NOS 8-14-01

Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-079298-B
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone	8. Lease Name and Well No. SAN JUAN 28-7 UNIT 125F
2. Name of Operator CONOCO INC. Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com	9. API Well No. 30 039 27062
3a. Address 10 DESTA DR., ROOM 608W MIDLAND, TX 79705 / 3b. Phone No. (include area code) Ph: 915.686.5799 Ext: 5799	10. Field and Pool, or Exploratory BLANCO MESAVERDE/BASIN DAKO
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNW 2445FNL 115FWL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area E Sec 12 T27N R7W Mer NMP
14. Distance in miles and direction from nearest town or post office*	12. County or Parish RIO ARRIBA / 13. State NM
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	17. Spacing Unit dedicated to this well 320.00 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. / 19. Proposed Depth 7668 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6545 GL / 22. Approximate date work will start	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.
2. A Drilling Plan.
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).
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 authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 08/07/2002
Title AUTHORIZED SIGNATURE		
Approved by (Signature)	Name (Printed/Typed)	Date 10/19/05
Title AFM	Office FFO	

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 #13428 verified by the BLM Well Information System
For CONOCO INC., sent to the Farmington

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".

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

NMOCD

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

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	2 Pool Code	3 Pool Name
30-039-27062	72319 / 71599	BLANCO MESAVERDE / BASIN DAKOTA

4 Property Code	5 Property Name	6 Well Number
016608	SAN JUAN 28-7 UNIT	125F

7 OGRID No.	8 Operator Name	9 Elevation
005073	CONOCO, INC.	6545'

10 Surface Location

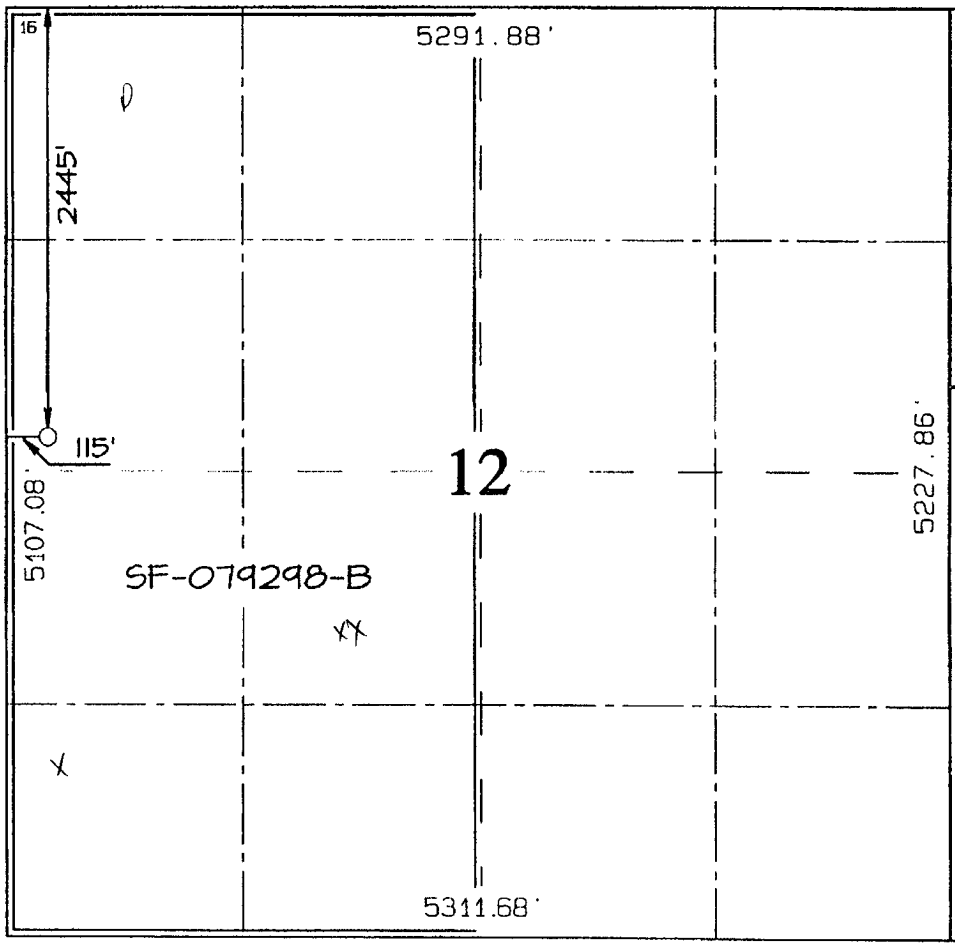
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	27N	7W		2445	NORTH	115	WEST	RIO ARRIBA

