

Anadarko Petroleum Corp.

Arapahoe County, CO (NAD 83)

Sec. 24-T5S-R65W

State of Colorado 7-24

Plan A Rev 0

Survey: Sperry MWD Survey

Standard Survey Report

27 January, 2011

Halliburton Company

Survey Report

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well State of Colorado 7-24
Project:	Arapahoe County, CO (NAD 83)	TVD Reference:	RKB 17' @ 5948.00ft (Extreme 8)
Site:	Sec. 24-T5S-R65W	MD Reference:	RKB 17' @ 5948.00ft (Extreme 8)
Well:	State of Colorado 7-24	North Reference:	True
Wellbore:	Plan A Rev 0	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Project	Arapahoe County, CO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site		Sec. 24-T5S-R65W			
Site Position:		Northing:	1,646,085.57 ft	Latitude:	39.603932
From:	Lat/Long	Easting:	3,250,421.29 ft	Longitude:	-104.611235
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.56 °

Well		State of Colorado 7-24				
Well Position	+N/-S	0.00 ft	Northing:	1,646,085.57 ft	Latitude:	39.603932
	+E/-W	0.00 ft	Easting:	3,250,421.29 ft	Longitude:	-104.611235
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,931.00 ft

Wellbore	Plan A Rev 0				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	11/27/2010	8.75	66.46	52,750

Design	Actual Field Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	90.00	

Survey Program	Date	1/27/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
2,290.00	8,711.00	Sperry MWD Survey (Plan A Rev 0)	MWD	MWD - Standard	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,290.00	0.20	246.48	2,290.00	-1.59	-3.66	-3.66	0.01	0.01	0.00	
Tie-in to Multi-shot Gyro Survey										
2,319.00	0.40	188.93	2,318.99	-1.72	-3.73	-3.73	1.17	0.69	-198.45	
1st Sperry MWD Survey										
2,499.00	0.22	119.06	2,498.99	-2.50	-3.52	-3.52	0.21	-0.10	-38.82	
2,678.00	0.29	107.66	2,677.99	-2.81	-2.79	-2.79	0.05	0.04	-6.37	
2,858.00	0.32	115.04	2,857.99	-3.16	-1.90	-1.90	0.03	0.02	4.10	
3,032.00	0.19	135.20	3,031.99	-3.57	-1.26	-1.26	0.09	-0.07	11.59	
3,208.00	0.37	159.05	3,207.98	-4.31	-0.85	-0.85	0.12	0.10	13.55	
3,387.00	0.32	209.07	3,386.98	-5.28	-0.88	-0.88	0.16	-0.03	27.94	
3,568.00	0.57	253.41	3,567.98	-5.98	-1.99	-1.99	0.23	0.14	24.50	
3,748.00	0.77	276.85	3,747.96	-6.09	-4.05	-4.05	0.19	0.11	13.02	

Halliburton Company

Survey Report

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Project:	Arapahoe County, CO (NAD 83)	TVD Reference:	RKB 17' @ 5948.00ft (Extreme 8)
Site:	Sec. 24-T5S-R65W	MD Reference:	RKB 17' @ 5948.00ft (Extreme 8)
Well:	State of Colorado 7-24	North Reference:	True
Wellbore:	Plan A Rev 0	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

