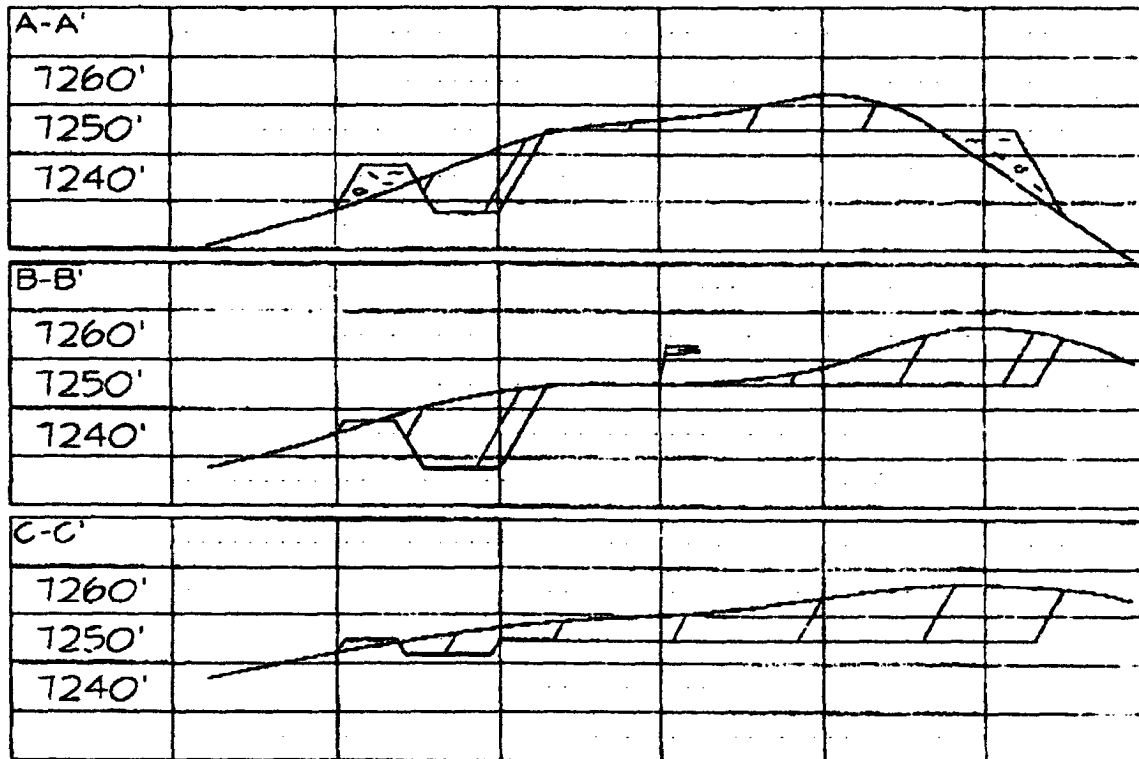
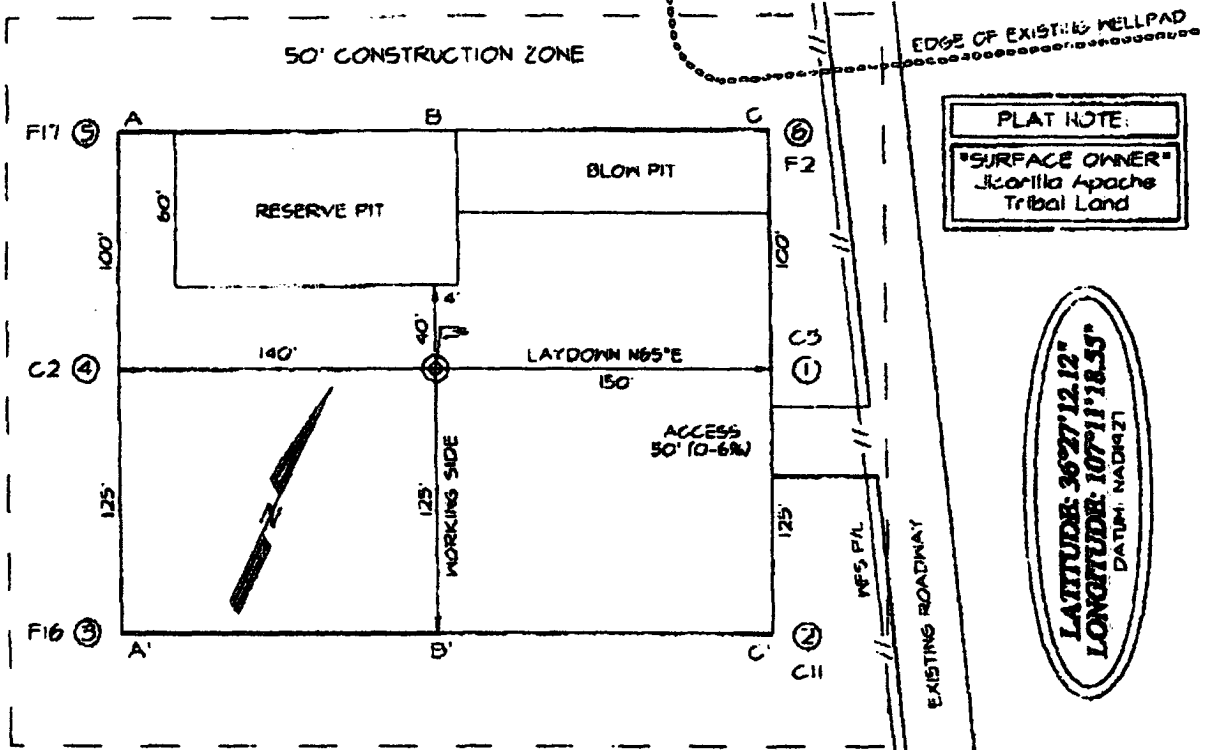
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Patsy Clugston TITLE Sr. Regulatory Specialist DATE 10/9/2006

