Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD
FEB 13 2013
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

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 page 2.*

5. Lease Serial No.
NM27508

6. If Indian, Allottee or Tribe Name
N/A

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

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

8. Well Name and No.
Wilder Federal 28 # 3H

2. Name of Operator
ConocoPhillips Company

9. API Well No.
30-025-40501

3a. Address
P.o. Box 51810
Midland, Tx 79710

3b. Phone No. *(include area code)*
432-688-6943

10. Field and Pool or Exploratory Area
Jennings Bone Spring, Upper Shale

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
224 FNL & 1544 FWL
UL: C (NENW) of Section 28-26S-32E

11. County or Parish, State
Lea County, NM

12. CHECK THE 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
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Revised Drill Plan & Bottom Hole
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

ConocoPhillips Company respectfully request to amend the drill plan, directional plan, and bottom hole as indicated below and with the supporting documents attached.

1. A different rig will be drilling this project than was permitted for. Please see attached BOP schematic
2. The setting depth of the 13 3/8" surface casing is proposed at ~~950'~~ 850' See COA
3. The setting depth of the 9 5/8" intermediate casing is proposed at 4560'
4. An additional string of casing (7" 29# P110 BTC) will be added with a proposed setting depth of 9606'
5. An uncemented 4 1/2" liner will be run from 9100-16190 MD
6. The planned KOP is 8710 MD
7. The proposed bottom hole is 355 FSL & 1714 FWL in Section 33-26S-32E, Federal Lease NM107393. A communitization agreement will be filed.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Rev. by CRW 2/11/13

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Donna Williams

Title Sr. Regulatory Advisor

Signature

Date 01/30/2013

APPROVED
FEB 11 2013
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

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)

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FEB 25 2013

DRILLING PLAN

PROSPECT/FIELD	Bonespring/Red Hills			**COUNTY/STATE**		Lea County, NM
OWNERS	ConocoPhillips			**LEASE**		
WELL NO.	Wilder Federal AC COM 28 #3H		**FNL**	**FSL**	**FEL**	**FWL**
LOCATION		Surface Location:	224			1544
		Bottom Hole Location:		330		1544
EST. T.D.	Leg #1 16,190' MD			**GROUND ELEV.**		3,168' (est)
					RKB	3,193' (est)

PROGNOSIS: *Based on* 3,193' KB*(est)*

Marker	TVD	S.S. Depth
Quaternary	Surface	
Rustler	926	2,265
Salado	1,023	2,170
Castile	2,670	523
Delaware Top	4,426	-1,233
Ford Shale	4,513	-1,320
Olds	4,550	-1,357
Cherry Top	5,378	-2,185
Bone Spring	8,240	-5,047
Bone Spring 1st Carbonate Top	8,500	-5,307
Bone Spring 1st Carbonate Base	8,550	-5,357
Avalon A Shale Top	8,738	-5,545
Avalon A Shale Base	8,952	-5,759
Avalon B Zone Top	8,952	-5,759
Avalon B Zone Base	9,146	-5,953
Avalon C Shale Top	9,146	-5,953
Avalon C Shale Base (Should not penetrate)	9,384	-6,191

LOGS:

Type	Interval
Open Hole:	
GR-MWD	16190- 8,710'

DEVIATION:

Surf: 3° max.; svy every 500'
Int1/2: 3° max., svy every 90'
Prod:

DST'S:

None

CORES:

No core.

SAMPLES:

Mudlogging: Start End
Two-Man: 950 TD Vertical and Horizontal sections

BOP:

COP Category 3 Well Control Requirements
HnP486 BOPE: 13-5/8"-5Mpsi Annular
(With Rotating Head) 13-3/8"-5Mpsi Blind Ram
13-3/8"-5Mpsi Cross / Choke & Kill Lines
13-3/8"-5M psi Pipe Ram
13-3/8"-5Mpsi Spacer Spool

Dip Rate: Slight Down Dip

Max. Anticipated BHP: 0.65 psi/ft **Surface Formation:**

MUD:	Interval	Type	Max. MW	Vis	WL	Remarks
Surface:	0'-950'	Aquagel - Spud Mud	9.3	32-36	NC	
Intermediate 1:	*950'-4560'* 4560'	*Brine*	*10.5*	*28-30*	*5-8*	
Intermediate 2:	4560'-9673' 9606'	Cut Brine	9.5	30-39	<=4	
Production:	9673'-15888' 16,190'	Cut Brine	9.8	30-40	<=5	

