

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078305
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
2. Name of Operator CONOCOPHILLIPS COMPANY		7. If Unit or CA Agreement, Name and No.
Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conocophillips.com		8. Lease Name and Well No. SAN JUAN 29-5 UNIT 21B
3a. Address 4001 PENBROOK, SUITE 346 ODESSA, TX 79762	3b. Phone No. (include area code) Ph: 915.368.1352	9. API Well No. 30039-27784
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWSE 2220FSL 2555FEL At proposed prod. zone		10. Field and Pool, or Exploratory BLANCO MESAVERDE
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area J Sec 8 T29N R5W Mer NMP
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	12. County or Parish RIO ARriba ✓
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 6138 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6605 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well E/P
20. BLM/BIA Bond No. on file		23. Estimated duration

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 (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 06/09/2004
Title AGENT		
Approved by (Signature) <i>Jim Lovato</i>	Name (Printed/Typed)	Date 12/6/04
Title <i>Acting Field Manager - Minerals</i>	Office	

Application approval does not warrant or certify 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.

Additional Operator Remarks (see next page)

Electronic Submission #31708 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington

ALL 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

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

*APT Number <b>30-039-27784</b>		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 31325	*Property Name SAN JUAN 29-5 UNIT		*Well Number 21B
*OGRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6605'

<sup>10</sup> Surface Location

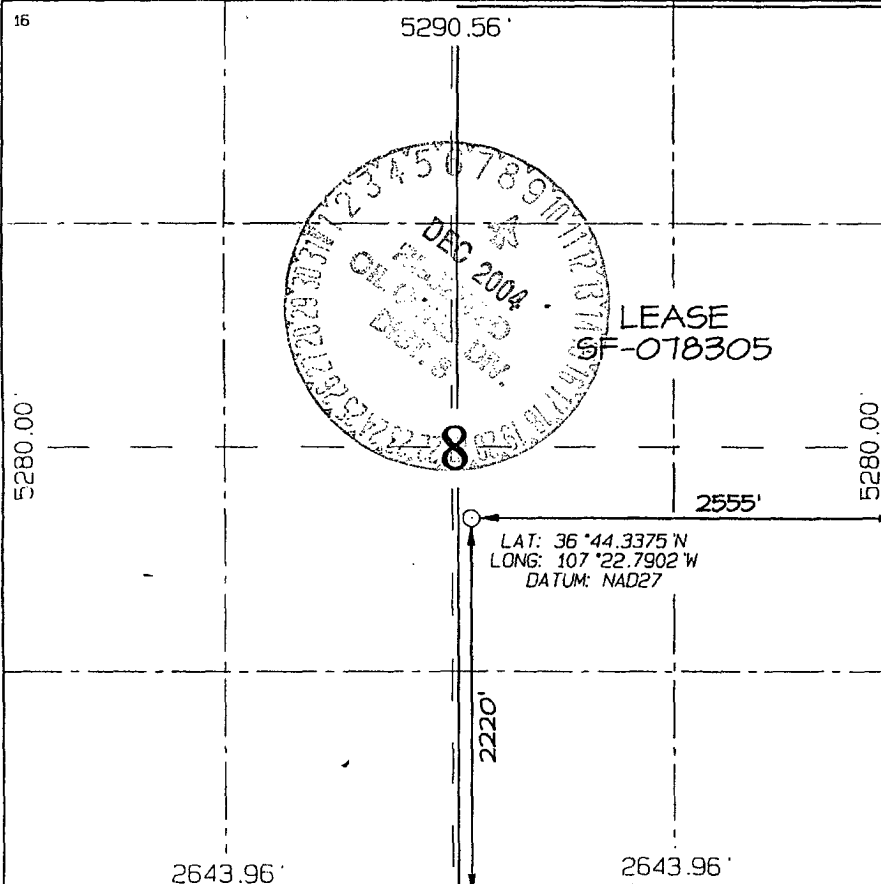
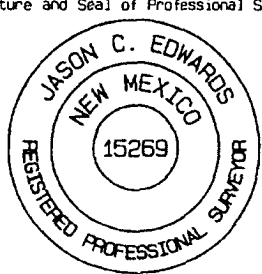
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	8	29N	5W		2220	SOUTH	2555	EAST	RIO ARriba