Type or print name Patsy Clugston E-mail address: L.Clugston@conocophillip Telephone No. 505-326-9518  
**For State Use Only**

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #2 DATE MAR 22 2007  
Conditions of Approval (if any):

**CONOCO, INC. JICARILLA D #21**  
**1170' FSL, 1590' FWL, SECTION 30, T26N, R3W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO GROUND ELEVATION: 7250'**



FILENAME: 26930WT

SHEET 3 OF 5

NCE SURVEYS, INC.

DRAWN BY: SLE

CHECKED BY: NCE

**TOPSET FRUITLAND COAL Wells:** (topset casing above coal to prepare for cavitation/DO/UR)

**Drilling Mud Program:**

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

**Centralizer Program:**

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, & 10<sup>th</sup> joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

**CASE & FRAC FRUITLAND COAL Wells:** (casing set below coal to prepare for frac completion)

**Drilling Mud Program:**

Surface: spud mud

Production: fresh water mud with bentonite and polymer as needed

**Centralizer Program:**

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> joints

Production: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, & 10<sup>th</sup> joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

**MESA VERDE Wells:**

**Drilling Mud Program:**

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist drilling media with foamer, polymer, & corrosion inhibitor as needed

**Centralizer Program:**

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, & 10<sup>th</sup> joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

**DAKOTA Wells:**

**Drilling Mud Program:**

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

**Centralizer Program:**

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, & 10<sup>th</sup> joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

# PROJECT PROPOSAL - New Drill / Sidetrack

JICARILLA D 21

Lease:		AFE #: WAN.CNV.5144		AFE \$:	
Field Name: JICARILLA		Rig:	State: NM	County: RIO ARRIBA	API #: 3003926838
Geoscientist: Brain, Ted H.		Phone: 832-486-2592	Prod. Engineer: Fontenot, Jessie C		Phone: +1 832-486-3483
Res. Engineer: Harrington, Tim R.		Phone: 832-486-2207	Proj. Field Lead: Fransen, Eric E.		Phone:

**Primary Objective (Zones):**

Zone	Zone Name
RON	BLANCO MESAVERDE (PRORATED GAS)

<b>Location:</b> Surface		<b>Datum Code:</b> NAD 27				<b>Straight Hole</b>	
Latitude: 36.453020	Longitude: -107.188030	X:	Y:	Section: 30	Range: 3W		
Footage X: 1865 FWL		Footage Y: 1030 FSL		Elevation: 7258 (FT)	Township: 26N		
Tolerance:							
Location Type: Year Round		Start Date (Est.):		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 7274 Units = FT							

