

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JAN 10 2011

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-078962 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator ConocoPhillips Company	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Hodges 9. Well Number 12E RCVD MAR 11 '11 OIL CONS. DIV. DIST. 3
4. Location of Well Surf: Unit M(SWSW), 203' FSL & 91' FWL BH: Unit M(SWSW), 710' FSL & 710' FWL Surf: Latitude: 36.43727° N (NAD83) Longitude: 107.67715° W BH : Latitude: 36.43861° N (NAD83) Longitude: 107.67521° W	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 34, T26N, R8W API # 30-045-35229
14. Distance in Miles from Nearest Town 37 Miles from Bloomfield, NM	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 91'	
16. Acres in Lease 562.130	17. Acres Assigned to Well 320 Acres W/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1200' from Quitzau #1- PC (BR)	
19. Proposed Depth 6954' This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6686' GL	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Brandie Blakley</u> Brandie Blakley (Staff Regulatory Tech)	<u>12-31-10</u> Date

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE Petr. Eng DATE 3/4/11

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 to any Federal agency of the United States 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

MAR 16 2011

NMOCD

ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATION ON FEDERAL AND INDIAN LANDS

Hold C104
for Directional Survey
and "As Drilled" plat

RECEIVED

JAN 10 2011

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department Field Office
Bureau of Land Management

Form C-102
Revised October 12, 2005

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Artesia, N.M. 87410

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35229		*Pool Code 71599	*Pool Name BASIN DAKOTA
*Property Code 31768	*Property Name HODGES		*Well Number 12E
*OGRD No. 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6686'

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
M	34	26N	8W		203'	SOUTH	91'	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
M	34	26N	8W		710'	SOUTH	710'	WEST	SAN JUAN

*Dedicated Acres 320.00 ACRES - W/2	*Joint or Infill	*Consolidation Code	*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

18

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 or a compulsory pooling order heretofore entered by the division.

Dollie L. Busse 4/19/10
Signature Date

Dollie L. Busse

Printed Name

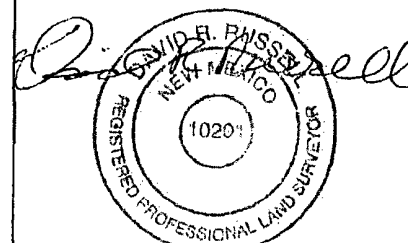
18 SURVEYOR CERTIFICATION

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.

MARCH 18, 2010

Date of Survey

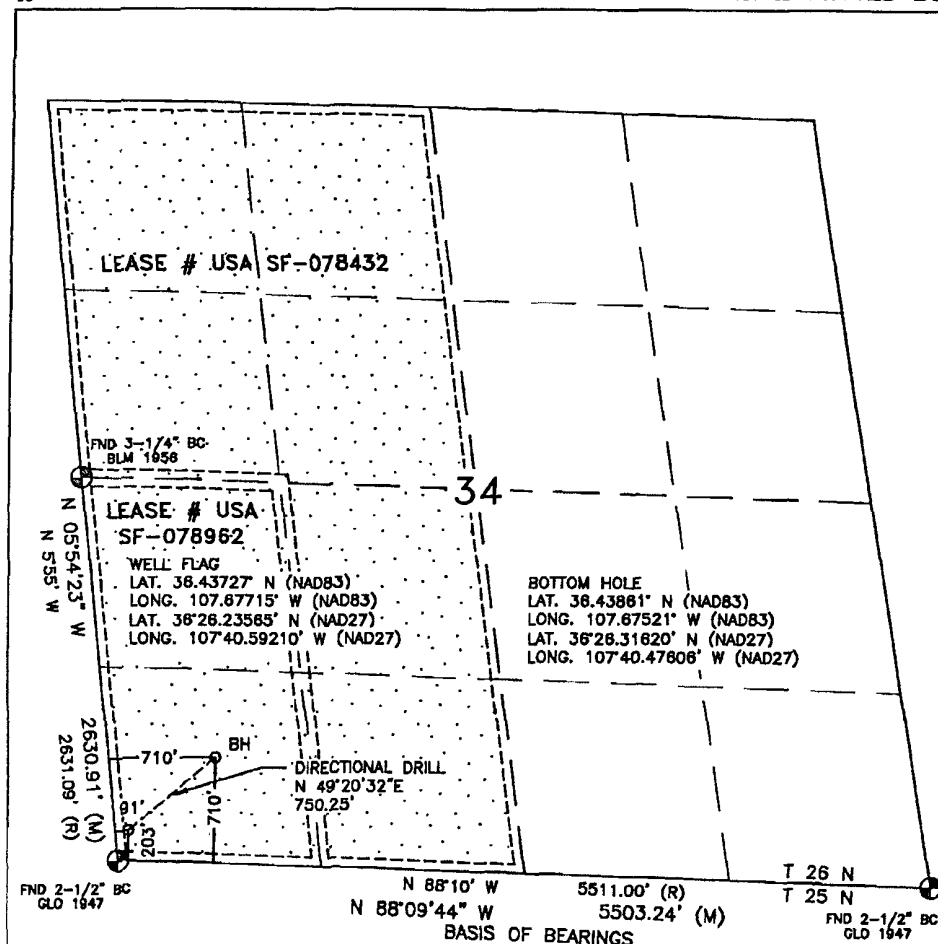
Signature and Seal of Professional Surveyor:



DAVID RUSSELL

Certificate Number

10201



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HODGES 12E

DEVELOPMENT

Lease:		AFE #: WAN.CDR.9380				AFE \$: 799,387.45	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: SAN JUAN		API #:
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist:		Phone:		Prod. Engineer:		Phone:	
Res. Engineer:		Phone:		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
FRR	BASIN DAKOTA (PRORATED GAS)						
Location: Surface							
Datum Code: NAD 27		Directional					
Latitude: 36.437259	Longitude: -107.676539	X:	Y:	Section: 34	Range: 008W		
Footage X: 91 FWL	Footage Y: 203 FSL	Elevation: 6686	(FT)	Township: 026N			
Tolerance:							
Location: Bottom Hole							
Datum Code: NAD 27		Directional					
Latitude: 36.438599	Longitude: -107.674599	X:	Y:	Section: 34	Range: 008W		
Footage X: 710 FWL	Footage Y: 710 FSL	Elevation:	(FT)	Township: 026N			
Tolerance:							
Location Type: Year Round		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6701 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	230	6471		☐			12 1/4" hole to 230' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
OJO ALAMO	1593	5108		☐			
KIRTLAND	1745	4956		☐			
FRUITLAND	1959	4742		☐			Possible Gas
PICTURED CLIFFS	2370	4331		☐			
LEWIS	2452	4249		☐			
HUERFANITO BENTONITE	2761	3940		☐			
CHACRA	3219	3482		☐			
UPPER CLIFF HOUSE	3802	2899		☐			Cliff House is wet
MASSIVE CLIFF HOUSE	3940	2761		☐			
MENEFEE	4000	2701		☐			
Intermediate Casing	4150	2551		☐	94		8 3/4" hole 7" 23 ppf J-55 LT&C casing. Cement with 960 cuft. Circulated cement to surface.
POINT LOOKOUT	4696	2005		☐			GAS
MANCOS	5021	1680		☐			
UPPER GALLUP	5784	917		☐			
GREENHORN	6645	56		☐			
GRANEROS	6697	4		☐			
TWO WELLS	6725	-24		☐	3260		Gas
PAGUATE	6810	-109		☐			
UPPER CUBERO	6873	-172		☐			
LOWER CUBERO	6891	-190		☐			Est. Btm Perf - 6939 (- 238) based on offset wells

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HODGES 12E

DEVELOPMENT

ENCINAL	6954	-253	☐	TD - T/ENCN; consistent with air drill and offset information.
Total Depth	6954	-253	☐	185 6 1/4" hole 4 1/2" 11.6 ppf, L-80 LTC casing. Cement with 386 cuft. Circulate cement to surface.
BURRO CANYON	7027	-326	☐	
MORRISON	7058	-357	☐	

Reference Wells:

Reference Type	Well Name	Comments
Production	Hodges 11	26N 8W 27 SW SW
Production	Nickson 16	26N 8W 35 SW SE
Production	Hodges 9	26N 8W 28 SW NE
Production	Hodges 15E	26N 8W 27 SE NW SE

Logging Program:

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

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

Cased Hole GR / CBL

Mudlog from 100' above top of GLLP to TD - mudlogger will call TD.