CASING:	Size	Wt ppf	Hole	Depth	Cement	WOC	Remarks
Surface:	13-3/8"	54.5	17-1/2	950'	To Surface	18hrs	
Intermediate 1:	9-5/8"	36	12-1/4"	4,560'	To Surface	18hrs	
Intermediate 2:	7"	29	8-3/4"	9,606'	500' into intermediate	18hrs	
Production Liner:	4-1/2"	11.6	6 1/8"	16,190'	Uncemented	0	40-42 Stages Sleeves & Packers

or iBall System. Completion Selection will depend on production results

DIRECTIONAL PLAN

	MD	TVD	AZ	
Surface:	N/A	N/A	180	Directional Company: DDC or Weatherford
Vertical KOP :	8,710'	8,697'	180	Vertical Build Rate: 10.0 °/100'
End Build :	*9,606'*	*9,270'*	*180*	*Tan Leg Turn Rate: 0.0 °/100'*
Tangent:	N/A	N/A	180	
Turn:	N/A	N/A	180	
TD:	16,190'	9,316'	180	

Comments:
Surveys will be taken in intermediate section with INC ONLY or MWD tools. Directional surveys will be taken with MWD Tool.

Prep By: Katia Filina **Date:** 1/29/13 **Doc:** REV.3

Wilder Federal AC COM 28 #3H			
Surface Location:		Bottom Hole Location	
0	0	330	0

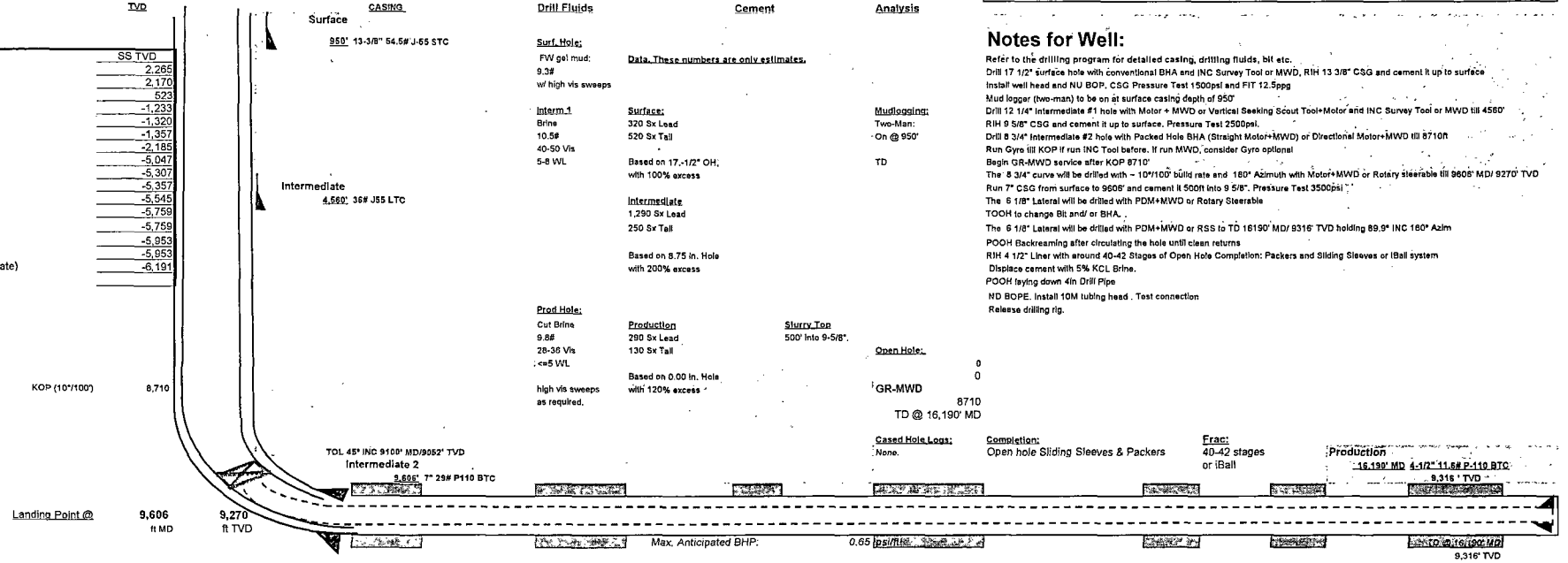
SAP Network:	TBA
Inv. Handler ID:	TBA
Drilling:	TBA
Completion/Facility:	$0
Total:	

Permit:	
NDIC #:	TBA
API #:	30-025-40502
Fed #:	217817
AFE#	WA5.CAV.0006

Directional:

	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI
Vertical KOP :	8710	8697	0	0	0	180
End Build :	9,606'	9,270'	0	0	0	180.0
Tangent:	N/A	N/A	0	0	0	180.0
Turn:	N/A	N/A	0	0	0	180.0
TD:	16,190'	9,316'	0	0	0	180.0

