



PATTERSON-UTI DRILLING COMPANY

A LIMITED PARTNERSHIP

1512 Larimer Street, Suite 730, Denver, Colorado 80202

303-542-1900 • Fax: 303-542-1903

API 30-045-32930

July 21, 2005

Rig #747
ConocoPhillips Corporation
PO BOX 2197
Houston, TX 77252-2197

This is to certify that Patterson UTI Drilling, did run deviation surveys at the listed depth on your San Juan 32-7 #228A in Sec. 7T31N7W.

Depth	Deviation	Depth	Deviation
213'	1/2°	2790'	26 1/2°
2113'	268°	3113'	1 1/2°

To the best of my knowledge, I swear this information to be true.

Sincerely,

Gary Miller

Area Manager

State of New Mexico county San Juan

This instrument was acknowledged before me

by Gary Miller

Notary public

Angela R. DeCade

My commission expire

5-1-09

Ryan Energy Technologies Inc.

COMPLETION REPORT



Company: ConocoPhillips		Date: 7/20/2005		Time: 08:08:53		Page: 1	
Field: San Juan County, NM		Co-ordinate(NE) Reference:		Site: San Juan 32-7 Unit 228A, Grid Nort			
Site: San Juan 32-7 Unit 228A		Vertical (TVD) Reference:		SITE 0.0			
Well: Well #228A		Section (VS) Reference:		Well (0.00N,0.00E,274.76Azi)			
Wellpath: Original hole		Survey Calculation Method:		Minimum Curvature		Db: Sybase	

Field: San Juan County, NM New Mexico USA		Map System: US State Plane Coordinate System 1927		Map Zone: New Mexico, Western Zone	
Geo Datum: NAD27 (Clarke 1866)		Coordinate System: Site Centre		Geomagnetic Model: igrf2005	
Sys Datum: Mean Sea Level					

Site: San Juan 32-7 Unit 228A sec. 7, T31N, R07W San Juan County, New Mexico					
Site Position:	Northing: 2017855.07 ft	Latitude: 36 32 40.910 N			
From: Geographic	Easting: 637946.51 ft	Longitude: 107 21 49.410 W			
Position Uncertainty: 0.00 ft		North Reference: Grid			
Ground Level: 6410.00 ft		Grid Convergence: 0.28 deg			

Well: Well #228A API #		Slot Name:			
Well Position: +N/-S 0.00 ft	Northing: 2017855.07 ft	Latitude: 36 32 40.910 N			
+E/-W 0.00 ft	Easting: 637946.51 ft	Longitude: 107 21 49.410 W			
Position Uncertainty: 0.00 ft					

Wellpath: Original hole		Drilled From: Surface	
Current Datum: SITE	Height 0.00 ft	Tie-on Depth: 0.00 ft	
Magnetic Data: 6/24/2005		Above System Datum: Mean Sea Level	
Field Strength: 51333 nT		Declination: 10.42 deg	
Vertical Section: Depth From (TVD)	+N/-S	Mag Dip Angle: 63.51 deg	
ft	ft	+E/-W	Direction
		ft	deg
0.00	0.00	0.00	274.76

Survey Program for Definitive Wellpath				
Date: 7/20/2005	Validated: No	Version: 1		
Actual From ft	To ft	Survey	Toolcode	Tool Name
234.00	3053.00	Survey #1 (234.00-3053.00)	MWD	Standard MWD
3113.00	3113.00	Survey #2 (3113.00-3113.00)	Projection	Projection

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
234.00	0.00	234.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
270.00	0.35	270.00	0.05	210.04	-0.10	-0.06	0.11	210.04	0.97	MWD
301.00	1.06	301.00	0.37	262.43	-0.21	-0.39	0.44	240.93	2.87	MWD
330.00	2.11	329.99	1.16	276.84	-0.19	-1.18	1.20	261.03	3.84	MWD
361.00	3.52	360.95	2.68	276.14	-0.02	-2.70	2.70	269.64	4.55	MWD
393.00	5.19	392.85	5.11	275.08	0.22	-5.11	5.12	272.42	5.22	MWD
423.00	6.60	422.70	8.19	271.74	0.39	-8.19	8.20	272.72	4.84	MWD
452.00	8.00	451.46	11.87	269.46	0.42	-11.87	11.88	272.03	4.93	MWD
482.00	9.23	481.12	16.34	268.58	0.34	-16.37	16.37	271.19	4.12	MWD
512.00	10.38	510.68	21.43	270.69	0.31	-21.47	21.48	270.84	4.02	MWD
543.00	10.99	541.14	27.16	271.04	0.40	-27.22	27.22	270.84	1.98	MWD
573.00	10.90	570.60	32.84	270.86	0.50	-32.92	32.92	270.86	0.32	MWD
603.00	11.70	600.02	38.71	271.57	0.62	-38.79	38.80	270.92	2.71	MWD
633.00	12.75	629.34	45.06	273.68	0.92	-45.14	45.15	271.16	3.80	MWD
664.00	13.45	659.53	52.08	275.43	1.48	-52.14	52.16	271.62	2.60	MWD
694.00	14.16	688.66	59.24	276.14	2.20	-59.26	59.30	272.13	2.43	MWD
725.00	14.25	718.71	66.85	275.79	2.99	-66.83	66.89	272.56	0.40	MWD
755.00	14.95	747.75	74.41	275.79	3.75	-74.35	74.45	272.89	2.33	MWD
785.00	15.83	776.67	82.37	275.26	4.52	-82.28	82.40	273.14	2.97	MWD
814.00	16.80	804.50	90.51	274.73	5.23	-90.39	90.54	273.31	3.38	MWD
845.00	17.50	834.12	99.65	273.68	5.90	-99.51	99.68	273.39	2.47	MWD

Ryan Energy Technologies Inc.