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	320' - 216'	7058	<input type="checkbox"/>			Severe lost circulation is possible. 9 5/8", 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	2274	5000	<input type="checkbox"/>			
OJAM	3272	4002	<input type="checkbox"/>			Possible water flows
KRLD/FRLD	3607	3667	<input type="checkbox"/>			
PCCF	3874	3400	<input type="checkbox"/>	325	132	Gas; possible lost circulation
LEWS	4074	3200	<input type="checkbox"/>			
CHRA	4838	2436	<input type="checkbox"/>			
CLFH	5561	1713	<input type="checkbox"/>			Gas; possibly wet
MENF	5661	1613	<input type="checkbox"/>			Gas
PTLK	6034	1240	<input type="checkbox"/>	575		Gas
MNCS	6284	990	<input type="checkbox"/>			
Total Depth	6384	890	<input type="checkbox"/>		173	7 7/8" hole; 4 1/2", 10.5 ppf, J-55, STC casing. Circulate cement to surface.

<b>Reference Wells:</b>		
Reference Type	Well Name	Comments

<b>Logging Program:</b>		
Intermediate Logs: <input type="checkbox"/> Log only if show <input type="checkbox"/> GR/ILD <input type="checkbox"/> Triple Combo		
TD Logs: <input type="checkbox"/> Triple Combo <input type="checkbox"/> Dipmeter <input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input type="checkbox"/> VSP <input checked="" type="checkbox"/> TDT		

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: Location/Tops/Logging - Location relatively firm near existing D5 PCCF well. GL & KB are estimates for staking purposes. TDT log only.

Zones - MV Single Only. A location. Pending performance of Jicarilla B2A MV completion (Drilled in 2000). This is a BLM

HOLE: 12.25"  
 CSG OD: 9.625"  
 CSG ID: 9.001"  
 WGT: 32.3 ppf  
 GRADE: H-40  
 EXCESS: 125 %  
 DEPTH: 320'

### SURFACE:

Option 1  
 118 sx  
 24.6 bbls  
 138.0 cuft  
 1.17 ft<sup>3</sup>/sx  
 15.8 ppg  
 4.973 gal/sx  
 Class G Cement  
 + 3% S001 Calcium Chloride  
 + 0.25 lb/sx D029 Cellophane Flakes

### Option 2

114 sx  
 24.6 bbls  
 138.0 cuft  
 1.21 ft<sup>3</sup>/sx  
 15.6 ppg  
 5.29 gal/sx  
 Standard Cement  
 + 3% Calcium Chloride  
 + 0.25 lb/sx Flocele

### Option 3

65 sx  
 18.6 bbls  
 104.3 cuft  
 1.61 ft<sup>3</sup>/sx  
 14.5 ppg  
 7.41 gal/sx  
 Type I-II Ready Mix  
 + 20% Fly Ash

Comp. Strength  
 8 hrs 475 psi  
 24 hrs 1375 psi

### PRODUCTION LEAD:

#### Option 1

640 sx  
 310.2 bbls  
 1741.8 cuft  
 2.72 ft<sup>3</sup>/sx  
 11.7 ppg  
 15.74 gal/sx  
 Class G Cement  
 + 3% D079 Extender  
 + 0.20% D046 Antifoam  
 + 10 lb/sx Phenoseal

#### Option 2

670 sx  
 310.2 bbls  
 1741.8 cuft  
 2.60 ft<sup>3</sup>/sx  
 11.5 ppg  
 14.62 gal/sx  
 Type III Ashgrove Cement  
 + 30 lb/sx San Juan Poz  
 + 3% Bentonite  
 + 5.0 lb/sx Phenoseal

#### Option 3

662 sx  
 310.2 bbls  
 1741.8 cuft  
 2.63 ft<sup>3</sup>/sx  
 11.7 ppg  
 15.92 gal/sx  
 Class G Cement  
 + 3% D079 Extender  
 + 0.20% D046 Antifoam  
 + 1.0 lb/bbl CemNet

