

2005 MAY 23 601 9 38

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
070 FARMINGTON

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-078410
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input 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.
3a. Address 4001 Penbrook, Odessa, TX 79762	3b. Phone No. (include area code) 432-368-1352	8. Lease Name and Well No. San Juan 29-5 Unit #21C
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface NWNE 400 FNL - 2500 FEL At proposed prod. zone		9. API Well No. 30-039-29553
14. Distance in miles and direction from nearest town or post office*		10. Field and Pool, or Exploratory Blanco Mesaverde
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 800.88 acres	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 8, T29N, R5W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 6139'	12. County or Parish Rio Arriba
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6646' GL	22. Approximate date work will start*	13. State NM
17. Spacing Unit dedicated to this well E/2 - 320.0 acres		
20. BLM/BIA Bond No. on file		
23. Estimated duration JUN 2005		
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must 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 BLM.

25. Signature <i>Vicki Westby</i>	Name (Printed/Typed) Vicki Westby	Date 5/20/2005
Title Staff Agent		

Approved by (Signature) <i>SD Mankiewicz</i>	Name (Printed/Typed) AFM	Date 6-6-05
Title AFM	Office PFO	

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 page 2)

ConocoPhillips Company proposes to drill a vertical wellbore to the Blanco Mesaverde formation. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD / ROW.

DRILLING 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

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

*API Number 30-039-29553	*Pool Code 72319	*Pool Name BLANCO MESA VERDE
*Property Code 31325	*Property Name SAN JUAN 29-5 UNIT	*Well Number 21C
*OGRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY	Elevation 6646'

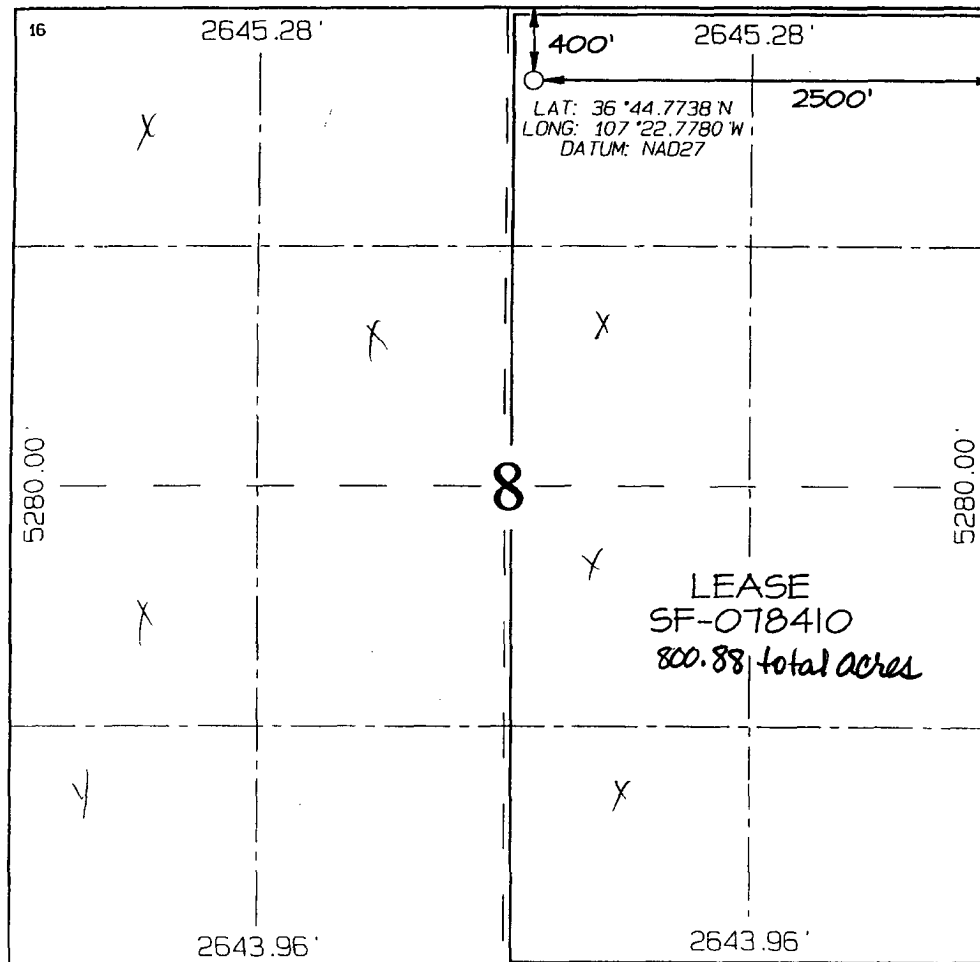
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	29N	5W		400	NORTH	2500	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
¹² Dedicated Acres 320.0 Acres - E/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



