Fonn 3160 -3 (February 2005)

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

UNITED STATES

DEPARTMENT OF THEIR **BUREAU OF LAND MANAGE**

NM-03402 6. If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO DRIL

7. If Unit or CA Agreement, Name and No. DRILL REENTER Ia. Type of work: 8. Lease Name and Well No. lb. Type of Well: Oil Well Gas Well San Juan 32-8 Unit #8B 2. Name of Operator 9. API Well No. ConocoPhillips Company <u> 30-845-</u> 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 4001 Penbrook, Odessa, TX 79762 432-368-1352 Blanco Mesaverde 4. Location of Well (Report location clearly and in accordance with any State requirements, *) I 1. Sec., T. R. M. or Blk. and Survey or Area NWNE 1165 FNL - 1860 FEL At surface Section 22, T31N, R8W NMPM At proposed prod. zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State San Juan NM 15, Distance from proposed* 16. No. of acres in lease 17. Spacing Unit dedicated to this well location to nearest propery or lease line, ft. (Also to nearest drig. unit line, if any) 840 acres E/2 - 320.0 acres 19. Proposed Depth 18. Distance from proposed location* 20. BLM/BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. 6064' TVD 22 Approximate date work will start* 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 23. Estimated duration 6526' 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. 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 must be filed with the appropriate Forest Service office). 6. Such other site specific information and/or plans as may be required by the BLM~ 25. Signature Name (Printed/Typed) Vicki Westby 6/6/2005 Staff Agent Approved by (Signature) Name (Printed/Typed)

conduct operations thereon. Conditions of approval, if any, are attached.

cinapproval 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

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 juris iction.

*(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.

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".

District I PO Box 1980, Hobbs, NM 88241-1980

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

*Pool Code

320.0 Acres - E/2

API Number

12 Dedicated Acres

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

³Pool Name

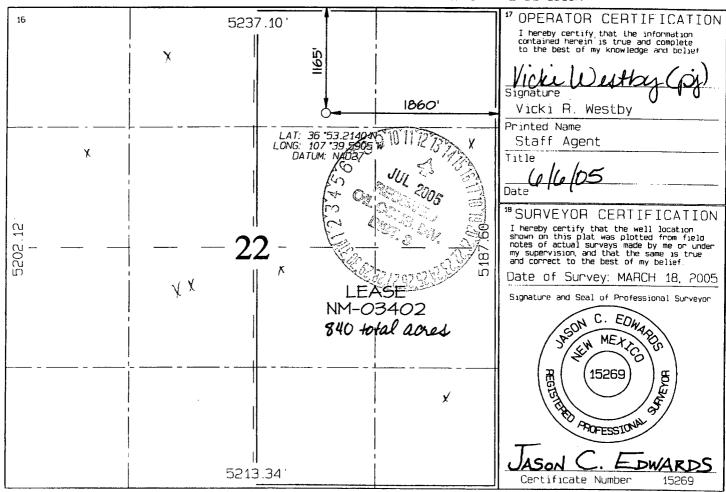
15 Order No.

30-045	-33	SO 72319 BLANCO MESAVERDE								
*Property	Code				*Property	y Name			⁶ We	11 Number
	31330 SAN JUAN 32-8 UNIT									8B
'OGRID No.		*Operator Name					•E	levat ion		
21783	217817 CONOCOPHILLIPS COMPANY							(5526 .	
					¹⁰ Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	t line	County
В	55	31N 8W 1165 NORTH 1860 EAS					ST	SAN JUAN		
	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/Wes	t line	County