<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

<sup>12</sup> Dedicated Acres 320.0 Acres - E/2	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

<div><p>16</p></div>	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Vicki R. Westby</i> Signature Vicki R. Westby</p> <p>Printed Name Sr. Analyst</p> <p>Title <i>June 9, 2004</i> Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <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>Survey Date: FEBRUARY 13, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <div><p><b>JASON C. EDWARDS</b> Certificate Number 15269</p></div>

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.

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Juan 29-5 Unit

8. Well Number

21B

9. OGRID Number

217817

10. Pool name or Wildcat

Blanco Mesaverde

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

ConocoPhillips Company

3. Address of Operator

4001 Penbrook, Odessa, TX 79762

4. Well Location

Unit Letter J : 2220 feet from the South line and 2555 feet from the East line

Section 8 Township 29N Range 5W NMPM Rio Arriba County

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

6605' GL

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

Pit Location: UL J Sect 21 Twp 29N Rng 5W Pit type Drill Pit Depth to Groundwater >50' Distance from nearest fresh water well >1 000'

Distance from nearest surface water >200 <1000' Below-grade Tank Location UL  Sect  Twp  Rng  ;  feet from the  line and  feet from the  line

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 COMPLETION ☐

OTHER: Drill Pit Notification

✓

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND 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.

ConocoPhillips Company's Generic Pit Plan is on file at NMOCD in Aztec, NM. See the attached diagram that details the location of the pit in reference to the proposed wellhead. The drill pit will be lined. The drill pit will be closed after the well has been completed. The solids left after the water has been disposed of will be sampled and NMOCD approval will be obtained prior to closure of this pit.

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 Vicki Westby TITLE Sr. Analyst DATE 6/9/04

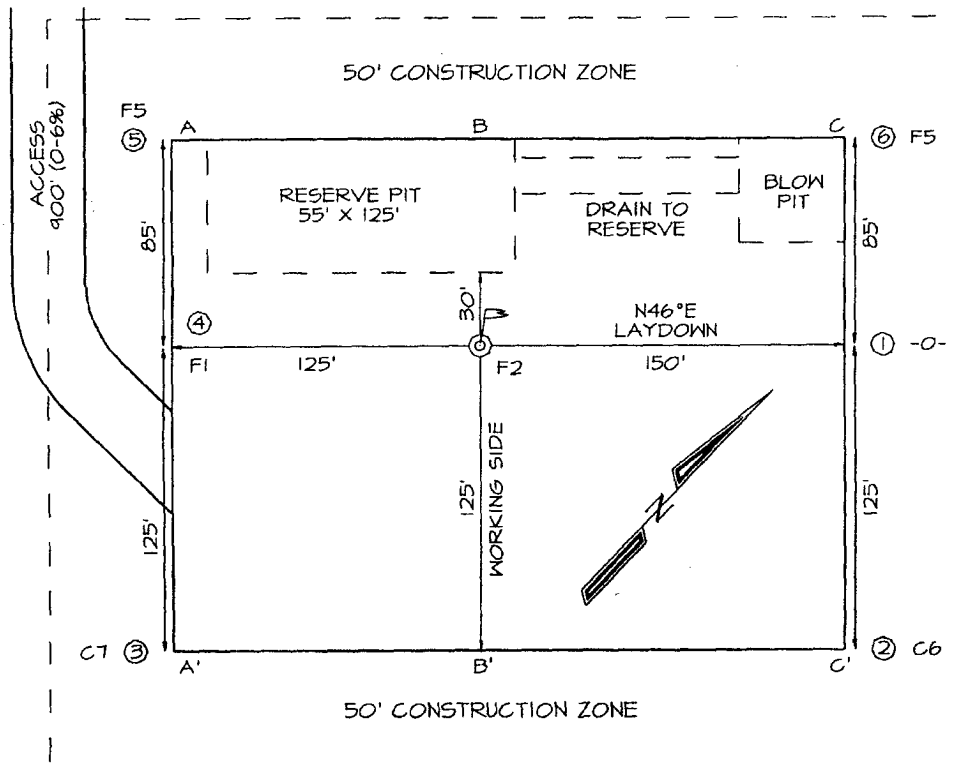
Type or print name Vicki Westby E-mail address: Vicki.R.Westby@conocophillips.com Telephone No. 432-368-1352

