

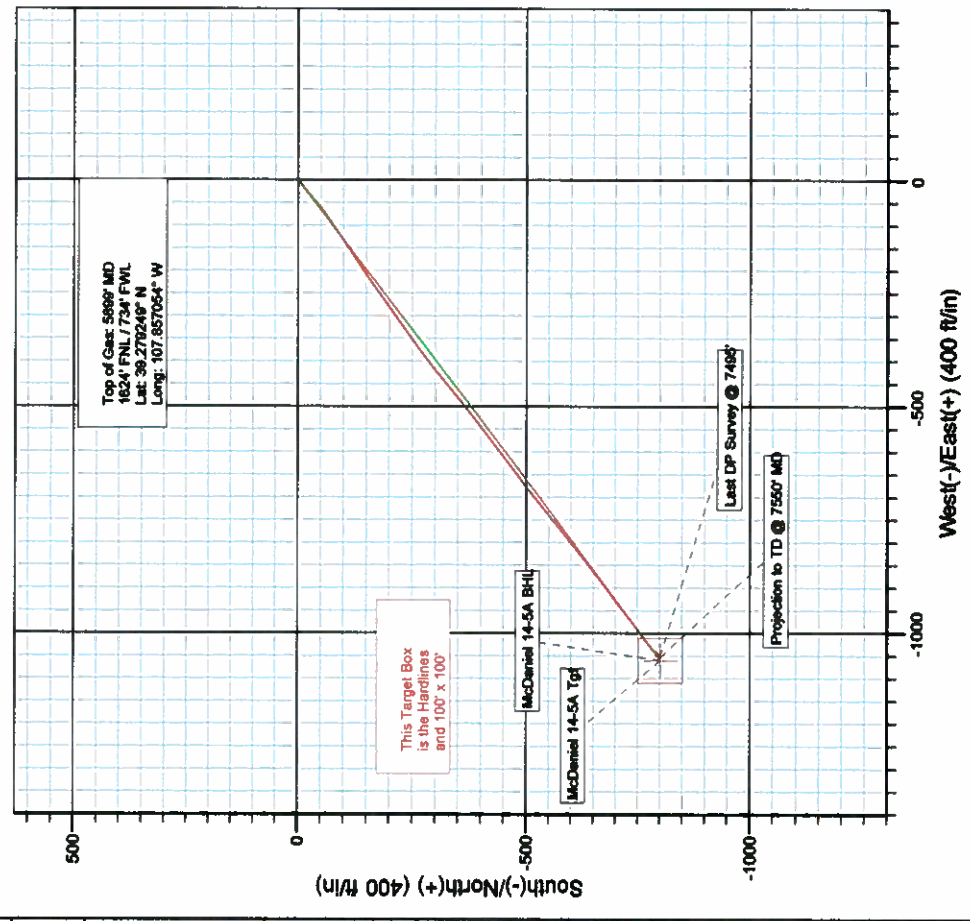
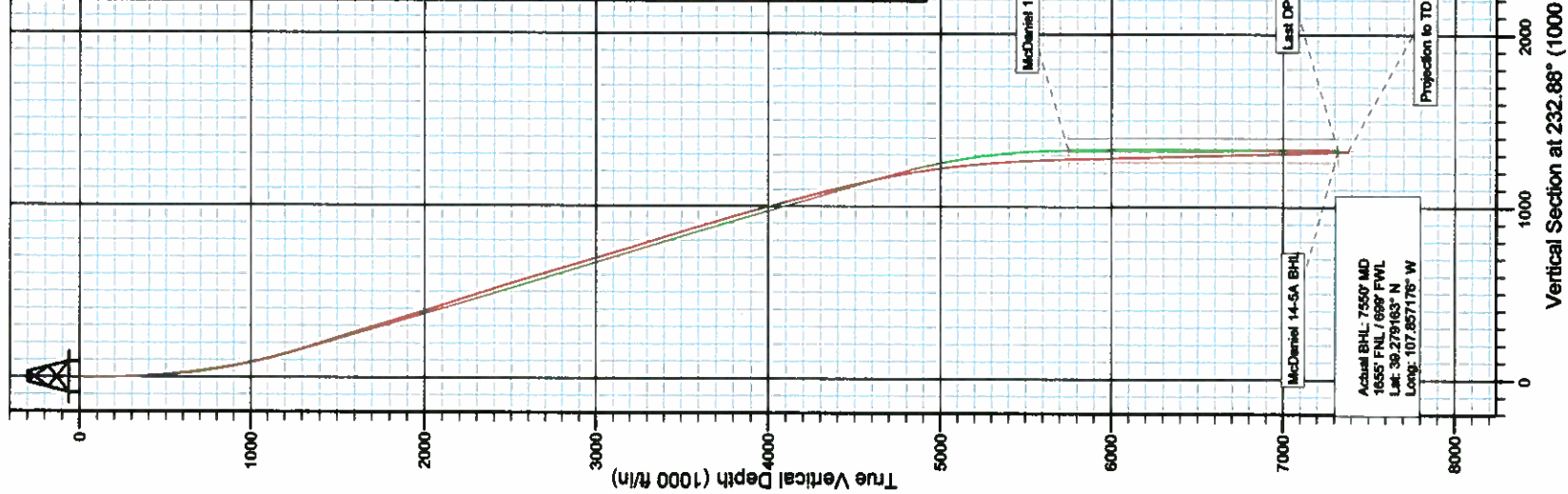


