



Anadarko Petroleum Corporation

Dacono

Dacono 11 Pad

Dacono 32-2 (111434)

Dacono 32-2

Survey: 32-2

Survey Report - Geographic

22 March, 2012

Survey Report - Geographic

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Dacono 32-2 (111434)
Project:	Dacono	TVD Reference:	KB @ 5031.00ft (Original Well Elev)
Site:	Dacono 11 Pad	MD Reference:	KB @ 5031.00ft (Original Well Elev)
Well:	Dacono 32-2 (111434)	North Reference:	True
Wellbore:	Dacono 32-2	Survey Calculation Method:	Minimum Curvature
Design:	Dacono 32-2	Database:	EDM5000-New

Project	Dacono		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	NAD83 Colorado - HARN		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	Dacono 11 Pad				
Site Position:		Northing:	14,556,637.29 usft	Latitude:	40.082118°N
From:	Lat/Long	Easting:	1,647,890.09 usft	Longitude:	104.973282°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	0.02 °

Well	Dacono 32-2 (111434)					
Well Position	+N/-S	0.00 ft	Northing:	14,556,547.34 usft	Latitude:	40.081871°N
	+E/-W	0.00 ft	Easting:	1,647,889.56 usft	Longitude:	104.973284°W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,016.00 ft

Wellbore	Dacono 32-2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/12/12	8.84	66.73	52,853

Design	Dacono 32-2				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	256.80	

Survey Program	Date	03/22/12			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
121.00	8,663.00	32-2 (Dacono 32-2)	MWD	MWD - Standard	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,556,547.34	1,647,889.56	40.081871°N	104.973284°W
121.00	0.40	14.12	121.00	0.41	0.10	14,556,547.75	1,647,889.66	40.081872°N	104.973284°W
213.00	1.01	277.70	212.99	0.83	-0.62	14,556,548.17	1,647,888.94	40.081873°N	104.973286°W
306.00	2.50	267.81	305.95	0.86	-3.46	14,556,548.20	1,647,886.10	40.081873°N	104.973297°W
413.00	4.39	264.30	412.75	0.37	-9.87	14,556,547.71	1,647,879.69	40.081872°N	104.973320°W
498.00	5.89	261.62	497.41	-0.59	-17.42	14,556,546.74	1,647,872.14	40.081869°N	104.973347°W
584.00	7.51	257.88	582.82	-2.42	-27.28	14,556,544.92	1,647,862.28	40.081864°N	104.973382°W
669.00	8.61	254.01	666.98	-5.33	-38.83	14,556,542.00	1,647,850.73	40.081856°N	104.973423°W
755.00	9.32	253.00	751.92	-9.14	-51.68	14,556,538.18	1,647,837.89	40.081846°N	104.973469°W
840.00	11.12	251.91	835.57	-13.70	-66.05	14,556,533.62	1,647,823.51	40.081833°N	104.973520°W
946.00	11.12	251.91	939.58	-20.05	-85.49	14,556,527.27	1,647,804.08	40.081816°N	104.973590°W
1,019.00	11.51	249.80	1,011.16	-24.75	-99.01	14,556,522.56	1,647,790.56	40.081803°N	104.973638°W

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Site:	Dacono 11 Pad	MD Reference:	KB @ 5031.00ft (Original Well Elev)
Well:	Dacono 32-2 (111434)	North Reference:	True
Wellbore:	Dacono 32-2	Survey Calculation Method:	Minimum Curvature
Design:	Dacono 32-2	Database:	EDM5000-New