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 42 DATE DEC - 9 2004

Conditions of approval, if any:

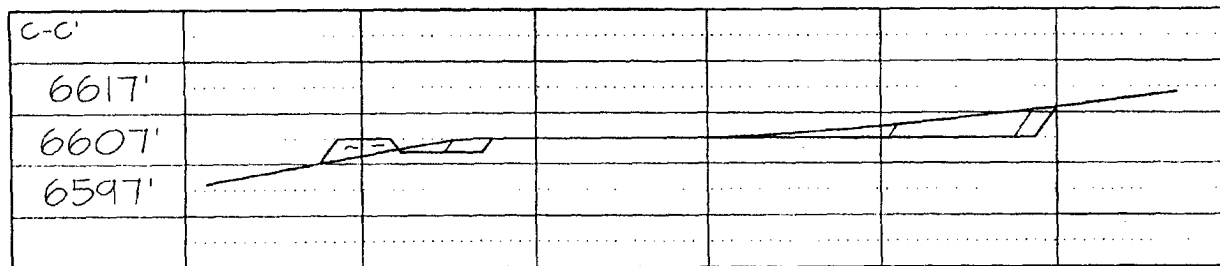
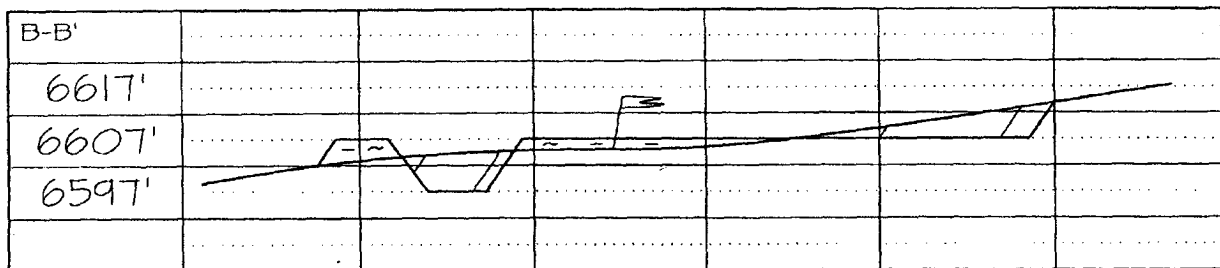
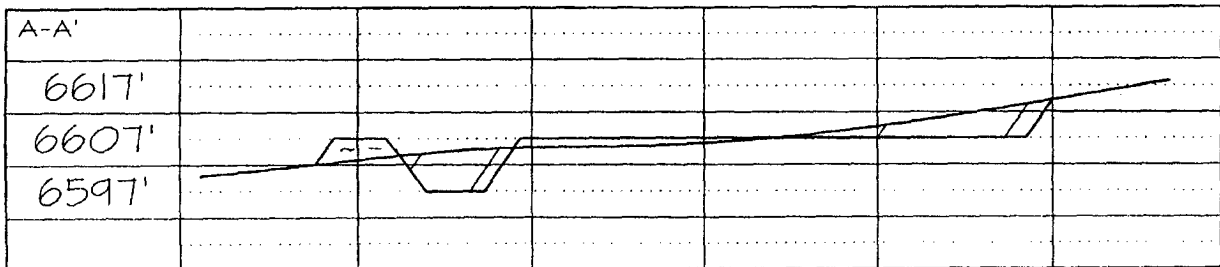
**CONOCOPHILLIPS COMPANY SAN JUAN 29-5 UNIT #21B**  
**2220' FSL & 2555' FEL, SECTION 8, T29N, R5W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6605'**