Phins Exploration & Production Company

Project: Brush Creek
Site: NENW Sec 14-T8S-R94W
Well: McDaniel 14-5A
Wellbore: DD
Design: DD



Directional Plus
A Division of Cathedral Energy Services Ltd.



Magnetic North: 10.57°
Azimuths to True North
Magnetic Field
Strength: 52428.8nT
Dip Angle: 65.67°
Date: 11/3/2008
Model: IGRF200510

DESIGN DETAILS: DD

85639, JS
McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 16)
Target
McDaniel 14-5A BHL
Azimuth
232.88
Origin Type
Spot
N/S
0.0
E/W
0.0
TVD
0.0

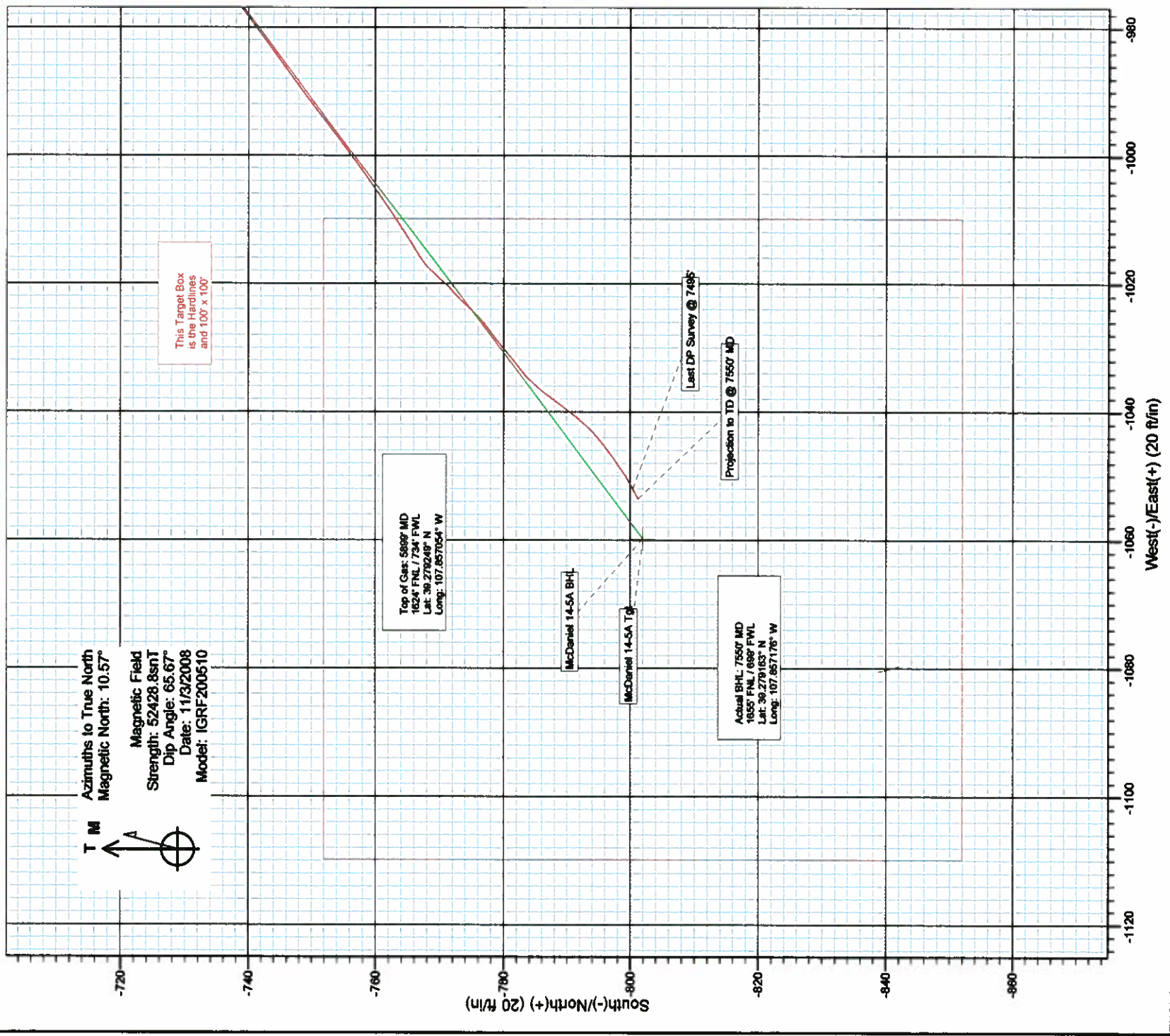


Plains Exploration & Production Company

Project: Brush Creek
Site: NENW Sec 14-T9S-R94W
Well: McDaniel 14-5A
Wellbore: DD
Design: DD