Formation	TVD
Quaternary	SS TVD
Rustler	2,265
Salado	2,170
Castile	523
Delaware Top	-1,233
Ford Shale	-1,320
Olds	-1,357
Cherry Top	-2,185
Bone Spring	-5,047
Bone Spring 1st Carbonate Top	-5,307
Bone Spring 1st Carbonate Base	-5,357
Avalon A Shale Top	-5,545
Avalon A Shale Base	-5,759
Avalon B Zone Top	-5,759
Avalon B Zone Base	-5,953
Avalon C Shale Top	-5,953
Avalon C Shale Base (Should not penetrate)	-6,191



Casing	Drill Fluids	Cement	Analysis
Surface			
950' 13-3/8" 54.5# J-55 STC	Surf. Hole:	Data. These numbers are only estimates.	
	FW gel mud: 9.3# w/ high vis sweeps		
	Interm 1	Surface:	Mudlogging:
	Brine	320 Sx Lead	Two-Man:
	10.5#	520 Sx Tail	On @ 950'
	40-50 Vis		
	5-8 WL	Based on 17-1/2" OH, with 100% excess	TD
Intermediate			
4,660' 36# J55 LTC		Intermediate	
		1,290 Sx Lead	
		250 Sx Tail	
		Based on 8.75 in. Hole with 200% excess	
	Prod Hole:		
	Cut Brine	Production	Slurry Top
	9.8#	290 Sx Lead	500' into 9-5/8".
	28-36 Vis	130 Sx Tail	
	<=5 WL		Open Hole:
		Based on 0.00 in. Hole with 120% excess	0
	high vis sweeps as required.		0
			GR-MWD
			8710
			TD @ 16,190' MD

Cased Hole Logs: None.

Completion: Open hole Sliding Sleeves & Packers

Frac: 40-42 stages or iBall

Production: 16,190' MD 4-1/2" 11.6# P-110 BTC

Max. Anticipated BHP: 0.65 psi/ft

Notes for Well:

Refer to the drilling program for detailed casing, drilling fluids, bit etc.
Drill 17 1/2" surface hole with conventional BHA and INC Survey Tool or MWD, RIH 13 3/8" CSG and cement it up to surface
Install well head and NU BOP. CSG Pressure Test 1500psi and FIT 12.5ppg
Mud logger (two-man) to be on at surface casing depth of 950'
Drill 12 1/4" intermediate #1 hole with Motor + MWD or Vertical Seeking Scout Tool+Motor and INC Survey Tool or MWD till 4560'
RIH 9 5/8" CSG and cement it up to surface. Pressure Test 2500psi.
Drill 8 3/4" intermediate #2 hole with Packed Hole BHA (Straight Motor+MWD) or Directional Motor+MWD till 8710ft
Run Gyro till KOP if run INC Tool before. If run MWD, consider Gyro optional
Begin GR-MWD service after KOP 8710'
The 8 3/4" curve will be drilled with ~ 10°/100' build rate and 180° Azimuth with Motor+MWD or Rotary steerable till 9606' MD/ 9270' TVD
Run 7" CSG from surface to 9606' and cement it 500ft into 9 5/8". Pressure Test 3500psi
The 6 1/8" Lateral will be drilled with PDM+MWD or Rotary Steerable
TOOH to change Bit and/ or BHA.
The 6 1/8" Lateral will be drilled with PDM+MWD or RSS to TD 16190' MD/ 9316' TVD holding 89.9° INC 180° Azim
POOH Backreaming after circulating the hole until clean returns
RIH 4 1/2" Liner with around 40-42 Stages of Open Hole Completion: Packers and Sliding Sleeves or iBall system
Displace cement with 5% KCL Brine.
POOH laying down 4in Drill Pipe
ND BOPE. Install 10M tubing head . Test connection
Release drilling rig.

Vick Harvey
Geologist
Date 1/29/2013

Katia Filina
Drilling Engineer
Date 1/29/2013

Bonespring/Red Hills
ConocoPhillips
Wilder Federal AC COM 28 #3H

0

Surface Casing:	
Surface Casing Depth (Ft)	950
Surface Casing O.D. (In.)	13.375
Surface Casing ID (In)	12.715
Hole O.D. (In)	17.5
Excess (%)	100%
Volume Tail (Sx)	320
Yield Tail (Cu. Ft./Sx)	1.33
Yield Lead (Cu. Ft./Sx)	1.75
Shoe Joint (Ft)	40
Shoe Volume (Cu. Ft)	35.3
Tail feet of cement	300
Calculated Total Volume (Cu. Ft.)	1,355
Calc. Tail Volume (Cu. Ft.)	417
Calc. Lead Volume (Cu. Ft.)	903
Calc. Lead Volume (Sx)	520

Intermediate #1 Casing (Lead):	
Intermediate Casing O.D. (In.)	9.625
Intermediate Casing ID (In)	8.921
Hole O.D. (In)	12.25
Excess (%)	150%
cap 12-1/4 - 9-5/8"	0.0558
Calculated fill:	4,060'
Yield Lead (Cu. Ft./Sx)	2.47
Calculated Total Lead (Cu. Ft.)	3,179
Calc. Lead Volume (Sx)	1290