**LATITUDE: 36.73896° N**  
**LONGITUDE: 107.37984° W**  
 DATUM: NAD83

PLAT NOTE:

\*FEE SURFACE OWNER\*  
 J. Felix Gomez Estate



# PROJECT PROPOSAL - New Drill / Sidetrack

**SAN JUAN 29-5 21B**

Lease:		AFE #:		AFE \$:	
Field Name: hPHILLIPS 29-5	Rig: MACKLON Rig 3	State: NM	County: RIO ARRIBA	API #:	
Geoscientist: Glaser, Terry J	Phone: (832)486-2332	Prod. Engineer: Moody, Craig E.	Phone: (281) 293 - 6559		
Res. Engineer: Johnson, Tom B.	Phone: (832)-486-2347	Proj. Field Lead: Fransen, Eric E.	Phone:		

## Primary Objective (Zones):

Zone	Zone Name
RON	BLANCO MESAVERDE (PRORATED GAS)

Location: Surface					Straight Hole	
Latitude: 36.74	Longitude: -107.38	X:	Y:	Section: 8	Range: 5W	
Footage X: 2555 FEL	Footage Y: 2220 FSL	Elevation: 6605	(FT)	Township: 29N		
Tolerance:						

Location Type: Summer Only	Start Date (Est.):	Completion Date:	Date In Operation:
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Formation Data: Assume KB = 6618	Units = FT
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Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SURFACE CSG	213	6405	<input type="checkbox"/>			Severe Lost Circulation is possible. 12 1/4" Hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface. Test casing to 500 psi.
NCMT	1468	5150	<input type="checkbox"/>			
OJAM	2718	3900	<input type="checkbox"/>			Possible water flows.
KRLD	2908	3710	<input type="checkbox"/>			
FRLD	3228	3390	<input type="checkbox"/>			Possible gas.
PCCF	3558	3060	<input type="checkbox"/>			Possible gas.
LEWS	3758	2860	<input type="checkbox"/>			
Intermediate Casing	3858	2760	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface. Test casing to 1500 psi.
CHRA	4568	2050	<input type="checkbox"/>			
CLFH	5423	1195	<input type="checkbox"/>			Gas; possibly wet
MENF	5458	1160	<input type="checkbox"/>			Gas.
PTLK	5738	880	<input type="checkbox"/>	2000		Gas.
Total Depth	6138	480	<input type="checkbox"/>			6 1/4" Hole. 4 1/2", 10.5 ppf, J-55, STC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface.

## Reference Wells:

Reference Type	Well Name	Comments
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## Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☒ TDT

Additional Information:

Comments: General/Work Description -

### 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

# **San Juan 29-5 # 21B**

## **SURFACE CASING :**

Drill Bit Diameter	12.25"	
Casing Outside Diameter	9.625"	Casing Inside Diam. 9.001"
Casing Weight	32.3	ppf
Casing Grade	H-40	
Shoe Depth	230'	
Cement Yield	1.21	cuft/sk
Excess Cement	150	%
Cement Required	162	sx

SHOE 230 ', 9.625 ", 32.3 ppf, H-40 STC

## **INTERMEDIATE CASING :**

Drill Bit Diameter	8.75"	
Casing Outside Diameter	7"	Casing Inside Diam. 6.456"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3858'	
Lead Cement Yield	2.88	cuft/sk
Lead Cement Excess	150	%
Tail Cement Length	771.6'	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Excess	150	%
Lead Cement Required	386	sx
Tail Cement Required	225	sx