COMPLETION REPORT



Company: ConocoPhillips	Date: 7/20/2005	Time: 08:08:53	Page: 2
Field: San Juan County, NM	Co-ordinate(NE) Reference:	Site: San Juan 32-7 Unit 228A, Grid Nort	
Site: San Juan 32-7 Unit 228A	Vertical (TVD) Reference:	SITE 0.0	
Well: Well #228A	Section (VS) Reference:	Well (0.00N,0.00E,274.76Azi)	
Wellpath: Original hole	Survey Calculation Method:	Minimum Curvature	Db: 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
875.00	17.76	862.71	108.74	274.73	6.56	-108.57	108.77	273.46	1.37	MWD
907.00	18.55	893.12	118.71	274.91	7.40	-118.50	118.74	273.57	2.47	MWD
935.00	18.91	919.64	127.70	275.61	8.23	-127.46	127.72	273.69	1.52	MWD
966.00	19.43	948.92	137.88	275.08	9.17	-137.59	137.90	273.81	1.77	MWD
996.00	20.66	977.10	148.16	275.61	10.13	-147.83	148.18	273.92	4.14	MWD
1028.00	21.28	1006.98	159.61	275.08	11.20	-159.23	159.63	274.02	2.03	MWD
1059.00	21.72	1035.82	170.97	275.61	12.26	-170.54	170.98	274.11	1.55	MWD
1088.00	22.34	1062.71	181.85	276.49	13.41	-181.36	181.86	274.23	2.42	MWD
1119.00	22.77	1091.34	193.73	276.84	14.79	-193.17	193.74	274.38	1.45	MWD
1149.00	23.30	1118.94	205.46	276.49	16.15	-204.83	205.47	274.51	1.82	MWD
1180.00	24.27	1147.31	217.96	275.61	17.46	-217.26	217.96	274.60	3.33	MWD
1212.00	24.80	1176.42	231.25	275.61	18.76	-230.49	231.25	274.65	1.66	MWD
1242.00	25.50	1203.58	244.00	275.96	20.05	-243.17	244.00	274.71	2.39	MWD
1272.00	26.47	1230.54	257.14	275.79	21.39	-256.25	257.14	274.77	3.24	MWD
1303.00	27.52	1258.17	271.21	275.08	22.72	-270.25	271.21	274.81	3.54	MWD
1334.00	28.84	1285.49	285.85	275.79	24.11	-284.83	285.85	274.84	4.39	MWD
1365.00	29.37	1312.58	300.92	275.43	25.59	-299.83	300.92	274.88	1.80	MWD
1397.00	29.28	1340.48	316.59	275.61	27.09	-315.43	316.60	274.91	0.39	MWD
1427.00	29.37	1366.63	331.29	275.43	28.51	-330.06	331.29	274.94	0.42	MWD
1458.00	29.63	1393.61	346.55	275.08	29.91	-345.26	346.55	274.95	1.01	MWD
1489.00	29.72	1420.55	361.90	275.26	31.29	-360.54	361.90	274.96	0.41	MWD
1520.00	29.72	1447.47	377.27	275.08	32.67	-375.85	377.27	274.97	0.29	MWD
1551.00	29.46	1474.43	392.57	275.08	34.03	-391.10	392.58	274.97	0.84	MWD
1583.00	29.55	1502.28	408.33	275.79	35.52	-406.79	408.33	274.99	1.13	MWD
1614.00	29.63	1529.23	423.64	275.79	37.07	-422.02	423.64	275.02	0.26	MWD
1645.00	29.81	1556.16	439.00	275.61	38.59	-437.31	439.01	275.04	0.65	MWD
1676.00	29.90	1583.04	454.43	276.66	40.24	-452.65	454.44	275.08	1.71	MWD
1706.00	29.90	1609.05	469.38	276.14	41.91	-467.51	469.39	275.12	0.86	MWD
1737.00	29.81	1635.93	484.80	276.66	43.63	-482.85	484.82	275.16	0.88	MWD
1768.00	29.90	1662.82	500.23	276.14	45.35	-498.18	500.24	275.20	0.88	MWD
1800.00	29.81	1690.57	516.16	275.96	47.03	-514.03	516.17	275.23	0.40	MWD
1831.00	29.90	1717.46	531.58	276.31	48.68	-529.37	531.60	275.25	0.63	MWD
1862.00	29.72	1744.36	546.99	276.66	50.42	-544.68	547.01	275.29	0.81	MWD
1894.00	29.90	1772.12	562.89	276.84	52.29	-560.48	562.91	275.33	0.63	MWD
1925.00	29.72	1799.02	578.29	276.49	54.08	-575.79	578.32	275.37	0.81	MWD
1956.00	29.02	1826.04	593.48	276.66	55.82	-590.89	593.52	275.40	2.27	MWD
1988.00	28.49	1854.09	608.87	276.84	57.63	-606.18	608.91	275.43	1.68	MWD
2019.00	27.35	1881.48	623.38	275.79	59.22	-620.60	623.42	275.45	4.00	MWD
2050.00	26.91	1909.07	637.51	275.79	60.65	-634.67	637.56	275.46	1.42	MWD
2082.00	26.82	1937.62	651.97	276.31	62.17	-649.05	652.02	275.47	0.79	MWD
2114.00	26.82	1966.18	666.40	276.31	63.76	-663.40	666.46	275.49	0.00	MWD
2145.00	25.94	1993.95	680.17	275.96	65.23	-677.09	680.23	275.50	2.88	MWD
2175.00	25.41	2020.98	693.17	275.43	66.52	-690.03	693.23	275.51	1.93	MWD
2206.00	25.06	2049.03	706.38	275.61	67.80	-703.18	706.44	275.51	1.16	MWD
2238.00	24.09	2078.13	719.69	275.61	69.10	-716.43	719.75	275.51	3.03	MWD
2269.00	23.48	2106.49	732.19	275.43	70.30	-728.87	732.25	275.51	1.98	MWD
2300.00	23.13	2134.96	744.45	274.91	71.41	-741.08	744.52	275.50	1.31	MWD
2331.00	22.69	2163.52	756.52	274.20	72.36	-753.11	756.58	275.49	1.68	MWD
2361.00	22.16	2191.25	767.97	274.55	73.24	-764.52	768.02	275.47	1.82	MWD
2392.00	21.98	2219.98	779.61	274.91	74.20	-776.13	779.67	275.46	0.73	MWD
2423.00	21.28	2248.80	791.04	274.73	75.16	-787.52	791.10	275.45	2.27	MWD
2454.00	20.49	2277.76	802.09	274.91	76.09	-798.53	802.15	275.44	2.56	MWD
2486.00	19.76	2307.81	813.10	273.50	76.90	-809.51	813.16	275.43	2.74	MWD

