



DEPT. OF CONSERVATION  
199 PCROS  
SHREVEPORT, LA

2009 FEB -8 PM 12:45

SN- 236491

19510 Oil Center Blvd  
Houston, TX 77073  
Bus 281 443 1414  
Fax 281 443 1676

State of Louisiana  
Caddo Parish

I, **C Kopech**, certify that, I am employed by Ryan Energy Technologies USA, Inc , that I did on the day(s) of **11/15/07** thru **12/14/07** conduct or supervise the taking of **MWD surveys** from a depth of **8899' MD** to a depth of **11089' MD**, on the day(s) of **12/18/07** thru **01/01/08** conduct or supervise the taking of **MWD surveys** from a depth of **9981' MD** to a depth of **12509' MD**, that the data is true, correct, complete, and within the limitations of the tool as set forth by Ryan Energy Technologies USA, Inc , that I am authorized and qualified to make this report, that this survey was conducted at the request of **Goodrich Petroleum Corporation** for the **AC Mitchell #1**, in **Caddo Parish, LA** and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Ryan Energy Technologies USA, Inc

C KOPECH

C Kopech  
Directional Driller  
Ryan Energy Technologies U S A , Inc

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# Ryan Energy Technologies

## COMPLETION REPORT



<b>Company</b> Goodrich Petroleum Corporation				<b>Date</b> 1/2/2008		<b>Time</b> 09 56 25		<b>Page</b> 1	
<b>Field</b> Caddo Parish LA				<b>Co-ordinate(NE) Reference</b> Well Well # 1 Grnd North					
<b>Site</b> AC Mitchell #1				<b>Vertical (TVD) Reference</b> Est RKB 257 0					
<b>Well</b> Well # 1				<b>Section (VS) Reference</b> Well (0 00N 0 00E 181 37Azi)					
<b>Wellpath</b> #1				<b>Survey Calculation Method</b> Minimum Curvature		<b>Db</b> Sybase			

  

<b>Field</b> Caddo Parish LA			
USA			
<b>Map System</b> US State Plane Coordinate System 1927		<b>Map Zone</b> Louisiana Northern Zone	
<b>Geo Datum</b> NAD27 (Clarke 1866)		<b>Coordinate System</b> Well Centre	
<b>Sys Datum</b> Mean Sea Level		<b>Geomagnetic Model</b> igrf2005	

  

<b>Site</b> AC Mitchell #1			
Caddo Parish LA			
<b>Site Position</b>	<b>Northing</b>	<b>Latitude</b>	
From Map	685546 00 ft	32 32 31 973 N	
<b>Position Uncertainty</b>	<b>Easting</b>	<b>Longitude</b>	
0 00 ft	1530365 00 ft	94 1 26 275 W	
<b>Ground Level</b>		<b>North Reference</b>	
237 00 ft		Grnd	
		<b>Grid Convergence</b>	-0 81 deg

  

<b>Well</b> Well # 1				<b>Slot Name</b>			
<b>Well Position</b>	<b>+N/-S</b>	<b>0 00 ft</b>	<b>Northing</b>	<b>685546 00 ft</b>	<b>Latitude</b>	<b>32 32 31 973 N</b>	
	<b>+E/-W</b>	<b>0 00 ft</b>	<b>Easting</b>	<b>1530365 00 ft</b>	<b>Longitude</b>	<b>94 1 26 275 W</b>	
<b>Position Uncertainty</b>		<b>0 00 ft</b>					

  

<b>Wellpath</b> #1				<b>Drilled From</b> Surface			
<b>Current Datum</b>	<b>Est RKB</b>	<b>Height</b>	<b>257 00 ft</b>	<b>Tie-on Depth</b>	<b>0 00 ft</b>		
<b>Magnetic Data</b>	<b>9/18/2007</b>			<b>Above System Datum</b>	<b>Mean Sea Level</b>		
<b>Field Strength</b>	<b>49949 nT</b>			<b>Declination</b>	<b>2 73 deg</b>		
<b>Vertical Section</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>		<b>Mag Dip Angle</b>	<b>61 95 deg</b>		
	<b>ft</b>	<b>ft</b>		<b>+E/-W</b>	<b>Direction</b>		
				<b>ft</b>	<b>deg</b>		
	<b>0 00</b>	<b>0 00</b>		<b>0 00</b>	<b>181 37</b>		

  

<b>Survey Program for Definitive Wellpath</b>				<b>Version</b> 0			
<b>Date</b>	<b>1/2/2008</b>	<b>Validated No</b>		<b>Toolcode</b>		<b>Tool Name</b>	
<b>Actual From</b>	<b>To</b>	<b>Survey</b>					
<b>ft</b>	<b>ft</b>						
100 00	2320 00	Survey #1 (100 00-2320 00)		Gyro		Gyro	
2500 00	8850 00	Survey #2 (2500 00-8850 00)		Gyro		Gyro	
8899 00	11098 00	Survey #3 (8899 00-11098 00)		MWD		MWD	
11168 00	11168 00	Survey #4 (11168 00-11168 00)		Projection		Projection	

