

Results of Directional Survey

5

API number:	30-025-40790		
OGRID:		Operator:	CONOCOPHILLIPS COMPANY
		Property:	WILDER 29 FEDERAL # 1H

surface	ULSTR:	A	29	T 26S	R 32E
				524 FNL	849 FEL

BH Loc	ULSTR:	P	29	T 26S	R 32E
13322	MD	9227.0	TVD	338 FSL	772 FEL
				4942 FNL	

Top Perf/OH	ULSTR:	A	29	T 26S	R 32E
9619	MD	9218.3	TVD	1241 FNL	857 FEL

Bot Perf/OH	ULSTR:	P	29	T 26S	R 32E
13123	MD	9225.3	TVD	537 FSL	780 FEL
				4743 FNL	

	MD	N/S	E/W	VD
	9572	-670.10	-11.00	9217.1
TOP PERFS/OH	9619	-717.00	-8.42	9218.29
	9663	-760.90	-6.00	9219.40
	13105	-4201.00	68.80	9224.90
BOT PERFS/OH	13123	-4218.98	69.38	9225.26
	13195	-4290.90	71.70	9226.70

NEXT TO LAST	13266	-4361.90	74.40	9227.00
LAST READING	13322	-4417.80	76.80	9227.00
TD	13322	-4417.80	76.80	9227.00

Surface Location	524	FN	849	FE
Projected BHL	4942	FN	772	FE
Location of				
Top Perfs/OH	1241	FN	857	FE
Bottom Perfs/OH	4743	FN	780	FE

SUMMARY of Subsurface Locations

Surface Location	A-29-26S-32E	524	FN	849	FE	Vert. Depth
Top Perfs/OH	A-29-26S-32E	1241	FN	857	FE	9218.29
Bottom Perfs/OH	P-29-26S-32E	4743	FN	780	FE	9225.26
Projected TD	P-29-26S-32E	4942	FN	772	FE	9227.00

FEB 25 2013



HOBBS OCD

JAN 28 2013

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Conoco Phillips

Lea County, New Mexico
Sec 29 T26S R32E
Wilder Federal 29 #1H

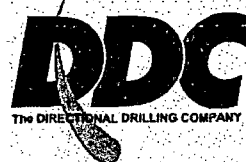
Wellbore #1

SUR: A-29-26s-32e, 524/N & 849/E
BHL: P-29-26s-32e, 4942/N & 772/E
API # 30-025-40790

Survey: MWD

DDC Survey Report

07 November, 2012



Company:	Conoco Phillips	Local Co-ordinate Reference:	Well Wilder Federal 29 #1H
Project:	Lea County, New Mexico	TVD Reference:	WELL @ 3155.0usft (Precision #827)
Site:	Sec 29 T26S R32E	MD Reference:	WELL @ 3155.0usft (Precision #827)
Well:	Wilder Federal 29 #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Lea County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Sec 29 T26S R32E			
Site Position:		Northing:	371,336.41 usft	Latitude:	32° 1' 9.447 N
From:	Map	Easting:	699,118.36 usft	Longitude:	103° 41' 27.155 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.34 °

Well:	Wilder Federal 29 #1H				
Well Position	+N-S	0.0 usft	Northing:	371,336.41 usft	Latitude: 32° 1' 9.447 N
	+E-W	0.0 usft	Easting:	699,118.36 usft	Longitude: 103° 41' 27.155 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level: 3,139.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/17/2012	7.46	59.94	48,348

Design:	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	178.96	

Survey Program		Date	11/7/2012	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
101.2	8,537.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
8,608.0	13,322.0	MWD (Wellbore #1)	MWD default	MWD - Standard

Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
TIE IN @ 8537' MD/ 8536' TVD									
8,537.0	2.13	219.78	8,535.4	-62.3	-43.8	61.5	0.00	0.00	0.00
8,608.0	2.40	220.20	8,606.4	-64.4	-45.6	63.6	0.38	0.38	0.59
8,653.0	5.80	210.10	8,651.2	-67.1	-47.4	66.2	7.70	7.56	-22.44
8,697.0	9.40	220.00	8,694.8	-71.8	-50.8	70.8	8.68	8.18	22.50
8,742.0	14.20	216.10	8,738.9	-79.1	-56.4	78.0	10.81	10.67	-8.67
8,787.0	18.60	209.30	8,782.0	-89.8	-63.2	88.6	10.65	9.78	-15.11
8,832.0	23.00	203.10	8,824.1	-104.1	-70.1	102.8	10.92	9.78	-13.78
8,876.0	26.20	196.10	8,864.1	-121.4	-76.2	120.0	9.83	7.27	-15.91
8,921.0	29.20	188.50	8,904.0	-141.8	-80.6	140.3	10.29	6.67	-16.89

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Site:	Sec 29 T26S R32E	MD Reference:	WELL @ 3155.0usft (Precision #827)
Well:	Wilder Federal 29 #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,966.0	31.70	180.60	8,942.8	-164.5	-82.3	163.0	10.48	5.56	-17.56
9,010.0	36.30	175.70	8,979.2	-189.0	-81.5	187.5	12.16	10.45	-11.14
9,055.0	41.50	174.50	9,014.3	-217.2	-79.0	215.7	11.68	11.56	-2.67
9,100.0	45.50	172.70	9,046.9	-248.0	-75.6	246.6	9.30	8.89	-4.00
9,144.0	49.80	173.60	9,076.5	-280.2	-71.7	278.9	9.89	9.77	2.05
9,189.0	54.30	171.30	9,104.2	-315.4	-67.0	314.1	10.78	10.00	-5.11
9,233.0	59.40	167.80	9,128.3	-351.6	-60.3	350.5	13.37	11.59	-7.95
9,278.0	64.20	166.20	9,149.5	-390.2	-51.4	389.2	11.12	10.67	-3.56
9,323.0	67.90	166.40	9,167.8	-430.2	-41.7	429.4	8.23	8.22	0.44
9,367.0	71.60	167.30	9,183.0	-470.4	-32.3	469.7	8.63	8.41	2.05
9,412.0	74.90	170.10	9,196.0	-512.6	-23.8	512.1	9.45	7.33	6.22
9,457.0	78.80	173.90	9,206.2	-556.0	-17.7	555.6	11.95	8.67	8.44
9,502.0	83.40	177.30	9,213.2	-600.3	-14.3	599.9	12.66	10.22	7.56
9,512.0	84.40	177.30	9,214.2	-610.2	-13.9	609.9	10.00	10.00	0.00
9,560.0	89.20	177.30	9,216.9	-658.1	-11.6	657.8	10.00	10.00	0.00
9,572.0	88.60	176.90	9,217.1	-670.1	-11.0	669.8	6.01	-5.00	-3.33
9,663.0	88.60	176.80	9,219.4	-760.9	-6.0	760.7	0.11	0.00	-0.11
9,753.0	90.30	177.60	9,220.2	-850.8	-1.6	850.6	2.09	1.89	0.89
9,844.0	90.50	177.10	9,219.6	-941.7	2.6	941.6	0.59	0.22	-0.55
9,934.0	90.90	178.70	9,218.5	-1,031.6	5.9	1,031.6	1.83	0.44	1.78
10,025.0	90.90	178.00	9,217.1	-1,122.6	8.5	1,122.5	0.77	0.00	-0.77
10,116.0	90.40	179.60	9,216.0	-1,213.5	10.4	1,213.5	1.84	-0.55	1.76
10,206.0	90.60	179.40	9,215.3	-1,303.5	11.2	1,303.5	0.31	0.22	-0.22
10,297.0	91.00	178.90	9,214.0	-1,394.5	12.5	1,394.5	0.70	0.44	-0.55
10,388.0	90.50	180.30	9,212.8	-1,485.5	13.2	1,485.5	1.63	-0.55	1.54
10,478.0	88.60	178.50	9,213.5	-1,575.5	14.1	1,575.5	2.91	-2.11	-2.00
10,569.0	88.70	178.90	9,215.6	-1,666.4	16.2	1,666.5	0.45	0.11	0.44
10,659.0	88.40	179.00	9,217.9	-1,756.4	17.8	1,756.4	0.35	-0.33	0.11
10,750.0	88.40	179.60	9,220.5	-1,847.4	18.9	1,847.4	0.66	0.00	0.66
10,840.0	89.60	179.60	9,222.0	-1,937.3	19.6	1,937.4	1.33	1.33	0.00
10,931.0	90.40	178.00	9,222.0	-2,028.3	21.5	2,028.4	1.97	0.88	-1.76
11,022.0	90.60	178.50	9,221.2	-2,119.3	24.3	2,119.4	0.59	0.22	0.55
11,112.0	90.30	178.30	9,220.5	-2,209.2	26.8	2,209.4	0.40	-0.33	-0.22
11,203.0	91.00	178.70	9,219.5	-2,300.2	29.2	2,300.3	0.89	0.77	0.44
11,293.0	89.70	178.50	9,218.9	-2,390.2	31.4	2,390.3	1.46	-1.44	-0.22
11,384.0	89.70	178.50	9,219.4	-2,481.1	33.7	2,481.3	0.00	0.00	0.00
11,475.0	89.90	178.50	9,219.7	-2,572.1	36.1	2,572.3	0.22	0.22	0.00
11,565.0	88.60	180.30	9,220.9	-2,662.1	37.1	2,662.3	2.47	-1.44	2.00
11,656.0	88.60	180.40	9,223.1	-2,753.1	36.5	2,753.3	0.11	0.00	0.11
11,746.0	88.60	181.00	9,225.3	-2,843.0	35.4	2,843.2	0.67	0.00	0.67
11,837.0	90.40	179.90	9,226.1	-2,934.0	34.7	2,934.2	2.32	1.98	-1.21
11,927.0	91.00	179.00	9,225.0	-3,024.0	35.6	3,024.1	1.20	0.67	-1.00
12,018.0	92.00	176.80	9,222.7	-3,114.9	38.9	3,115.1	2.65	1.10	-2.42