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)
3,928.00	0.43	226.57	3,927.96	-6.41	-5.74	-5.74	0.33	-0.19	-27.93
4,019.00	1.40	88.79	4,018.95	-6.63	-4.88	-4.88	1.91	1.07	-151.41
4,107.00	1.83	57.61	4,106.91	-5.85	-2.62	-2.62	1.09	0.49	-35.43
4,196.00	2.64	78.06	4,195.85	-4.66	0.59	0.59	1.26	0.91	22.98
4,284.00	3.42	68.62	4,283.72	-3.29	5.01	5.01	1.05	0.89	-10.73
4,373.00	4.09	74.34	4,372.53	-1.46	10.54	10.54	0.86	0.75	6.43
4,463.00	4.14	82.07	4,462.30	-0.15	16.85	16.85	0.62	0.06	8.59
4,552.00	5.56	93.64	4,550.98	0.02	24.34	24.34	1.93	1.60	13.00
4,642.00	4.92	96.19	4,640.61	-0.67	32.52	32.52	0.76	-0.71	2.83
4,733.00	5.34	94.27	4,731.24	-1.41	40.63	40.63	0.50	0.46	-2.11
4,822.00	4.81	103.60	4,819.89	-2.59	48.38	48.38	1.10	-0.60	10.48
4,910.00	3.58	94.29	4,907.66	-3.67	54.71	54.71	1.59	-1.40	-10.58
4,955.00	3.15	94.81	4,952.58	-3.88	57.34	57.34	0.96	-0.96	1.16
5,000.00	3.06	55.48	4,997.52	-3.30	59.56	59.56	4.65	-0.20	-87.40
5,045.00	4.80	73.07	5,042.41	-2.07	62.35	62.35	4.66	3.87	39.09
5,090.00	6.50	90.73	5,087.20	-1.55	66.70	66.70	5.36	3.78	39.24
5,135.00	6.42	91.19	5,131.91	-1.64	71.77	71.77	0.21	-0.18	1.02
5,224.00	5.69	95.20	5,220.41	-2.14	81.13	81.13	0.95	-0.82	4.51
5,268.00	5.42	95.74	5,264.21	-2.55	85.37	85.37	0.63	-0.61	1.23
5,357.00	6.50	91.20	5,352.72	-3.07	94.59	94.59	1.32	1.21	-5.10
5,446.00	6.49	92.42	5,441.15	-3.39	104.66	104.66	0.16	-0.01	1.37
5,536.00	6.23	92.31	5,530.60	-3.80	114.62	114.62	0.29	-0.29	-0.12
5,624.00	6.00	93.93	5,618.10	-4.31	123.98	123.98	0.33	-0.26	1.84
5,670.00	5.84	93.83	5,663.85	-4.63	128.71	128.71	0.35	-0.35	-0.22
5,715.00	5.72	93.99	5,708.62	-4.94	133.23	133.23	0.27	-0.27	0.36
5,760.00	5.34	91.11	5,753.42	-5.14	137.56	137.56	1.05	-0.84	-6.40
5,850.00	4.18	91.35	5,843.10	-5.30	145.03	145.03	1.29	-1.29	0.27