¹⁷ OPERATOR CERTIFICATION

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

Vicki Westby
Signature

Vicki R. Westby

Printed Name
Staff Agent

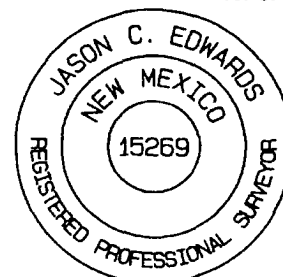
Title
May 20, 2005
Date

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

Survey Date: DECEMBER 21, 2004

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

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
May 27, 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 21C

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 B 400 feet from the North line and 2500 feet from the East line
Section 8 Township 20N Range 5W NMPM Rio Arriba County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6646' GL

Pit or Below-grade Tank Application ☒ Closure ☐

Pit type drill Depth to Groundwater 40' Distance from nearest fresh water well > 1 mile Distance from nearest surface water 100'

Liner Thickness: mil Below-Grade Tank: Volume bbls; Construction Material

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: ☐

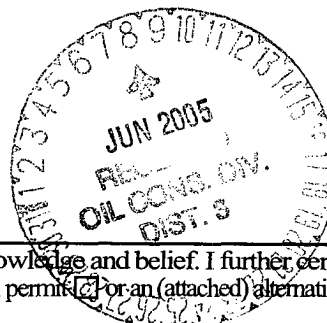
SUBSEQUENT REPORT OF:

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 11.03. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

The pit will be constructed and closed in accordance with Rule 50 and as per the Nov. 1, 2004 Guidelines. 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.



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 Staff Agent

DATE 5/20/2005

Type or print name

E-mail address:

Telephone No.

For State Use Only

APPROVED BY:

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 3

DATE

Conditions of Approval (if any)

