

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD JUN 6 '12
OIL CONS. DIV.
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-078138
1b. Type of Well GAS	6. If Indian, All. or Tribe Unit Reporting Number CANNM 73853(DK) NMNM 112626(MV)
2. Operator ConocoPhillips Company	8. Farm or Lease Name Pubco Federal Gas Com
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	9. Well Number 1F
4. Location of Well Surface: Unit K (NESW), 1936' FSL & 1579' FWL BHL : Unit J (NWSE), 1930' FSL & 2280' FEL Surface: Latitude: 36.810260° N (NAD83) Longitude: 107.964104° W Surface: Latitude: 36.810155° N (NAD83) Longitude: 107.959381° W	10. Field, Pool, Wildcat Blanco MV/Basin DK
14. Distance in Miles from Nearest Town 3.4 miles from Aztec	12. County San Juan
15. Distance from Proposed Location to Nearest Property or Lease Line 1579'	13. State NM
16. Acres in Lease 2063.260	17. Acres Assigned to Well MV - 313.81 Acres S/2 DK - 320.00 Acres S/2 313.81
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 51.9' from Morris A Com 100/MV	20. Rotary or Cable Tools Rotary
19. Proposed Depth 7077	22. Approx. Date Work will Start
21. Elevations (DF, FT, GR, Etc.) 5973' GL	
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)	Date <u>4/25/12</u>

RECEIVED

APR 25 2012

Farmington Field Office
Bureau of Land Management
BLM'S APPROVAL OR CONCURRENCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS



H₂S POTENTIAL EXIST

Hold C104
for Directional Survey
and "As Drilled" plat

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 5/31/12

Archaeological Report attached A gas recovery unit may or may not be used on this location.
Threatened and Endangered Species Report attached
NOTE This format is issued in lieu of U.S. BLM Form 3160-3
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make for Directional Survey and "As Drilled" plat any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.
Example Master Plan Type 3 Bond Numbers ES-0048 and ES-0085

This action is subject to technical and procedural review pursuant to 43 CFR 3160.3 and appeal pursuant to 43 CFR 3165.4

ca JUN 14 2012 NMOCD

for Directional Survey and "As Drilled" plat

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

PC

District I
1625 N. French Dr., Hobbs, NM 88210
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 331-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

Farmington Field Office AMENDED REPORT
Bureau of Land Management

APR 25 2012

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35369		² Pool Code 71599/72319		³ Pool Name BASIN DAKOTA/BLANCO MESAVERDE	
⁴ Property Code 39272		⁵ Property Name PUBCO FEDERAL GAS COM			⁶ Well Number 1F
⁷ OGRID No. 21787		⁸ Operator Name CONOCOPHILLIPS COMPANY			⁹ Elevation 5973

¹⁰ SURFACE LOCATION

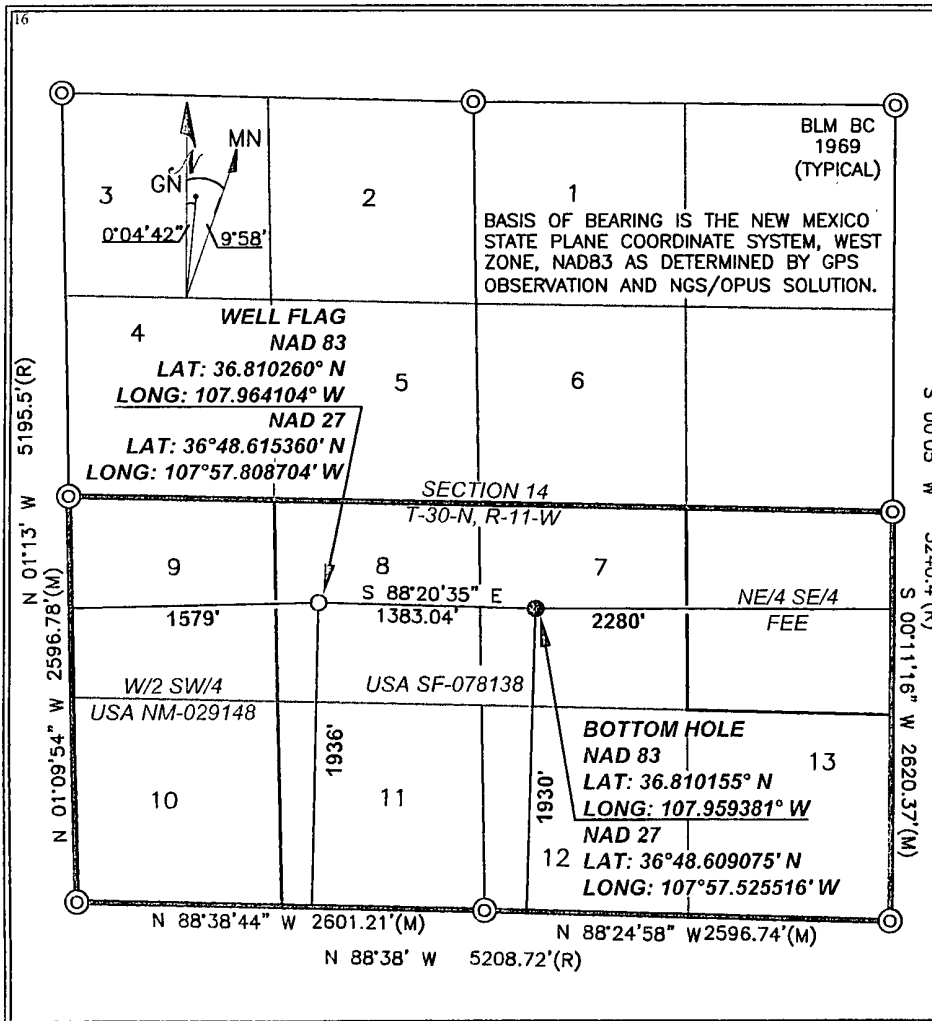
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	14	30-N	11-W	8	1936	SOUTH	1579	WEST	SAN JUAN