HOLE: 7.875"  
 CSG OD: 4.5"  
 CSG ID: 4.052"  
 WGT: 10.5 ppf  
 GRADE: J-55  
 EXCESS: 50 %  
 TAIL: 1277'

DEPTH: 6384'

### PRODUCTION TAIL:

#### Option 1

336 sx  
 78.4 bbls  
 440.0 cuft  
 1.31 ft<sup>3</sup>/sx  
 13.5 ppg  
 5.317 gal/sx  
 50/50 Poz: Class G Cement  
 + 0.25 lb/sx D029 Cellophane Flakes  
 + 3% S001 Calcium Chloride  
 + 2% D020 Bentonite  
 + 1.5 lb/sx D024 Gilsontite Extender  
 + 0.1% D046 Antifoamer  
 + 6 lb/sx Phenoseal

#### Option 2

331 sx  
 78.4 bbls  
 440.0 cuft  
 1.33 ft<sup>3</sup>/sx  
 13.5 ppg  
 5.52 gal/sx  
 50/50 Poz: Standard Cement  
 + 2% Bentonite  
 + 6.0 lb/sx Phenoseal

#### Option 3

344 sx  
 78.4 bbls  
 440.0 cuft  
 1.28 ft<sup>3</sup>/sx  
 13.5 ppg  
 5.255 gal/sx  
 50/50 Poz: Class G Cement  
 + 2% D020 Bentonite  
 + 5.0 lb/sx D024 Gilsontite Extender  
 + 2% S001 Calcium Chloride  
 + 0.1% D046 Antifoamer  
 + 0.15% D065 Dispersant  
 + 1.0 lb/bbl CemNet

Comp. Strength  
 2:05 50 psi  
 4:06 500 psi  
 12 hrs 1250 psi  
 24 hrs 1819 psi

Comp. Strength  
 24 hrs 1850 psi  
 48 hrs 3411 psi

Handwritten signature and date: 11/14/06



# Jicarilla D #21

HOLE: 12.25"  
CSG OD: 9.625"  
CSG ID: 9.001"  
WGT: 32.3 ppf  
GRADE: H-40  
EXCESS: 125 %

DEPTH: 320'

## SURFACE:

## INTERMEDIATE LEAD:

Option 4

605 sx  
310.2 bbls  
1741.8 cuft  
2.88 ft<sup>3</sup>/sx  
11.5 ppg  
16.85 gal/sx  
Standard Cement  
+ 3% Econolite (Extender)  
+ 10 lb/sx Phenoseal

Comp. Strength  
1:47 50 psi  
12 hrs 350 psi  
24 hrs 450 psi

HOLE: 7.875"  
CSG OD: 4.5"  
CSG ID: 4.052"  
WGT: 10.5 ppf  
GRADE: J-55  
EXCESS: 50 %

TAIL: 1277'

DEPTH: 6384'