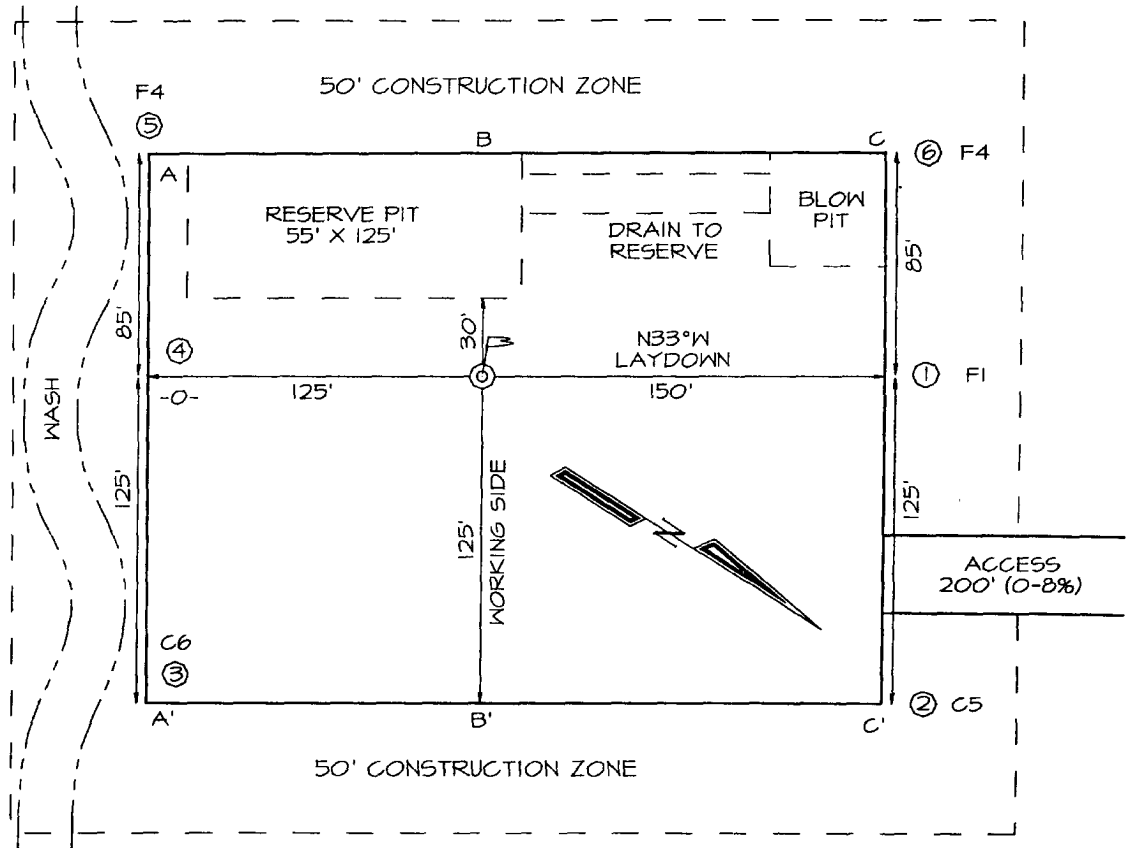
JUN - 8 2005

LATITUDE: 36.74623° N
LONGITUDE: 107.37963° W

DATUM: NAD1927

PLAT NOTE:

FEE SURFACE OWNER
J. Felix Gomez Estate

[illegible]

B-B'					
6656'					
6646'					
6636'					

C-C'						
6656'						
6646'						
6636'						

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 29-5 21C

Lease:		AFE #:		AFE \$:	
Field Name: hPHILLIPS 29-5		Rig:	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:		Phone:

Primary Objective (Zones):

Zone	Zone Name
RON	BLANCO MESAVERDE (PRORATED GAS)

Location: Surface Straight Hole

Latitude: 36.75 Longitude: -107.38 X: Y: Section: 8 Range: 5W

Footage X: 2500 FEL Footage Y: 400 FNL Elevation: 6646 (FT) Township: 29N

Tolerance:

Location Type: Summer Only Start Date (Est.): Completion Date: Date In Operation:

Formation Data: Assume KB = 6659 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SURFACE CSG	213	6446	<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.
NCMT	1459	5200	<input type="checkbox"/>			
OJAM	2749	3910	<input type="checkbox"/>			Possible water flows.
KRLD	2919	3740	<input type="checkbox"/>			
FRLD	3239	3420	<input type="checkbox"/>			Possible gas.
PCCF	3589	3070	<input type="checkbox"/>			
LEWS	3789	2870	<input type="checkbox"/>			
Intermediate Casing	3889	2770	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4609	2050	<input type="checkbox"/>			
CLFH	5464	1195	<input type="checkbox"/>			Gas; possibly wet