A Division of Cathedral Energy Services Ltd.



Survey Report

Company: Occidental Petroleum Corporation				Local Co-ordinates Reference:				Well McDaniel 14-5A	
Project: Brush Creek				TVD Reference:				McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)	
Site: NENW Sec 14-T9S-R94W				MD Reference:				McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)	
Well: McDaniel 14-5A				North Reference:				True	
Wellbore: DD				Survey Calculation Method:				Minimum Curvature	
Design: DD				Database:				EDM 2003.21 US Multi User D8	
Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,207.0	15.50	237.20	1,195.0	-83.7	-108.8	137.3	1.53	1.37	
1,303.0	16.80	234.70	1,287.2	-88.7	-131.0	164.0	1.54	1.35	
1,399.0	18.20	236.70	1,378.8	-114.9	-154.8	192.8	1.59	1.46	
1,478.0	18.10	237.60	1,453.8	-128.3	-175.5	217.3	0.38	-0.13	
1,591.0	17.80	236.70	1,561.3	-147.2	-204.7	252.1	0.36	-0.27	
1,687.0	17.20	235.50	1,652.9	-163.3	-228.7	280.9	0.73	-0.63	
1,783.0	16.70	234.30	1,744.7	-179.4	-251.6	308.9	0.64	-0.52	
1,879.0	17.30	234.20	1,836.5	-195.8	-274.4	336.9	0.63	0.63	
1,974.0	17.30	235.30	1,927.2	-212.1	-297.4	365.2	0.34	0.00	
2,070.0	18.10	235.00	2,018.7	-228.7	-321.4	394.3	0.84	0.83	
2,166.0	17.90	235.70	2,110.0	-245.6	-345.8	424.0	0.31	-0.21	
2,262.0	18.20	234.30	2,201.3	-262.7	-370.2	453.7	0.55	0.31	
2,357.0	17.90	233.10	2,291.6	-280.1	-393.9	483.1	0.50	-0.32	
2,453.0	17.90	231.30	2,382.9	-298.2	-417.2	512.6	0.58	0.00	
2,549.0	17.40	230.80	2,474.4	-316.5	-439.8	541.7	0.54	-0.52	
2,644.0	16.80	229.80	2,565.2	-334.3	-461.3	569.6	0.70	-0.63	
2,740.0	16.90	231.30	2,657.1	-352.0	-482.8	597.4	0.46	0.10	
2,836.0	16.30	230.60	2,749.1	-369.3	-504.1	624.8	0.66	-0.63	
2,932.0	16.00	232.30	2,841.3	-385.9	-525.0	651.5	0.58	-0.31	
3,027.0	15.90	233.30	2,932.7	-401.7	-545.8	677.6	0.31	-0.11	
3,123.0	16.80	234.20	3,024.8	-417.6	-567.5	704.5	0.77	0.73	
3,219.0	16.70	233.70	3,116.8	-433.8	-589.7	732.0	0.18	0.10	
3,315.0	17.10	232.30	3,208.6	-450.6	-612.0	759.9	0.59	0.42	
3,410.0	16.70	233.30	3,299.5	-467.3	-634.0	787.5	0.52	-0.42	
3,506.0	17.30	232.30	3,391.4	-484.2	-656.3	815.6	0.70	0.62	
3,602.0	16.80	232.70	3,483.1	-501.4	-678.7	843.7	0.53	-0.52	
3,698.0	17.00	230.60	3,575.0	-518.7	-700.5	871.6	0.67	0.21	
3,793.0	16.50	230.50	3,666.0	-536.1	-721.7	899.0	0.53	-0.53	
3,889.0	16.70	231.90	3,758.0	-553.3	-743.1	926.4	0.47	0.21	
3,985.0	16.40	230.70	3,850.0	-570.4	-764.4	953.7	0.47	-0.31	
4,080.0	16.80	231.50	3,941.1	-587.3	-785.4	980.7	0.32	0.21	
4,176.0	16.30	231.00	4,033.1	-604.3	-806.6	1,007.9	0.35	-0.31	
4,272.0	15.80	230.60	4,125.4	-621.1	-827.2	1,034.4	0.53	-0.52	
4,368.0	15.30	229.90	4,217.9	-637.5	-846.9	1,060.1	0.56	-0.52	
4,463.0	14.40	230.70	4,309.7	-653.1	-865.7	1,084.4	0.97	-0.95	
4,559.0	13.80	233.60	4,402.8	-667.5	-884.1	1,107.8	0.97	-0.63	
4,655.0	13.10	233.20	4,496.2	-680.8	-902.1	1,130.1	0.74	-0.73	
4,751.0	12.50	233.10	4,589.8	-693.5	-919.1	1,151.4	0.63	-0.63	
4,846.0	11.30	233.90	4,682.7	-705.2	-934.8	1,171.0	1.28	-1.26	
4,942.0	10.30	230.80	4,777.0	-716.1	-949.1	1,188.9	1.20	-1.04	
5,038.0	9.30	229.90	4,871.6	-726.6	-961.7	1,205.3	1.05	-1.04	
5,133.0	7.80	231.40	4,965.6	-735.5	-972.6	1,219.4	1.60	-1.58	
5,229.0	6.70	234.20	5,060.8	-742.9	-982.2	1,231.5	1.20	-1.15	
5,325.0	5.80	232.30	5,156.3	-749.1	-990.6	1,241.9	0.96	-0.94	
5,421.0	4.90	232.10	5,251.8	-754.6	-997.7	1,250.9	0.94	-0.94	
5,516.0	4.00	236.00	5,346.6	-758.9	-1,003.6	1,258.3	1.00	-0.95	
5,612.0	3.70	235.00	5,442.3	-762.6	-1,008.9	1,264.7	0.32	-0.31	
5,708.0	3.20	240.60	5,538.2	-765.7	-1,013.8	1,270.4	0.63	-0.52	
5,804.0	1.90	229.90	5,634.1	-768.0	-1,017.3	1,274.7	1.44	-1.35	
5,899.0	1.20	213.70	5,729.0	-769.9	-1,019.1	1,277.2	0.86	-0.74	
5,995.0	1.20	229.70	5,825.0	-771.4	-1,020.4	1,279.2	0.35	0.00	
6,091.0	1.20	228.50	5,921.0	-772.7	-1,021.9	1,281.2	0.03	0.00	
6,187.0	1.20	219.00	6,017.0	-774.1	-1,023.3	1,283.1	0.21	0.00	