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

14 Consolidation Code

¹³ Joint or Infill



Submit 3 Copies To Appropriate District Office	State of New Mexico	Form C-10				
District I 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natural Resources	WELL API NO.				
District 11 1301 W. Grand Ave., Artesia, NM 882 1 0	OILCONSERVATION DIVISION	·				
District III	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE FEE				
I 000 Rio Brazos Rd., Aztec, NM 8741 0 District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.				
1220 S. St. Francis Dr., Santa I e, NM 87505						
SUNDRYNO	TICES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name				
	OSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A CATION FOR PERMIT (FORM C-101) FOR SUCH	SAN JUAN 32-8 UNIT				
PROPOSALS) 1. Type of Well: Oil Well	Gas Well X Other	8. Well Number 8B				
2. Name of Operator	CONOCODIUM I INC CONTRANTA	9. OGRID Number				
3. Address of Operator	CONOCOPHILLIPS COMPANY	10. Pool name or Wildcat				
501 2000 51 Special	4001 PENBROOK, ODESSA, TX 79762	BLANCO MESAVERDE				
4. Well Location						
Unit Letter B Section 22	1165 feet from the NORTH line and	1860 feet from the EAST line				
Section 22	Township 31N Range 8W I 1. Elevation (Show whether DR, RKB, RT, GR, e	NMPM SAN JUAN County				
	6526' GI	, , , , , , , , , , , , , , , , , , ,				
Pit or Below-grade Tank Application Of the Pit type DRILL Depth to Groundw		E Distance from nearest surface water 50'				
Liner Thickness: mil		Construction Material				
	Appropriate Box to Indicate Nature of Notice					
		•				
NOTICE OF IN PERFORM REMEDIAL WORK	PLUG AND ABANDON REMEDIAL WO	JBSEQUENT REPORT OF: DRK ☐ ALTERING CASING ☐				
TEMPORARILY ABANDON		PRILLING OPNS. PANDA				
PULL OR ALTER CASING	MULTIPLE COMPL CASING/CEME	INT JOB				
OTHER:	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 I 1 03. For Multiple Completions: Attach wellbore diagram of proposed completion						
or recompletion.	ik). SEE KOLET 1 03. For Multiple Completions: A	Auach wellbore diagram or proposed completion				
•						
The size of the constructed and along the						
	accordance with Rule 50 and as per the Nov. 1, 2004 Gu posed wellhead. The drill pit will be lined. The drill pit v					
I hereby certify that the information all grade tank has been/will be constructed or cl	pove is true and complete to the best of rny knowledge osed according to NMOCD guidelines , a general permit [and belief. I further certify that any pit or below- or an (attached) alternative OCD-approved plan				
SIGNATURE Vicki Westby	TITLE Staff Agent	DATE 6/6/2005				
Type or print name	E-mail address:	Telephone No.				
For State Use Only	DEPUTY OIL & GAS INS	FECTOR, DIST. 84 JUL 13 2005				
APPROVED BY: Conditions of Approval (if any):	My TITLE	DATE				

ConocoPhillips

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 32-8 8B

Lease:					AFE #:					AF	E \$:
Field Name: hPHIL	LIPS 32-8		Rig:			_	State:	NM Coun	ty: San Juan	AF	PI #:
Geoscientist: Glas	er, Terry J		Phone	: (832)486-	-2332	Prod.	Engineer:	Moody, Cr	aig E.	Phone	e: 486-2334
Res. Engineer: Tor	mberlin, Tim	othy A	Phone	: (832) 486	-2328	Proj.	Field Lead:	Fransen, E	Eric E.	Phone	:
Primary Objectiv	e (Zones):	PW TO			1915						
Zone	Zone Name	•									
R20002	MESAVERD	E(R20002)									
Location: Surface											Straight Hole
Latitude: 36.89		ude: 107.66		X:		Y:		Secti	ion: 22	T	Range: 8W
Footage X: 1860 FI		ge Y: 1165 FI	NL	Elevation: (6526	L	Township:			L	go. o
Tolerance:		,-				<u>V Z. I</u>				·	
Location Type: Sun	mer Only		Start D	ate (Est.):		Cor	npletion Dat	e:	Date	In Operat	ion:
	Assume KB :	- 6E20	Units =								
Formation Call &	ASSUME ND -	Depth	SS	Depletion		ВНТ	T		Remar	-lea	
Casing Points		(TVD in Ft)	(Ft)	(Yes/No)	(PSIG)	ВП					· · · · · · · · · · · · · · · · · · ·
SURFACE CSG		213	6326				12-1/4 hole to surface.		32.3 ppf, H-40,	, STC casi	ng. Circulate cemen
NCMT		739	5800								
KRLD		2329	4210								
FRLD		3084	3455				Possible ga	is.			
PCCF		3424	3115								
LEWS Intermediate Casing		3624 3724	2915 2815				8 3/4" Hold	a 7" 20 m	nf 1-55 STC (Cacina C	irculate cement to
		3/24	2015				surface.	, , 20 p	pr, 3 33, 31C (casing. C	arculate tement to
CHRA		4539	2000								
CLFH		5344	1195				Gas; possib	oly wet			
MENF		5394	1145				Gas.				
PTLK		5714	825	Ц			Gas.				
MNCS		5964	575				C 4 (411) 1	4.4/08			a.
Total Depth		6064	475				a minimum	of 100' ins	10.5 ppr, J-55, side the previo with GR to sur	us casing	ng. Circulate cement string. No open hole
Reference Wells:					9		iogs: casea	Hole 101	With Give to Sui	ridee.	
Reference Type W				Comment	ts						
Logging Program											
Intermediate Logs:		if show 🔲	GR/ILD	Triple	e Combo						
TD Logs:	Triple Co	ombo 🔲 Di	pmeter	☐ RFT [Sonic [☐ VSP	✓ TDT				
Additional Information	on:										
Log Type	Stage	From	(Ft)	To (Ft))	Tool	Гуре/Name		Remarks		
				•	-						