Additional Information:

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

REFERENCE INFORMATION

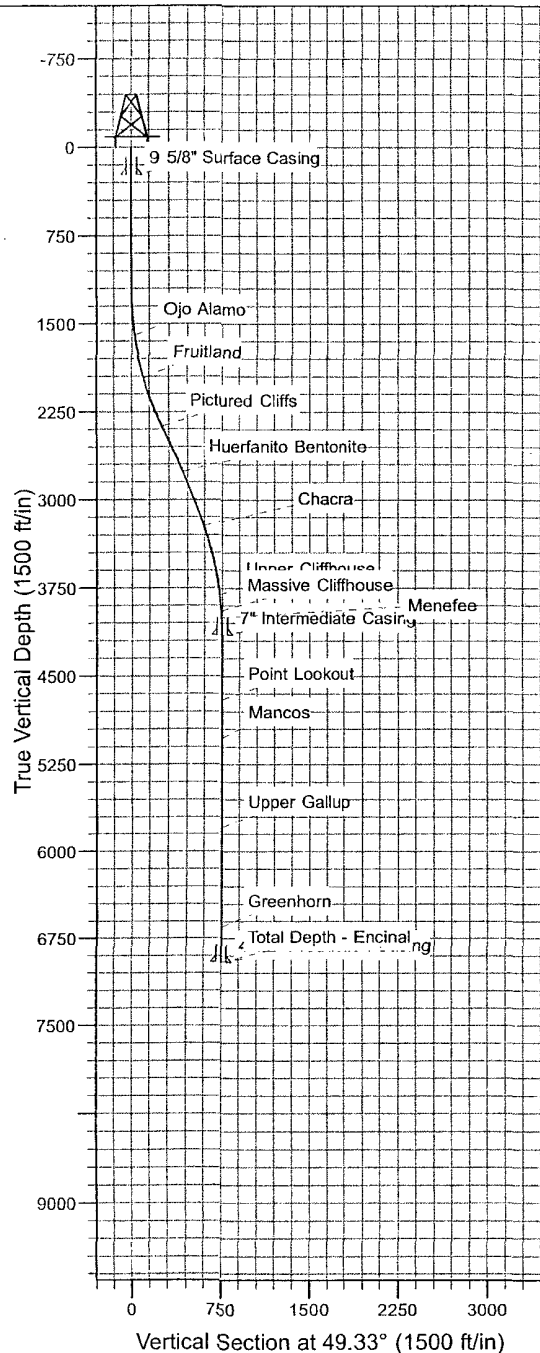
RKB @ 6701.0ft (AWS RIGS)
Ground Elevation 6686.0
Reference Lat: 36° 26' 14.139 N
Reference Long: 107° 40' 35.526 W

Project: San Juan Basin - New Mexico West V
Site: Other Named Wells
Well: Hodges #12E
Wellbore: Principal Wellbore
Design: Plan #1

ConocoPhillips

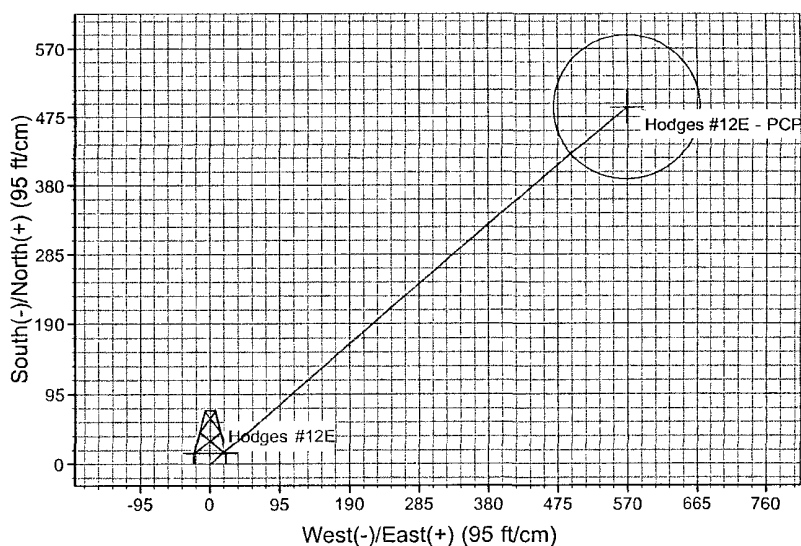
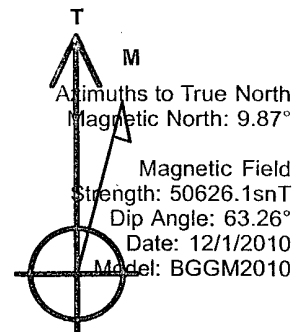
SECTION DETAILS

