Results of Directional Survey

API number:	30-025-40414			
OGRID:		Operator:	CONOCOPHILLIPS COMPANY	
		Property:	RED HILLS WEST 16 STATE	# 5H

surface	ULSTR:	D	16	T	26S	R	32E
				180	FNL	690	FWL

BH Loc	ULSTR:	M	16	T	26S	R	32E
13616	MD	9309.1	TVD	234	FSL	943	FWL
				5046	FNL		

Top Perf/OH	ULSTR:	D	16	T	26S	R	32E
9849	MD	9280.3	TVD	1282	FNL	916	FWL

Bot Perf/OH	ULSTR:	M	16	T	26S	R	32E
13525	MD	9306.3	TVD	325	FSL	949	FWL
				4955	FNL		

	MD	N/S	E/W	VD
	9762	-1015.00	225.70	9281.8
TOP PERFS/OH	**9849**	-1101.90	225.99	9280.27
	9853	-1105.90	226.00	9280.20
	13480	-4730.60	261.90	9304.80
BOT PERFS/OH	**13525**	-4775.44	258.69	9306.25
	13564	-4814.30	255.90	9307.50

NEXT TO LAST	13564	-4814.30	255.90	9307.50
LAST READING	13616	-4866.20	252.60	9309.10
TD	**13616**	-4866.20	252.60	9309.10

Surface Location	180	FN	690	FW
Projected BHL	5046	FN	943	FW
Location of				
Top Perfs/OH	1282	FN	916	FW
Bottom Perfs/OH	4955	FN	949	FW

SUMMARY of Subsurface Locations

Surface Location	D-16-26S-32E	180	FN	690	FW	Vert. Depth
Top Perfs/OH	D-16-26S-32E	1282	FN	916	FW	9280.27
Bottom Perfs/OH	M-16-26S-32E	4955	FN	949	FW	9306.25
Projected TD	M-16-26S-32E	5046	FN	943	FW	9309.10

SEP 05 2013

ConocoPhillips

Conoco Phillips

Lea County, New Mexico
Sec 16, T26S, R32E NMPM
Red Hills West 16 State 5H

Wellbore #1

Survey: DDC MWD

DDC Survey Report

11 October, 2012

DDC
The DIRECTIONAL DRILLING COMPANY

Company:	Conoco Phillips	**Local Co-ordinate Reference:**	Well Red Hills West 16 State 5H
Project:	Lea County, New Mexico	**TVD Reference:**	WELL @ 3216.0usft (Precision #827)
Site:	Sec 16, T26S, R32E NMPM	**MD Reference:**	WELL @ 3216.0usft (Precision #827)
Well:	Red Hills West 16 State 5H	**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 16, T26S, R32E NMPM

Site Position:		**Northing:**	382,382.50 usft	**Latitude:**	32° 2' 58.675 N
From:	Map	**Easting:**	700,544.80 usft	**Longitude:**	103° 41' 9.818 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.34 °

Well Red Hills West 16 State 5H

Well Position	**+N/-S**	0.0 usft	**Northing:**	382,382.90 usft	**Latitude:**	32° 2' 58.676 N
	+E/-W	0.0 usft	**Easting:**	700,594.80 usft	**Longitude:**	103° 41' 9.237 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,200.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/29/2012	7.50	59.98	48,396

Design Wellbore #1

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	176.84

Survey Program Date 10/11/2012

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
255.0	788.0	Teledrift Surveys (Wellbore #1)	Good_gyro	Good Gyro
857.0	13,616.0	DDC MWD (Wellbore #1)	MWD default	MWD - Standard

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)
788.0	3.30	179.60	787.7	-10.3	-1.4	10.2	0.00	0.00	0.00
TIE IN @ 788' MD / 788' TVD									
788.1	3.30	179.60	787.8	-10.3	-1.4	10.2	0.00	0.00	0.00
857.0	4.40	168.80	856.5	-14.9	-0.9	14.8	1.91	1.60	-15.67
991.0	5.20	142.10	990.1	-24.7	3.9	24.9	1.75	0.60	-19.93
1,080.0	4.60	132.90	1,078.8	-30.4	9.0	30.8	1.11	-0.67	-10.34
1,170.0	4.00	105.00	1,168.5	-33.6	14.6	34.4	2.39	-0.67	-31.00
1,259.0	4.30	93.00	1,257.3	-34.6	21.0	35.7	1.03	0.34	-13.48
1,349.0	6.20	85.50	1,346.9	-34.4	29.2	36.0	2.24	2.11	-8.33
1,438.0	7.60	88.10	1,435.3	-33.8	39.9	36.0	1.61	1.57	2.92