## INTERMEDIATE TAIL:

Option 5

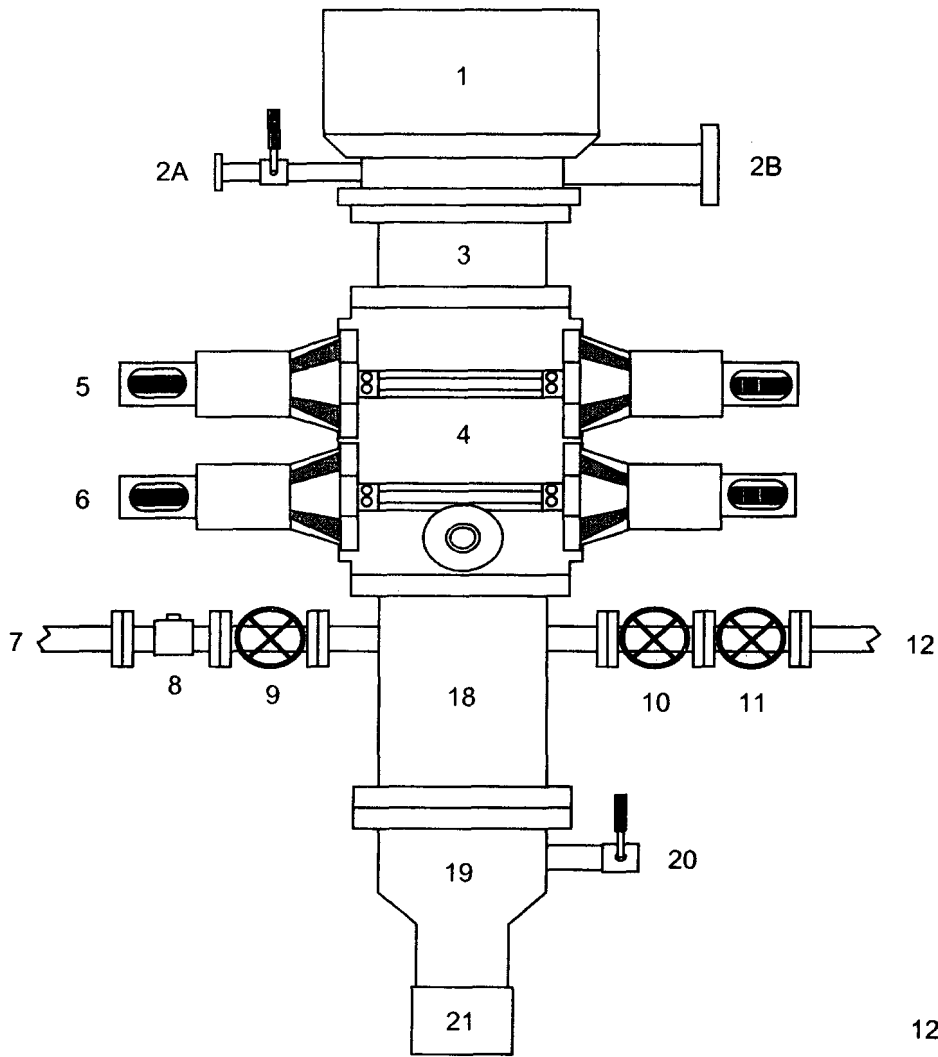
829 sx  
310.2 bbls  
1741.8 cuft  
2.10 ft<sup>3</sup>/sx  
11.7 ppg  
11.724 gal/sx  
75% Type XI / 25% Class G Cement  
+ 0.25 lb/sx D029 Cellophane Flakes  
+ 3% D079 Extender  
+ 0.20% D046 Antifoam

Comp. Strength  
10:56 500 psi  
42 hrs 1012 psi

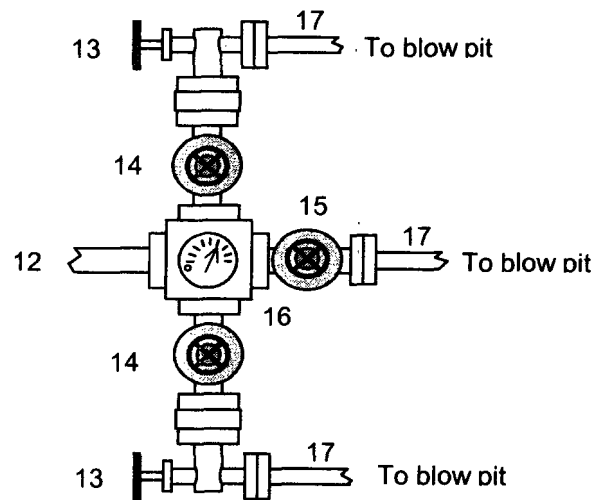
20-28 11/14/06

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Flowline
3. Spacer Spool
4. Double Ram BOP (11", 3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10. Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Mud Cross Spacer Spool
19. Casing Head "A" Section
20. Casing Head "A" Section 2" Valve
21. 9 5/8" Casing Collar



A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 1000 psi (high pressure test) for 10 minutes. Then the test plug will be removed, and the **9-5/8" casing will be pressure tested** against closed blind rams to 200 psi to 300 psi for 10 minutes and to **1000 psi for 30 minutes** (this value is one 44% of the minimum internal yield pressure of the 9-5/8" casing). (Note: per regulatory requirements we will wait on cement at least 8 hrs after placement before testing the 9-5/8" surface casing). Then an 8-3/4" hole will be drilled to intermediate casing point and 7" intermediate casing will be run and cemented.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use