Ryan Energy Technologies Inc.

COMPLETION REPORT



Company: ConocoPhillips Field: San Juan County, NM Site: San Juan 32-7 Unit 228A Well: Well #228A Wellpath: Original hole	Date: 7/20/2005 Co-ordinate(NE) Reference: Site: San Juan 32-7 Unit 228A, Grid Nort Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,274.76Azi) Survey Calculation Method: Minimum Curvature	Time: 08:08:53 Page: 3 Db: Sybase
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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
2518.00	18.82	2338.01	823.67	272.09	77.41	-820.07	823.71	275.39	3.28	MWD
2549.00	17.94	2367.43	833.43	272.09	77.77	-829.84	833.47	275.35	2.84	MWD
2579.00	17.06	2396.04	842.44	271.39	78.05	-838.85	842.48	275.32	3.02	MWD
2610.00	15.92	2425.76	851.21	269.98	78.15	-847.65	851.25	275.27	3.90	MWD
2642.00	14.68	2456.63	859.62	269.11	78.09	-856.09	859.65	275.21	3.94	MWD
2673.00	13.54	2486.69	867.14	268.75	77.95	-863.65	867.16	275.16	3.69	MWD
2705.00	11.78	2517.91	874.11	267.52	77.73	-870.66	874.12	275.10	5.56	MWD
2736.00	10.20	2548.34	879.97	268.40	77.51	-876.57	879.99	275.05	5.13	MWD
2767.00	9.23	2578.90	885.18	271.04	77.48	-881.79	885.19	275.02	3.44	MWD
2797.00	8.53	2608.54	889.81	274.20	77.69	-886.42	889.82	275.01	2.84	MWD
2828.00	7.65	2639.23	894.17	277.19	78.12	-890.76	894.18	275.01	3.15	MWD
2860.00	6.16	2671.00	898.01	276.14	78.57	-894.58	898.02	275.02	4.67	MWD
2891.00	4.75	2701.86	900.96	274.03	78.83	-897.51	900.97	275.02	4.59	MWD
2922.00	3.61	2732.77	903.22	276.66	79.04	-899.76	903.23	275.02	3.73	MWD
2953.00	2.73	2763.73	904.93	279.83	79.28	-901.46	904.94	275.03	2.89	MWD
2984.00	2.46	2794.69	906.33	277.37	79.49	-902.85	906.34	275.03	0.94	MWD
3014.00	2.37	2824.67	907.59	278.07	79.66	-904.10	907.60	275.04	0.32	MWD
3053.00	2.29	2863.64	909.17	283.34	79.95	-905.66	909.18	275.04	0.59	MWD
3113.00	2.29	2923.59	911.54	283.34	80.50	-907.99	911.55	275.07	0.00	PROJECTED

Surface 2321/S 2488/E
 2402/S 1148/W