5,940.00	2.18	103.02	5,932.96	-5.76	149.98	149.98	2.32	-2.22	12.97
6,031.00	0.52	60.64	6,023.93	-5.95	152.02	152.02	2.01	-1.82	-46.57
6,165.00	0.28	84.03	6,157.93	-5.61	152.88	152.88	0.21	-0.18	17.46
6,343.00	0.35	167.14	6,335.93	-6.10	153.43	153.43	0.24	0.04	46.69
6,524.00	0.76	232.34	6,516.92	-7.37	152.60	152.60	0.38	0.23	36.02
6,612.00	0.25	65.98	6,604.92	-7.65	152.32	152.32	1.14	-0.58	-189.05
6,703.00	0.67	78.23	6,695.92	-7.46	153.02	153.02	0.47	0.46	13.46
6,793.00	0.75	86.40	6,785.91	-7.32	154.12	154.12	0.14	0.09	9.08
6,883.00	1.53	61.46	6,875.89	-6.71	155.77	155.77	1.01	0.87	-27.71
6,971.00	1.76	60.32	6,963.85	-5.47	157.97	157.97	0.26	0.26	-1.30
7,059.00	0.69	50.79	7,051.83	-4.47	159.56	159.56	1.23	-1.22	-10.83
7,150.00	0.58	76.64	7,142.83	-4.02	160.43	160.43	0.33	-0.12	28.41
7,241.00	0.89	59.96	7,233.82	-3.56	161.49	161.49	0.41	0.34	-18.33
7,331.00	1.23	32.66	7,323.81	-2.39	162.62	162.62	0.67	0.38	-30.33
7,419.00	1.21	36.45	7,411.79	-0.85	163.68	163.68	0.09	-0.02	4.31
7,510.00	1.19	26.38	7,502.77	0.77	164.67	164.67	0.23	-0.02	-11.07
7,600.00	0.99	7.44	7,592.75	2.38	165.18	165.18	0.45	-0.22	-21.04
7,645.00	1.22	4.40	7,637.74	3.24	165.27	165.27	0.53	0.51	-6.76
7,735.00	1.39	330.14	7,727.72	5.14	164.80	164.80	0.87	0.19	-38.07
7,826.00	1.89	348.61	7,818.68	7.57	163.96	163.95	0.79	0.55	20.30
7,961.00	1.31	333.37	7,953.63	11.13	162.82	162.82	0.53	-0.43	-11.29
8,052.00	1.15	188.37	8,044.62	11.16	162.22	162.22	2.58	-0.18	-159.34
8,142.00	2.54	180.68	8,134.57	8.27	162.07	162.07	1.57	1.54	-8.54
8,230.00	2.84	176.69	8,222.48	4.14	162.17	162.17	0.40	0.34	-4.53
8,282.00	3.39	175.25	8,274.40	1.32	162.37	162.37	1.07	1.06	-2.77
Last Sperry MWD Survey									
8,711.00	3.39	175.25	8,702.65	-23.96	164.47	164.48	0.00	0.00	0.00