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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2325.5	22.51	49.33	2296.8	142.2	165.6	2.00	49.33	218.3	
4	3144.3	22.51	49.33	3053.2	346.5	403.3	0.00	0.00	531.8	
5	4269.8	0.00	0.00	4150.0	488.8	568.9	2.00	180.00	750.0	Hodges #12E - ICP
6	7073.8	0.00	0.00	6954.0	488.8	568.9	0.00	0.00	750.0	Hodges #12E - PCP



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1593.0	1594.2	Ojo Alamo
1745.0	1748.3	Kirtland
1959.0	1968.2	Fruitland
2370.0	2404.8	Pictured Cliffs
2452.0	2493.5	Lewis
2761.0	2828.0	Huerfano Bentonite
3219.0	3321.6	Chacra
3802.0	3921.0	Upper Cliffhouse
3940.0	4059.7	Massive Cliffhouse
4000.0	4119.8	Menefee
4696.0	4815.8	Point Lookout
5021.0	5140.8	Mancos
5784.0	5903.8	Upper Gallup
6645.0	6764.8	Greenhorn
6697.0	6816.8	Graneros
6725.0	6844.8	Two Wells
6810.0	6929.8	Paguate
6873.0	6992.8	Upper Cubero
6891.0	7010.8	Lower Cubero
6954.0	7073.8	Total Depth - Encinal



ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hodges #12E
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6701.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6701.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Hodges #12E	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:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site:	Other Named Wells		
Site Position:	From:	Lat/Long	
Position Uncertainty:	15.0 ft	Slot Radius:	6-1/8"
		Northings:	2,108,178.26 ft
		Easting:	643,887.63 ft
		Latitude:	36° 47' 33.793 N
		Longitude:	107° 20' 30.932 W
		Grid Convergence:	0.29 °

Well:	Hodges #12E; Directional "S" Curve Short; No Lewis		
Well Position	+N-S	0.0 ft	Northings:
	+E-W	0.0 ft	Easting:
Position Uncertainty	3.5 ft	Wellhead Elevation:	ft
		Latitude:	36° 26' 14.139 N
		Longitude:	107° 40' 35.526 W
		Ground Level:	6,686.0 ft

Wellbore:	Principal Wellbore		
Magnetics	Model Name	Sample Date	Declination
	BGGM2010	12/1/2010	9.87
			Dip Angle
			63.26
			Field Strength
			50,626

Design:	Plan #1		
Audit Notes:			
Version:	1	Phase:	PROTOTYPE
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			49.33

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,325.5	22.51	49.33	2,296.8	142.2	165.6	2.00	2.00	0.00	49.33	
3,144.3	22.51	49.33	3,053.2	346.5	403.3	0.00	0.00	0.00	0.00	
4,269.8	0.00	0.00	4,150.0	488.8	568.9	2.00	-2.00	0.00	180.00	Hodges #12E - ICP
7,073.8	0.00	0.00	6,954.0	488.8	568.9	0.00	0.00	0.00	0.00	Hodges #12E - PCP