Company:	Conoco Phillips	**Local Co-ordinate Reference:**	Well Red Hills West 16 State 5H
Project:	Lea County, New Mexico	**TVD Reference:**	WELL @ 3216.0usft (Precision #827)
Site:	Sec 16, T26S, R32E NMPM	**MD Reference:**	WELL @ 3216.0usft (Precision #827)
Well:	Red Hills West 16 State 5H	**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)
1,527.0	7.00	86.00	1,523.5	-33.3	51.1	36.0	0.74	-0.67	-2.36
1,617.0	5.60	77.60	1,613.0	-31.9	60.9	35.2	1.86	-1.56	-9.33
1,706.0	5.50	74.70	1,701.6	-29.9	69.3	33.6	0.33	-0.11	-3.26
1,796.0	6.40	78.80	1,791.1	-27.8	78.3	32.0	1.11	1.00	4.56
1,885.0	7.10	82.50	1,879.5	-26.1	88.7	30.9	0.93	0.79	4.16
1,974.0	8.60	84.90	1,967.6	-24.8	100.7	30.3	1.72	1.69	2.70
2,064.0	9.00	87.60	2,056.6	-23.9	114.5	30.1	0.64	0.44	3.00
2,153.0	7.10	90.70	2,144.7	-23.6	126.9	30.6	2.19	-2.13	3.48
2,243.0	5.00	90.70	2,234.2	-23.8	136.4	31.2	2.33	-2.33	0.00
2,332.0	5.20	89.00	2,322.8	-23.7	144.3	31.7	0.28	0.22	-1.91
2,422.0	6.00	89.00	2,412.4	-23.6	153.1	32.0	0.89	0.89	0.00
2,511.0	7.50	92.30	2,500.8	-23.7	163.6	32.7	1.74	1.69	3.71
2,600.0	8.80	100.80	2,588.9	-25.2	176.1	34.9	1.99	1.46	9.55
2,690.0	8.40	118.20	2,677.9	-29.6	188.6	40.0	2.91	-0.44	19.33
2,780.0	6.40	143.50	2,767.2	-36.8	197.4	47.6	4.20	-2.22	28.11
2,869.0	3.60	195.10	2,855.8	-43.5	199.6	54.4	5.65	-3.15	57.98
2,959.0	3.20	245.40	2,945.7	-47.2	196.6	58.0	3.23	-0.44	55.89
3,049.0	1.80	229.30	3,035.6	-49.2	193.2	59.8	1.73	-1.56	-17.89
3,138.0	1.80	190.60	3,124.6	-51.5	191.9	62.0	1.34	0.00	-43.48
3,228.0	2.30	177.60	3,214.5	-54.7	191.7	65.2	0.76	0.56	-14.44
3,317.0	2.70	177.60	3,303.4	-58.6	191.9	69.1	0.45	0.45	0.00
3,407.0	2.70	166.50	3,393.3	-62.8	192.5	73.3	0.58	0.00	-12.33
3,496.0	1.90	192.50	3,482.3	-66.2	192.7	76.8	1.46	-0.90	29.21
3,586.0	2.00	213.60	3,572.2	-69.0	191.5	79.4	0.80	0.11	23.44
3,675.0	2.10	226.30	3,661.2	-71.4	189.4	81.8	0.52	0.11	14.27
3,765.0	2.20	203.40	3,751.1	-74.1	187.5	84.4	0.95	0.11	-25.44
3,854.0	3.20	186.90	3,840.0	-78.2	186.6	88.3	1.41	1.12	-18.54
3,944.0	2.70	161.60	3,929.9	-82.7	186.9	92.9	1.53	-0.56	-28.11
4,032.0	3.30	156.50	4,017.8	-87.0	188.6	97.2	0.75	0.68	-5.80
4,121.0	2.70	158.20	4,106.6	-91.3	190.4	101.6	0.68	-0.67	1.91
4,210.0	2.50	159.30	4,195.6	-95.0	191.9	105.5	0.23	-0.22	1.24
4,299.0	2.60	162.40	4,284.5	-98.8	193.2	109.3	0.19	0.11	3.48
4,389.0	2.90	166.00	4,374.4	-102.9	194.3	113.5	0.38	0.33	4.00
4,469.0	3.10	171.20	4,454.2	-107.0	195.2	117.6	0.42	0.25	6.50
4,558.0	4.40	165.30	4,543.1	-112.7	196.4	123.4	1.52	1.46	-6.63
4,648.0	5.90	153.30	4,632.7	-120.2	199.3	131.0	2.04	1.67	-13.33
4,737.0	4.10	154.70	4,721.4	-127.1	202.8	138.1	2.03	-2.02	1.57
4,826.0	0.80	183.20	4,810.3	-130.6	204.1	141.7	3.84	-3.71	32.02
4,915.0	0.70	204.30	4,899.3	-131.8	203.8	142.8	0.33	-0.11	23.71
5,005.0	1.70	136.40	4,989.2	-133.2	204.5	144.3	1.75	1.11	-75.44
5,094.0	1.50	173.90	5,078.2	-135.3	205.6	146.5	1.18	-0.22	42.13
5,183.0	1.50	161.10	5,167.2	-137.6	206.1	148.7	0.38	0.00	-14.38
5,273.0	1.40	141.90	5,257.1	-139.6	207.1	150.8	0.55	-0.11	-21.33