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
320.0 Acres - W/2			

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 R. Westby
Signature

Vicki R. Westby
Printed Name

Sr. Title Analyst
Title

December 13, 2001
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: NOVEMBER 17, 2001

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED 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 882 1 0
District III
1 000 Rio Brazos Rd., Aztec, NM 8741 0
District IV
1220 S. St. Francis Dr., Santa I e, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

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

Fonn C- 1 03
May 27, 2004

WELL API NO. 30-039-27062
5. Indicate Type of Lease STATE ☐ FEE ☐
6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name: SAN JUAN 28-7
1. Type of Well: Oil Well ☐ Gas Well ☒ Other
8. Well Number: 125F
2. Name of Operator: ConocoPhillips Company
9. OGRID Number: 217817
3. Address of Operator: 4001 Penbrook, Odessa, TX 79762
I 0. Pool name or Wildcat: BLANCO MESAVERDE / BASIN DAKOTA

4. Well Location
Unit Letter E 2445 feet from the North line and 115 feet from the West line
Section 12 Township 27N Range 7W NMPM Rio Arriba County

I 1. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6545 GL

Pit or Below -grade Tank Application ☒ Closure ☐
Pit type DRILL Depth to Groundwater ~~500~~ >100' Distance from nearest fresh water well ~~>1 MILE~~ >10000' 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:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT 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.

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. 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 anv 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 1/07/05

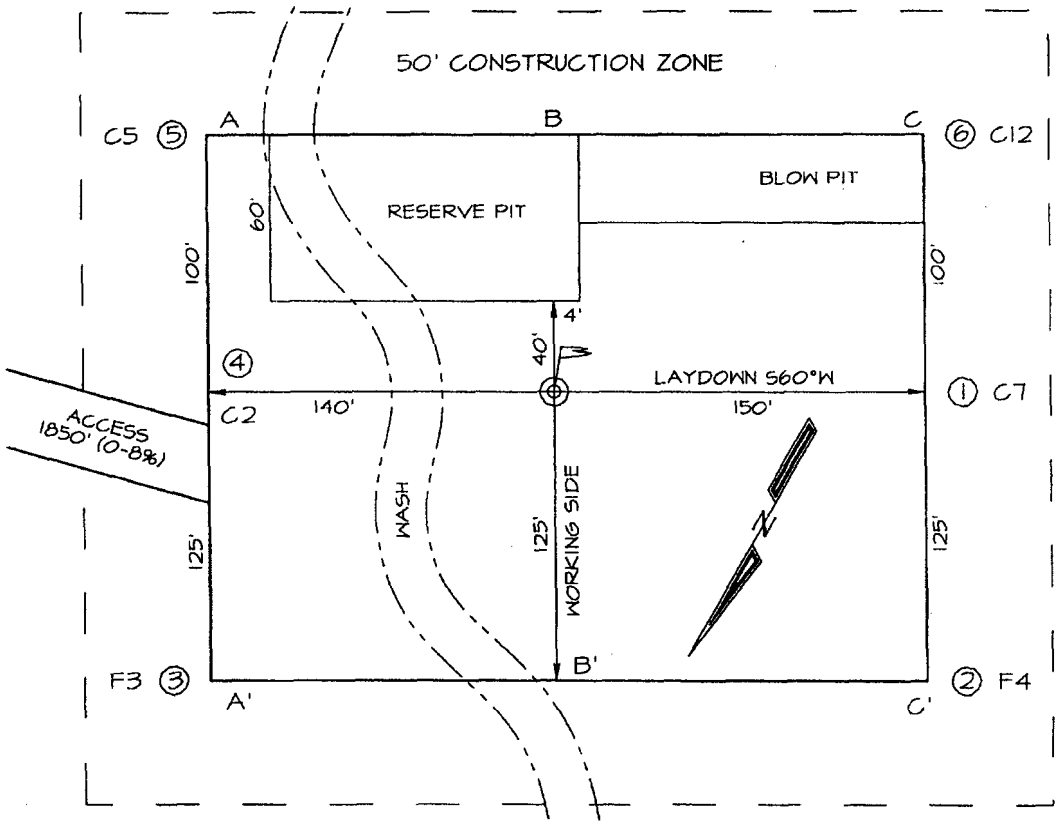
Type or print name E-mail address: Telephone No.