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/West line	County
J	14	30-N	11-W	7	1930	SOUTH	2280	EAST	SAN JUAN

¹² Dedicated Acres S/2(313.81)MV S/2(320)DK	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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Arleen Kellywood 11-3-11
Signature Date
Arleen Kellywood
Printed Name
arleen.r.kellywood@conocophillips.com
E-mail Address

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

Date of Survey: 07/20/11
Signature and Seal of
HENRY P. BROADHURST, JR.
NEW MEXICO
11393
11/2/11
PROFESSIONAL SURVEYOR

Certificate Number: NM 11393

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

PUBCO FEDERAL GAS COM 1F

DEVELOPMENT

Lease:		AFE #: WAN.CDR.1078			AFE \$:		
Field Name: SAN JUAN		Rig: Aztec Rig 730		State: NM	County: SAN JUAN		
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist:		Phone:		Prod. Engineer:		Phone:	
Res. Engineer:		Phone:		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
RON	BLANCO MESAVERDE (PRORATED GAS)						
FRR	BASIN DAKOTA (PRORATED GAS)						
Location: Surface Datum: Code: NAD: 27 Directional							
Latitude: 36.810256	Longitude: -107.963482	X:	Y:	Section: 14	Range: 011W		
Footage X: 1579 FWL	Footage Y: 1936 FSL	Elevation: 5973	(FT)	Township: 030N			
Tolerance:							
Location: Bottom Hole Datum: Code: NAD: 27 Directional							
Latitude: 36.810151	Longitude: -107.958759	X:	Y:	Section: 14	Range: 011W		
Footage X: 2280 FEL	Footage Y: 1930 FSL	Elevation:	(FT)	Township: 030N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 5988 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
NACIMIENTO	15	5973		<input type="checkbox"/>			Ground wtr in Hartman Com 6A (30n11w23).
Surface Casing	200	5788		<input type="checkbox"/>		60	12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
OJO ALAMO	1015	4973		<input type="checkbox"/>			
KIRTLAND	1134	4854		<input type="checkbox"/>			
FRUITLAND	1826	4162		<input type="checkbox"/>		93	Possible Gas
PICTURED CLIFFS	2424	3564		<input type="checkbox"/>	85		
LEWIS	2586	3402		<input type="checkbox"/>			
HUERFANITO BENTONITE	3173	2815		<input type="checkbox"/>			
CHACRA	3445	2543		<input type="checkbox"/>		126	
MASSIVE CLIFF HOUSE	4158	1830		<input type="checkbox"/>	741		Gas
MENEFEE	4246	1742		<input type="checkbox"/>			Gas
Intermediate Casing	4396	1592		<input type="checkbox"/>		142	8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1051 cuft. Circulate cement to surface.
POINT LOOKOUT	4767	1221		<input type="checkbox"/>			Gas - Est MV bottom perf ~928' (~293' below top PNLK).
MANCOS	5087	901		<input type="checkbox"/>			
UPPER GALLUP	5965	23		<input type="checkbox"/>			
GREENHORN	6726	-738		<input type="checkbox"/>		193	
GRANEROS	6780	-792		<input type="checkbox"/>			
TWO WELLS	6836	-848		<input type="checkbox"/>	1903		Gas
PAGUATE	6912	-924		<input type="checkbox"/>			Gas
LOWER CUBERO	6962	-974		<input type="checkbox"/>			Gas - Est bottom perf ~1069' (~95' below top cbrl) base on offset wells. Wet CBRO Hartman 23 1F (30n11w23).