Intermediate #1 Casing (Tail):	
Intermediate Casing O.D. (In.)	9-5/8"
Production Casing ID (In)	8.921
Hole O.D. (In)	12.25
Excess (%)	200%
cap 12-1/4 - 9-5/8"	0.0558
Calculated fill:	500'
Yield Tail (Cu. Ft./Sx)	1.33
Shoe Joint (Ft)	40
Shoe Volume (Cu. Ft)	17.4
Calc. Tail Volume (Cu. Ft.)	331
Required Tail Volume (Sx)	250

Intermediate #2 Casing (Lead):	
Intermediate Casing O.D. (In.)	7.000
Intermediate Casing ID (In)	6.184
Hole O.D. (In)	8.75
Excess (%)	115%
cap 5-1/2" - 8-3/4" bls/ft	0.0268
cap 5-1/2 - 9-5/8" bls/ft	0.02823
Calculated fill: (500' into 9-5/8")	4,546'
Yield Lead (Cu. Ft./Sx)	2.7
Calculated Total Lead (Cu. Ft.)	786
Calc. Lead Volume (Sx)	290
	8,606
	4060

Intermediate #2 Casing (Tail):	
Intermediate Casing O.D. (In.)	7.000
Intermediate Casing ID (In)	6.184
Hole O.D. (In)	8.75
Excess (%)	120%
cap 5-1/2" - 8-3/4" bls/ft	0.0268
cap 7 - 9-5/8" bls/ft	
Calculated fill:	1,000'
Yield Lead (Cu. Ft./Sx)	1.39
Calculated Total Tail (Cu. Ft.)	180
Required Tail Volume (Sx)	130

4050

ConocoPhillips MCBU

Permian Delaware Hz New Mexico
Wilder Federal AC COM 28 3H
Wilder Federal AC COM 28 3H

Original Borehole

Plan: Design #3

Standard Planning Report - Geographic

, 29 January, 2013

ConocoPhillips

Planning Report - Geographic

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site Wilder Federal AC COM 28 3H
Company:	ConocoPhillips MCBU	**TVD Reference:**	KB @ 3193.0usft (Original Well Elev)
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	KB @ 3193.0usft (Original Well Elev)
Site:	Wilder Federal AC COM 28 3H	**North Reference:**	Grid
Well:	Wilder Federal AC COM 28 3H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Borehole		
Design:	Design #3		

Project	Permian Delaware Hz New Mexico, Mexico
Map System:	US State Plane 1927 (Exact solution)
Geo Datum:	NAD 1927 (NADCON CONUS)
Map Zone:	New Mexico East 3001

System Datum: Mean Sea Level

Site Wilder Federal AC COM 28 3H

Site Position:		**Northing:**	371,652.70 usft	**Latitude:**	32.020
From:	Map	**Easting:**	701,508.60 usft	**Longitude:**	-103.683
Position Uncertainty:	0.0 usft	**Slot Radius:**	20 "	**Grid Convergence:**	0.34 °

Well Wilder Federal AC COM 28 3H

Well Position	**+N/-S**	0.0 usft	**Northing:**	371,652.70 usft	**Latitude:**	32.020	
	+E/-W	0.0 usft	**Easting:**	701,508.60 usft	**Longitude:**	-103.683	
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,168.0	usft

Wellbore Original Borehole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	11/30/2012	7.53	59.89	48,323

Design Design #3

Audit Notes:

Version: **Phase:** PROTOTYPE **Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	178.23

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	6.00	41.00	1,399.5	11.8	10.3	2.00	2.00	0.00	41.00	
3,640.0	6.00	41.00	3,627.2	188.6	163.9	0.00	0.00	0.00	0.00	
3,940.0	0.00	0.00	3,926.6	200.4	174.2	2.00	-2.00	0.00	180.00	
8,710.5	0.00	0.00	8,697.1	200.4	174.2	0.00	0.00	0.00	0.00	
9,606.4	89.60	179.68	9,270.0	-368.5	177.4	10.00	10.00	0.00	179.68	
16,164.0	89.60	179.67	9,316.0	-6,925.8	214.5	0.00	0.00	0.00	-113.92	Wilder 28 3H BHL Fi