For State Use Only

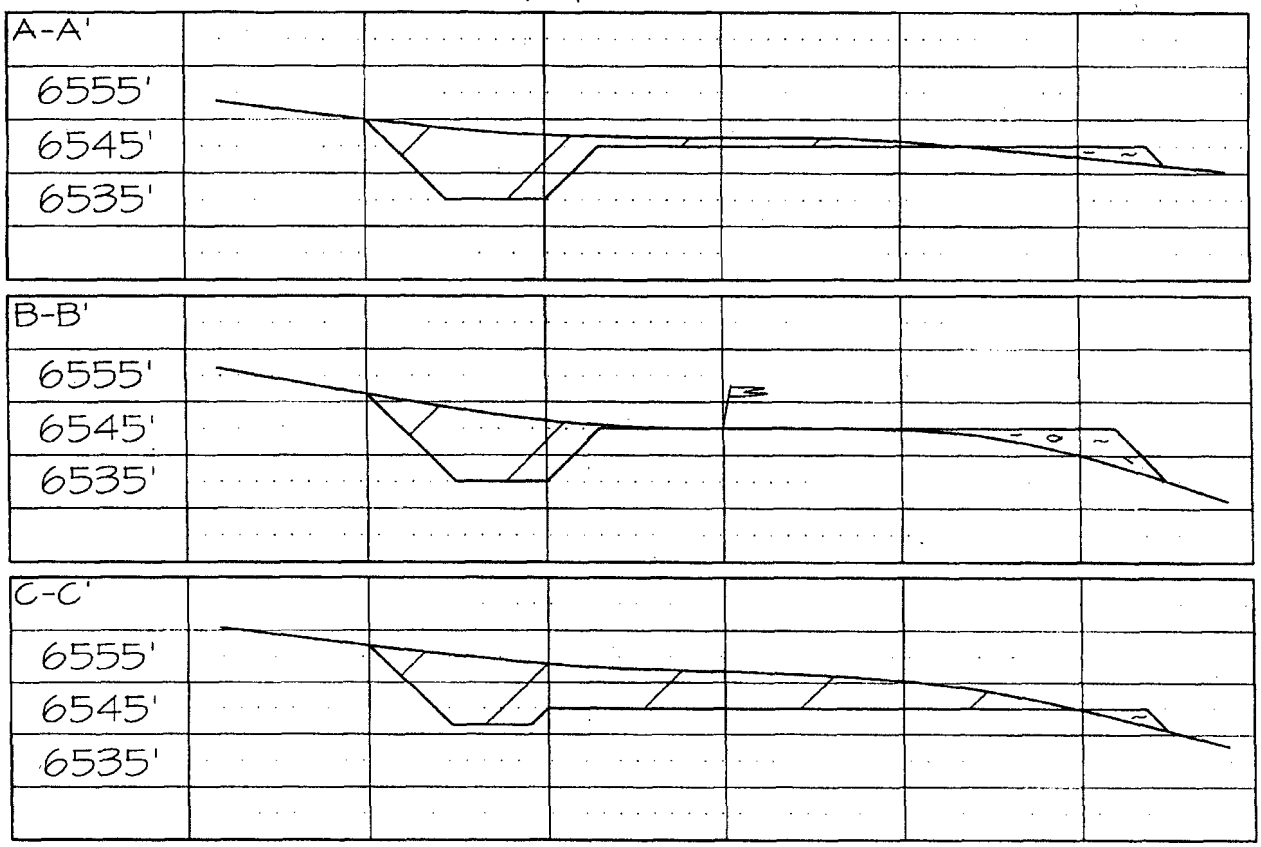
APPROVED BY: TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE OCT 21 2005
Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY SAN JUAN 28-7 UNIT #125F
2445' FNL, 115' FWL, SECTION 12, T27N, R7W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 6545'

LATITUDE: 36.58944° N
LONGITUDE: 107.53356° W
DATUM: NAD1927



PLAT NOTE:
SURFACE OWNER Bureau of Land Management



FILENAME: 27T12ET	SHEET 2 OF 5	NCE SURVEYS, INC.	DRAWN BY: SLE	CHECKED BY: JCE

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMSF079298B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SAN JUAN 28-7 125F