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,105.00	12.39	251.20	1,095.30	-30.69	-115.80	14,556,516.62	1,647,773.77	40.081787°N	104.973698°W
1,190.00	13.71	256.21	1,178.10	-36.03	-134.22	14,556,511.28	1,647,755.36	40.081772°N	104.973764°W
1,276.00	16.39	254.89	1,261.15	-41.62	-155.83	14,556,505.68	1,647,733.74	40.081757°N	104.973841°W
1,361.00	18.19	252.61	1,342.30	-48.71	-180.07	14,556,498.58	1,647,709.50	40.081737°N	104.973928°W
1,447.00	20.30	253.49	1,423.49	-56.96	-207.19	14,556,490.32	1,647,682.39	40.081715°N	104.974025°W
1,532.00	20.39	250.72	1,503.19	-66.04	-235.30	14,556,481.23	1,647,654.28	40.081690°N	104.974125°W
1,618.00	21.01	247.51	1,583.64	-76.89	-263.69	14,556,470.37	1,647,625.90	40.081660°N	104.974227°W
1,703.00	22.59	251.99	1,662.57	-87.77	-293.30	14,556,459.49	1,647,596.29	40.081630°N	104.974333°W
1,789.00	22.50	255.20	1,742.00	-97.08	-324.92	14,556,450.17	1,647,564.67	40.081605°N	104.974446°W
1,874.00	24.08	255.99	1,820.07	-105.43	-357.47	14,556,441.81	1,647,532.13	40.081582°N	104.974562°W
1,960.00	26.19	254.98	1,897.92	-114.60	-392.82	14,556,432.63	1,647,496.77	40.081556°N	104.974689°W
2,045.00	27.42	253.88	1,973.79	-124.89	-429.75	14,556,422.32	1,647,459.85	40.081528°N	104.974821°W
2,131.00	26.98	257.79	2,050.28	-134.52	-467.84	14,556,412.68	1,647,421.76	40.081502°N	104.974957°W
2,216.00	26.59	258.41	2,126.16	-142.42	-505.32	14,556,404.77	1,647,384.29	40.081480°N	104.975091°W
2,302.00	24.92	254.19	2,203.62	-151.22	-541.61	14,556,395.96	1,647,348.00	40.081456°N	104.975221°W
2,387.00	25.31	253.49	2,280.59	-161.26	-576.26	14,556,385.91	1,647,313.35	40.081428°N	104.975344°W
2,473.00	26.10	255.51	2,358.08	-171.22	-612.21	14,556,375.94	1,647,277.41	40.081401°N	104.975473°W
2,558.00	25.80	257.00	2,434.51	-180.06	-648.33	14,556,367.09	1,647,241.29	40.081377°N	104.975602°W
2,644.00	25.62	256.92	2,512.00	-188.48	-684.68	14,556,358.66	1,647,204.94	40.081353°N	104.975732°W
2,729.00	27.11	255.42	2,588.15	-197.51	-721.32	14,556,349.61	1,647,168.30	40.081329°N	104.975863°W
2,815.00	26.10	254.28	2,665.05	-207.57	-758.50	14,556,339.54	1,647,131.13	40.081301°N	104.975996°W
2,900.00	26.72	251.29	2,741.18	-218.77	-794.60	14,556,328.34	1,647,095.03	40.081270°N	104.976125°W
2,986.00	27.11	251.99	2,817.86	-231.03	-831.55	14,556,316.06	1,647,058.09	40.081237°N	104.976257°W
3,071.00	27.42	255.11	2,893.42	-242.05	-868.88	14,556,305.03	1,647,020.76	40.081206°N	104.976391°W
3,157.00	26.28	255.90	2,970.15	-251.77	-906.48	14,556,295.30	1,646,983.15	40.081180°N	104.976525°W
3,242.00	25.88	255.80	3,046.50	-260.91	-942.72	14,556,286.15	1,646,946.92	40.081155°N	104.976654°W
3,328.00	25.62	255.60	3,123.96	-270.14	-978.92	14,556,276.91	1,646,910.72	40.081129°N	104.976784°W
3,413.00	26.10	254.50	3,200.44	-279.70	-1,014.74	14,556,267.33	1,646,874.91	40.081103°N	104.976912°W