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
200.0	0.00	0.00	200.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
400.0	0.00	0.00	400.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
600.0	0.00	0.00	600.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
800.0	0.00	0.00	800.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
980.0	0.00	0.00	980.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
13 3/8"									
1,000.0	0.00	0.00	1,000.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
1,100.0	0.00	0.00	1,100.0	0.0	0.0	371,652.70	701,508.60	32.020	-103.683
1,200.0	2.00	41.00	1,200.0	1.3	1.1	371,654.02	701,509.74	32.020	-103.683
1,400.0	6.00	41.00	1,399.5	11.8	10.3	371,664.54	701,518.90	32.020	-103.683
1,600.0	6.00	41.00	1,598.4	27.6	24.0	371,680.32	701,532.61	32.020	-103.683
1,800.0	6.00	41.00	1,797.3	43.4	37.7	371,696.10	701,546.33	32.020	-103.683
2,000.0	6.00	41.00	1,996.2	59.2	51.4	371,711.88	701,560.04	32.020	-103.683
2,200.0	6.00	41.00	2,195.1	75.0	65.2	371,727.66	701,573.76	32.020	-103.683
2,400.0	6.00	41.00	2,394.0	90.7	78.9	371,743.43	701,587.47	32.020	-103.683
2,600.0	6.00	41.00	2,592.9	106.5	92.6	371,759.21	701,601.19	32.020	-103.683
2,800.0	6.00	41.00	2,791.8	122.3	106.3	371,774.99	701,614.90	32.020	-103.683
3,000.0	6.00	41.00	2,990.7	138.1	120.0	371,790.77	701,628.62	32.020	-103.683
3,200.0	6.00	41.00	3,189.6	153.8	133.7	371,806.54	701,642.33	32.021	-103.683
3,400.0	6.00	41.00	3,388.5	169.6	147.4	371,822.32	701,656.05	32.021	-103.683
3,600.0	6.00	41.00	3,587.4	185.4	161.2	371,838.10	701,669.76	32.021	-103.683
3,640.0	6.00	41.00	3,627.2	188.6	163.9	371,841.25	701,672.51	32.021	-103.683

3,800.0	2.80	41.00	3,786.7	197.8	172.0	371,850.52	701,680.56	32.021	-103.683
3,940.0	0.00	0.00	3,926.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
4,000.0	0.00	0.00	3,986.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
4,200.0	0.00	0.00	4,186.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
4,400.0	0.00	0.00	4,386.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
4,553.4	0.00	0.00	4,540.0	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
9 5/8"									
4,600.0	0.00	0.00	4,586.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
4,800.0	0.00	0.00	4,786.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
5,000.0	0.00	0.00	4,986.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
5,200.0	0.00	0.00	5,186.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
5,400.0	0.00	0.00	5,386.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
5,600.0	0.00	0.00	5,586.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
5,800.0	0.00	0.00	5,786.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
6,000.0	0.00	0.00	5,986.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
6,200.0	0.00	0.00	6,186.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
6,400.0	0.00	0.00	6,386.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
6,600.0	0.00	0.00	6,586.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
6,800.0	0.00	0.00	6,786.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
7,000.0	0.00	0.00	6,986.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
7,200.0	0.00	0.00	7,186.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
7,400.0	0.00	0.00	7,386.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
7,600.0	0.00	0.00	7,586.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
7,800.0	0.00	0.00	7,786.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
8,000.0	0.00	0.00	7,986.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
8,200.0	0.00	0.00	8,186.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
8,400.0	0.00	0.00	8,386.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
8,600.0	0.00	0.00	8,586.6	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
8,710.5	0.00	0.00	8,697.1	200.4	174.2	371,853.10	701,682.80	32.021	-103.683
8,800.0	8.95	179.68	8,786.3	193.4	174.2	371,846.12	701,682.84	32.021	-103.683
9,000.0	28.95	179.68	8,974.5	128.8	174.6	371,781.50	701,683.20	32.020	-103.683

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,200.0	48.96	179.68	9,129.2	3.7	175.3	371,656.39	701,683.90	32.020	-103.683
9,400.0	68.96	179.68	9,231.8	-166.8	176.3	371,485.91	701,684.85	32.020	-103.683
9,600.0	88.96	179.68	9,269.9	-362.1	177.3	371,290.61	701,685.95	32.019	-103.683
9,606.4	89.60	179.68	9,270.0	-368.5	177.4	371,284.23	701,685.98	32.019	-103.683
9,800.0	89.60	179.68	9,271.4	-562.1	178.5	371,090.61	701,687.06	32.019	-103.683
10,000.0	89.60	179.68	9,272.7	-762.1	179.6	370,890.62	701,688.18	32.018	-103.683
10,200.0	89.60	179.68	9,274.1	-962.1	180.7	370,690.63	701,689.30	32.017	-103.683
10,400.0	89.60	179.68	9,275.5	-1,162.1	181.8	370,490.64	701,690.42	32.017	-103.683
10,600.0	89.60	179.68	9,276.9	-1,362.1	182.9	370,290.65	701,691.54	32.016	-103.683
10,800.0	89.60	179.68	9,278.3	-1,562.0	184.1	370,090.65	701,692.66	32.016	-103.683
11,000.0	89.60	179.68	9,279.7	-1,762.0	185.2	369,890.66	701,693.79	32.015	-103.683
11,200.0	89.60	179.68	9,281.1	-1,962.0	186.3	369,690.67	701,694.91	32.015	-103.683
11,400.0	89.60	179.68	9,282.5	-2,162.0	187.4	369,490.68	701,696.04	32.014	-103.683
11,600.0	89.60	179.68	9,283.9	-2,362.0	188.6	369,290.69	701,697.16	32.014	-103.683
11,800.0	89.60	179.68	9,285.3	-2,562.0	189.7	369,090.69	701,698.29	32.013	-103.683
12,000.0	89.60	179.68	9,286.7	-2,762.0	190.8	368,890.70	701,699.42	32.013	-103.683
12,200.0	89.60	179.68	9,288.1	-2,962.0	191.9	368,690.71	701,700.54	32.012	-103.683
12,400.0	89.60	179.68	9,289.5	-3,162.0	193.1	368,490.72	701,701.67	32.011	-103.683
12,600.0	89.60	179.68	9,290.9	-3,362.0	194.2	368,290.73	701,702.80	32.011	-103.683
12,800.0	89.60	179.68	9,292.3	-3,562.0	195.3	368,090.73	701,703.93	32.010	-103.683
13,000.0	89.60	179.68	9,293.8	-3,762.0	196.5	367,890.74	701,705.07	32.010	-103.683