Company:	Conoco Phillips	**Local Co-ordinate Reference:**	Well Red Hills West 16 State 5H
Project:	Lea County, New Mexico	**TVD Reference:**	WELL @ 3216.0usft (Precision #827)
Site:	Sec 16, T26S, R32E NMPM	**MD Reference:**	WELL @ 3216.0usft (Precision #827)
Well:	Red Hills West 16 State 5H	**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)
5,362.0	1.50	144.50	5,346.1	-141.4	208.5	152.7	0.13	0.11	2.92
5,452.0	1.30	145.60	5,436.1	-143.2	209.7	154.5	0.22	-0.22	1.22
5,541.0	1.20	141.90	5,525.1	-144.7	210.9	156.2	0.14	-0.11	-4.16
5,630.0	1.10	131.20	5,614.0	-146.0	212.1	157.5	0.27	-0.11	-12.02
5,720.0	1.40	173.50	5,704.0	-147.7	212.9	159.2	1.05	0.33	47.00
CROSSED HARD LINE @ 5809' MD / 5793' TVD									
5,809.0	1.60	177.80	5,793.0	-150.0	213.0	161.5	0.26	0.22	4.83
5,898.0	1.50	167.00	5,882.0	-152.4	213.3	163.9	0.35	-0.11	-12.13
5,988.0	1.10	162.80	5,971.9	-154.4	213.9	165.9	0.46	-0.44	-4.67
6,077.0	1.10	159.10	6,060.9	-156.0	214.4	167.6	0.08	0.00	-4.16
6,166.0	1.20	161.60	6,149.9	-157.7	215.0	169.3	0.13	0.11	2.81
6,256.0	1.10	170.70	6,239.9	-159.4	215.5	171.1	0.23	-0.11	10.11
6,345.0	1.00	147.00	6,328.9	-160.9	216.0	172.6	0.50	-0.11	-26.63
6,434.0	1.10	142.20	6,417.9	-162.2	217.0	174.0	0.15	0.11	-5.39
6,524.0	0.90	144.50	6,507.8	-163.5	217.9	175.3	0.23	-0.22	2.56
6,613.0	1.10	150.70	6,596.8	-164.8	218.7	176.6	0.26	0.22	6.97
6,702.0	1.10	152.10	6,685.8	-166.3	219.5	178.2	0.03	0.00	1.57
6,792.0	1.10	163.30	6,775.8	-167.9	220.2	179.8	0.24	0.00	12.44
6,881.0	1.10	169.70	6,864.8	-169.6	220.6	181.5	0.14	0.00	7.19
6,970.0	1.70	172.60	6,953.8	-171.7	220.9	183.6	0.68	0.67	3.26
7,060.0	1.90	156.30	7,043.7	-174.4	221.7	186.4	0.61	0.22	-18.11
7,149.0	1.20	146.50	7,132.7	-176.5	222.8	188.5	0.84	-0.79	-11.01
7,238.0	1.20	150.90	7,221.7	-178.1	223.8	190.2	0.10	0.00	4.94
7,328.0	0.90	152.60	7,311.6	-179.6	224.5	191.7	0.34	-0.33	1.89
7,417.0	1.10	154.00	7,400.6	-181.0	225.2	193.1	0.23	0.22	1.57
7,506.0	1.60	167.70	7,489.6	-182.9	225.9	195.1	0.66	0.56	15.39
7,596.0	1.70	176.90	7,579.6	-185.5	226.2	197.7	0.31	0.11	10.22
7,685.0	1.90	146.80	7,668.5	-188.1	227.1	200.3	1.07	0.22	-33.82
7,774.0	2.40	145.20	7,757.5	-190.8	229.0	203.2	0.57	0.56	-1.80
7,864.0	0.40	53.80	7,847.4	-192.2	230.3	204.6	2.71	-2.22	-101.56
7,953.0	0.40	33.10	7,936.4	-191.7	230.7	204.2	0.16	0.00	-23.26
8,042.0	0.30	40.60	8,025.4	-191.3	231.0	203.7	0.12	-0.11	8.43
8,132.0	0.10	347.50	8,115.4	-191.0	231.2	203.5	0.28	-0.22	-59.00
8,221.0	0.20	207.60	8,204.4	-191.1	231.1	203.6	0.32	0.11	-157.19
8,311.0	0.30	238.00	8,294.4	-191.4	230.8	203.8	0.18	0.11	33.78
8,428.0	0.30	210.60	8,411.4	-191.8	230.4	204.2	0.12	0.00	-23.42
8,473.0	0.40	199.20	8,456.4	-192.1	230.3	204.5	0.27	0.22	-25.33
8,518.0	3.30	193.20	8,501.4	-193.5	229.9	205.8	6.45	6.44	-13.33
8,562.0	7.70	188.10	8,545.2	-197.6	229.2	209.9	10.05	10.00	-11.59
8,607.0	12.20	185.70	8,589.5	-205.3	228.3	217.6	10.04	10.00	-5.33
8,652.0	15.80	180.60	8,633.2	-216.2	227.8	228.4	8.45	8.00	-11.33
8,696.0	19.30	175.60	8,675.1	-229.4	228.3	241.7	8.65	7.95	-11.36
8,741.0	22.80	174.80	8,717.1	-245.5	229.7	257.8	7.80	7.78	-1.78
8,785.0	25.20	176.30	8,757.3	-263.4	231.0	275.7	5.63	5.45	3.41