Halliburton Company

Survey Report

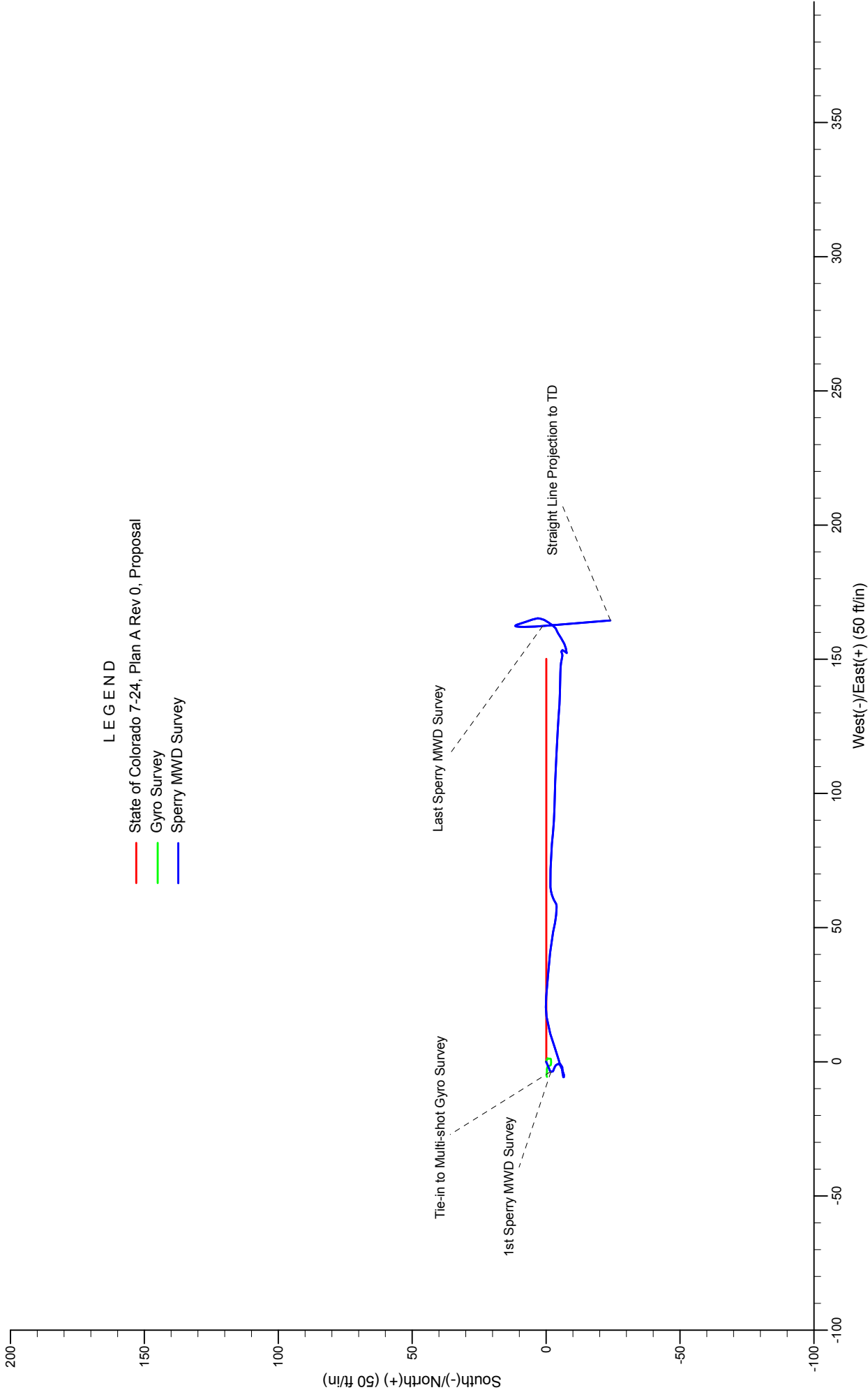
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Well:	State of Colorado 7-24	North Reference:	True
Wellbore:	Plan A Rev 0	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