3,499.00	26.10	256.52	3,277.68	-289.17	-1,051.37	14,556,257.86	1,646,838.28	40.081077°N	104.977043°W
3,584.00	26.59	256.70	3,353.85	-297.90	-1,088.06	14,556,249.11	1,646,801.59	40.081053°N	104.977174°W
3,670.00	26.02	253.88	3,430.94	-307.57	-1,124.92	14,556,239.44	1,646,764.74	40.081026°N	104.977306°W
3,755.00	26.41	251.99	3,507.20	-318.59	-1,160.81	14,556,228.40	1,646,728.85	40.080996°N	104.977434°W
3,841.00	26.19	254.50	3,584.30	-329.58	-1,197.28	14,556,217.41	1,646,692.38	40.080966°N	104.977565°W
3,926.00	25.62	255.11	3,660.76	-339.31	-1,233.12	14,556,207.66	1,646,656.55	40.080939°N	104.977693°W
4,012.00	25.09	257.49	3,738.48	-348.04	-1,268.89	14,556,198.92	1,646,620.78	40.080915°N	104.977821°W
4,097.00	25.40	258.80	3,815.36	-355.48	-1,304.37	14,556,191.47	1,646,585.30	40.080895°N	104.977947°W
4,183.00	25.40	259.29	3,893.05	-362.49	-1,340.58	14,556,184.45	1,646,549.09	40.080876°N	104.978077°W
4,268.00	26.19	259.42	3,969.58	-369.33	-1,376.93	14,556,177.60	1,646,512.74	40.080857°N	104.978207°W
4,353.00	26.10	258.32	4,045.88	-376.56	-1,413.68	14,556,170.36	1,646,475.99	40.080837°N	104.978338°W
4,439.00	23.60	258.01	4,123.91	-383.96	-1,449.05	14,556,162.95	1,646,440.63	40.080817°N	104.978465°W
4,524.00	21.40	257.09	4,202.44	-390.96	-1,480.82	14,556,155.94	1,646,408.86	40.080797°N	104.978578°W
4,610.00	19.82	258.41	4,282.93	-397.40	-1,510.39	14,556,149.49	1,646,379.29	40.080780°N	104.978684°W
4,695.00	17.50	258.19	4,363.46	-402.91	-1,537.02	14,556,143.97	1,646,352.66	40.080765°N	104.978779°W
4,781.00	15.60	259.51	4,445.89	-407.66	-1,561.05	14,556,139.21	1,646,328.63	40.080751°N	104.978865°W
4,866.00	13.49	259.82	4,528.16	-411.50	-1,582.05	14,556,135.37	1,646,307.64	40.080741°N	104.978940°W
4,952.00	14.72	256.52	4,611.57	-415.82	-1,602.55	14,556,131.05	1,646,287.14	40.080729°N	104.979013°W
5,037.00	15.29	254.72	4,693.67	-421.29	-1,623.86	14,556,125.57	1,646,265.83	40.080714°N	104.979090°W
5,123.00	14.81	253.80	4,776.72	-427.34	-1,645.36	14,556,119.51	1,646,244.34	40.080697°N	104.979166°W
5,208.00	13.40	253.09	4,859.16	-433.24	-1,665.21	14,556,113.61	1,646,224.48	40.080681°N	104.979237°W
5,294.00	11.38	253.88	4,943.15	-438.49	-1,682.90	14,556,108.35	1,646,206.79	40.080667°N	104.979301°W
5,379.00	10.02	255.42	5,026.67	-442.68	-1,698.12	14,556,104.15	1,646,191.58	40.080655°N	104.979355°W
5,465.00	8.92	256.39	5,111.50	-446.13	-1,711.84	14,556,100.70	1,646,177.86	40.080646°N	104.979404°W
5,550.00	8.09	256.21	5,195.56	-449.11	-1,724.05	14,556,097.72	1,646,165.65	40.080638°N	104.979448°W
5,636.00	7.21	255.90	5,280.80	-451.87	-1,735.16	14,556,094.95	1,646,154.54	40.080630°N	104.979487°W
5,721.00	6.20	255.90	5,365.21	-454.29	-1,744.79	14,556,092.53	1,646,144.91	40.080623°N	104.979522°W