Survey Report

Company:	Occidental Petroleum Corporation	Well:	McDaniel 14-5A	Local Co-ordinate Reference:	Well McDaniel 14-5A
Project:	Brush Creek	Wellbore:	DD	TVD Reference:	McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)
Site:	NENW Sec 14-T8S-R94W	Design:	DD	MD Reference:	McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)
				North Reference:	True
				Survey Calculation Method:	Minimum Curvature
				Database:	EDM 2003.21 US Multi User D8

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
6,283.0	1.20	226.70	6,112.9	-775.6	-1,024.7	1,285.1	0.17	0.00	
6,379.0	1.30	229.20	6,208.9	-777.0	-1,026.2	1,287.2	0.12	0.10	
6,474.0	1.50	237.80	6,303.9	-778.4	-1,028.1	1,289.5	0.30	0.21	
6,570.0	1.50	224.60	6,399.9	-779.9	-1,030.1	1,292.0	0.36	0.00	
6,666.0	1.70	235.30	6,495.8	-781.6	-1,032.1	1,294.7	0.37	0.21	
6,762.0	1.90	228.20	6,591.8	-783.5	-1,034.5	1,297.7	0.31	0.21	
6,857.0	2.00	217.60	6,686.7	-785.9	-1,036.7	1,300.9	0.39	0.11	
6,953.0	2.20	214.70	6,782.7	-788.7	-1,038.7	1,304.2	0.24	0.21	
7,049.0	2.10	219.30	6,878.6	-791.6	-1,040.9	1,307.7	0.21	-0.10	
7,144.0	1.70	224.20	6,973.5	-793.9	-1,043.0	1,310.8	0.45	-0.42	
7,240.0	1.50	235.60	7,069.5	-796.7	-1,045.0	1,313.4	0.39	-0.21	
7,336.0	2.00	231.40	7,165.5	-797.4	-1,047.3	1,316.4	0.54	0.52	
7,432.0	2.10	239.80	7,261.4	-799.4	-1,050.2	1,319.8	0.33	0.10	
7,495.0	1.80	241.60	7,324.4	-800.4	-1,052.0	1,321.9	0.49	-0.48	
7,550.0	1.80	241.60	7,379.3	-801.2	-1,053.6	1,323.6	0.00	0.00	