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

PUBCO FEDERAL GAS COM 1F

DEVELOPMENT

Total Depth	7077	-1089	<input type="checkbox"/>	199	6-1/4" hole, 4-1/2" 11.6 ppf, J-55, LTC casing. Cement w/ 355 cuft. Circulate cement a minimum of 100' inside the previous casing string.
BURRO CANYON	7093	-1105	<input type="checkbox"/>		Wet in Ross Fed 1R (30n11w23), Ross Fed 1M (30n11w23), & Aztec Fed 1M (30n11w24).
MORRISON	7099	-1111	<input type="checkbox"/>		

Reference Wells:		
Reference Type	Well Name	Comments
Production	ROSS FEDERAL 1R	
Production	PUBCO FEDERAL GAS COM 1	

Logging Program:

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

TD Logs: Triple Combo Dipmeter RFT Sonic VSP TDT Other

GR/CBL
Mud log ~100' above GLLP down to TD.
Mudlogger will call TD.
Est bottom perf ~20' above TD.

Additional Information:

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

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Pubco Federal Gas Com 1F
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 5988.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 5988.0ft (Original Well Elev)
Site:	Other Named Wells	North Reference:	True
Well:	Pubco Federal Gas Com 1F	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Project:	San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site:	Other Named Wells				
Site Position:		Northing:	2,063,826.04 ft	Latitude:	36° 40' 18.848 N
From:	Lat/Long	Easting:	504,691.02 ft	Longitude:	107° 49' 2.415 W
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"	Grid Convergence:	0 01 °

Well:	Pubco Federal Gas Com 1F					
Well Position	+N/-S	0.0 ft	Northing:	2,114,218.46 ft	Latitude:	36° 48' 36.922 N
	+E/-W	0.0 ft	Easting:	461,901.43 ft	Longitude:	107° 57' 48.522 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,973.0 ft

Wellbore:	Principal Wellbore				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	BGGM2011	4/19/2012	(°)	(°)	(nT)
			9.88	63.46	50,632

Design:	Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	91.58

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,541.8	24.44	91.58	1,505.1	-7.1	256.5	2.00	2.00	0.00	91.58	
3,849.3	24.44	91.58	3,605.9	-33.4	1,210.8	0.00	0.00	0.00	0.00	
4,663.9	0.00	0.00	4,396.0	-38.1	1,381.8	3.00	-3.00	0.00	180.00	Pubco Federal Gas C
7,344.9	0.00	0.00	7,077.0	-38.1	1,381.8	0.00	0.00	0.00	0.00	Pubco Federal Gas C

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Pubco Federal Gas Com 1F
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 5988.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 5988.0ft (Original Well Elev)
Site:	Other Named Wells	North Reference:	True
Well:	Pubco Federal Gas Com 1F	Survey Calculation Method:	Minimum Curvature
Wellbore Design:	Principal Wellbore Plan #1		