SHOE 3858 ', 7 ", 20 ppf, J-55 STC

## **PRODUCTION CASING :**

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.000"
Casing Weight	11.6	ppf 10.5
Casing Grade	N-80	J-55
Top of Cement	3668'	200' inside intermediate casing
Shoe Depth	6138'	
Cement Yield	1.45	cuft/sk
Cement Excess	50	%
Cement Required	258	sx

SHOE 6138 ', 4.5 ", 10.5 ppf, J-55 LTC

San Juan 29-5 # 21B			
	Surf. Csg	Int. Csg	Prod. Csg
OD	9.625	7	4.5
ID	9.001	6.456	4.000
Depth	230	3858	6138
Hole Diam	12.25	8.75	6.25
% Excess Lead		150	
% Excess Tail	150	150	50
Lead Yield		2.88	
Tail Yield	1.21	1.33	1.45
Ft of Tail Slurry	230	771.6	2480
Top of Tail Slurry	0	3086.4	3658
Top of Lead Slurry	N/A	0	N/A
Mud Wt (ppg)	8.9	9.0	air drill
Mud Type	WBM	WBM	air drill

Surface Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Open Hole Annulus	230	0.055804	2.5	32.1	180.2	148.9
Shoe Track Volume	40	0.078735	1	3.1	17.7	13.3
Total				35.2	197.8	162.2

Intermediate Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Lead Open Hole Annulus	2856.4	0.026786	2.5	191.3	1073.9	372.9
Lead Cased Hole Annulus	220	0.031116	1	6.8	38.4	13.3
Lead Total				198.1	1112.4	386.2
Tail Open Hole Annulus	771.6	0.026786	2.5	51.7	290.1	218.1
Tail Shoe Track Volume	42	0.040505	1	1.7	9.6	7.2
Tail Total				53.4	299.7	225.3

Production Casing						
	Ft	Cap	XS Factor	bbls	cuft	sx
Open Hole Annulus	2280	0.018282	1.5	62.5	351.0	242.1
Cased Hole Annulus	200	0.020826	1	4.2	23.4	16.1
Total				66.7	374.4	258.2

San Juan 29-5 # 21B		
9 5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+0.25 lb/sx Flocele	
Cement Volume	162	sx
Cement Yield	1.21	cuft/sx
Slurry Volume	197.8	cuft
	35.2	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx
Compressive Strength		
Sample cured at 60 deg F for 8 hrs		
4hrs 38 mins	50	psi
9hrs	250	psi