2. Name of Operator
CONOCOPHILLIPS COMPANY
Contact: VICKI WESTBY
E-Mail: VICKI.R.WESTBY@CONOCOPHILLIPS.COM

9. API Well No.
30-039-27062-00-X1

3a. Address
P O BOX 2197 WL 6106
HOUSTON, TX 77252

3b. Phone No. (include area code)
Ph: 432.368.1352

10. Field and Pool, or Exploratory
~~MESAVERDE~~ POINT LOOKOUT
VWW PTL

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 12 T27N R7W SWNW 2445FNL 115FWL

11. County or Parish, and State
RIO ARRIBA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

OCT 2005
RECEIVED
OIL CONS. DIV.
DIST. 3

ConocoPhillips Company requests to submit revised a well plan, road and pipeline for this well as per the attached supporting documents.

Supporting documents attached include:
- Revised Cut & Fill Plat
- C-103 Form (not originally included in APD)
- Revised Well Plan and cement calculations
- Revised Road Plat
- Revised Driving Directions

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

Electronic Submission #52729 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Farmington
Committed to AFMSS for processing by ADRIENNE BRUMLEY on 01/19/2005 (05AXB0659SE)

Name *(Printed/Typed)* VICKI WESTBY — Title AGENT

Signature (Electronic Submission) — Date 01/07/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Matthew J. Mavrecic — Title AFM — Date 1/19/05

Conditions of approval, if any, are attached. Approval of this notice 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.

Office FFO

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

NMOCD

ConocoPhillips

San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 28-7 125F

Lease:	AFE #: WAN.CNV.4158			AFE $:
Field Name: EAST 28-7	Rig: Key Rig 43	State: NM	County: RIO ARRIBA	API #:
Geoscientist:	Phone:	Prod. Engineer:		Phone:
Res. Engineer:	Phone:	Proj. Field Lead:		Phone:

Primary Objective (Zones):

Zone	Zone Name
FRR	BASIN DAKOTA (PRORATED GAS)
RON	BLANCO MESAVERDE (PRORATED GAS)

Location: Surface **Straight Hole**

Latitude: 36.59	Longitude: -107.53	X:	Y:	Section: 12	Abstract: 7W
Footage X: 115 FWL	Footage Y: 2445 FNL	Elevation: 6545 (FT)	Survey: 27N		
Tolerance:					

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

Formation Data: Assume KB = 6558 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	213	6345	☐			12 1/4" Hole. 9 5/8", 32.3 ppf, H-40, STC casing. Circulate cement to surface.
OJAM	2348	4210	☐			Possible water flows
KRLD	2498	4060	☐			
FRLD	2883	3675	☐			
PCCF	3133	3425	☐			
LEWS	3333	3225	☐			
Intermediate Casing	3433	3125	☐			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4108	2450	☐			
CLFH	4808	1750	☐			Gas; possibly wet
MENF	4938	1620	☐			Gas
PTLK	5368	1190	☐	1300		Gas
GLLP	6633	-75	☐			
GRHN	7318	-760	☐			Gas possible, highly fractured
TWLS	7398	-840	☐			Gas
CBBO	7538	-980	☐			Gas
Total Depth	7668	-1110	☐	3000		6-1/4" hole. 4 1/2", 11.6 ppf, N-80, LTC 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

ConocoPhillips

San Juan Business Unit

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 28-7 125F

Logging Program:

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

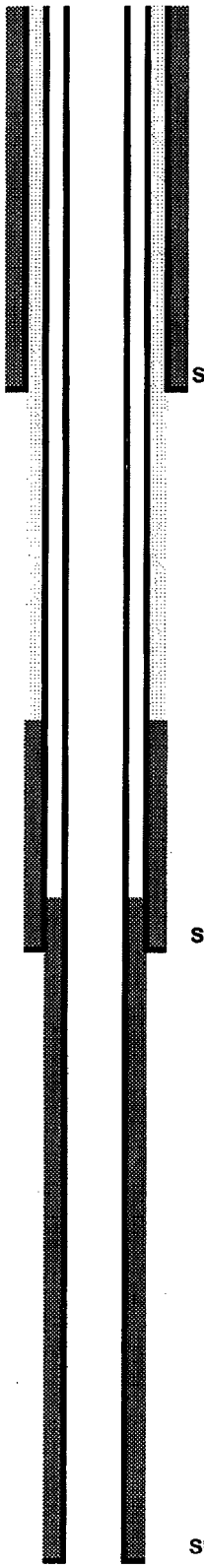
TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☑ TDT