Planned Survey											
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00		
15.0	0.00	0.00	15.0	0.0	0.0	0.0	0.00	0.00	0.00		
Nacimiento											
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00		
Surface Casing											
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00		
400.0	1.60	91.58	400.0	0.0	1.1	1.1	2.00	2.00	0.00		
500.0	3.60	91.58	499.9	-0.2	5.7	5.7	2.00	2.00	0.00		
600.0	5.60	91.58	599.6	-0.4	13.7	13.7	2.00	2.00	0.00		
700.0	7.60	91.58	698.9	-0.7	25.2	25.2	2.00	2.00	0.00		
800.0	9.60	91.58	797.8	-1.1	40.1	40.1	2.00	2.00	0.00		
900.0	11.60	91.58	896.0	-1.6	58.5	58.5	2.00	2.00	0.00		
1,000.0	13.60	91.58	993.6	-2.2	80.3	80.3	2.00	2.00	0.00		
1,022.0	14.04	91.58	1,015.0	-2.4	85.5	85.6	2.00	2.00	0.00		
Ojo Alamo											
1,100.0	15.60	91.58	1,090.4	-2.9	105.5	105.5	2.00	2.00	0.00		
1,145.4	16.51	91.58	1,134.0	-3.3	118.0	118.1	2.00	2.00	0.00		
Kirtland											
1,200.0	17.60	91.58	1,186.2	-3.7	134.0	134.1	2.00	2.00	0.00		
1,300.0	19.60	91.58	1,281.0	-4.6	165.9	166.0	2.00	2.00	0.00		
1,400.0	21.60	91.58	1,374.6	-5.5	201.1	201.2	2.00	2.00	0.00		
1,500.0	23.60	91.58	1,466.9	-6.6	239.5	239.6	2.00	2.00	0.00		
1,541.8	24.44	91.58	1,505.1	-7.1	256.5	256.6	2.00	2.00	0.00		
1,600.0	24.44	91.58	1,558.1	-7.7	280.6	280.7	0.00	0.00	0.00		
1,700.0	24.44	91.58	1,649.1	-8.9	321.9	322.1	0.00	0.00	0.00		
1,800.0	24.44	91.58	1,740.2	-10.0	363.3	363.4	0.00	0.00	0.00		
1,894.3	24.44	91.58	1,826.0	-11.1	402.3	402.4	0.00	0.00	0.00		
Fruitland											
1,900.0	24.44	91.58	1,831.2	-11.2	404.6	404.8	0.00	0.00	0.00		
2,000.0	24.44	91.58	1,922.2	-12.3	446.0	446.2	0.00	0.00	0.00		
2,100.0	24.44	91.58	2,013.3	-13.4	487.4	487.5	0.00	0.00	0.00		
2,200.0	24.44	91.58	2,104.3	-14.6	528.7	528.9	0.00	0.00	0.00		
2,300.0	24.44	91.58	2,195.4	-15.7	570.1	570.3	0.00	0.00	0.00		
2,400.0	24.44	91.58	2,286.4	-16.9	611.4	611.6	0.00	0.00	0.00		
2,500.0	24.44	91.58	2,377.5	-18.0	652.8	653.0	0.00	0.00	0.00		
2,551.1	24.44	91.58	2,424.0	-18.6	673.9	674.2	0.00	0.00	0.00		
Pictured Cliffs											
2,600.0	24.44	91.58	2,468.5	-19.1	694.1	694.4	0.00	0.00	0.00		
2,700.0	24.44	91.58	2,559.5	-20.3	735.5	735.8	0.00	0.00	0.00		
2,729.1	24.44	91.58	2,586.0	-20.6	747.5	747.8	0.00	0.00	0.00		
Lewis											
2,800.0	24.44	91.58	2,650.6	-21.4	776.8	777.1	0.00	0.00	0.00		
2,900.0	24.44	91.58	2,741.6	-22.6	818.2	818.5	0.00	0.00	0.00		
3,000.0	24.44	91.58	2,832.7	-23.7	859.5	859.9	0.00	0.00	0.00		
3,100.0	24.44	91.58	2,923.7	-24.8	900.9	901.2	0.00	0.00	0.00		
3,200.0	24.44	91.58	3,014.8	-26.0	942.2	942.6	0.00	0.00	0.00		
3,300.0	24.44	91.58	3,105.8	-27.1	983.6	984.0	0.00	0.00	0.00		
3,373.8	24.44	91.58	3,173.0	-28.0	1,014.1	1,014.5	0.00	0.00	0.00		
Huerfano Bentonite											
3,400.0	24.44	91.58	3,196.8	-28.3	1,024.9	1,025.3	0.00	0.00	0.00		
3,500.0	24.44	91.58	3,287.9	-29.4	1,066.3	1,066.7	0.00	0.00	0.00		
3,600.0	24.44	91.58	3,378.9	-30.5	1,107.7	1,108.1	0.00	0.00	0.00		
3,672.6	24.44	91.58	3,445.0	-31.4	1,137.7	1,138.1	0.00	0.00	0.00		

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Pubco Federal Gas Com 1F
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 5988 0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 5988 0ft (Original Well Elev)
Site:	Other Named Wells	North Reference:	True
Well:	Pubco Federal Gas Com 1F	Survey Calculation Method:	Minimum Curvature
Wellbore Design:	Principal Wellbore Plan #1		