  

<b>Survey</b>										
MD	Incl	TVD	VS	Azim	N/S	E/W	Clsr Dist	Clsr Azi	Dog Leg	Tool
ft	deg	ft	ft	deg	ft	ft	ft	deg	deg/100ft	
100 00	0 25	100 00	0 14	232 00	-0 13	-0 17	0 22	232 00	0 00	Gyro
200 00	0 25	200 00	0 43	227 00	-0 42	-0 50	0 65	230 33	0 02	Gyro
300 00	0 25	300 00	0 59	269 00	-0 57	-0 88	1 05	237 10	0 18	Gyro
400 00	0 25	400 00	0 67	254 00	-0 63	-1 31	1 45	244 16	0 07	Gyro
500 00	0 25	500 00	0 95	173 00	-0 91	-1 49	1 75	238 60	0 32	Gyro
600 00	0 25	600 00	1 38	174 00	1 34	-1 44	1 97	227 02	0 00	Gyro
700 00	0 25	699 99	1 81	171 00	-1 78	-1 39	2 25	217 95	0 01	Gyro
800 00	0 25	799 99	2 17	228 00	-2 14	-1 51	2 62	215 30	0 24	Gyro
900 00	0 75	899 99	2 95	197 00	-2 91	-1 87	3 46	212 69	0 55	Gyro
1000 00	0 75	999 98	4 24	187 00	-4 19	-2 14	4 70	207 06	0 13	Gyro
1100 00	0 25	1099 98	5 10	180 00	-5 05	-2 22	5 52	203 70	0 50	Gyro
1200 00	0 50	1199 97	5 76	175 00	-5 71	2 18	6 11	200 91	0 25	Gyro
1300 00	0 25	1299 97	6 40	170 00	6 36	-2 10	6 69	198 32	0 25	Gyro
1400 00	0 25	1399 97	6 84	185 00	6 79	-2 09	7 10	197 08	0 07	Gyro
1500 00	0 25	1499 97	6 92	308 00	6 87	-2 28	7 24	198 33	0 44	Gyro
1600 00	0 25	1599 97	6 66	55 00	-6 61	-2 27	6 99	198 95	0 40	Gyro
1700 00	0 25	1699 97	6 57	262 00	-6 52	-2 31	6 91	199 49	0 49	Gyro
1800 00	0 25	1799 97	6 51	298 00	-6 44	2 72	6 99	202 85	0 15	Gyro
1900 00	0 25	1899 97	6 19	352 00	6 13	-2 94	6 79	205 63	0 23	Gyro
2000 00	0 50	1999 97	5 61	329 00	5 54	-3 19	6 39	209 98	0 29	Gyro

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## COMPLETION REPORT



<b>Company</b>	Goodrich Petroleum Corporation	<b>Date</b>	1/2/2008	<b>Time</b>	09 56 25	<b>Page</b>	2
<b>Field</b>	Caddo Parish LA	<b>Co-ordinate(NE) Reference</b>	Well #1	<b>Grid</b>	North		
<b>Site</b>	AC Mitchell #1	<b>Vertical (TVD) Reference</b>	Est RKB		257 0		
<b>Well</b>	Well #1	<b>Section (VS) Reference</b>	Well (0 00N,0 00E 181 37Az)				
<b>Wellpath</b>	#1	<b>Survey Calculation Method</b>	Minimum Curvature	<b>Db</b>	Sybase		