Last DP Survey @ 7495'
 Projection to TD @ 7550' MD

Targets							
Target Name	+N-S	+E-W	Northing	Easting	Latitude	Longitude	
- Id/Notes target	(ft)	(ft)	(ft)	(ft)			
- Shape							
McDaniel 14-5A Tgt - survey misses target center by S1.4ft at 5922.0ft MD (5752.0 TVD, -770.3 N, -1019.4 E) - Point	-802.0	-1,059.8	1,535,223.93	2,332,823.20	39.279161	-107.857198	
McDaniel 14-5A BHL - survey misses target center by 8.0ft at 7492.9R MD (7322.3 TVD, -800.4 N, -1052.0 E) - Rectangle (sides W100.0 H100.0 D0.0)	-802.0	-1,059.8	1,535,223.93	2,332,823.20	39.279161	-107.857198	

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N-S (ft)	+E-W (ft)	
7,495.0	7,324.4	-800.4	-1,052.0	Last DP Survey @ 7495'
7,550.0	7,379.3	-801.2	-1,053.6	Projection to TD @ 7550' MD

Checked By: _____ Approved By: _____ Date: _____

Survey Report

Company: Occidental Petroleum Corporation		Local Co-ordinates Reference:		Well McDaniel 14-5A	
Project: Brush Creek		TVD Reference:		McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)	
Site: NENW Sec 14-T8S-R94W		MD Reference:		McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)	
Well: McDaniel 14-5A		North Reference:		True	
Wellbore: DD		Survey Calculation Method:		Minimum Curvature	
Design: DD		Database:		EDM 2003.21 US Multi User DB	

Project: Brush Creek		System Datum:		Mean Sea Level	
Map System: US State Plane 1983					
Geo Datum: North American Datum 1983					
Map Zone: Colorado Central Zone					

Site: NENW Sec 14-T8S-R94W		Northing:		Latitude:	
Site Position:		Eastings:		Longitude:	
From:		Slot Radius:		Grid Convergence:	
Position Uncertainty:		0.0 ft		-	

Well: McDaniel 14-5A		Northing:		Latitude:	
Well Position		Eastings:		Longitude:	
Position Uncertainty		Wellhead Elevation:		Ground Level:	
		0.0 ft		ft	

Wellbore: DD		Declination (°)		Dip Angle (°)		Field Strength (nT)	
Magnetics		Sample Date		10.58		65.67	
		IGRF200510		11/3/2008		52.429	

Design: DD		Phase:		Tie On Depth:			
Audit Notes:		ACTUAL		0.0			
Version:		1.0					
Vertical Section:		Depth From (TVD)		+N-S		Direction (°)	
		(ft)		(ft)		(°)	
		0.0		0.0		232.88	

Survey Program		Date		12/3/2008	
From (ft)		To (ft)		Survey (Wellbore)	
94.0		7,550.0		Survey #1 (DD)	
				Geolink MWD	
				Geolink MWD	

Survey		Vertical		Dogleg Rate (°/100ft)		Build Rate (°/100ft)		Formations / Comments	
Measured Depth (ft)		Depth (ft)		+N-S (ft)		+E-W (ft)			
0.0		0.0		0.0		0.0		0.00	
94.0		94.0		-0.1		0.5		-0.3	
186.0		186.0		-1.0		0.2		0.4	
278.0		277.9		-3.2		-2.0		3.5	
370.0		369.8		-6.0		-5.7		8.2	
463.0		462.6		-9.4		-10.8		14.3	
555.0		554.3		-13.7		-16.9		21.7	
647.0		645.8		-19.3		-24.3		31.0	
739.0		737.1		-26.8		-33.1		42.6	
831.0		828.1		-35.8		-43.5		56.3	
923.0		918.7		-46.0		-55.7		72.2	
1,016.0		1,009.8		-57.4		-70.5		90.9	
1,112.0		1,103.2		-70.1		-88.7		113.0	
								1.77	

Survey Report - Geographic

Company: Occidental Petroleum Corporation		Local Co-ordinate Reference:		Well McDaniel 14-5A	
Project: Brush Creek		TVD Reference:		McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)	
Site: NENW Sec 14-T9S-R94W		MD Reference:		McDaniel 14-5A KBE @ 7310.0ft (Grey Wolf 18)	
Well: McDaniel 14-5A		North Reference:		True	
Wellbore: DD		Survey Calculation Method:		Minimum Curvature	
Design: DD		Database:		EDM 2003.21 US Multi User DB	

Project	Brush Creek				Mean Sea Level	
Map System:	US State Plane 1983					
Geo Datum:	North American Datum 1983					
Map Zone:	Colorado Central Zone					

Site	NENW Sec 14-T9S-R94W					
Site Position:			Northings:	1,536,075.65 ft	Latitude:	39.281568
From:	Lat/Long		Eastings:	2,333,796.71 ft	Longitude:	-107.853838
Position Uncertainty:	0.0 ft		Slot Radius:	-	Grid Convergence:	-1.48 °