San Juan 29-5 # 21B

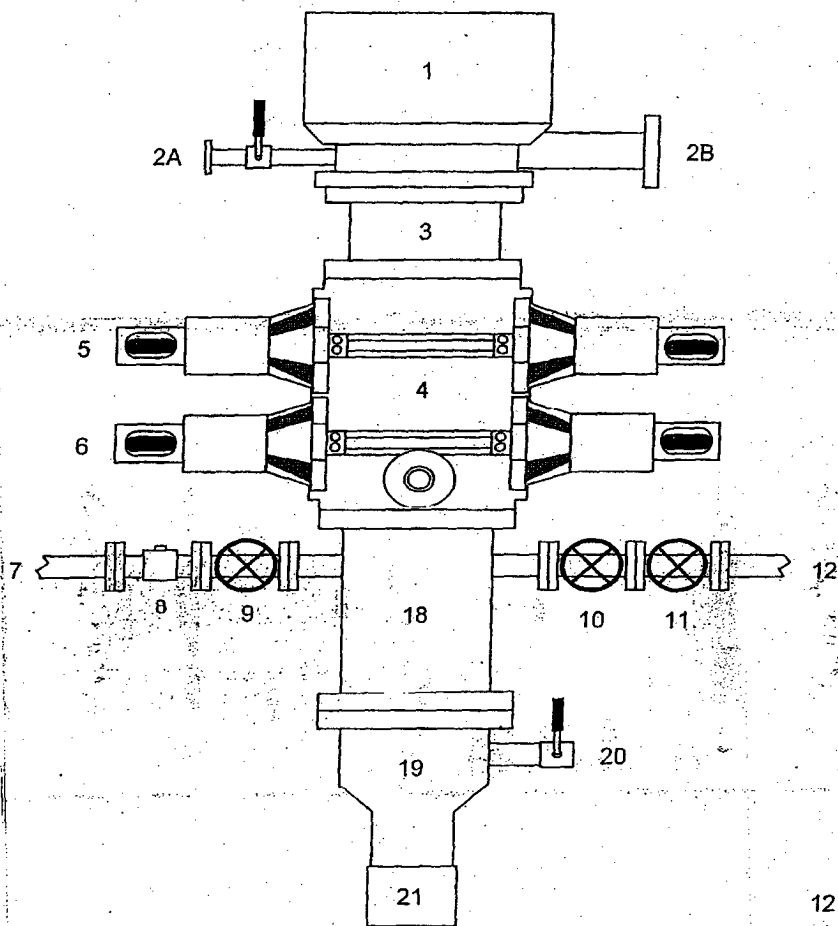
7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Standard Cement	
	+ 3% Econolite (extender)	
	+ 10 lb/sx Pheno Seal	
Cement Required	386	sx
Cement Yield	2.88	cuft/sx
Slurry Volume	1112.4	cuft
	198.1	bbls
Cement Density	11.5	ppg
Water Required	16.91	gal/sx
Compressive Strength		
Sample cured at 130 deg F for 24 hrs		
1 hr 47 min	50	psi
12 hr	350	psi
24 hr	450	psi

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard Cement	
	+ 2% Bentonite	
	+ 6 lb/sx Pheno Seal	
Cement Required	225	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	299.7	cuft
	53.4	bbls
Cement Density	13.5	ppg
Water Required	5.52	gal/sx
Compressive Strength		
Sample cured at 130 deg F for 24 hrs		
2 hr 05 min	50	psi
4 hr 06 min	500	psi
12 hr	1250	psi
24 hr	1819	psi

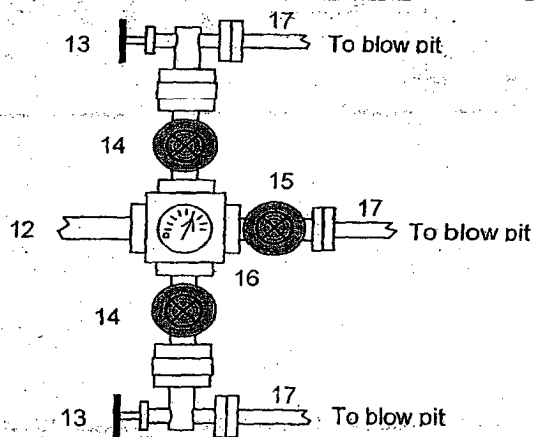
San Juan 29-5 # 21B		
4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ:Standard Cement	
	+ 3% Bentonite	
	+ 3.5 lb/sx PhenoSeal	
	+ 0.2% CFR-3 Friction Reducer	
	+ 0.1% HR-5 Retarder	
	+ 0.8% Halad-9 Fluid Loss Additive	
Cement Quantity	258	sx
Cement Yield	1.45	cuft/sx
Cement Volume	374.4	cuft
	66.7	
Cement Density	13.1	ppg
Water Required	6.47	gal/sx
Compressive Strength		
Sample cured at 200 deg F for 23 hrs		
9 hr 50 min	50	psi
13 hr 45 min	500	psi
16 hr	1500	psi
23 hr	2525	psi