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Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,108.0	92.00	176.80	9,219.5	-3,204.7	43.9	3,205.0	0.00	0.00	0.00
12,199.0	89.10	176.80	9,218.6	-3,295.5	49.0	3,295.9	3.19	-3.19	0.00
12,289.0	90.80	179.20	9,218.7	-3,385.5	52.1	3,385.9	3.27	1.89	2.67
12,380.0	89.90	180.60	9,218.2	-3,476.5	52.3	3,476.9	1.83	-0.99	1.54
12,471.0	89.20	179.60	9,218.9	-3,567.5	52.1	3,567.8	1.34	-0.77	-1.10
12,561.0	90.00	179.60	9,219.5	-3,657.5	52.8	3,657.8	0.89	0.89	0.00
12,652.0	91.80	177.60	9,218.1	-3,748.4	55.0	3,748.8	2.96	1.98	-2.20
12,742.0	90.40	177.80	9,216.3	-3,838.3	58.6	3,838.8	1.57	-1.56	0.22
12,833.0	90.50	177.80	9,215.6	-3,929.3	62.1	3,929.7	0.11	0.11	0.00
12,924.0	87.30	178.30	9,217.4	-4,020.2	65.2	4,020.7	3.56	-3.52	0.55
13,014.0	87.50	179.40	9,221.5	-4,110.1	67.0	4,110.6	1.24	0.22	1.22
13,105.0	88.20	178.30	9,224.9	-4,201.0	68.8	4,201.5	1.43	0.77	-1.21
13,195.0	89.50	178.00	9,226.7	-4,290.9	71.7	4,291.5	1.48	1.44	-0.33
13,266.0	90.00	177.60	9,227.0	-4,361.9	74.4	4,362.5	0.90	0.70	-0.56
TD @ 13322" MD/ 9227" TVD									
13,322.0	90.00	177.60	9,227.0	-4,417.8	76.8	4,418.5	0.00	0.00	0.00

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,537.0	8,535.4	-62.3	-43.8	TIE IN @ 8537' MD/ 8536' TVD
13,322.0	9,227.0	-4,417.8	76.8	TD @ 13322" MD/ 9227" TVD

Checked By: _____ Approved By: _____ Date: _____