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

Comments:

San Juan 28-7 #125F



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	149	**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	3433	'	
Lead Cement Yield	2.88	cuft/sk	
Lead Cement Excess	150	%	
Tail Cement Length	686.6	'	
Tail Cement Yield	1.33	cuft/sk	
Tail Cement Excess	150	%	
Lead Cement Required	342	**sx**	
Tail Cement Required	201	**sx**	

SHOE 3433 ', 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	
Casing Grade	N-80		
Top of Cement	3233	'	200' inside intermediate casing
Shoe Depth	7668	'	
Cement Yield	1.45	cuft/sk	
Cement Excess	50	%	
Cement Required	466	**sx**	

SHOE 7668 ', 4.5 ", 11.6 ppf, N-80 STC

SAN JUAN 28-7 #125F

OPTION 1

9-5/8 Surface Casing		
Cement Recipe	Class C Standard Cement	
	+ 3% Calcium Chloride	
	+0.25 lb/sx Flocele	
Cement Volume	149	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	342	sx
Cement Yield	2.88	cuft/sx
Slurry Volume	984.5	cuft
	175.4	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	201	sx
Cement Yield	1.33	cuft/sx
Slurry Volume	267.7	cuft
	47.7	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	466	sx
Cement Yield	1.45	cuft/sx
Cement Volume	675.4	cuft
	120.3	
Cement Density	13.1	ppg
Water Required	6.47	gal/sx