Company:	Conoco Phillips	**Local Co-ordinate Reference:**	Well Red Hills West 16 State 5H
Project:	Lea County, New Mexico	**TVD Reference:**	WELL @ 3216.0usft (Precision #827)
Site:	Sec 16, T26S, R32E NMPM	**MD Reference:**	WELL @ 3216.0usft (Precision #827)
Well:	Red Hills West 16 State 5H	**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)
8,830.0	26.90	177.20	8,797.7	-283.1	232.2	295.5	3.88	3.78	2.00
8,875.0	29.30	178.40	8,837.4	-304.3	233.0	316.7	5.48	5.33	2.67
8,920.0	30.70	181.60	8,876.4	-326.8	232.9	339.1	4.72	3.11	7.11
8,964.0	33.50	183.60	8,913.7	-350.1	231.9	362.4	6.81	6.36	4.55
9,009.0	36.10	182.00	8,950.6	-375.8	230.6	387.9	6.12	5.78	-3.56
9,054.0	38.40	179.00	8,986.4	-403.0	230.4	415.1	6.51	5.11	-6.67
9,098.0	41.80	178.10	9,020.1	-431.3	231.1	443.4	7.84	7.73	-2.05
9,143.0	44.50	179.00	9,052.9	-462.1	231.9	474.2	6.15	6.00	2.00
9,188.0	46.80	180.00	9,084.4	-494.3	232.2	506.3	5.35	5.11	2.22
9,232.0	49.20	180.90	9,113.8	-527.0	231.9	539.0	5.66	5.45	2.05
9,277.0	52.40	181.10	9,142.2	-561.8	231.3	573.7	7.12	7.11	0.44
9,322.0	56.40	180.00	9,168.4	-598.4	231.0	610.2	9.11	8.89	-2.44
9,366.0	59.50	178.30	9,191.8	-635.7	231.5	647.5	7.77	7.05	-3.86
9,411.0	62.40	177.60	9,213.6	-675.0	232.9	686.8	6.59	6.44	-1.56
9,456.0	66.70	179.00	9,233.0	-715.6	234.1	727.4	9.96	9.56	3.11
9,500.0	71.10	180.90	9,248.8	-756.6	234.2	768.4	10.78	10.00	4.32
9,545.0	75.90	182.90	9,261.6	-799.8	232.7	811.4	11.49	10.67	4.44
9,590.0	80.10	183.70	9,270.9	-843.7	230.2	855.1	9.49	9.33	1.78
9,635.0	83.70	183.00	9,277.3	-888.2	227.6	899.3	8.15	8.00	-1.56
9,679.0	87.20	180.90	9,280.8	-932.0	226.1	943.0	9.27	7.95	-4.77