Planned/Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
Chacra										
3,700.0	24.44	91.58	3,470.0	-31.7	1,149.0	1,149.4	0.00	0.00	0.00	
3,800.0	24.44	91.58	3,561.0	-32.8	1,190.4	1,190.8	0.00	0.00	0.00	
3,849.3	24.44	91.58	3,605.9	-33.4	1,210.8	1,211.2	0.00	0.00	0.00	
3,900.0	22.92	91.58	3,652.3	-33.9	1,231.1	1,231.6	3.00	-3.00	0.00	
4,000.0	19.92	91.58	3,745.4	-35.0	1,267.6	1,268.1	3.00	-3.00	0.00	
4,100.0	16.92	91.58	3,840.3	-35.8	1,299.2	1,299.7	3.00	-3.00	0.00	
4,200.0	13.92	91.58	3,936.7	-36.6	1,325.7	1,326.2	3.00	-3.00	0.00	
4,300.0	10.92	91.58	4,034.3	-37.2	1,347.2	1,347.7	3.00	-3.00	0.00	
4,400.0	7.92	91.58	4,133.0	-37.6	1,363.6	1,364.1	3.00	-3.00	0.00	
4,425.3	7.16	91.58	4,158.0	-37.7	1,366.9	1,367.4	3.00	-3.00	0.00	
Massive Cliff House										
4,500.0	4.92	91.58	4,232.3	-37.9	1,374.8	1,375.3	3.00	-3.00	0.00	
4,513.7	4.50	91.58	4,246.0	-37.9	1,375.9	1,376.4	3.00	-3.00	0.00	
Menefee										
4,600.0	1.92	91.58	4,332.1	-38.1	1,380.7	1,381.2	3.00	-3.00	0.00	
Pubco Federal Gas Com 1F Vert Pt										
4,663.9	0.00	0.00	4,396.0	-38.1	1,381.8	1,382.3	3.00	-3.00	0.00	
Int Casing Pt - Pubco Federal Gas Com 1F Int Csg Pt										
5,034.9	0.00	0.00	4,767.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Pt. Lookout										
5,354.9	0.00	0.00	5,087.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Mancos Shale										
6,232.9	0.00	0.00	5,965.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Gallup										
6,993.9	0.00	0.00	6,726.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Greenhorn										
7,047.9	0.00	0.00	6,780.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Graneros										
7,103.9	0.00	0.00	6,836.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Two Wells										
7,179.9	0.00	0.00	6,912.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Pauguate										
7,229.9	0.00	0.00	6,962.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
Cubero										
7,344.9	0.00	0.00	7,077.0	-38.1	1,381.8	1,382.3	0.00	0.00	0.00	
TD - Prod Casing Pt - Pubco Federal Gas Com 1F Prod. Csg Pt										

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Pubco Federal Gas Com 1F
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 5988.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 5988.0ft (Original Well Elev)
Site:	Other Named Wells	North Reference:	True
Well:	Pubco Federal Gas Com 1F	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

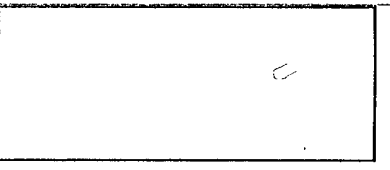
Targets										
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Eastng	Latitude	Longitude
Shape		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Pubco Federal Gas Corr		0.00	0.00	3,500.0	-50,338.2	42,861.6	2,063,826.04	504,691.02	36° 40' 18.848 N	107° 49' 2.415 W
	- plan misses target center by 65203.3ft at 4600 0ft MD (4332.1 TVD, -38.1 N, 1380.7 E)									
	- Point									
Pubco Federal Gas Corr		0.00	0.00	4,396.0	-38.1	1,381.8	2,114,178.48	463,283.05	36° 48' 36.544 N	107° 57' 31.531 W
	- plan hits target center									
	- Point									
Pubco Federal Gas Corr		0.00	0.00	7,077.0	-38.1	1,381.8	2,114,178.48	463,283.07	36° 48' 36.545 N	107° 57' 31.531 W
	- plan hits target center									
	- Point									

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(")	(")	
200.0	200.0	Surface Casing	9-5/8	12-1/4	
4,663.9	4,396.0	Int Casing Pt	7	8-3/4	
7,344.9	7,077.0	Prod Casing Pt	4-1/2	6-1/4	

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
6,993.9	6,726.0	Greenhorn		0.00		
2,551.1	2,424.0	Pictured Cliffs		0.00		
7,344.9	7,077.0	TD		0.00		
4,513.7	4,246.0	Menefee		0.00		
3,373.8	3,173.0	Huerfanito Bentonite		0.00		
7,047.9	6,780.0	Graneros		0.00		
7,179.9	6,912.0	Paugate		0.00		
3,672.6	3,445.0	Chacra		0.00		
2,729.1	2,586.0	Lewis		0.00		
7,103.9	6,836.0	Two Wells		0.00		
4,425.3	4,158.0	Massive Cliff House		0.00		
5,354.9	5,087.0	Mancos Shale		0.00		
1,894.3	1,826.0	Fruitland		0.00		
15.0	15.0	Nacimiento		0.00		
1,022.0	1,015.0	Ojo Alamo		0.00		
	7,093.0	Burro Canyon		0.00		
1,145.4	1,134.0	Kirtland		0.00		
7,229.9	6,962.0	Cubero		0.00		
5,034.9	4,767.0	Pt. Lookout		0.00		
6,232.9	5,965.0	Gallup		0.00		

