



# **Anadarko Petroleum Corporation**

**Dacono**

**Dacono 11 Pad**

**Dacono 6-2 (111431)**

**Dacono 6-2**

**Survey: 6-2**

## **Survey Report - Geographic**

**06 March, 2012**

# Survey Report - Geographic

<b>Company:</b>	Anadarko Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Dacono 6-2 (111431)
<b>Project:</b>	Dacono	<b>TVD Reference:</b>	KB @ 5031.00ft (Original Well Elev)
<b>Site:</b>	Dacono 11 Pad	<b>MD Reference:</b>	KB @ 5031.00ft (Original Well Elev)
<b>Well:</b>	Dacono 6-2 (111431)	<b>North Reference:</b>	True
<b>Wellbore:</b>	Dacono 6-2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Dacono 6-2	<b>Database:</b>	EDM5000-New

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

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

<b>Well</b>	Dacono 6-2 (111431)		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40.081954°N
		<b>Longitude:</b>	104.973283°W
		<b>Ground Level:</b>	5,016.00 ft

<b>Wellbore</b>	Dacono 6-2		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>
			(°)
	IGRF2010	04/11/12	8.84
			<b>Dip Angle</b>
			(°)
			66.73
			<b>Field Strength</b>
			(nT)
			52,853

<b>Design</b>	Dacono 6-2		
<b>Audit Notes:</b>			
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL
		<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			<b>Direction</b>
			(°)
			216.00

<b>Survey Program</b>	<b>Date</b>	03/05/12		
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
(ft)	(ft)			
150.00	8,327.00	6-2 (Dacono 6-2)	MWD	MWD - Standard

<b>Survey</b>									
<b>Measured</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Map</b>	<b>Map</b>	<b>Latitude</b>	<b>Longitude</b>
<b>Depth</b>	(°)	(°)	<b>Depth</b>	(ft)	(ft)	<b>Northing</b>	<b>Easting</b>		
(ft)			(ft)			(usft)	(usft)		
0.00	0.00	0.00	0.00	0.00	0.00	14,556,577.57	1,647,889.83	40.081954°N	104.973283°W
150.00	0.40	51.73	150.00	0.32	0.41	14,556,577.89	1,647,890.24	40.081955°N	104.973282°W
243.00	0.62	93.04	243.00	0.50	1.17	14,556,578.07	1,647,891.00	40.081955°N	104.973279°W
336.00	0.22	106.44	335.99	0.42	1.84	14,556,577.99	1,647,891.67	40.081955°N	104.973277°W
412.00	0.79	107.45	411.99	0.22	2.48	14,556,577.79	1,647,892.31	40.081955°N	104.973274°W
541.00	0.70	127.23	540.98	-0.52	3.96	14,556,577.05	1,647,893.79	40.081953°N	104.973269°W
669.00	0.70	138.04	668.97	-1.57	5.10	14,556,575.99	1,647,894.94	40.081950°N	104.973265°W
797.00	0.79	135.45	796.96	-2.79	6.24	14,556,574.78	1,647,896.08	40.081946°N	104.973261°W
912.00	0.88	138.65	911.95	-4.01	7.38	14,556,573.56	1,647,897.22	40.081943°N	104.973257°W
959.00	0.88	138.65	958.94	-4.55	7.86	14,556,573.01	1,647,897.69	40.081942°N	104.973255°W
1,105.00	0.79	106.53	1,104.93	-5.68	9.57	14,556,571.89	1,647,899.40	40.081938°N	104.973249°W
1,233.00	2.42	235.26	1,232.89	-7.47	8.19	14,556,570.09	1,647,898.03	40.081934°N	104.973254°W