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hodges #12E
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6701.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6701.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Hodges #12E	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	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
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
230.0	0.00	0.00	230.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8" Surface Casing									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	49.33	1,300.0	1.1	1.3	1.7	2.00	2.00	0.00
1,400.0	4.00	49.33	1,399.8	4.5	5.3	7.0	2.00	2.00	0.00
1,500.0	6.00	49.33	1,499.5	10.2	11.9	15.7	2.00	2.00	0.00
1,594.2	7.88	49.33	1,593.0	17.6	20.5	27.1	2.00	2.00	0.00
Ojo Alamo									
1,600.0	8.00	49.33	1,598.7	18.2	21.1	27.9	2.00	2.00	0.00
1,700.0	10.00	49.33	1,697.5	28.4	33.0	43.5	2.00	2.00	0.00
1,748.3	10.97	49.33	1,745.0	34.1	39.7	52.3	2.00	2.00	0.00
Kirtland									
1,800.0	12.00	49.33	1,795.6	40.8	47.5	62.6	2.00	2.00	0.00
1,900.0	14.00	49.33	1,893.1	55.5	64.5	85.1	2.00	2.00	0.00
1,968.2	15.36	49.33	1,959.0	66.7	77.7	102.4	2.00	2.00	0.00
Fruitland									
2,000.0	16.00	49.33	1,989.6	72.3	84.2	111.0	2.00	2.00	0.00
2,100.0	18.00	49.33	2,085.3	91.4	106.4	140.2	2.00	2.00	0.00
2,200.0	20.00	49.33	2,179.8	112.6	131.0	172.8	2.00	2.00	0.00
2,300.0	22.00	49.33	2,273.2	135.9	158.2	208.6	2.00	2.00	0.00
2,325.5	22.51	49.33	2,296.8	142.2	165.6	218.3	2.00	2.00	0.00
2,400.0	22.51	49.33	2,365.6	160.8	187.2	246.8	0.00	0.00	0.00
2,404.8	22.51	49.33	2,370.0	162.0	188.6	248.6	0.00	0.00	0.00
Pictured Cliffs									
2,493.5	22.51	49.33	2,452.0	184.2	214.3	282.6	0.00	0.00	0.00
Lewis									
2,500.0	22.51	49.33	2,458.0	185.8	216.2	285.1	0.00	0.00	0.00
2,600.0	22.51	49.33	2,550.4	210.7	245.3	323.4	0.00	0.00	0.00
2,700.0	22.51	49.33	2,642.7	235.7	274.3	361.6	0.00	0.00	0.00
2,800.0	22.51	49.33	2,735.1	260.6	303.3	399.9	0.00	0.00	0.00
2,828.0	22.51	49.33	2,761.0	267.6	311.5	410.6	0.00	0.00	0.00
Huerfano Bentonite									
2,900.0	22.51	49.33	2,827.5	285.6	332.4	438.2	0.00	0.00	0.00
3,000.0	22.51	49.33	2,919.9	310.5	361.4	476.5	0.00	0.00	0.00
3,100.0	22.51	49.33	3,012.3	335.5	390.5	514.8	0.00	0.00	0.00
3,144.3	22.51	49.33	3,053.2	346.5	403.3	531.8	0.00	0.00	0.00
3,200.0	21.40	49.33	3,104.8	360.1	419.1	552.6	2.00	-2.00	0.00
3,300.0	19.40	49.33	3,198.6	382.8	445.6	587.4	2.00	-2.00	0.00
3,321.6	18.96	49.33	3,219.0	387.4	450.9	594.5	2.00	-2.00	0.00
Chacra									
3,400.0	17.40	49.33	3,293.5	403.4	469.5	619.0	2.00	-2.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hodges #12E
Company:	ConocoPhillips SJBU	TVD Reference:	RKB @ 6701.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6701.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Hodges #12E	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	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)
3,500.0	15.40	49.33	3,389.4	421.7	490.9	647.2	2.00	-2.00	0.00
3,600.0	13.40	49.33	3,486.2	438.0	509.8	672.1	2.00	-2.00	0.00
3,700.0	11.40	49.33	3,583.9	451.9	526.0	693.5	2.00	-2.00	0.00
3,800.0	9.40	49.33	3,682.3	463.7	539.7	711.6	2.00	-2.00	0.00
3,900.0	7.40	49.33	3,781.2	473.2	550.8	726.2	2.00	-2.00	0.00
3,921.0	6.98	49.33	3,802.0	474.9	552.8	728.8	2.00	-2.00	0.00
Upper Cliffhouse									
4,000.0	5.40	49.33	3,880.6	480.5	559.3	737.3	2.00	-2.00	0.00
4,059.7	4.20	49.33	3,940.0	483.7	563.1	742.3	2.00	-2.00	0.00
Massive Cliffhouse									
4,100.0	3.40	49.33	3,980.3	485.5	565.1	745.0	2.00	-2.00	0.00
4,119.8	3.00	49.33	4,000.0	486.2	565.9	746.1	2.00	-2.00	0.00
Menefee									
4,200.0	1.40	49.33	4,080.2	488.2	568.3	749.2	2.00	-2.00	0.00
4,269.8	0.00	0.00	4,150.0	488.8	568.9	750.0	2.00	-2.00	-70.63
7" Intermediate Casing - Hodges #12E - ICP									
4,300.0	0.00	0.00	4,180.2	488.8	568.9	750.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,280.2	488.8	568.9	750.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,380.2	488.8	568.9	750.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,480.2	488.8	568.9	750.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,580.2	488.8	568.9	750.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,680.2	488.8	568.9	750.0	0.00	0.00	0.00
4,815.8	0.00	0.00	4,696.0	488.8	568.9	750.0	0.00	0.00	0.00
Point Lookout									
4,900.0	0.00	0.00	4,780.2	488.8	568.9	750.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,880.2	488.8	568.9	750.0	0.00	0.00	0.00
5,100.0	0.00	0.00	4,980.2	488.8	568.9	750.0	0.00	0.00	0.00
5,140.8	0.00	0.00	5,021.0	488.8	568.9	750.0	0.00	0.00	0.00
Mancos									
5,200.0	0.00	0.00	5,080.2	488.8	568.9	750.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,180.2	488.8	568.9	750.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,280.2	488.8	568.9	750.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,380.2	488.8	568.9	750.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,480.2	488.8	568.9	750.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,580.2	488.8	568.9	750.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,680.2	488.8	568.9	750.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,780.2	488.8	568.9	750.0	0.00	0.00	0.00
5,903.8	0.00	0.00	5,784.0	488.8	568.9	750.0	0.00	0.00	0.00
Upper Gallup									
6,000.0	0.00	0.00	5,880.2	488.8	568.9	750.0	0.00	0.00	0.00
6,100.0	0.00	0.00	5,980.2	488.8	568.9	750.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,080.2	488.8	568.9	750.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,180.2	488.8	568.9	750.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,280.2	488.8	568.9	750.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,380.2	488.8	568.9	750.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,480.2	488.8	568.9	750.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,580.2	488.8	568.9	750.0	0.00	0.00	0.00
6,764.8	0.00	0.00	6,645.0	488.8	568.9	750.0	0.00	0.00	0.00
Greenhorn									
6,800.0	0.00	0.00	6,680.2	488.8	568.9	750.0	0.00	0.00	0.00
6,816.8	0.00	0.00	6,697.0	488.8	568.9	750.0	0.00	0.00	0.00
Graneros									