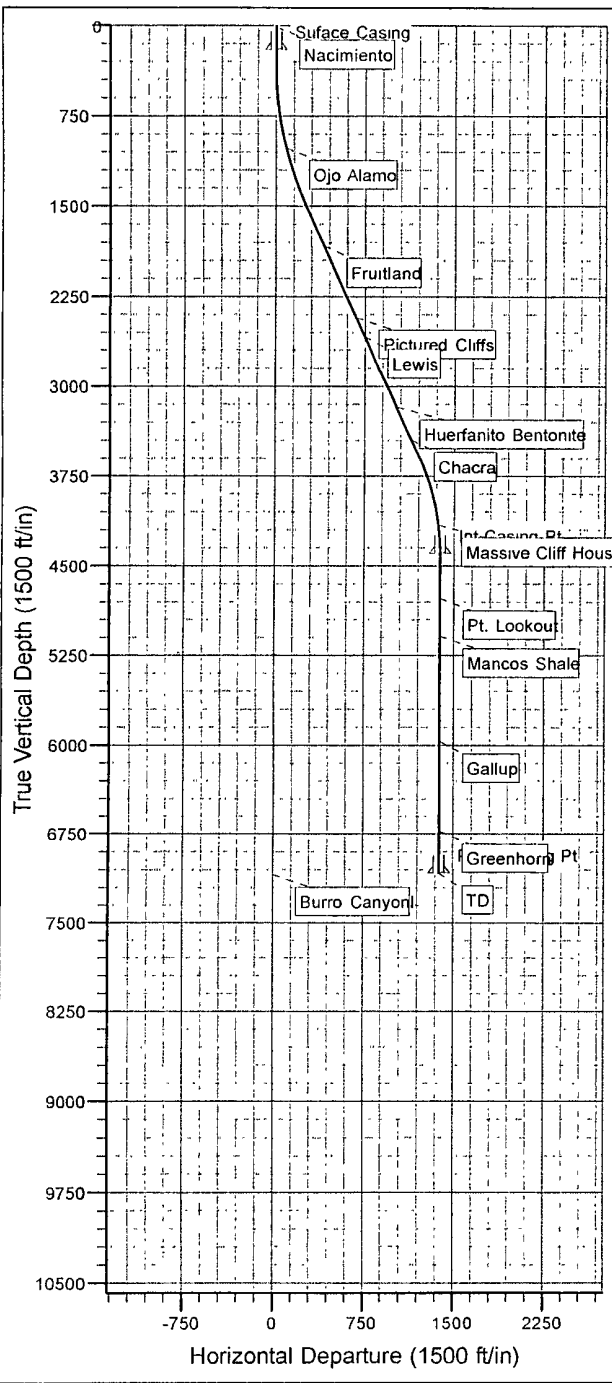
REFERENCE INFORMATION
 RKB @ 5988.0ft (Original Well Elev)
 Ground Elevation 5973.0
 Reference Lat 36° 48' 36.922 N
 Reference Long: 107° 57' 48.522 W

Project: San Juan Basin - New Mexico West V
 Site: Other Named Wells
 Well: Pubco Federal Gas Com 1F
 Wellbore: Principal Wellbore
 Design: Plan #1