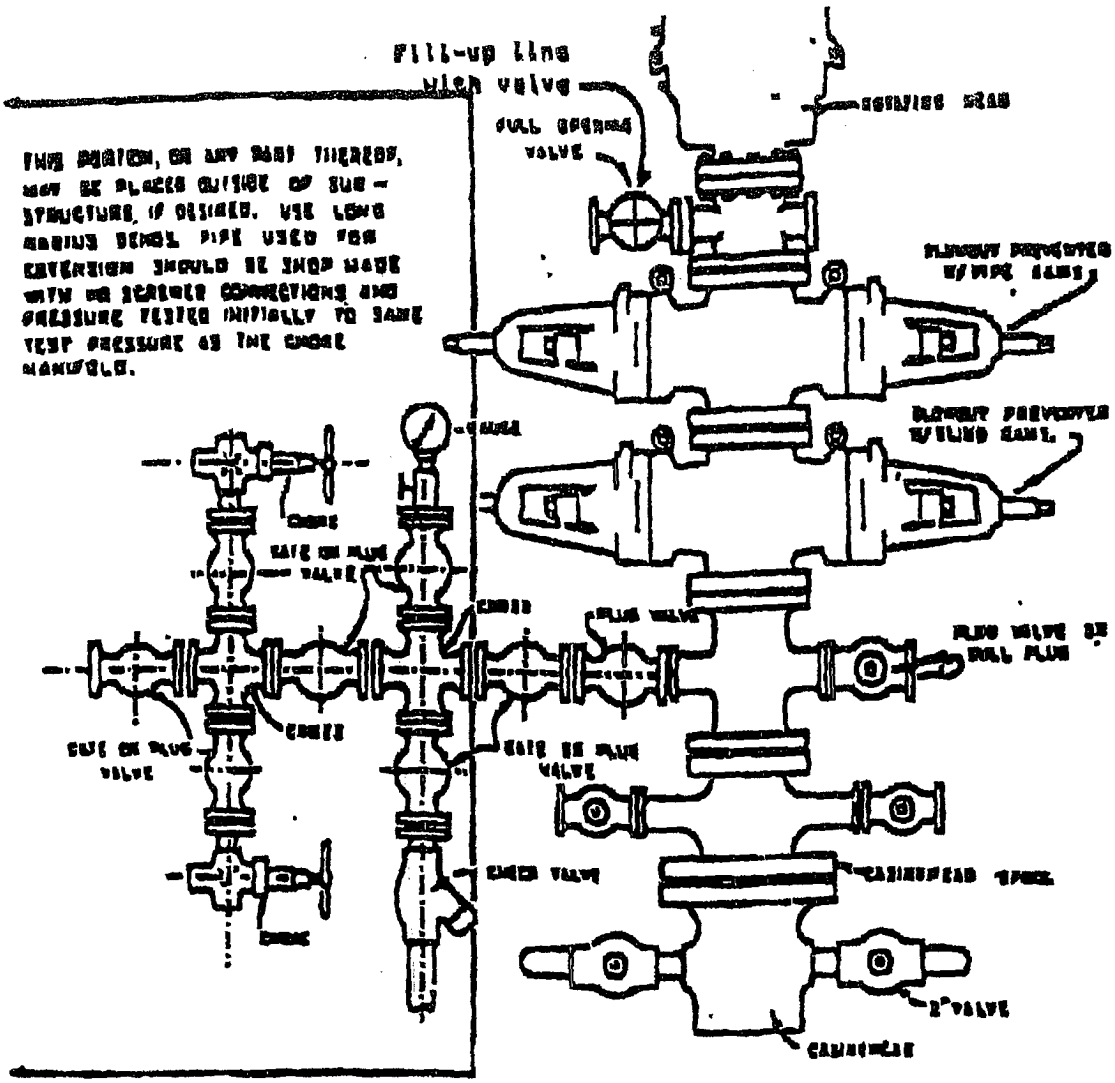
OPTION 2

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	362	sx
Cement Yield	2.72	cuft/sx
Slurry Volume	985.9	cuft
	175.6	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	204	sx
Cement Yield	1.31	cuft/sx
Slurry Volume	267.6	cuft
	47.7	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	469	sx
Cement Yield	1.44	cuft/sx
Cement Volume	675.2	cuft
	120.3	
Cement Density	13	ppg
Water Required	6.43	gal/sx



BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows delation of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

1. Two rams with one blind and one pipe ram.
2. Kill line (2 inch maximum).
3. One kill line valve.
4. One choke line valve.
5. Two chokes (reference diagram No. 1).
6. Upper kelly cock valve with handle.
7. Safety valve and subs to fit all drill strings in use.
8. Two-inch minimum choke line.
9. Pressure gauge on choke manifold.
10. Fill-up line above the upper most preventor.
11. Rotating head.

Property : SAN JUAN 28-7 **Well #:** 125F

Surface Location:

Unit: E **Section:** 12 **Township:** 27N Range: 7W

County: Rio Arriba **State: New Mexico**

Footage: 2445 **from the** North line, 115 **from the** West **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.

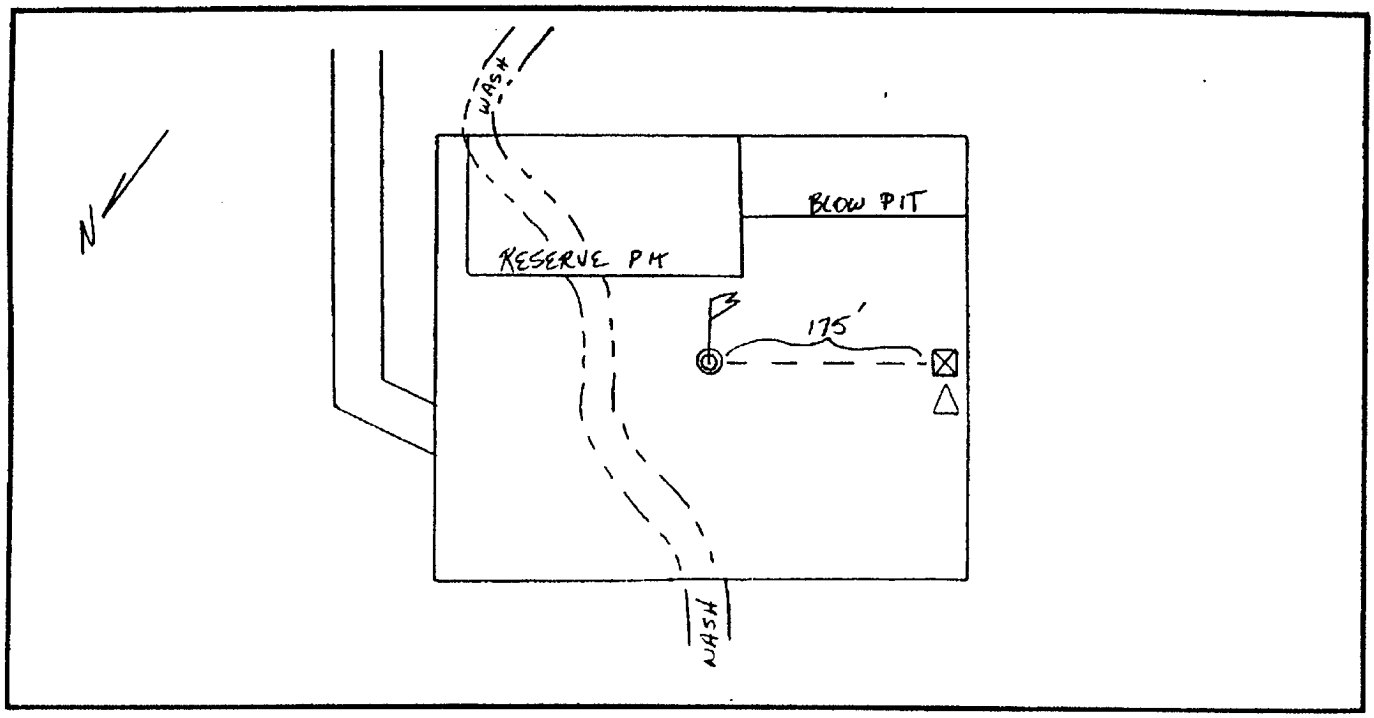
All drilling activity will remain on the existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.