Well	McDaniel 14-5A					
Well Position	+N-S	0.0 ft	Northings:	1,535,998.19 ft	Latitude:	39.281363
	+E-W	0.0 ft	Eastings:	2,333,903.44 ft	Longitude:	-107.853454
Position Uncertainty	0.0 ft		Wellhead Elevation:	ft	Ground Level:	7,286.0 ft

Wellbore	DD				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/3/2008	10.58	65.67	52,429

Design	DD				
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Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)	
	0.0	0.0	0.0	0.0	0.00

Survey Program	From (ft)	To (ft)	Date	Survey (Wellbore)	Tool Name	Description
	94.0	7,550.0	Survey #1 (DD)		Geolink MWD	Geolink MWD

Survey Report - Geographic

Company: Project: Site: Well: Wellbore: Design:	Occidental Petroleum Corporation				Local Co-ordinate Reference:				Well McDaniel 14-SA			
	Brush Creek				TVD Reference:				McDaniel 14-SA KBE @ 7310.0ft (Grey Wolf 18)			
	NENW Sec 14-T9S-R94W				MD Reference:				McDaniel 14-SA KBE @ 7310.0ft (Grey Wolf 18)			
	McDaniel 14-SA				North Reference:				True			
	DD				Survey Calculation Method:				Minimum Curvature			
	DD				Database:				EDM 2003.21 US Multi 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			
0.0	0.00	0.00	0.0	0.0	0.0	1,535,998.19	2,333,903.44	39.281363	-107.853454			
94.0	0.60	100.60	94.0	-0.1	0.5	1,535,998.09	2,333,903.92	39.281363	-107.853452			
186.0	1.40	219.30	186.0	-1.0	0.2	1,535,997.13	2,333,903.65	39.281360	-107.853453			
278.0	2.50	231.40	277.9	-3.2	-2.0	1,535,995.07	2,333,901.32	39.281354	-107.853466			
370.0	3.30	234.10	368.8	-6.0	-5.7	1,535,992.36	2,333,897.54	39.281347	-107.853474			
463.0	4.20	237.80	462.6	-9.4	-10.8	1,535,989.11	2,333,892.40	39.281337	-107.853492			
555.0	5.10	232.30	554.3	-13.7	-16.9	1,535,984.97	2,333,886.20	39.281325	-107.853514			
647.0	6.50	232.80	645.8	-19.3	-24.3	1,535,979.52	2,333,878.68	39.281310	-107.853540			
739.0	8.00	227.60	737.1	-26.8	-33.1	1,535,972.29	2,333,869.61	39.281289	-107.853571			
831.0	9.20	229.90	828.1	-35.8	-43.5	1,535,963.50	2,333,859.03	39.281265	-107.853608			
923.0	10.70	230.10	918.7	-46.0	-55.7	1,535,953.60	2,333,846.59	39.281237	-107.853651			
1,016.0	12.50	235.00	1,009.8	-57.4	-70.5	1,535,942.68	2,333,831.43	39.281206	-107.853703			
1,112.0	14.20	234.70	1,103.2	-70.1	-88.7	1,535,930.39	2,333,812.98	39.281170	-107.853767			
1,207.0	15.50	237.20	1,195.0	-83.7	-108.8	1,535,917.31	2,333,792.46	39.281133	-107.853839			
1,303.0	16.80	234.70	1,287.2	-98.7	-131.0	1,535,902.92	2,333,769.97	39.281092	-107.853917			
1,399.0	18.20	236.70	1,378.8	-114.9	-154.8	1,535,887.29	2,333,745.70	39.281047	-107.854001			
1,478.0	18.10	237.60	1,453.8	-128.3	-175.5	1,535,874.49	2,333,724.69	39.281011	-107.854074			
1,591.0	17.80	236.70	1,561.3	-147.2	-204.7	1,535,856.36	2,333,694.98	39.280958	-107.854177			
1,687.0	17.20	235.50	1,652.9	-163.3	-228.7	1,535,840.89	2,333,670.58	39.280915	-107.854262			
1,783.0	16.70	234.30	1,744.7	-179.4	-251.6	1,535,825.40	2,333,647.28	39.280871	-107.854343			
1,879.0	17.30	234.20	1,836.5	-195.8	-274.4	1,535,809.60	2,333,624.08	39.280825	-107.854423			
1,974.0	17.30	235.30	1,927.2	-212.1	-297.4	1,535,793.90	2,333,600.60	39.280781	-107.854505			