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)
Straight Line Projection to TD									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
State of Colorado 7-24 S	0.00	0.00	0.00	0.00	0.00	1,646,085.57	3,250,421.29	39.603932	-104.611235
- survey hits target center									
- Polygon									
Point 1			0.00	1,980.00	1,980.00	1,648,084.79	3,252,381.78		
Point 2			0.00	-3,300.00	1,980.00	1,642,805.18	3,252,433.43		
Point 3			0.00	-3,300.00	-3,300.00	1,642,753.53	3,247,153.82		
Point 4			0.00	1,980.00	-3,300.00	1,648,033.14	3,247,102.17		
State of Colorado 7-24 F	0.00	0.00	8,710.00	0.00	150.19	1,646,087.03	3,250,571.47	39.603932	-104.610702
- survey misses target center by 28.84ft at 8711.00ft MD (8702.65 TVD, -23.96 N, 164.47 E)									
- Point									

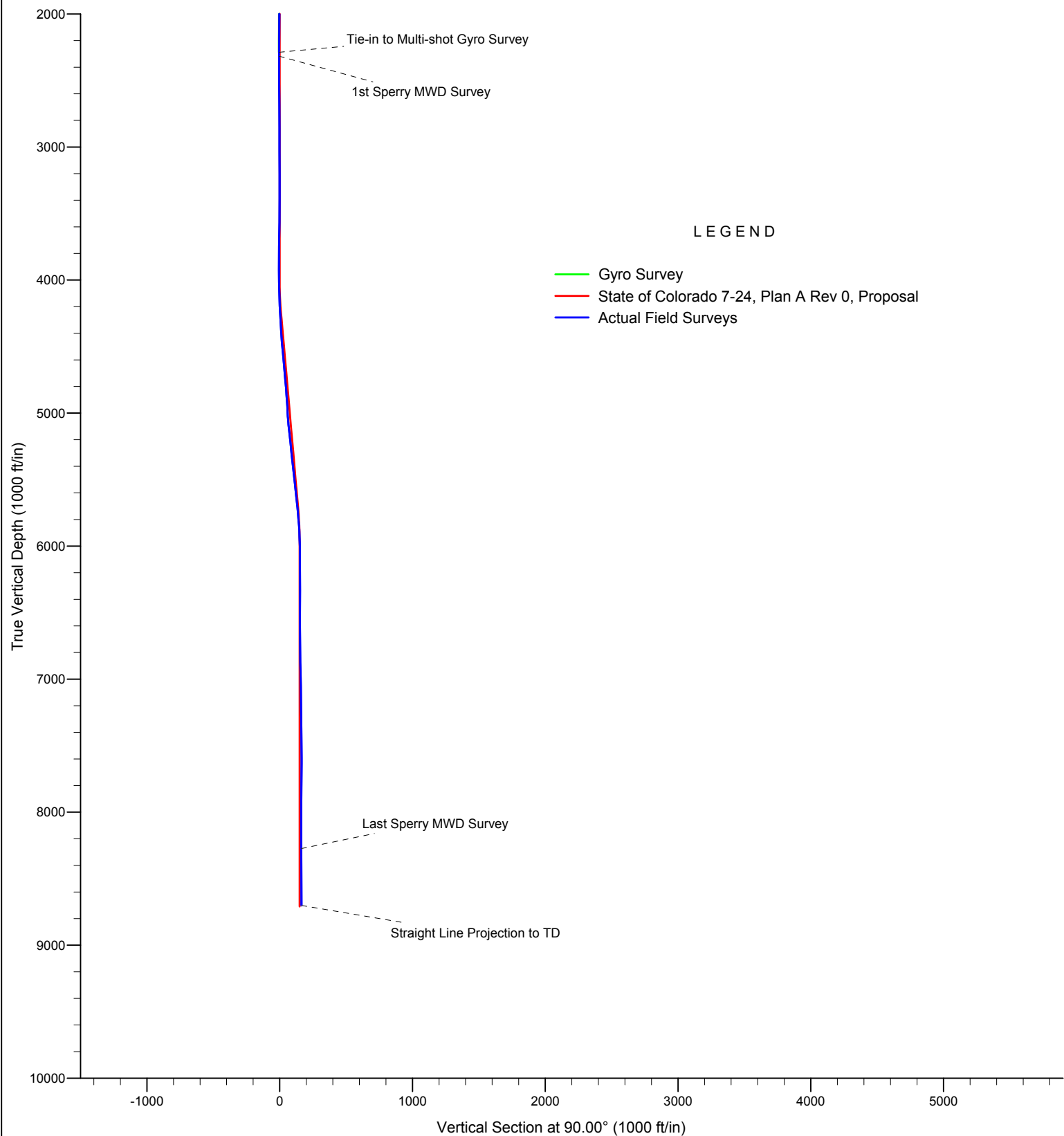
Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2,290.00	2,290.00	-1.59	-3.66	Tie-in to Multi-shot Gyro Survey	
2,319.00	2,318.99	-1.72	-3.73	1st Sperry MWD Survey	
8,282.00	8,274.40	1.32	162.37	Last Sperry MWD Survey	
8,711.00	8,702.65	-23.96	164.47	Straight Line Projection to TD	

Checked By: _____	Approved By: _____	Date: _____
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Project: Arapahoe County, CO (NAD 83)
Site: Sec. 24-T5S-R65W
Well: State of Colorado 7-24

Anadarko Petroleum Corp.



Anadarko Petroleum Corp.

Arapahoe County, CO (NAD 83)

Sec. 24-T5S-R65W

State of Colorado 7-24

Plan A Rev 0

Survey: Sperry MWD Survey

Survey Report - Geographic

27 January, 2011

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well State of Colorado 7-24
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Well:	State of Colorado 7-24	North Reference:	True
Wellbore:	Plan A Rev 0	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Project	Arapahoe County, CO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site		Sec. 24-T5S-R65W			
Site Position:		Northing:	1,646,085.57 ft	Latitude:	39.603932
From:	Lat/Long	Easting:	3,250,421.29 ft	Longitude:	-104.611235
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.56 °