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hodges #12E
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6701.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6701.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Hodges #12E	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	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)
6,844.8	0.00	0.00	6,725.0	488.8	568.9	750.0	0.00	0.00	0.00
Two Wells									
6,900.0	0.00	0.00	6,780.2	488.8	568.9	750.0	0.00	0.00	0.00
6,929.8	0.00	0.00	6,810.0	488.8	568.9	750.0	0.00	0.00	0.00
Paguato									
6,992.8	0.00	0.00	6,873.0	488.8	568.9	750.0	0.00	0.00	0.00
Upper Cubero									
7,000.0	0.00	0.00	6,880.2	488.8	568.9	750.0	0.00	0.00	0.00
7,010.8	0.00	0.00	6,891.0	488.8	568.9	750.0	0.00	0.00	0.00
Lower Cubero									
7,073.8	0.00	0.00	6,954.0	488.8	568.9	750.0	0.00	0.00	0.00
Total Depth - Encinal - 4 1/2" Production Casing - Hodges #12E - PCP									

Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude Longitude
Hodges #12E - PCP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	6,954.0	488.8	568.9	1,978,935.64	546,690.77	36° 26' 18.972 N 107° 40' 28.564 W
Hodges #12E - ICP	- plan hits target center - Circle (radius 100.0)	0.00	0.00	4,150.0	488.8	568.9	1,978,935.64	546,690.77	36° 26' 18.972 N 107° 40' 28.564 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
230.0	230.0	9 5/8" Surface Casing	9-5/8	12-1/4	
4,269.8	4,150.0	7" Intermediate Casing	7	8-3/4	
7,073.8	6,954.0	4 1/2" Production Casing	4-1/2	6-1/4	