2,070.0	18.10	235.00	2,018.7	-228.7	-321.4	1,535,777.84	2,333,576.22	39.280735	-107.854589			
2,166.0	17.90	235.70	2,110.0	-245.6	-345.8	1,535,761.61	2,333,551.39	39.280689	-107.854676			
2,262.0	18.20	234.30	2,201.3	-262.7	-370.2	1,535,745.19	2,333,526.59	39.280642	-107.854762			
2,357.0	17.90	233.10	2,291.6	-280.1	-393.9	1,535,728.39	2,333,502.43	39.280594	-107.854846			
2,453.0	17.90	231.30	2,382.9	-298.2	-417.2	1,535,710.91	2,333,478.65	39.280544	-107.854928			
2,549.0	17.40	230.80	2,474.4	-316.5	-439.8	1,535,693.21	2,333,455.55	39.280494	-107.855008			
2,644.0	16.80	229.80	2,565.2	-334.3	-461.3	1,535,675.93	2,333,433.60	39.280445	-107.855084			
2,740.0	16.90	231.30	2,657.1	-352.0	-482.8	1,535,658.82	2,333,411.66	39.280397	-107.855160			
2,836.0	16.30	230.60	2,749.1	-369.3	-504.1	1,535,642.10	2,333,389.92	39.280349	-107.855235			
2,932.0	16.00	232.30	2,841.3	-385.9	-525.0	1,535,626.00	2,333,368.62	39.280303	-107.855309			
3,027.0	15.90	233.30	2,932.7	-401.7	-545.8	1,535,610.76	2,333,347.43	39.280260	-107.855382			
3,123.0	16.60	234.20	3,024.8	-417.6	-567.5	1,535,595.45	2,333,325.36	39.280216	-107.855459			
3,219.0	16.70	233.70	3,116.8	-433.8	-589.7	1,535,579.84	2,333,302.71	39.280172	-107.855537			
3,315.0	17.10	232.30	3,208.6	-450.6	-612.0	1,535,563.63	2,333,279.99	39.280126	-107.855616			
3,410.0	16.70	233.30	3,299.5	-467.3	-634.0	1,535,547.51	2,333,257.57	39.280080	-107.855694			
3,506.0	17.30	232.30	3,391.4	-484.2	-656.3	1,535,531.12	2,333,234.79	39.280033	-107.855773			
3,602.0	16.80	232.70	3,483.1	-501.4	-678.7	1,535,514.56	2,333,212.02	39.279986	-107.855852			
3,698.0	17.00	230.60	3,575.0	-518.7	-700.5	1,535,497.82	2,333,188.70	39.279939	-107.855929			
3,793.0	16.50	230.50	3,666.0	-536.1	-721.7	1,535,480.98	2,333,168.11	39.279891	-107.856003			
3,889.0	16.70	231.90	3,758.0	-553.3	-743.1	1,535,464.36	2,333,146.30	39.279844	-107.856079			
3,985.0	18.40	230.70	3,850.0	-570.4	-764.4	1,535,447.82	2,333,124.53	39.279797	-107.856154			
4,080.0	16.60	231.50	3,941.1	-587.3	-785.4	1,535,431.43	2,333,103.09	39.279750	-107.856229			
4,176.0	16.30	231.00	4,033.1	-604.3	-806.6	1,535,414.97	2,333,081.46	39.279704	-107.856303			
4,272.0	15.80	230.60	4,125.4	-621.1	-827.2	1,535,398.73	2,333,060.46	39.279658	-107.856376			
4,368.0	15.30	229.90	4,217.9	-637.5	-846.9	1,535,382.80	2,333,040.26	39.279613	-107.856446			
4,463.0	14.40	230.70	4,309.7	-653.1	-865.7	1,535,367.73	2,333,021.13	39.279570	-107.856512			
4,559.0	13.80	233.60	4,402.8	-667.5	-884.1	1,535,353.86	2,333,002.31	39.279530	-107.856577			
4,655.0	13.10	233.20	4,496.2	-680.8	-902.1	1,535,341.02	2,332,984.05	39.279494	-107.856641			
4,751.0	12.50	233.10	4,589.8	-693.5	-919.1	1,535,328.71	2,332,966.70	39.279459	-107.856701			
4,846.0	11.30	233.90	4,682.7	-705.2	-934.6	1,535,317.46	2,332,950.66	39.279427	-107.856756			
4,942.0	10.30	230.80	4,777.0	-716.1	-949.1	1,535,306.87	2,332,936.13	39.279397	-107.856807			
5,038.0	9.30	229.90	4,871.6	-726.6	-961.7	1,535,296.78	2,332,923.28	39.279368	-107.856851			
5,133.0	7.80	231.40	4,965.6	-735.5	-972.6	1,535,288.10	2,332,912.14	39.279343	-107.856890			