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ConocoPhillips San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-8 8B

Comments: Zones - 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 2nd, 3rd, & 4th joints
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th

ioints

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

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San Juan 32-8 #8B Halliburton Cement Calculations

SURFACE CASING:

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Shoe Depth
Cement Yield
Excess Cement
Cement Required

12.25	**		
9.625	H	Casing Inside	Diam. 9.001 "
32.3	ppf		
H-40			
230	•		
1.21	cuft/sk		
125	%		
147	SX		

SHOE

230 ', 9.625 ",

32.3 ppf,

H-40 STC

INTERMEDIATE CASING:

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Shoe Depth
Lead Cement Yield
Lead Cement Excess
Tail Cement Length
Tail Cement Excess
Lead Cement Required
Tail Cement Required

8.75 " Casing Inside Diam. 6.456 "
ppf
3-55
3724 '
2.88 cuft/sk
150 %
744.8 '
1.33 cuft/sk
150 %
372 sx
218 sx

SHOE

3724 ',

7 ",

20 ppf,

J-55 STC

PRODUCTION CASING:

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Top of Cement
Shoe Depth
Cement Yield
Cement Excess
Cement Required

6.25	n
4.5	" Casing Inside Diam. 4.052 "
10.5	ppf
J-55	
3524	' 200' inside intermediate casing
6064	'
1.45	cuft/sk
50]%
265	lev

. SAN JUAN 32-8 #8B

HALLIBURTON OPTION

HALLIBORTON OF TION						
9-5/8 Surface Casing						
Class C Standard Co	Class C Standard Cement					
+ 3% Calcium Chlor	ide					
+0.25 lb/sx Flocele						
147	SX					
1.21	cuft/sx					
179.8	cuft					
32.0	bbls					
15.6	ppg					
5.29	gal/sx					
	9-5/8 Surface Casing Class C Standard Co + 3% Calcium Chlor +0.25 lb/sx Flocele 147 1.21 179.8 32.0 15.6					

7" Intermediate Casing						
Lead Slurry						
	Standard Cement					
Cement Recipe	+ 3% Econolite (exte	ender)				
·	+ 10 lb/sx Pheno Se	al				
Cement Required	372	SX				
Cement Yield	2.88	cuft/sx				
	1072.1	cuft				
Slurry Volume	190.9	bbls				
Cement Density	11.5	ppg				
Water Required	16.91	gal/sx				

7" Intermediate Casing						
Tail Slurry						
	50 / 50 POZ:Standar	d Cement				
Cement Slurry	+ 2% Bentonite					
·	+ 6 lb/sx Pheno Seal					
Cement Required	218	SX				
Cement Yield	1.33	cuft/sx				
OI Valuus s	289.6	cuft				
Slurry Volume	51.6	bbls				
Cement Density	13.5	ppg				
Water Required	5.52	gal/sx				

4-1/2" Production Casing					
	50 / 50 POZ:Standard Cement				
	+ 3% Bentonite				
O Danima	+ 3.5 lb/sx PhenoSeal				
Cement Recipe	+ 0.2% CFR-3 Friction Reducer				
	+ 0.1% HR-5 Retarder				
	+ 0.8% Halad-9 Fluid Loss Additive				
Cement Quantity	265 sx				
Cement Yield	1.45 cuft/sx				
O 4) /aluma	383.7 cuft				
Cement Volume	68.3				
Cement Density	13.1 ppg				
Water Required	6.47 gal/sx				