Well	State of Colorado 7-24					
Well Position	+N/-S	0.00 ft	Northing:	1,646,085.57 ft	Latitude:	39.603932
	+E/-W	0.00 ft	Easting:	3,250,421.29 ft	Longitude:	-104.611235
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,931.00 ft

Wellbore	Plan A Rev 0				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	11/27/2010	8.75	66.46	52,750

Design	Actual Field Surveys			
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	90.00

Survey Program	Date	1/27/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
2,290.00	8,711.00	Sperry MWD Survey (Plan A Rev 0)	MWD	MWD - Standard	

Halliburton Company

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Well:	State of Colorado 7-24	North Reference:	True
Wellbore:	Plan A Rev 0	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	1,646,085.57	3,250,421.29	39.603932	-104.611235
2,290.00	0.20	246.48	2,290.00	-1.59	-3.66	1,646,083.94	3,250,417.65	39.603928	-104.611248
Tie-in to Multi-shot Gyro Survey									
2,319.00	0.40	188.93	2,318.99	-1.72	-3.73	1,646,083.82	3,250,417.58	39.603927	-104.611248
1st Sperry MWD Survey									
2,499.00	0.22	119.06	2,498.99	-2.50	-3.52	1,646,083.03	3,250,417.80	39.603925	-104.611248
2,678.00	0.29	107.66	2,677.99	-2.81	-2.79	1,646,082.73	3,250,418.53	39.603924	-104.611245
2,858.00	0.32	115.04	2,857.99	-3.16	-1.90	1,646,082.39	3,250,419.42	39.603923	-104.611242
3,032.00	0.19	135.20	3,031.99	-3.57	-1.26	1,646,081.99	3,250,420.07	39.603922	-104.611239
3,208.00	0.37	159.05	3,207.98	-4.31	-0.85	1,646,081.25	3,250,420.49	39.603920	-104.611238
3,387.00	0.32	209.07	3,386.98	-5.28	-0.88	1,646,080.28	3,250,420.46	39.603917	-104.611238
3,568.00	0.57	253.41	3,567.98	-5.98	-1.99	1,646,079.57	3,250,419.36	39.603916	-104.611242
3,748.00	0.77	276.85	3,747.96	-6.09	-4.05	1,646,079.43	3,250,417.30	39.603915	-104.611249
3,928.00	0.43	226.57	3,927.96	-6.41	-5.74	1,646,079.10	3,250,415.61	39.603914	-104.611255
4,019.00	1.40	88.79	4,018.95	-6.63	-4.88	1,646,078.89	3,250,416.48	39.603914	-104.611252
4,107.00	1.83	57.61	4,106.91	-5.85	-2.62	1,646,079.69	3,250,418.73	39.603916	-104.611244
4,196.00	2.64	78.06	4,195.85	-4.66	0.59	1,646,080.91	3,250,421.93	39.603919	-104.611233
4,284.00	3.42	68.62	4,283.72	-3.29	5.01	1,646,082.33	3,250,426.34	39.603923	-104.611217
4,373.00	4.09	74.34	4,372.53	-1.46	10.54	1,646,084.21	3,250,431.85	39.603928	-104.611198
4,463.00	4.14	82.07	4,462.30	-0.15	16.85	1,646,085.58	3,250,438.14	39.603932	-104.611175
4,552.00	5.56	93.64	4,550.98	0.02	24.34	1,646,085.83	3,250,445.63	39.603932	-104.611149
4,642.00	4.92	96.19	4,640.61	-0.67	32.52	1,646,085.21	3,250,453.82	39.603930	-104.611120
4,733.00	5.34	94.27	4,731.24	-1.41	40.63	1,646,084.56	3,250,461.93	39.603928	-104.611091
4,822.00	4.81	103.60	4,819.89	-2.59	48.38	1,646,083.45	3,250,469.70	39.603925	-104.611063