### Survey

MD ft	Incl deg	TVD ft	VS ft	Azim deg	N/S ft	E/W ft	Clsr Dist ft	Clsr Azi deg	Dog Leg deg/100ft	Tool
2100 00	1 00	2099 96	4 70	310 00	-4 60	-4 09	6 15	221 61	0 55	Gyro
2200 00	1 25	2199 94	3 52	307 00	-3 38	-5 63	6 57	238 98	0 26	Gyro
2320 00	1 00	2319 91	2 14	307 00	-1 97	-7 51	7 76	255 33	0 21	Gyro
2500 00	0 77	2499 89	0 89	287 89	-0 65	-9 91	9 93	266 25	0 21	Gyro
2550 00	0 90	2549 89	0 69	286 66	-0 43	-10 61	10 62	267 66	0 26	Gyro
2600 00	0 86	2599 88	0 50	283 83	-0 23	-11 35	11 35	268 83	0 12	Gyro
2650 00	0 74	2649 88	0 37	279 68	-0 09	-12 03	12 03	269 59	0 27	Gyro
2700 00	0 84	2699 87	0 30	275 99	0 01	-12 72	12 72	270 03	0 22	Gyro
2750 00	0 84	2749 87	0 19	283 01	0 13	-13 44	13 44	270 54	0 21	Gyro
2800 00	0 81	2799 86	0 05	282 09	0 28	-14 14	14 14	271 15	0 07	Gyro
2850 00	0 86	2849 86	-0 09	283 75	0 45	-14 85	14 86	271 72	0 11	Gyro
2900 00	0 93	2899 85	-0 28	286 52	0 65	-15 60	15 62	272 39	0 16	Gyro
2950 00	0 93	2949 84	-0 50	288 59	0 90	-16 38	16 40	273 13	0 07	Gyro
3000 00	1 01	2999 84	-0 82	297 74	1 23	-17 15	17 20	274 10	0 35	Gyro
3050 00	0 97	3049 83	-1 14	287 90	1 57	-17 94	18 01	274 98	0 35	Gyro
3100 00	0 98	3099 82	-1 38	287 51	1 82	-18 75	18 84	275 55	0 02	Gyro
3150 00	1 00	3149 82	-1 66	293 81	2 13	-19 56	19 68	276 21	0 22	Gyro
3200 00	0 98	3199 81	-1 94	286 31	2 42	-20 37	20 51	276 79	0 26	Gyro
3250 00	0 82	3249 80	-2 05	271 52	2 55	-21 14	21 29	276 89	0 56	Gyro
3300 00	0 65	3299 80	-2 05	270 32	2 57	-21 78	21 93	276 72	0 34	Gyro
3350 00	0 91	3349 79	-2 30	311 95	2 83	-22 36	22 54	277 22	1 21	Gyro
3400 00	0 95	3399 79	-2 84	314 15	3 39	-22 95	23 20	278 39	0 11	Gyro
3450 00	0 95	3449 78	-3 41	315 63	3 97	-23 54	23 87	279 58	0 05	Gyro
3500 00	0 96	3499 77	-3 96	309 62	4 54	-24 15	24 57	280 63	0 20	Gyro
3550 00	0 91	3549 77	-4 50	317 60	5 10	-24 74	25 26	281 64	0 28	Gyro
3600 00	0 86	3599 76	-5 09	323 25	5 69	-25 23	25 87	282 71	0 20	Gyro
3650 00	0 85	3649 75	-5 69	327 49	6 30	-25 66	26 42	283 80	0 13	Gyro
3700 00	0 69	3699 75	-6 14	299 24	6 76	-26 12	26 98	284 51	0 81	Gyro
3750 00	0 15	3749 75	-6 32	309 21	6 95	-26 43	27 33	284 73	1 09	Gyro
3800 00	0 86	3799 75	-6 71	340 27	7 35	-26 61	27 61	285 43	1 47	Gyro
3850 00	0 74	3849 74	-7 26	309 50	7 90	-26 99	28 12	286 32	0 88	Gyro
3900 00	0 52	3899 74	-7 67	21 40	8 32	-27 15	28 40	287 04	1 52	Gyro
3950 00	0 89	3949 74	-8 26	347 67	8 91	-27 15	28 58	288 17	1 08	Gyro
4000 00	0 66	3999 73	-8 83	312 18	9 48	27 45	29 04	289 06	1 04	Gyro
4050 00	0 62	4049 73	-9 20	314 96	9 87	-27 85	29 55	289 51	0 10	Gyro
4100 00	0 55	4099 73	9 54	309 36	10 21	-28 23	30 02	289 89	0 18	Gyro
4150 00	0 72	4149 72	9 97	25 43	10 65	-28 28	30 22	290 63	1 59	Gyro
4200 00	0 78	4199 72	-10 56	334 76	11 24	-28 29	30 44	291 67	1 29	Gyro
4250 00	0 63	4249 72	-11 09	38 21	11 76	-28 27	30 62	292 59	1 50	Gyro
4300 00	0 88	4299 71	-11 69	1 66	12 36	-28 09	30 69	293 76	1 06	Gyro
4350 00	0 65	4349 71	12 34	339 72	13 01	28 17	31 03	294 79	0 74	Gyro
4400 00	0 65	4399 70	-12 86	338 96	13 54	-28 37	31 44	295 52	0 02	Gyro
4450 00	0 63	4449 70	-13 38	340 55	14 07	-28 57	31 84	296 22	0 05	Gyro
4500 00	0 70	4499 70	-13 94	347 60	14 62	-28 72	32 23	296 98	0 22	Gyro
4550 00	0 82	4549 69	-14 59	352 57	15 28	-28 84	32 63	297 92	0 27	Gyro
4600 00	0 95	4599 69	-15 35	357 60	16 05	-28 90	33 06	299 04	0 30	Gyro
4650 00	1 05	4649 68	-16 22	354 75	16 92	-28 96	33 54	300 29	0 22	Gyro
4700 00	1 48	4699 67	17 26	26 70	17 95	-28 71	33 86	302 01	1 62	Gyro
4750 00	0 91	4749 66	18 24	359 02	18 92	28 43	34 15	303 65	1 59	Gyro
4800 00	1 54	4799 65	19 24	28 21	19 91	-28 12	34 45	305 31	1 74	Gyro
4850 00	1 62	4849 63	-20 54	5 98	21 21	-27 73	34 91	307 41	1 23	Gyro
4900 00	1 57	4899 61	21 85	30 20	22 50	-27 31	35 38	309 49	1 34	Gyro
4950 00	1 76	4949 59	23 20	11 00	23 85	-26 82	35 89	311 65	1 34	Gyro

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