# 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



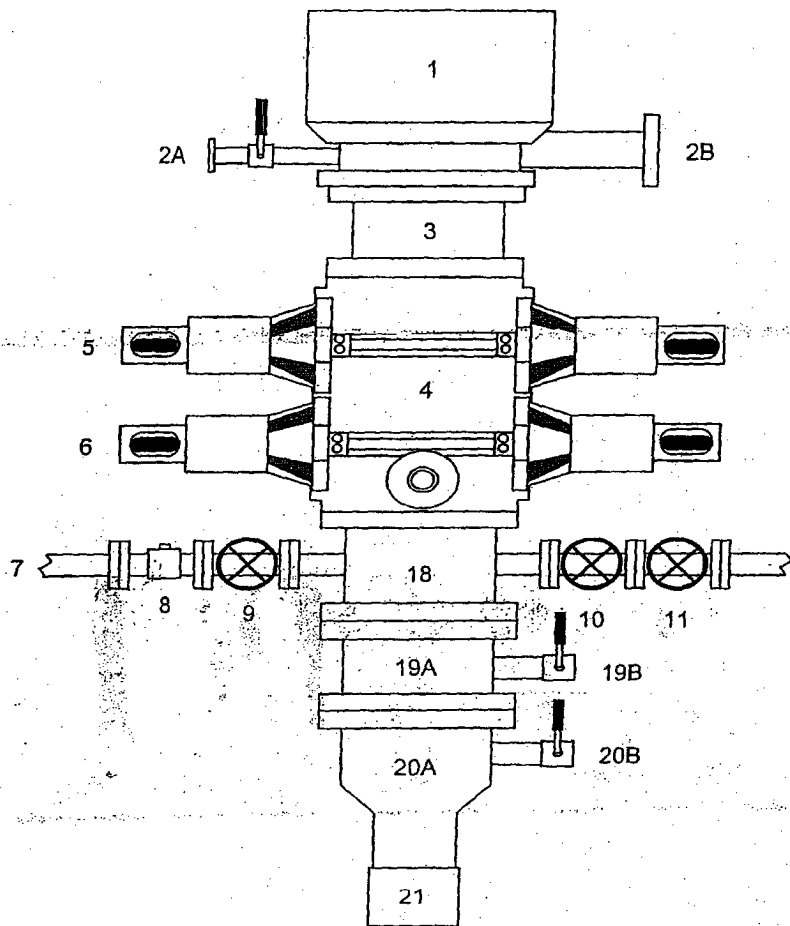
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 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 2-3 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). An 8-3/4" hole will be drilled to intermediate casing point and 7" casing will be run and cemented.

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

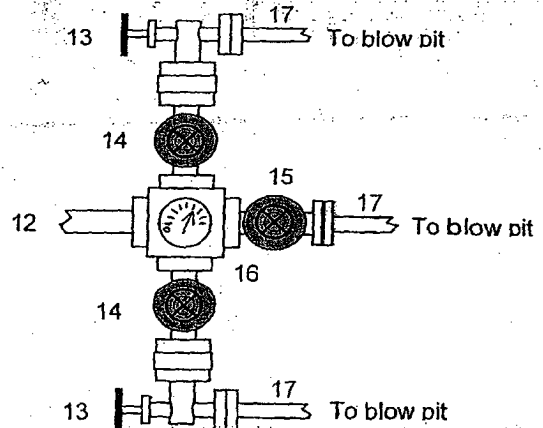
- Upper Kelly cock Valve with handle
- Stab-in TIW valve for all drillstrings in use

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bleeie Line (for Air Drilling)
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
- 19A Csg Spool "B" Section (11", 3M)
- 19B "B" Section Csg Valve (2", 3M)
- 20A, Csg Head "A" Section (11", 3M)
- 20B "A" Section Csg Valve (2", 3M)
21. 9 5/8" Casing Collar



After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 minutes and to 3000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and the 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 2-3 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. Then we will air drill the 6-1/4" hole to TD and run and cement the 4-1/2" casing.

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