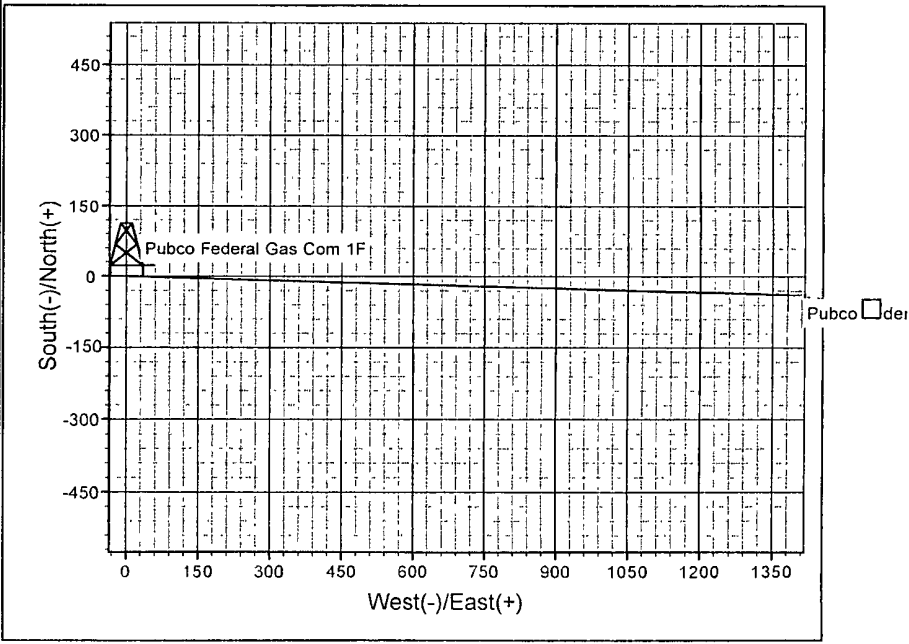
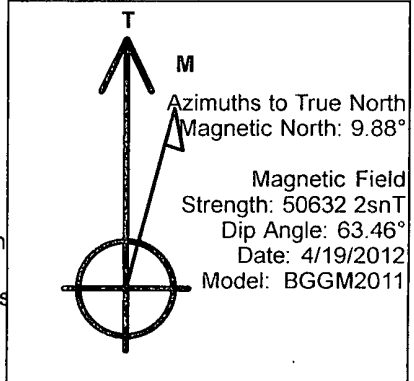
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	320.0	0.00	0.00	320.0	0.0	0.0	0.00	0.00	0.0	
3	1541.8	24.44	91.58	1505.1	-7.1	256.5	2.00	91.58	256.6	
4	3849.3	24.44	91.58	3605.9	-33.4	1210.8	0.00	0.00	1211.2	
5	4663.9	0.00	0.00	4396.0	-38.1	1381.8	3.00	180.00	1382.3	Pubco Federal Gas Com 1F Int Csg Pt
6	7344.9	0.00	0.00	7077.0	-38.1	1381.8	0.00	0.00	1382.3	Pubco Federal Gas Com 1F Prod Csg Pt