TIERRA CORROSION CONTROL
Cathodic Protection

CATHODIC PROTECTION PLAN FOR NEW WELL

WELL NAME: SAN JUAN 28-7 # 125F **LEGALS:** E-12-27-7 **COUNTY:** R.A.

PURPOSED C.P. SYSTEM: DRILL NEW G.B. & SET 12V-6A SOLAR ON WEST EDGE OF LOCATION. THEN TRENCH @ 175' #6 NEG FROM SOLAR TO W.H.



EXSISTING WELLHEAD	METER HOUSE	G.B.	POWER SOURCE	CABLE	NEW WELL	O.H. A.C.	CIRCUIT DIVIDER BOX

COMMENTS: ALL WORK WILL BE DONE ON WELLPAD.

THIS CATHODIC PROTECTION SYSTEM HAS BEEN PROPOSED TAKING ITS SURROUNDINGS INTO CONSIDERATION TO BEST FIT ITS PURPOSE. ALSO, POWER SOURCE AND GROUND BED TO BE PLACED OUT AND AWAY FROM ANY OBSTICLES WHICH MAY CONFLICT WITH IT AND VISE-VERSA.

TECHNICIAN: [signature] **DATE:** 12-4-01

Rocky Mountain Regional Headquarters

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Cathodic Protection System Description

Anode Bed Type	Deep Well	
Hole Size	8"	
Hole Depth	200' - 500'	As required to place anodes below moisture and in low resistance strata.
Surface Casing	8" Diam., ≥ 20' Length, Cemented In Annular Space	When needed, casing will be installed at an adequate depth to control ground water flow. Casing will extend a minimum of 2' above grade, be surrounded by a concrete pad, and sealed with a PVC cap. Steel casing will be substituted when boulders are encountered.
Vent Pipe	1" Diam. PVC	Vent pipe will extend from bottom of hole, through top of casing cap, and sealed with a 1" perforated PVC cap.
Type Of Anodes	Cast Iron Or Graphite	
Number Of Anodes	8 - 20	Sufficient quantity to achieve a total anode bed resistance of < 1 ohm and a design life ≥ 20 years.
Anode Bed Backfill	Loresco SW Calcined Petroleum Coke Breeze	Installed from bottom of hole to 10' above top anode.
Anode Junction Box	8 - 20 Circuit Fiberglass Or Metal	Sealed to prevent insect & rodent intrusion.
Current Splitter Box	2 - 5 Circuit Metal	Sealed to prevent insect & rodent intrusion.
DC / AC Cable	DC: #2, #4, #6, #8 Stranded Copper (One Size Or Any Combination Of) With High Molecular Weight Polyethylene (HMWPE) Insulation. AC: #8 Stranded Copper HMWPE	18" depth in typical situation, 24" depth in roadway, & 36" depth in arroya's and streams. EXCEPTION: If trenching is in extremely hard substratum, depth will be 8 - 12" with cable installed in conduit. Installed above foreign pipelines if 1' clearance is available, if not, installed under foreign pipeline with 1' clearance (AC cable always installed under foreign pipeline in conduit).
Power Source	1) Rectifier 2) Solar Power Unit 3) Thermoelectric Generator	Choice of power source depending on availability of AC & other economic factors.
External Painting	Color to be selected according to BLM specifications.	Paint applied to any surface equipment associated with the CP system which can reasonably be painted.