Survey Report - Geographic

Company: Project: Site: Well: Wellbore: Design:	Occidental Petroleum Corporation			Local Co-ordinate Reference:			Well McDaniel 14-SA		
	Brush Creek			TVD Reference:			McDaniel 14-SA KBE @ 7310.0ft (Grey Wolf 18)		
	NENW Sec 14-T9S-R04W			MD Reference:			McDaniel 14-SA KBE @ 7310.0ft (Grey Wolf 18)		
	McDaniel 14-SA			North Reference:			True		
	DD			Survey Calculation Method:			Minimum Curvature		
DD			Database:			EDM 2003.21 US Multi 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
5,229.0	6.70	234.20	5,060.8	-742.9	-982.2	1,535,261.01	2,332,902.32	39.279323	-107.856924
5,325.0	5.80	232.30	5,156.3	-749.1	-990.6	1,535,274.98	2,332,893.78	39.278306	-107.856953
5,421.0	4.90	232.10	5,251.8	-754.6	-997.7	1,535,269.68	2,332,886.57	39.279291	-107.856978
5,516.0	4.00	236.00	5,346.6	-758.9	-1,003.6	1,535,265.49	2,332,880.51	39.279279	-107.856998
5,612.0	3.70	235.00	5,442.3	-762.6	-1,008.9	1,535,261.98	2,332,875.10	39.279269	-107.857018
5,708.0	3.20	240.60	5,538.2	-765.7	-1,013.8	1,535,259.02	2,332,870.15	39.279261	-107.857035
5,804.0	1.90	228.90	5,634.1	-768.0	-1,017.3	1,535,256.77	2,332,866.54	39.279254	-107.857048
5,899.0	1.20	213.70	5,729.0	-769.9	-1,019.1	1,535,254.98	2,332,864.74	39.279249	-107.857054
5,995.0	1.20	229.70	5,825.0	-771.4	-1,020.4	1,535,253.52	2,332,863.38	39.279245	-107.857059
6,091.0	1.20	228.50	5,921.0	-772.7	-1,021.9	1,535,252.25	2,332,861.82	39.279241	-107.857064
6,187.0	1.20	219.00	6,017.0	-774.1	-1,023.3	1,535,250.84	2,332,860.40	39.279237	-107.857069
6,283.0	1.20	226.70	6,112.9	-775.6	-1,024.7	1,535,249.40	2,332,859.00	39.279233	-107.857074
6,379.0	1.30	229.20	6,208.9	-777.0	-1,026.2	1,535,248.04	2,332,857.41	39.279230	-107.857079
6,474.0	1.50	237.80	6,303.9	-778.4	-1,028.1	1,535,246.72	2,332,855.51	39.279226	-107.857086
6,570.0	1.50	224.60	6,398.9	-779.9	-1,030.1	1,535,245.21	2,332,853.52	39.279222	-107.857093
6,666.0	1.70	235.30	6,495.8	-781.6	-1,032.1	1,535,243.56	2,332,851.42	39.279217	-107.857100
6,762.0	1.80	228.20	6,591.8	-783.5	-1,034.5	1,535,241.75	2,332,849.02	39.279212	-107.857108
6,857.0	2.00	217.60	6,686.7	-785.9	-1,036.7	1,535,239.44	2,332,846.77	39.279205	-107.857116
6,953.0	2.20	214.70	6,782.7	-788.7	-1,038.7	1,535,236.66	2,332,844.63	39.279197	-107.857124
7,049.0	2.10	219.30	6,878.6	-791.6	-1,040.9	1,535,233.84	2,332,842.39	39.279190	-107.857131
7,144.0	1.70	224.20	6,973.5	-793.9	-1,043.0	1,535,231.53	2,332,840.25	39.279183	-107.857139
7,240.0	1.50	235.60	7,069.5	-795.7	-1,045.0	1,535,229.86	2,332,838.17	39.279178	-107.857146
7,336.0	2.00	231.40	7,165.5	-797.4	-1,047.3	1,535,228.16	2,332,835.78	39.279174	-107.857154
7,432.0	2.10	239.80	7,261.4	-799.4	-1,050.2	1,535,226.31	2,332,832.90	39.279168	-107.857164
7,495.0	1.80	241.60	7,324.4	-800.4	-1,052.0	1,535,225.30	2,332,831.01	39.279165	-107.857171
Last DP Survey @ 7495'									
7,550.0	1.80	241.60	7,379.3	-801.2	-1,053.6	1,535,224.52	2,332,829.47	39.279163	-107.857176
Projection to TD @ 7550' MD									

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		+E-W (ft)	Comment
7,495.0	7,324.4	+N-S (ft)			
7,550.0	7,379.3				
		-800.4		-1,052.0	Last DP Survey @ 7495'
		-801.2		-1,053.6	Projection to TD @ 7550' MD

Checked By: _____

Approved By: _____

Date: _____