MENF	5509	1150	<input type="checkbox"/>			Gas.
PTLK	5789	870	<input type="checkbox"/>	2000		Gas.
Total Depth	6139	520	<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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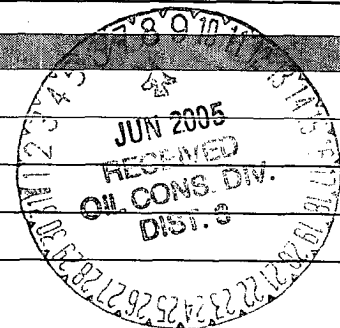
Logging Program:

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

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

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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San Juan 29-5 #21C
Halliburton Cement Calculations

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	125	%
Cement Required	147	sx

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

INTERMEDIATE CASING :

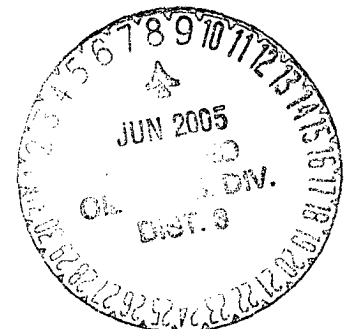
Drill Bit Diameter	8.75"	
Casing Outside Diameter	7"	Casing Inside Diam. 6.456"
Casing Weight	20	ppf
Casing Grade	J-55	
Shoe Depth	3889'	
Lead Cement Yield	2.88	cuft/sk
Lead Cement Excess	150	%
Tail Cement Length	777.8'	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Excess	150	%
Lead Cement Required	389	sx
Tail Cement Required	227	sx

SHOE 3889', 7", 20 ppf, J-55 STC

PRODUCTION CASING :

Drill Bit Diameter	6.25"	
Casing Outside Diameter	4.5"	Casing Inside Diam. 4.052"
Casing Weight	10.5	ppf
Casing Grade	J-55	
Top of Cement	3689'	200' inside intermediate casing
Shoe Depth	6139'	
Cement Yield	1.45	cuft/sk
Cement Excess	50	%
Cement Required	255	sx