13,200.0	89.60	179.68	9,295.2	-3,961.9	197.6	367,690.75	701,706.20	32.009	-103.683
13,400.0	89.60	179.68	9,296.6	-4,161.9	198.7	367,490.76	701,707.33	32.009	-103.683
13,600.0	89.60	179.67	9,298.0	-4,361.9	199.9	367,290.77	701,708.47	32.008	-103.683
13,800.0	89.60	179.67	9,299.4	-4,561.9	201.0	367,090.78	701,709.60	32.008	-103.683
14,000.0	89.60	179.67	9,300.8	-4,761.9	202.1	366,890.78	701,710.74	32.007	-103.683
14,200.0	89.60	179.67	9,302.2	-4,961.9	203.3	366,690.79	701,711.88	32.006	-103.683
14,400.0	89.60	179.67	9,303.6	-5,161.9	204.4	366,490.80	701,713.02	32.006	-103.683
14,600.0	89.60	179.67	9,305.0	-5,361.9	205.6	366,290.81	701,714.16	32.005	-103.683
14,800.0	89.60	179.67	9,306.4	-5,561.9	206.7	366,090.82	701,715.30	32.005	-103.683
15,000.0	89.60	179.67	9,307.8	-5,761.9	207.8	365,890.82	701,716.44	32.004	-103.683
15,200.0	89.60	179.67	9,309.2	-5,961.9	209.0	365,690.83	701,717.58	32.004	-103.683
15,400.0	89.60	179.67	9,310.6	-6,161.9	210.1	365,490.84	701,718.72	32.003	-103.683
15,600.0	89.60	179.67	9,312.0	-6,361.9	211.3	365,290.85	701,719.87	32.003	-103.683
15,800.0	89.60	179.67	9,313.4	-6,561.8	212.4	365,090.86	701,721.01	32.002	-103.683
16,000.0	89.60	179.67	9,314.8	-6,761.8	213.6	364,890.87	701,722.16	32.002	-103.683
16,164.0	89.60	179.67	9,316.0	-6,925.8	214.5	364,726.90	701,723.10	32.001	-103.683

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Wilder 28 3H BHL Final - plan hits target center - Point	0.00	0.00	9,316.0	-6,925.8	214.5	364,726.90	701,723.10	32.001	-103.683
BHL Inside 330ft BOX - plan hits target center - Point	0.00	0.00	9,316.0	-6,925.8	214.5	364,726.90	701,723.10	32.001	-103.683