ConocoPhillips or its affiliates Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Hodges #12E
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6701.0ft (AWS RIGS)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6701.0ft (AWS RIGS)
Site:	Other Named Wells	North Reference:	True
Well:	Hodges #12E	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,828.0	2,761.0	Huerfano Bentonite		0.00		
2,404.8	2,370.0	Pictured Cliffs		0.00		
4,059.7	3,940.0	Massive Cliffhouse		0.00		
4,815.8	4,696.0	Point Lookout		0.00		
6,816.8	6,697.0	Graneros		0.00		
6,764.8	6,645.0	Greenhorn		0.00		
5,903.8	5,784.0	Upper Gallup		0.00		
2,493.5	2,452.0	Lewis		0.00		
6,929.8	6,810.0	Paguate		0.00		
3,321.6	3,219.0	Chacra		0.00		
5,140.8	5,021.0	Mancos		0.00		
6,844.8	6,725.0	Two Wells		0.00		
1,594.2	1,593.0	Ojo Alamo		0.00		
1,968.2	1,959.0	Fruitland		0.00		
6,992.8	6,873.0	Upper Cubero		0.00		
3,921.0	3,802.0	Upper Cliffhouse		0.00		
4,119.8	4,000.0	Menefee		0.00		
1,748.3	1,745.0	Kirtland		0.00		
7,073.8	6,954.0	Total Depth - Encinal		0.00		
7,010.8	6,891.0	Lower Cubero		0.00		