4,910.00	3.58	94.29	4,907.66	-3.67	54.71	1,646,082.44	3,250,476.04	39.603922	-104.611041
4,955.00	3.15	94.81	4,952.58	-3.88	57.34	1,646,082.25	3,250,478.67	39.603921	-104.611031
5,000.00	3.06	55.48	4,997.52	-3.30	59.56	1,646,082.85	3,250,480.89	39.603923	-104.611024
5,045.00	4.80	73.07	5,042.41	-2.07	62.35	1,646,084.11	3,250,483.66	39.603926	-104.611014
5,090.00	6.50	90.73	5,087.20	-1.55	66.70	1,646,084.67	3,250,488.01	39.603928	-104.610998
5,135.00	6.42	91.19	5,131.91	-1.64	71.77	1,646,084.63	3,250,493.07	39.603927	-104.610980
5,224.00	5.69	95.20	5,220.41	-2.14	81.13	1,646,084.22	3,250,502.44	39.603926	-104.610947
5,268.00	5.42	95.74	5,264.21	-2.55	85.37	1,646,083.85	3,250,506.69	39.603925	-104.610932
5,357.00	6.50	91.20	5,352.72	-3.07	94.59	1,646,083.42	3,250,515.91	39.603924	-104.610899
5,446.00	6.49	92.42	5,441.15	-3.39	104.66	1,646,083.20	3,250,525.97	39.603923	-104.610864
5,536.00	6.23	92.31	5,530.60	-3.80	114.62	1,646,082.89	3,250,535.94	39.603922	-104.610828
5,624.00	6.00	93.93	5,618.10	-4.31	123.98	1,646,082.47	3,250,545.30	39.603920	-104.610795
5,670.00	5.84	93.83	5,663.85	-4.63	128.71	1,646,082.19	3,250,550.04	39.603919	-104.610778
5,715.00	5.72	93.99	5,708.62	-4.94	133.23	1,646,081.93	3,250,554.56	39.603918	-104.610762
5,760.00	5.34	91.11	5,753.42	-5.14	137.56	1,646,081.78	3,250,558.90	39.603918	-104.610747
5,850.00	4.18	91.35	5,843.10	-5.30	145.03	1,646,081.69	3,250,566.36	39.603917	-104.610720
5,940.00	2.18	103.02	5,932.96	-5.76	149.98	1,646,081.28	3,250,571.31	39.603916	-104.610703
6,031.00	0.52	60.64	6,023.93	-5.95	152.02	1,646,081.11	3,250,573.36	39.603916	-104.610695
6,165.00	0.28	84.03	6,157.93	-5.61	152.88	1,646,081.45	3,250,574.22	39.603917	-104.610692
6,343.00	0.35	167.14	6,335.93	-6.10	153.43	1,646,080.97	3,250,574.77	39.603915	-104.610690
6,524.00	0.76	232.34	6,516.92	-7.37	152.60	1,646,079.69	3,250,573.96	39.603912	-104.610693
6,612.00	0.25	65.98	6,604.92	-7.65	152.32	1,646,079.41	3,250,573.67	39.603911	-104.610694
6,703.00	0.67	78.23	6,695.92	-7.46	153.02	1,646,079.60	3,250,574.38	39.603912	-104.610692
6,793.00	0.75	86.40	6,785.91	-7.32	154.12	1,646,079.76	3,250,575.48	39.603912	-104.610688
6,883.00	1.53	61.46	6,875.89	-6.71	155.77	1,646,080.39	3,250,577.11	39.603914	-104.610682
6,971.00	1.76	60.32	6,963.85	-5.47	157.97	1,646,081.64	3,250,579.31	39.603917	-104.610674
7,059.00	0.69	50.79	7,051.83	-4.47	159.56	1,646,082.66	3,250,580.88	39.603920	-104.610669
7,150.00	0.58	76.64	7,142.83	-4.02	160.43	1,646,083.12	3,250,581.75	39.603921	-104.610666
7,241.00	0.89	59.96	7,233.82	-3.56	161.49	1,646,083.59	3,250,582.81	39.603922	-104.610662
7,331.00	1.23	32.66	7,323.81	-2.39	162.62	1,646,084.76	3,250,583.92	39.603925	-104.610658
7,419.00	1.21	36.45	7,411.79	-0.85	163.68	1,646,086.32	3,250,584.97	39.603930	-104.610654