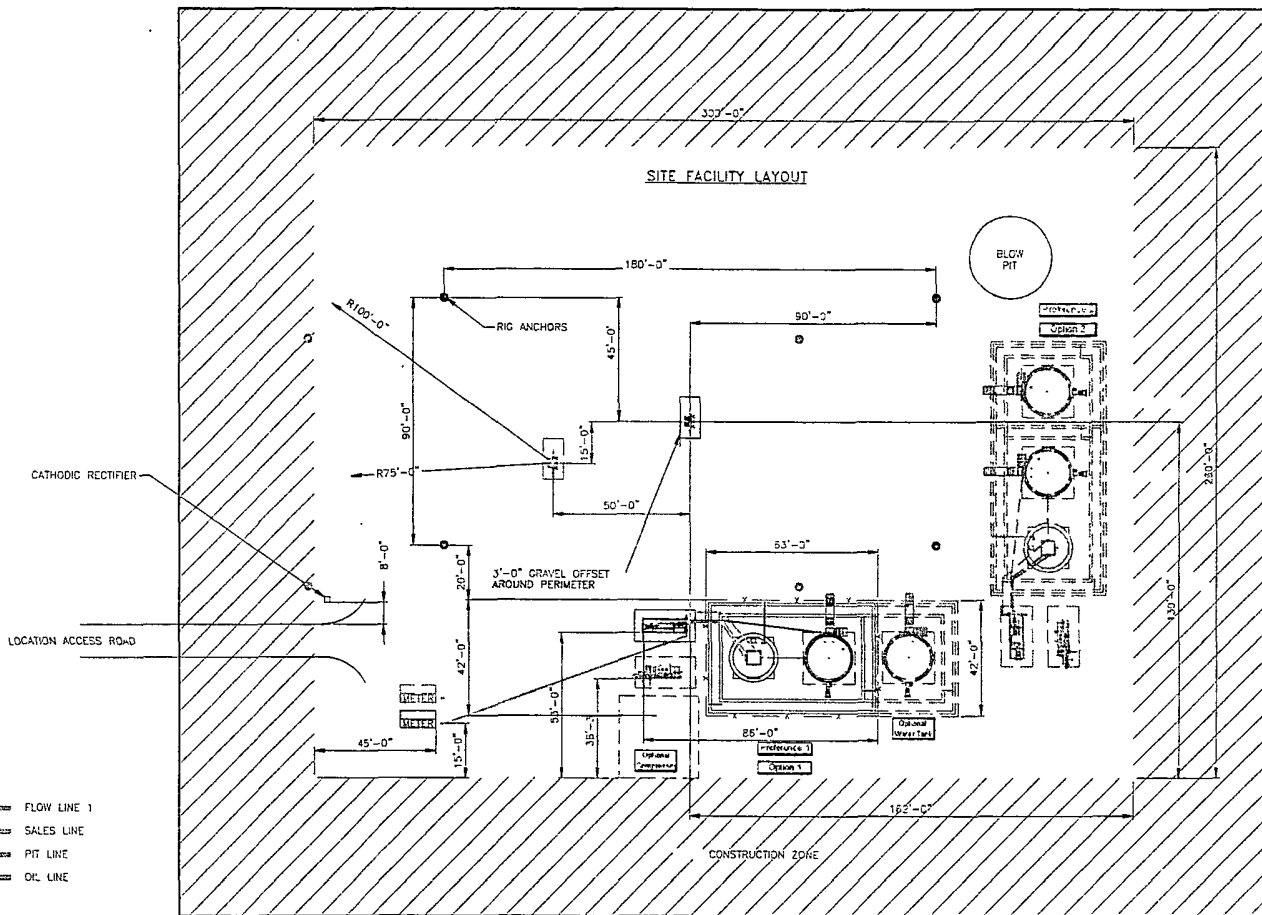


FORMATION TOP DETAILS

VDPPath	MDPath	Formation
		Burro Canyon
15.0	15.0	Nacimiento
1015.0	1022.0	Ojo Alamo
1134.0	1145.4	Kirtland
1826.0	1894.3	Fruitland
2424.0	2551.1	Pictured Cliffs
2586.0	2729.1	Lewis
3173.0	3373.8	Huerfanito Bentonite
3445.0	3672.6	Chacra
4158.0	4425.3	Massive Cliff House
4246.0	4513.7	Menefee
4767.0	5034.9	Pt. Lookout
5087.0	5354.9	Mancos Shale
5965.0	6232.9	Gallup
6726.0	6993.9	Greenhorn
6780.0	7047.9	Graneros
6836.0	7103.9	Two Wells
6912.0	7179.9	Pauguate
6962.0	7229.9	Cubero
7077.0	7344.9	TD



SHEET 1 OF 5 11/14/2012 12:26:55 PM gseeds



- FLOW LINE 1
- SALES LINE
- PIT LINE
- OIL LINE

SEE SHEET 3 & 4 FOR PIPING DETAILS
ALL UNDERGROUND PIPE IS TO BE BURIED A MIN OF 3'-0" TOP

SHEET 1 OF 5

ENGINEERING REVIEW										REFERENCE DRAWINGS			CONOCO-PHILLIPS HIGH PRESSURE 3 PHASE FACILITY DIAGRAM- SITE LAYOUT		
DISCIPLINE	REVIEWED	DATE	NO.	DESCRIPTION	CLIENT NO.	CLIENT ADDR.	APPR. DATE								
PROCESS															
MECHANICAL															
PIPING															
ELECTRICAL															
I & C															
CIVIL/STRUCTURAL															
PROJECT															

DESCRIPTION	DATE	BY	CHK'D	ENG	DEC	PRJ

CLIENT NO.	CLIENT ADDR.	APPR. DATE

DRAWN BY	SCALE NAME	DESIGNER DATE	SHEET NO.

SAN JUAN BUSINESS UNIT

HP3PHASE-REV1 1 OF 5

gseeds 3:\gseeds\gseeds LEF100\ST0 PRJ 002d ARCHIVES\SES_HP3Phase-REV1_01.dwg, 03/14/2012 12:26:55

**CONOCOPHILLIPS COMPANY
PUBCO FEDERAL GAS COM 1F
1936' FSL, 1579' FWL
SECTION 14, T-30-N, R-11-W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
NAD 83 LAT.: 36.810260111 ° N LONG.: 107.964103639°W
GROUND ELEV.: 5973 NAVD88
TWIN WITH MORRIS A COM 100, NO NEW ACCESS**

FROM INTERSECTION OF HWY. 550 & HWY. 516 (SUNDIAL CONOCO) IN
AZTEC, NM.

- GO: 1.1 MILES NORTH ON HWY 550. TURN RIGHT ON HWY 173 TOWARD NAVAJO DAM.
- GO: 1.0 MILES EAST. TURN LEFT AT NEW INTERSECTION. (SLOW FOR NEXT TURN).
- GO 0.1 MILES EAST ON HWY. 173. TURN RIGHT ONTO WELL ACCESS ROAD.
- GO: 0.3 MILES SOUTH, AROUND NORTH EAST SIDE OF NEW POND AT AZTEC ATHLETIC COMPLEX. TURN RIGHT.
- GO: 0.2 MILES SOUTH. TURN RIGHT.
- GO: 0.7 MILES SOUTH TO WELL LOCATION FOR BROG: MORRIS - A-COM 1 & -A-COM 100. NEW WELL STAKED HERE.