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<b>Well:</b>	Dacono 6-2 (111431)	<b>North Reference:</b>	True
<b>Wellbore:</b>	Dacono 6-2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Dacono 6-2	<b>Database:</b>	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
1,362.00	2.68	245.35	1,361.76	-10.28	3.21	14,556,567.28	1,647,893.05	40.081926°N	104.973272°W
1,618.00	2.68	249.92	1,617.48	-14.84	-7.85	14,556,562.73	1,647,881.99	40.081913°N	104.973311°W
1,875.00	2.42	225.53	1,874.24	-20.70	-17.36	14,556,556.86	1,647,872.48	40.081897°N	104.973345°W
2,131.00	1.41	151.44	2,130.12	-27.25	-19.71	14,556,550.31	1,647,870.13	40.081879°N	104.973354°W
2,388.00	0.40	180.45	2,387.09	-30.93	-18.21	14,556,546.63	1,647,871.63	40.081869°N	104.973348°W
2,642.00	0.79	331.84	2,641.08	-30.27	-19.04	14,556,547.29	1,647,870.80	40.081871°N	104.973351°W
2,899.00	1.19	316.15	2,898.04	-26.78	-21.73	14,556,550.78	1,647,868.11	40.081881°N	104.973361°W
3,155.00	0.62	230.94	3,154.02	-25.74	-24.65	14,556,551.82	1,647,865.19	40.081883°N	104.973371°W
3,411.00	0.40	249.92	3,410.01	-26.92	-26.56	14,556,550.64	1,647,863.28	40.081880°N	104.973378°W
3,667.00	0.48	8.09	3,666.01	-26.16	-27.25	14,556,551.39	1,647,862.59	40.081882°N	104.973381°W
3,924.00	0.40	146.52	3,923.00	-25.85	-26.60	14,556,551.71	1,647,863.24	40.081883°N	104.973378°W
4,180.00	0.70	301.82	4,179.00	-25.77	-27.44	14,556,551.79	1,647,862.40	40.081883°N	104.973381°W
4,437.00	1.89	303.76	4,435.93	-22.58	-32.30	14,556,554.97	1,647,857.54	40.081892°N	104.973399°W
4,693.00	1.58	292.86	4,691.81	-18.87	-39.06	14,556,558.69	1,647,850.78	40.081902°N	104.973423°W
4,950.00	2.90	217.05	4,948.65	-22.68	-46.24	14,556,554.87	1,647,843.60	40.081892°N	104.973449°W
5,206.00	0.79	184.45	5,204.51	-29.61	-50.28	14,556,547.94	1,647,839.56	40.081873°N	104.973463°W
5,463.00	0.40	196.00	5,461.50	-32.24	-50.67	14,556,545.31	1,647,839.18	40.081866°N	104.973464°W
5,721.00	0.31	266.93	5,719.49	-33.14	-51.61	14,556,544.41	1,647,838.23	40.081863°N	104.973468°W
5,978.00	0.22	149.55	5,976.49	-33.60	-52.05	14,556,543.95	1,647,837.79	40.081862°N	104.973469°W
6,234.00	0.62	339.22	6,232.49	-32.73	-52.30	14,556,544.82	1,647,837.55	40.081864°N	104.973470°W
6,491.00	1.41	161.33	6,489.47	-34.43	-51.78	14,556,543.12	1,647,838.06	40.081860°N	104.973468°W
6,747.00	0.48	148.23	6,745.43	-38.32	-50.20	14,556,539.23	1,647,839.64	40.081849°N	104.973463°W
7,004.00	0.62	140.63	7,002.42	-40.31	-48.76	14,556,537.24	1,647,841.09	40.081843°N	104.973458°W
7,260.00	0.40	315.62	7,258.41	-40.75	-48.50	14,556,536.81	1,647,841.34	40.081842°N	104.973457°W
7,517.00	1.41	356.62	7,515.38	-36.95	-49.32	14,556,540.60	1,647,840.53	40.081853°N	104.973460°W
7,773.00	1.10	29.63	7,771.32	-31.67	-48.29	14,556,545.88	1,647,841.55	40.081867°N	104.973456°W
8,030.00	0.62	279.06	8,028.30	-29.30	-48.44	14,556,548.25	1,647,841.40	40.081874°N	104.973456°W
8,280.00	0.09	287.85	8,278.30	-29.03	-49.96	14,556,548.52	1,647,839.88	40.081874°N	104.973462°W
8,327.00	0.09	287.85	8,325.30	-29.01	-50.03	14,556,548.54	1,647,839.81	40.081874°N	104.973462°W
Proj to TD at 8327 MD/8325 TVD									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,327.00	8,325.30	-29.01	-50.03	Proj to TD at 8327 MD/8325 TVD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_