Survey Report - Geographic

Company:	Anadarko Petroleum Corporation	Local Co-ordinate Reference:	Well Dacono 32-2 (111434)
Project:	Dacono	TVD Reference:	KB @ 5031.00ft (Original Well Elev)
Site:	Dacono 11 Pad	MD Reference:	KB @ 5031.00ft (Original Well Elev)
Well:	Dacono 32-2 (111434)	North Reference:	True
Wellbore:	Dacono 32-2	Survey Calculation Method:	Minimum Curvature
Design:	Dacono 32-2	Database:	EDM5000-New

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,807.00	5.19	256.39	5,450.79	-456.33	-1,753.07	14,556,090.49	1,646,136.63	40.080618°N	104.979551°W	
5,892.00	4.39	258.01	5,535.49	-457.91	-1,759.99	14,556,088.90	1,646,129.71	40.080613°N	104.979576°W	
6,020.00	3.78	259.99	5,663.16	-459.66	-1,768.94	14,556,087.15	1,646,120.77	40.080609°N	104.979608°W	
6,149.00	2.81	264.21	5,791.95	-460.72	-1,776.27	14,556,086.09	1,646,113.43	40.080606°N	104.979634°W	
6,405.00	2.11	276.21	6,047.71	-460.85	-1,787.20	14,556,085.96	1,646,102.50	40.080605°N	104.979673°W	
6,533.00	1.41	250.81	6,175.65	-461.11	-1,791.03	14,556,085.70	1,646,098.67	40.080605°N	104.979687°W	
6,662.00	1.01	259.42	6,304.63	-461.84	-1,793.65	14,556,084.97	1,646,096.06	40.080603°N	104.979697°W	
6,790.00	0.62	264.91	6,432.61	-462.11	-1,795.44	14,556,084.70	1,646,094.26	40.080602°N	104.979703°W	
6,918.00	0.62	254.10	6,560.61	-462.36	-1,796.80	14,556,084.45	1,646,092.90	40.080601°N	104.979708°W	
7,046.00	0.70	262.32	6,688.60	-462.65	-1,798.24	14,556,084.15	1,646,091.46	40.080600°N	104.979713°W	
7,175.00	0.48	271.99	6,817.59	-462.74	-1,799.56	14,556,084.06	1,646,090.14	40.080600°N	104.979718°W	
7,303.00	0.48	298.18	6,945.59	-462.47	-1,800.57	14,556,084.34	1,646,089.13	40.080601°N	104.979721°W	
7,431.00	0.48	285.00	7,073.58	-462.08	-1,801.56	14,556,084.73	1,646,088.14	40.080602°N	104.979725°W	
7,559.00	0.70	280.51	7,201.57	-461.79	-1,802.85	14,556,085.01	1,646,086.86	40.080603°N	104.979729°W	
7,688.00	0.48	299.89	7,330.57	-461.38	-1,804.09	14,556,085.42	1,646,085.61	40.080604°N	104.979734°W	
7,816.00	1.10	312.77	7,458.55	-460.28	-1,805.46	14,556,086.52	1,646,084.25	40.080607°N	104.979739°W	
7,944.00	1.10	306.88	7,586.53	-458.71	-1,807.34	14,556,088.09	1,646,082.36	40.080611°N	104.979745°W	
8,072.00	1.32	312.38	7,714.50	-456.98	-1,809.41	14,556,089.82	1,646,080.29	40.080616°N	104.979753°W	
8,201.00	0.79	316.99	7,843.48	-455.32	-1,811.12	14,556,091.48	1,646,078.58	40.080621°N	104.979759°W	
8,329.00	0.40	321.21	7,971.47	-454.33	-1,812.00	14,556,092.47	1,646,077.70	40.080623°N	104.979762°W	
8,457.00	0.22	92.69	8,099.47	-453.99	-1,812.04	14,556,092.81	1,646,077.67	40.080624°N	104.979762°W	
8,618.00	0.40	89.79	8,260.47	-454.01	-1,811.16	14,556,092.79	1,646,078.54	40.080624°N	104.979759°W	
8,663.00	0.40	89.79	8,305.47	-454.01	-1,810.85	14,556,092.79	1,646,078.85	40.080624°N	104.979758°W	
Proj to TD at 8663 MD/8305 TVD										

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
8,663.00	8,305.47	-454.01	-1,810.85	Proj to TD at 8663 MD/8305 TVD	

Checked By: _____	Approved By: _____	Date: _____
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