WELL FLAG

LATITUDE: 36.43727° N
LONGITUDE: 107.67715° W
CENTER OF PIT

LATITUDE: 36.43713° N
LONGITUDE: 107.67733° W
ELEVATION: 6663.1'
DATUM: NAD83 & NAVD88

CONOCOPHILLIPS COMAPNY

HODGES #12E

203' FSL & 91' FWL

LOCATED IN THE SW/4 SW/4 OF SECTION 34,

T26N, R8W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

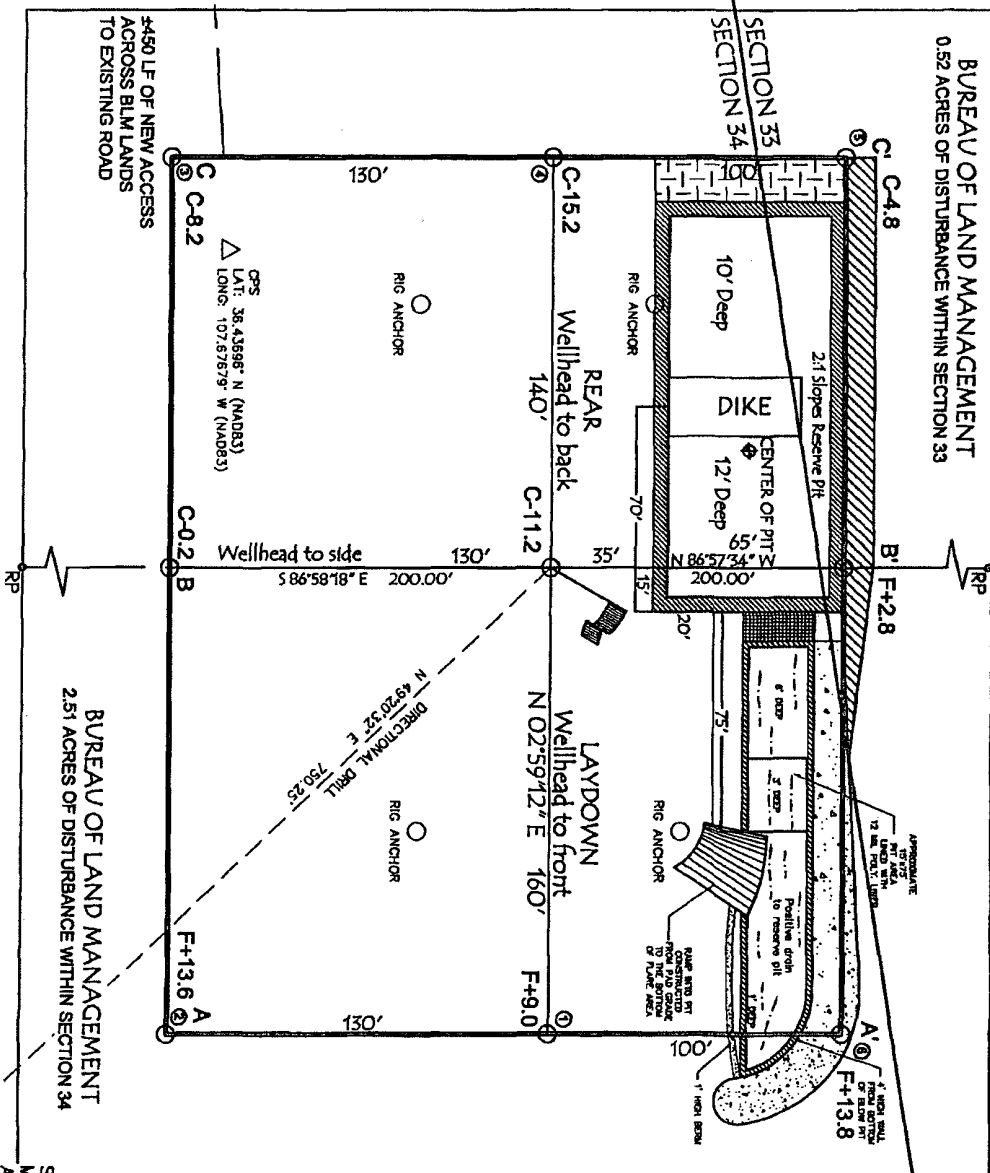
GROUND ELEVATION: 6686', NAVD 88

FINISHED PAD ELEVATION: 6675.1', NAVD 88

NOTES:

- 1.) BASIS OF BEARING: BETWEEN FOUND MONUMENTS AT THE SOUTHEAST CORNER AND THE SOUTHWEST CORNER OF SECTION 34, SAN JUAN COUNTY, NEW MEXICO. LINE BEARS: N 86°09'44" W A DISTANCE OF 550.24 FEET AS MEASURED BY G.P.S.
- 2.) LATITUDE, LONGITUDE AND ELLIPSOIDAL HEIGHTS BASED ON AZTEC COGS LT PHASE DISTANCES SHOWN ARE GROUND DISTANCES USING A TRAVERSE ALTERNATOR PROJECTION FROM A WGS84 ELLIPSOID, CONVERTED TO MAJOR ELEVATIONS AS PREDICTED BY GEODOL.
- 3.) LOCATION OF UNDERGROUND UTILITIES DETECTED ARE APPROXIMATE. PRIOR TO EXCAVATION UNDERGROUND UTILITIES SHOULD BE REVEALED. ALL CONSTRUCTION NEW MEDCO ONE-CALL AUTHORITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

BUREAU OF LAND MANAGEMENT
0.52 ACRES OF DISTURBANCE WITHIN SECTION 33



SLOPES TO BE CONSTRUCTED TO MATCH THE ORIGINAL CONTOURS AS CLOSE AS POSSIBLE.

Russell Surveying

1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637

TOTAL PERMITTED AREA
330' x 400' = 3.03 ACRES

SCALE: 1" = 60'

JOB No.: COPC373

DATE: 02/24/10

DRAWN BY: GRR

CONOCOPHILLIPS COMAPNY
HODGES #12E
203' FSL & 91' FWL
LOCATED IN THE SW/4 SW/4 OF SECTION 34,
T26N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

- 1) FROM POST OFFICE IN BLOOMFIELD, TRAVEL TO THE INTERSECTION OF HWY 64 AND HWY 550.
- 2) TRAVEL SOUTH ON HWY 550 FOR 23.5 MILES TO C.R. 7425.
- 3) TURN LEFT AND TRAVEL 9.3 MILES TO A "T" INTERSECTION.
- 4) TURN LEFT ON C.R. 7425, TRAVEL ACROSS THE BLANCO WASH FOR 0.5 MILES.
- 5) CONTINUE PAST THE BLANCO WASH FOR ANOTHER 3.0 MILES TO THE FLAGGED ACCESS ON THE LEFT.

WELL FLAG LOCATED AT LAT. 36.43727° N, LONG. 107.67715° W (NAD 83).

JOB No.: COPC373
DATE: 03/24/10



Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637