SHOE 6139', 4.5", 10.5 ppf, J-55 STC



SAN JUAN 29-5 #21C
HALLIBURTON OPTION

9-5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+0.25 lb/sx Flocele	
Cement Volume	147	sx
Cement Yield	1.21	cuft/sx
Slurry Volume	179.8	cuft
	32.0	bbls
Cement Density	15.6	ppg
Water Required	5.29	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Standard Cement	
	+ 3% Econolite (extender)	
	+ 10 lb/sx Pheno Seal	
Cement Required	389	sx
Cement Yield	2.88	cuft/sx
Slurry Volume	1121.7	cuft
	199.8	bbls
Cement Density	11.5	ppg
Water Required	16.91	gal/sx

7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard Cement	
	+ 2% Bentonite	
	+ 6 lb/sx Pheno Seal	
Cement Required	227	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	302.0	cuft
	53.8	bbls
Cement Density	13.5	ppg
Water Required	5.52	gal/sx

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	255	sx
Cement Yield	1.45	cuft/sx
Cement Volume	369.8	cuft
	65.9	
Cement Density	13.1	ppg
Water Required	6.47	gal/sx

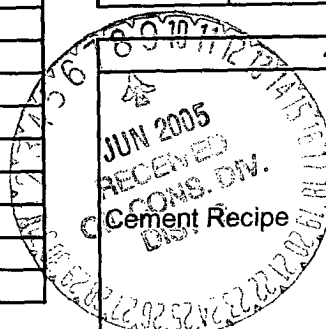
SCHLUMBERGER OPTION

9-5/8 Surface Casing		
Cement Recipe	Class G Standard Cement	
	+ 2% S001 Calcium Chloride	
	+0.25 lb/sx D029 Cellophane Flakes	
Cement Volume	148	sx
Cement Yield	1.16	cuft/sx
Cement Volume	171.5	cuft
Cement Density	15.8	ppg
Water Required	4.983	gal/sx

7" Intermediate Casing		
Lead Slurry		
Cement Recipe	Class G Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D079 Extender	
	+ 0.20% D046 Antifoam	
	+ 10 lb/sx Pheno Seal	
Cement Required	413	sx
Cement Yield	2.72	cuft/sx
Slurry Volume	1123.0	cuft
	200.0	bbls
Cement Density	11.7	ppg
Water Required	15.74	gal/sx

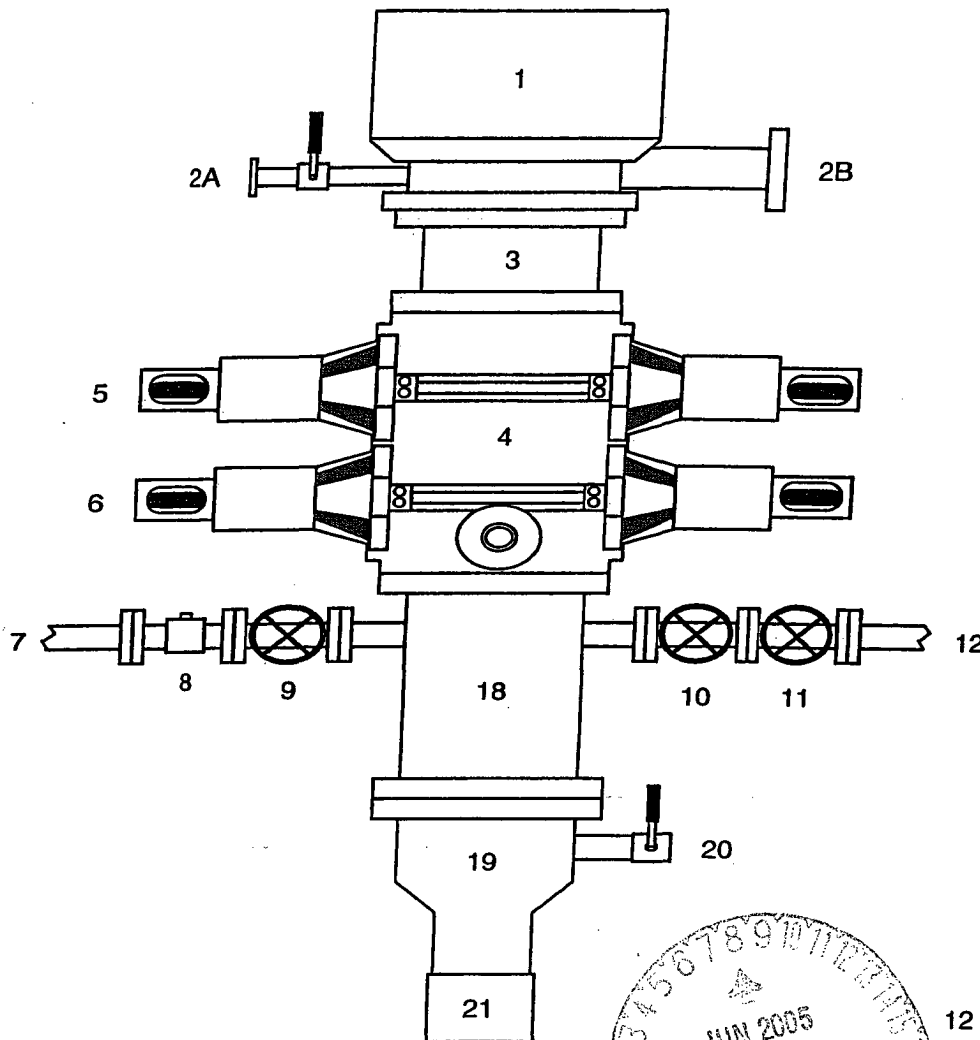
7" Intermediate Casing		
Tail Slurry		
Cement Slurry	50 / 50 POZ:Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 2% D020 Bentonite	
	+ 1.5 lb/sx D024 Gilsonite Extender	
	+ 2% S001 Calcium Chloride	
	+ 0.10% D046 Antifoam	
	+ 6 lb/sx Pheno Seal	
Cement Required	230	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	301.9	cuft
	53.8	bbls
Cement Density	13.5	ppg
Water Required	5.317	gal/sx