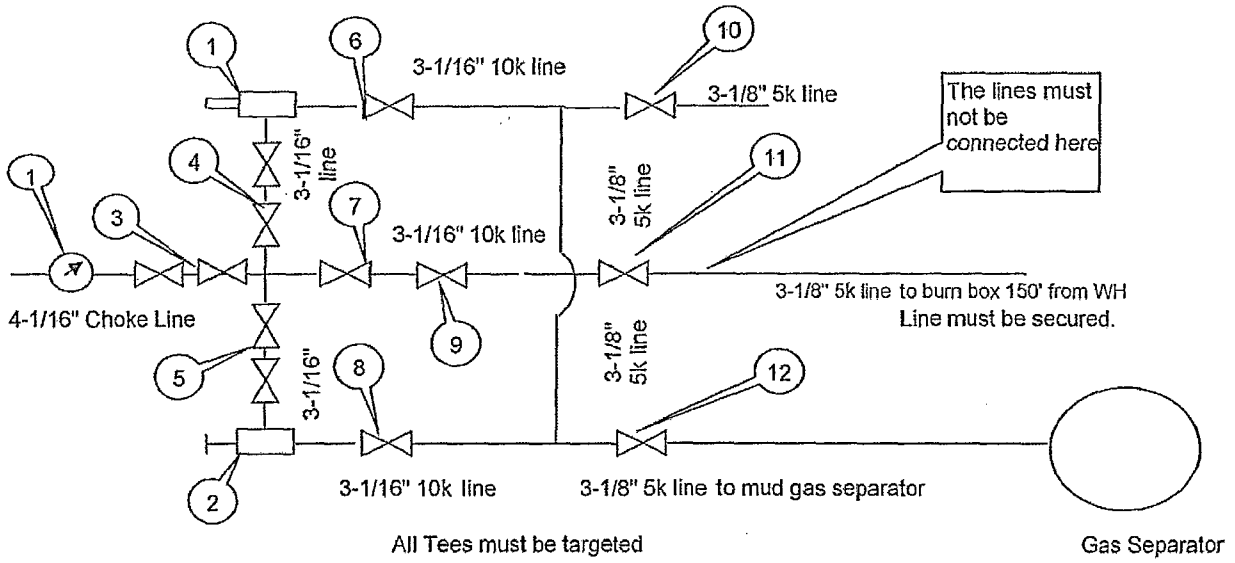
Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
980.0	980.0	13 3/8"	13-3/8	17-1/2
4,553.4	4,540.0	9 5/8"	9-5/8	12-1/4

Attachment # 2 Choke Manifold Configuration

CHOKE MANIFOLD ARRANGEMENT

5M System per Onshore Oil and Gas Order No. 2 utilizing 10M Equipment



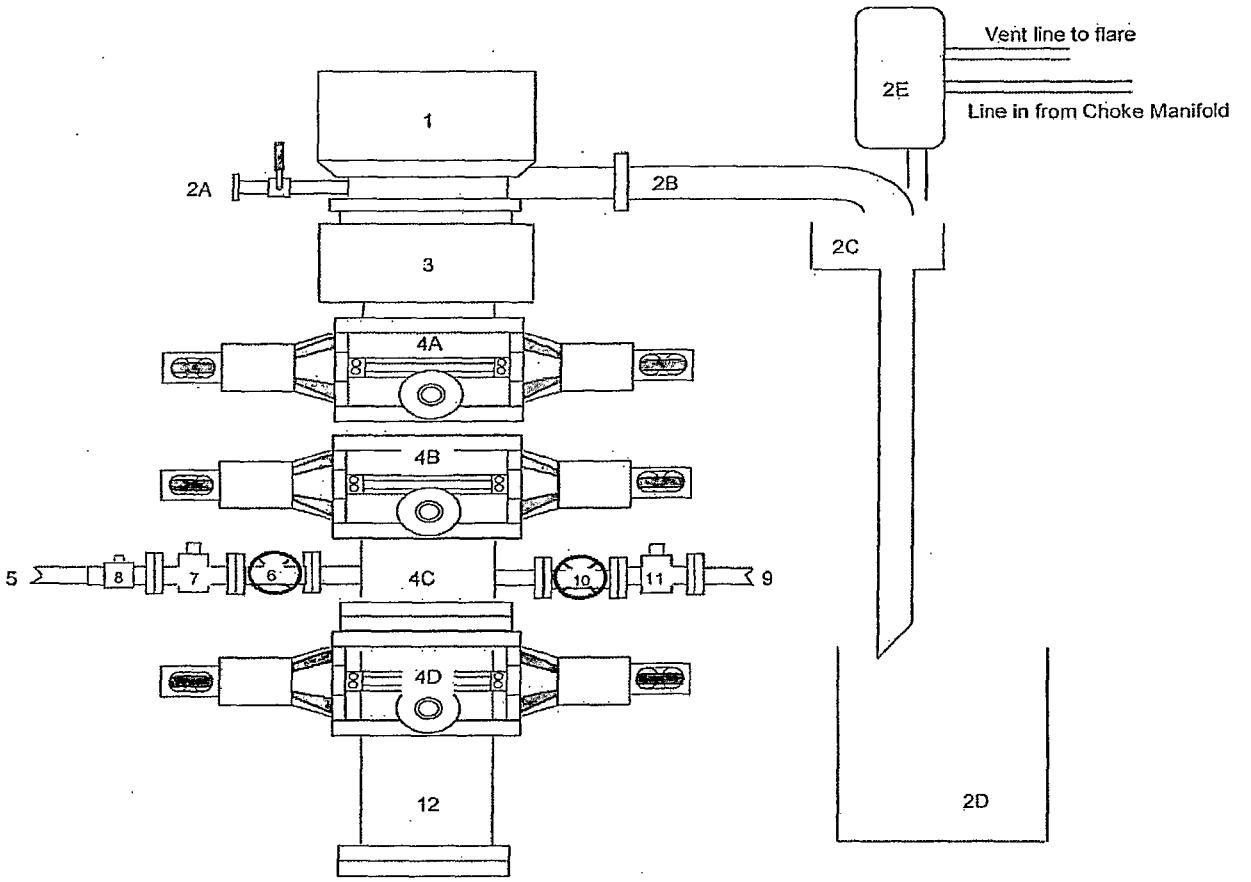
Item	Description
1	Remote Controlled Hydraulic Adjustable Choke, 4-1/16", 10M (Swaco Super hoke)
2	Manual Adjustable Choke, 4-1/16", 10M
3	2 Gate Valves, 4-1/16" 10M
4	Gate Valve, 3-1/16" 10M
5	Gate Valve, 3-1/16" 10M
6	Gate Valve, 3-1/16" 10M
7	Gate Valve, 3-1/16" 10M
8	Gate Valve, 3-1/16" 10M
9	Gate Valve, 3-1/16" 10M
10	Gate Valve, 3-1/8" 5M
11	Gate Valve, 3-1/8" 5M
12	Gate Valve, 3-1/8" 5M
13	Pressure Gauge