9,762.0	91.30	179.70	9,281.8	-1,015.0	225.7	1,025.8	5.15	4.94	-1.45
9,853.0	90.80	179.90	9,280.2	-1,105.9	226.0	1,116.7	0.59	-0.55	0.22
9,944.0	88.20	179.30	9,281.0	-1,196.9	226.6	1,207.6	2.93	-2.86	-0.66
10,035.0	87.00	178.40	9,284.8	-1,287.8	228.4	1,298.5	1.65	-1.32	-0.99
10,125.0	87.20	179.70	9,289.3	-1,377.7	229.9	1,388.3	1.46	0.22	1.44
10,216.0	88.90	177.90	9,292.4	-1,468.6	231.8	1,479.2	2.72	1.87	-1.98
10,307.0	90.00	178.80	9,293.3	-1,559.6	234.5	1,570.1	1.56	1.21	0.99
10,397.0	89.50	179.30	9,293.7	-1,649.6	235.9	1,660.1	0.79	-0.56	0.56
10,488.0	90.30	180.90	9,293.9	-1,740.6	235.8	1,750.9	1.97	0.88	1.76
10,579.0	90.00	178.30	9,293.6	-1,831.5	236.4	1,841.8	2.88	-0.33	-2.86
10,669.0	90.10	178.80	9,293.5	-1,921.5	238.7	1,931.7	0.57	0.11	0.56
10,760.0	91.40	179.90	9,292.3	-2,012.5	239.7	2,022.6	1.87	1.43	1.21
10,851.0	90.00	177.80	9,291.2	-2,103.5	241.6	2,113.6	2.77	-1.54	-2.31
10,941.0	90.80	177.00	9,290.6	-2,193.4	245.6	2,203.6	1.26	0.89	-0.89
11,032.0	89.30	178.60	9,290.5	-2,284.3	249.1	2,294.6	2.41	-1.65	1.76
11,123.0	90.00	180.40	9,291.1	-2,375.3	249.9	2,385.4	2.12	0.77	1.98
11,214.0	88.30	180.70	9,292.4	-2,466.3	249.1	2,476.2	1.90	-1.87	0.33
11,304.0	89.20	180.90	9,294.4	-2,556.2	247.8	2,566.0	1.02	1.00	0.22
11,395.0	88.50	183.60	9,296.2	-2,647.1	244.2	2,656.6	3.06	-0.77	2.97
11,485.0	88.10	182.30	9,298.9	-2,737.0	239.6	2,746.0	1.51	-0.44	-1.44
11,576.0	89.10	179.70	9,301.1	-2,827.9	238.0	2,836.7	3.06	1.10	-2.86
11,667.0	91.40	178.80	9,300.7	-2,918.9	239.2	2,927.7	2.71	2.53	-0.99
11,757.0	90.80	177.40	9,299.0	-3,008.8	242.2	3,017.6	1.69	-0.67	-1.56