Halliburton Company

Survey Report - Geographic

Company:	Anadarko Petroleum Corp.	Local Co-ordinate Reference:	Well State of Colorado 7-24
Project:	Arapahoe County, CO (NAD 83)	TVD Reference:	RKB 17' @ 5948.00ft (Extreme 8)
Site:	Sec. 24-T5S-R65W	MD Reference:	RKB 17' @ 5948.00ft (Extreme 8)
Well:	State of Colorado 7-24	North Reference:	True
Wellbore:	Plan A Rev 0	Survey Calculation Method:	Minimum Curvature
Design:	Actual Field Surveys	Database:	EDM 2003.16 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
7,510.00	1.19	26.38	7,502.77	0.77	164.67	1,646,087.95	3,250,585.94	39.603934	-104.610651
7,600.00	0.99	7.44	7,592.75	2.38	165.18	1,646,089.56	3,250,586.44	39.603939	-104.610649
7,645.00	1.22	4.40	7,637.74	3.24	165.27	1,646,090.42	3,250,586.52	39.603941	-104.610648
7,735.00	1.39	330.14	7,727.72	5.14	164.80	1,646,092.32	3,250,586.03	39.603946	-104.610650
7,826.00	1.89	348.61	7,818.68	7.57	163.96	1,646,094.74	3,250,585.16	39.603953	-104.610653
7,961.00	1.31	333.37	7,953.63	11.13	162.82	1,646,098.29	3,250,584.00	39.603963	-104.610657
8,052.00	1.15	188.37	8,044.62	11.16	162.22	1,646,098.31	3,250,583.40	39.603963	-104.610659
8,142.00	2.54	180.68	8,134.57	8.27	162.07	1,646,095.42	3,250,583.27	39.603955	-104.610660
8,230.00	2.84	176.69	8,222.48	4.14	162.17	1,646,091.30	3,250,583.41	39.603943	-104.610659
8,282.00	3.39	175.25	8,274.40	1.32	162.37	1,646,088.48	3,250,583.64	39.603936	-104.610659
Last Sperry MWD Survey									
8,711.00	3.39	175.25	8,702.65	-23.96	164.47	1,646,063.22	3,250,585.99	39.603866	-104.610651
Straight Line Projection to TD									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
State of Colorado 7-24 S	0.00	0.00	0.00	0.00	0.00	1,646,085.57	3,250,421.29	39.603932	-104.611235
- survey hits target center									
- Polygon									
Point 1			0.00	1,980.00	1,980.00	1,648,084.79	3,252,381.78		
Point 2			0.00	-3,300.00	1,980.00	1,642,805.18	3,252,433.43		
Point 3			0.00	-3,300.00	-3,300.00	1,642,753.53	3,247,153.82		
Point 4			0.00	1,980.00	-3,300.00	1,648,033.14	3,247,102.17		
State of Colorado 7-24 F	0.00	0.00	8,710.00	0.00	150.19	1,646,087.03	3,250,571.47	39.603932	-104.610702
- survey misses target center by 28.84ft at 8711.00ft MD (8702.65 TVD, -23.96 N, 164.47 E)									
- Point									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,290.00	2,290.00	-1.59	-3.66	Tie-in to Multi-shot Gyro Survey
2,319.00	2,318.99	-1.72	-3.73	1st Sperry MWD Survey
8,282.00	8,274.40	1.32	162.37	Last Sperry MWD Survey
8,711.00	8,702.65	-23.96	164.47	Straight Line Projection to TD

Checked By: _____ Approved By: _____ Date: _____