4-1/2" Production Casing		
Cement Recipe	50 / 50 POZ:Class G Standard Cement	
	+0.25 lb/sx D029 Cellophane Flakes	
	+ 3% D020 Bentonite	
	+ 1.0 lb/sx D024 Gilsonite Extender	
	+ 0.25% D167 Fluid Loss	
	+ 0.15% D065 Dispersant	
	+ 0.1% D800 Retarder	
	+ 0.1% D046 Antifoamer	
	+ 3.5 lb/sx PhenoSeal	
Cement Quantity	257	sx
Cement Yield	1.44	cuft/sx
Cement Volume	369.7	cuft
	65.8	
Cement Density	13	ppg
Water Required	6.43	gal/sx

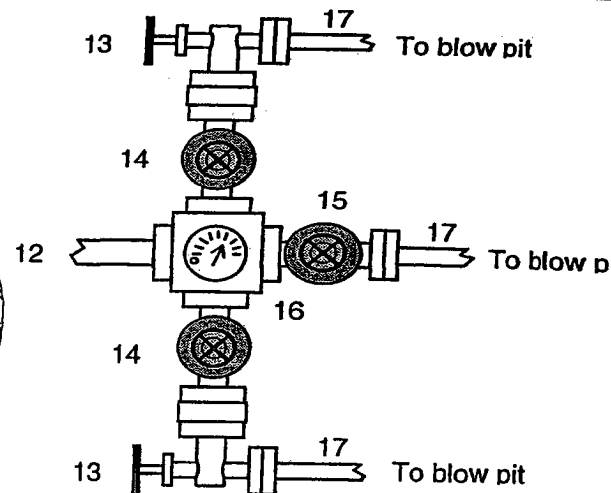


BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

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



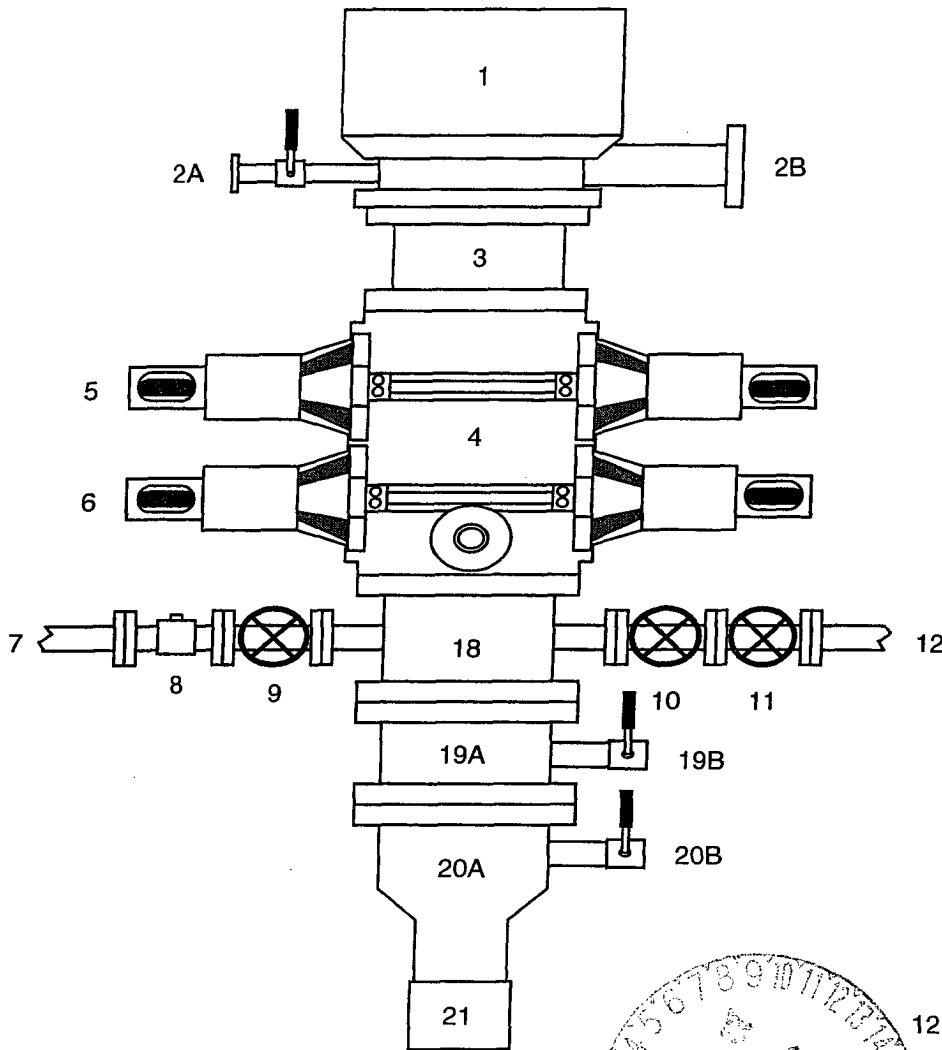
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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:

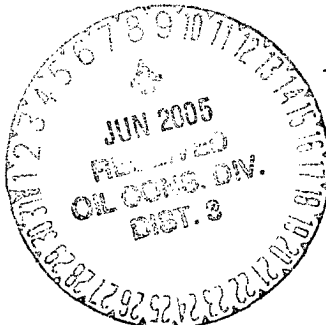
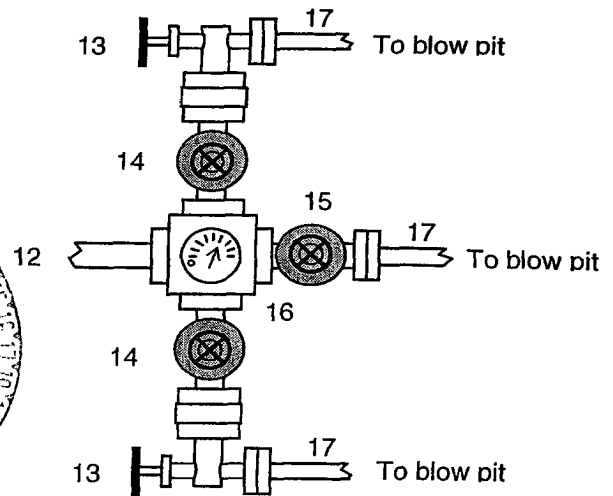
1. Upper Kelly cock Valve with handle

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Blooie 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 10 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 10 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