SCLUMBERGER OPTION

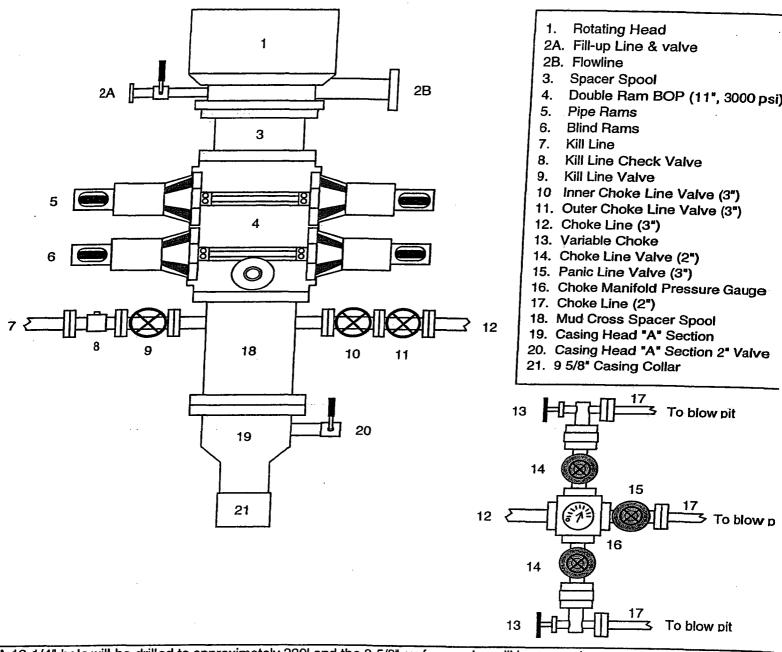
9-5/8 Surface Casing					
	Class G Standard Cement				
Cement Recipe	+ 2% S001 Calcium Chloride				
•	+0.25 lb/sx D029 Cellophane Flakes				
Cement Volume	148	sx			
Cement Yield	1.16	cuft/sx			
Cement Volume	171.5	cuft			
Cement Density	15.8	ppg			
Water Required	4.983	gal/sx			

7" Intermediate Casing					
Lead Slurry					
	Class G Standard Cement				
	+0.25 lb/sx D029 Cellophane Flakes				
Cement Recipe	+ 3% D079 Extender				
<u>'</u>	+ 0.20% D046 Antifoam				
	+ 10 lb/sx Pheno Seal				
Cement Required	395	sx			
Cement Yield	2.72	cuft/sx			
01	1073.4	cuft			
Slurry Volume	191.2	bbls			
Cement Density	11.7	ppg			
Water Required	15.74	gal/sx			

	7" Intermediate Casin	g		
	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	221	SX		
Cement Yield	1.31	cuft/sx		
Slurry Volume	289.5	cuft		
	51.6	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	266 sx				
Cement Yield	1.44 cuft/sx				
Cement Volume	383.5 cuft				
	68.3				
Cement Density	13 ppg				
Water Required	6.43 gal/sx				

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



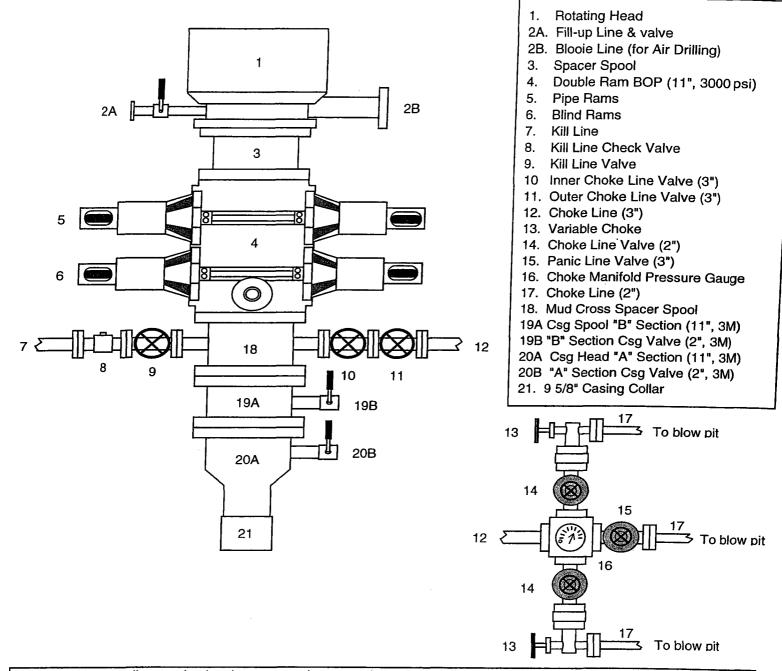
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. # test plug will be set in the wellhead and the pipe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



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

Property:	San Juan 32-8	Unit	<u>Unit</u> Well #:		8B		
Surface Locat	ion:						
Unit: B	Section: 22 Tow	nship: 31N	Range: _	8W			
County: San	Juan	State	State: New Mexico				
Footage: 1	165 from the	North line	1860	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.