Company:	Conoco Phillips	**Local Co-ordinate Reference:**	Well Red Hills West 16 State 5H
Project:	Lea County, New Mexico	**TVD Reference:**	WELL @ 3216.0usft (Precision #827)
Site:	Sec 16, T26S, R32E NMPM	**MD Reference:**	WELL @ 3216.0usft (Precision #827)
Well:	Red Hills West 16 State 5H	**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)
11,848.0	90.50	176.20	9,298.0	-3,099.7	247.3	3,108.6	1.36	-0.33	-1.32
11,939.0	88.30	179.70	9,298.9	-3,190.6	250.5	3,199.6	4.54	-2.42	3.85
12,030.0	88.00	180.00	9,301.9	-3,281.6	250.8	3,290.4	0.47	-0.33	0.33
12,120.0	87.70	178.80	9,305.2	-3,371.5	251.7	3,380.2	1.37	-0.33	-1.33
12,211.0	90.70	178.40	9,306.5	-3,462.4	253.9	3,471.2	3.33	3.30	-0.44
12,302.0	90.80	180.40	9,305.3	-3,553.4	254.9	3,562.1	2.20	0.11	2.20
12,392.0	89.00	179.30	9,305.5	-3,643.4	255.1	3,651.9	2.34	-2.00	-1.22
12,483.0	88.30	178.40	9,307.6	-3,734.4	256.9	3,742.9	1.25	-0.77	-0.99
12,574.0	89.40	180.00	9,309.4	-3,825.3	258.2	3,833.8	2.13	1.21	1.76
12,664.0	89.20	179.30	9,310.5	-3,915.3	258.8	3,923.6	0.81	-0.22	-0.78
12,755.0	88.40	179.30	9,312.4	-4,006.3	259.9	4,014.5	0.88	-0.88	0.00
12,846.0	89.20	179.70	9,314.3	-4,097.3	260.7	4,105.4	0.98	0.88	0.44
12,936.0	89.60	178.40	9,315.3	-4,187.3	262.2	4,195.3	1.51	0.44	-1.44
13,027.0	90.90	177.40	9,314.9	-4,278.2	265.5	4,286.3	1.80	1.43	-1.10
13,118.0	93.40	177.80	9,311.5	-4,369.0	269.3	4,377.2	2.78	2.75	0.44
13,208.0	91.60	178.60	9,307.6	-4,458.9	272.1	4,467.1	2.19	-2.00	0.89
13,299.0	90.80	181.60	9,305.6	-4,549.9	272.0	4,558.0	3.41	-0.88	3.30
13,390.0	91.00	183.40	9,304.2	-4,640.8	268.0	4,648.5	1.99	0.22	1.98
13,480.0	88.20	184.40	9,304.8	-4,730.6	261.9	4,737.8	3.30	-3.11	1.11
13,564.0	88.20	183.70	9,307.5	-4,814.3	255.9	4,821.1	0.83	0.00	-0.83
TD @ 13616' MD / 9309' TVD									
13,616.0	88.20	183.70	9,309.1	-4,866.2	252.6	4,872.7	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
788.1	787.8	-10.3	-1.4	TIE IN @ 788' MD / 788' TVD
5,809.0	5,793.0	-150.0	213.0	CROSSED HARD LINE @ 5809' MD / 5793' TVD
13,616.0	9,309.1	-4,866.2	252.6	TD @ 13616' MD / 9309' TVD

Checked By:		Approved By:		Date:	

PROSHOT MWD BY TELEDRIFT
P.O.Box 94395
Oklahoma City, OK 73143-4395
Ph : 405-631-4882

TELEDRIFT CANADA
Bay 7 4275 78th Ave SE
Calgary, Alberta P2C2Y4
Ph : 403-203-0840

Survey FileName : Conoco-Red Hills16 State #5H-18SEP12.psd
Tool Type : PROSHOT
Job ID : Conoco
Well Name : Red Hill West 16 State #5H
Company : Conoco
Contractor : Precision #827
API Number :
Location : Midland
Start Date : 18 SEP 12
North Correction : 7.6

Notes :

Depth is in feet

All azimuths are referenced to TRUE NORTH and corrected with the north correction above

Survey Number	Survey Depth	Date	Time	Inc	Azimuth
Tie_in	0	18 SEP 2012	13:43	0.0	7.6
5	231	19 SEP 2012	08:35	0.3	266.6
11	445	19 SEP 2012	10:16	1.2	296.6
17	671	19 SEP 2012	12:33	3.3	157.6
18	716	19 SEP 2012	13:09	3.0	169.6
20	788	19 SEP 2012	14:33	3.3	179.6