H & H TECHNICAL SERVICES A CORROSION COMPANY

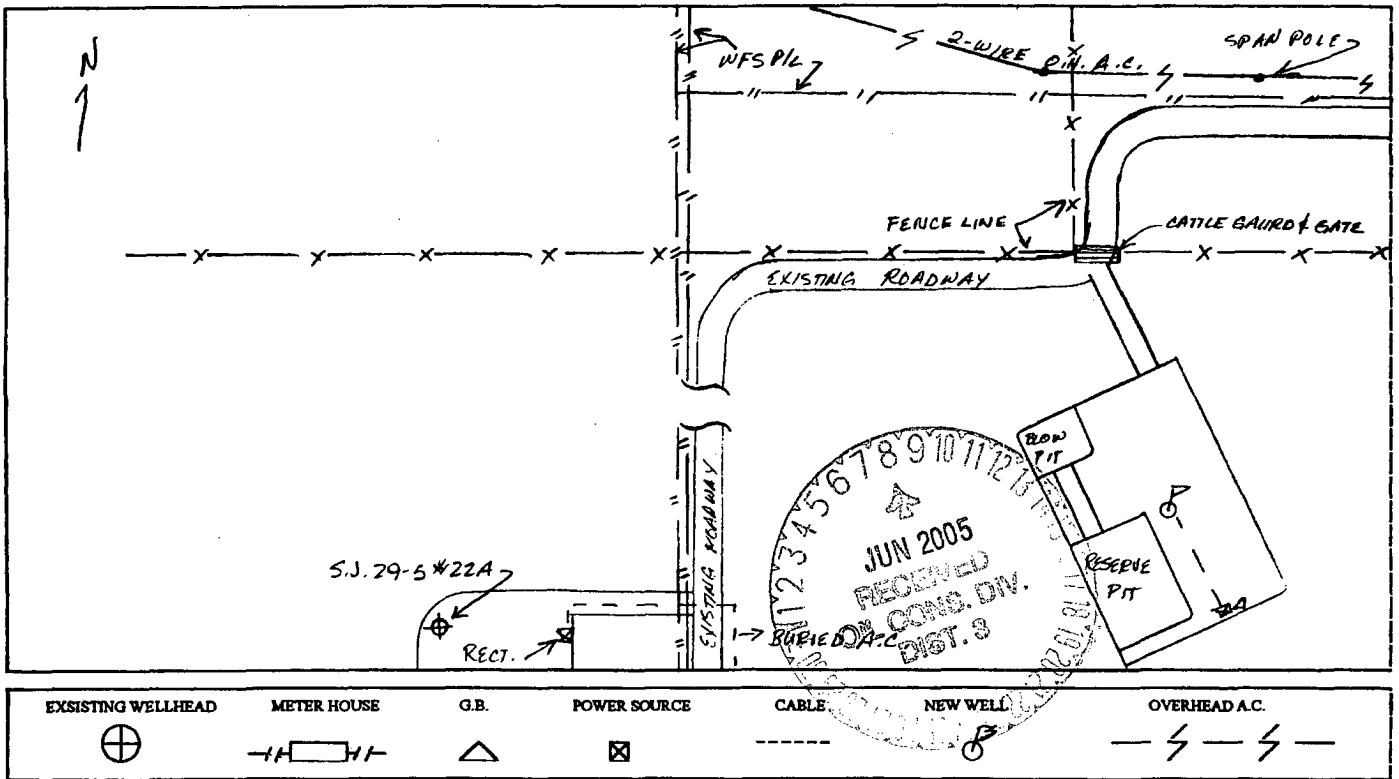
CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME: S.J. 29-5 #21C

LEGAL: B-8-29-5

COUNTY: R.A.

PURPOSED C.P. SYSTEM: DRILL G.B. & SET RECT @ S.E. EDGE OF LOCATION. ALSO TRENCH @ 200'
#A NEG FROM RECT. TO W.H.



COMMENTS: 2550' FROM BURIED A.C. (W #22A TO NEW RECT.
870' FROM SPAN POLE TO RECT. CAN WE CROSS FENCE WITH A.C.

NEAREST POWER SOURCE: _____ DISTANCE: _____
PIPELINES IN THE AREA: _____

TECHNICIAN: *Edith* DATE: 2-12-05

Property : San Juan 29-5 Unit Well #: 21C

Surface Location:

Unit: B Section: 8 Township: 29N Range: 5W

County: Rio Arriba State: New Mexico

Footage: 400 from the North line, 2500 from the East line.

CATHODIC PROTECTION

ConocoPhillips (COP) proposes to drill a cathodic protection deep well groundbed for the subject well. COP will drill a hole vertically at the surface large enough to accommodate 20 feet of 8 inch diameter PVC pipe for surface casing to assist in further drilling and loading. Casing may be cemented in place for stability if needed. COP will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on the existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.