We will test each valve to 5000 psi from the upstream side.

Drawn by:
Salvatore Amico
Drilling Engineer, ConocoPhillips Company
Date: Oct 26th-2012

Attachment # 3 BOP Stack Configuration

BLOWOUT PREVENTER ARRANGEMENT
5M System per Onshore Oil and Gas Order No. 2 utilizing 10M Rated Equipment



Item	Description
1	Rotating Head, 13-5/8"
2A	Fill up Line and Valve
2B	Flow Line (8")
2C	Shale Shakers and Solids Settling Tank
2D	Cuttings Bins for Zero Discharge
2E	Mud Gas Separator with vent line to flare and return line to mud system
3	Annular BOP (13-5/8", Hydrill CK5M)
4A	Single Ram (13-3/8", 10M, equipped with pipe Rams)
4B	Single Ram (13-3/8", 10M, equipped with blind Rams)
4C	Drilling Spool (13-3/8" 10M)
4D	Single Ram (13-3/8", 10M, equipped with pipe Rams)
5	Kill Line (2-1/16", 10k psi WP)
6	Kill Line Valve, Inner (Cameron "FLS" 2-1/16"", 10k psi WP)
7	Kill Line Valve, Outer (Cameron "FLS" 2-1/16"", 10k psi WP)
8	Kill Line Check Valve (2-1/16, 10k psi WP)
9	Choke Line (4-1/16", 10k psi WP)
10	Choke Line Valve, Inner (4-1/16", 10k psi WP)
11	Choke Line Valve, Outer, (4-1/6" 100 psi WP HCR)
12	Drilling Spool Adapter (13-3/8", 10M)

Drawn by: Salvatore Amico, Drilling Engineer, ConocoPhillips Company, Oct 26th, 2012

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CONOCOPHILLIPS
LEASE NO.:	NM27508
WELL NAME & NO.:	3H WILDER FEDERAL 28
SURFACE HOLE FOOTAGE:	0224' FNL & 1544' FWL
BOTTOM HOLE FOOTAGE	0355' FSL & 1714' FWL Sec. 33, T.26 S., R.32 E.
LOCATION:	Section 28, T.26 S., R.32 E., NMPM
COUNTY:	Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Delaware** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation. This will also be applicable if an un-cemented completion liner is run and a liner top seal, or equivalent, has not been established before the rig move.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD of the vertical portion of hole to surface shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the Red Beds, Delaware, and Bone Spring formations. Possible brine and fresh water flows in the Salado, Castile, Delaware and Bone Spring.

1. The **13-3/8** inch surface casing shall be set at approximately **850** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch 1st intermediate casing is: **(Casing shall be set at approximately 4560' as proposed by operator)**

   ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

3. The minimum required fill of cement behind the **7** inch 2nd intermediate casing is: **(Casing shall be set at approximately 9606' as proposed by operator)**

   ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

4. Cement not required on the **4-1/2"** casing. **Packer system being used.**

5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review**. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

    c. The results of the test shall be reported to the appropriate BLM office.

    d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
    e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 021113

OPERATOR'S NAME:	CONOCOPHILLIPS
LEASE NO.:	NM27508
WELL NAME & NO.:	3H WILDER FEDERAL 28
SURFACE HOLE FOOTAGE:	0224' FNL & 1544' FWL
BOTTOM HOLE FOOTAGE	0355' FSL & 1714' FWL Sec. 33, T.26 S., R.32 E.
LOCATION:	Section 28, T.26 S., R.32 E., NMPM
COUNTY:	Eddy County, New Mexico

Communitization Agreement

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

Operator shall submit a name change sundry to reflect the Communitization agreement.