

30-040-33832

ConocoPhillips

ConocoPhillips
Field: San Juan County, NM
Site: San Juan 32-7 #17A
Well: Well #17A
Wellpath: Original Hole
Plan: Plan #2



SITE DETAILS

San Juan 32-7 #17A
 Sec 17, T31N, R7W
 San Juan County, New Mexico

Water Depth 0 00
 Positional Uncertainty 0 00
 Convergence 0 00

FIELD DETAILS

San Juan County, NM
 New Mexico
 USA

Geodetic System US State Plane Coordinate System 1927
 Ellipsoid NAD27 (Clarke 1866)
 Zone New Mexico, Western Zone
 Magnetic Model igr2005
 System Datum Mean Sea Level
 Local North Grd North

WELLPATH DETAILS

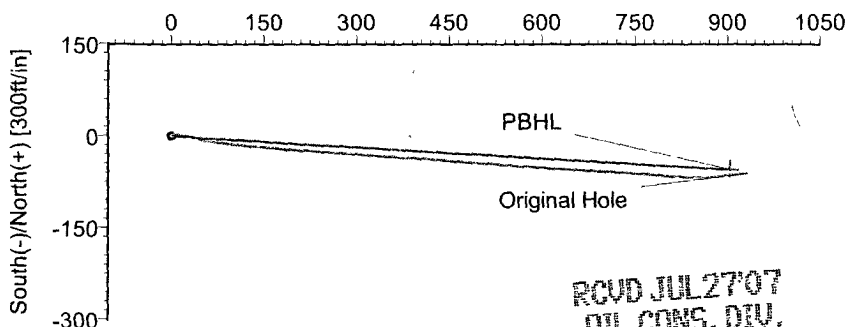
Original Hole

Rig Ref Datum	SITE	0 00ft
V Section Angle	Origin +N/-S	Origin +E/-W
93 48°	0 00	0 00
		Starting From TVD
		0 00

Surface 815/3 1665/E
Int BHL 753/5 732/E

md 6220 Tvd 6045

West(-)/East(+) [300ft/in]



RCVD JUL 27 '07
 OIL CONS. DIV.

DIST. 3

FORMATION TOP DETAILS

No	TVDPath	MDPath	Formation
1	1095 00	1115 32	NCMT
2	2280 00	2445 67	OJAM
3	2405 00	2579 55	KRLD
4	3025 00	3210 99	FRLD
5	3415 00	3600 99	PCCF
6	3615 00	3800 99	Lewis
7	4555 00	4740 99	Chacra
8	5365 00	5550 99	Cliffhouse
9	5415 00	5600 99	Menefee
10	5695 00	5880 99	Point Lookout
11	5945 00	6130 99	Mancos

CASING DETAILS

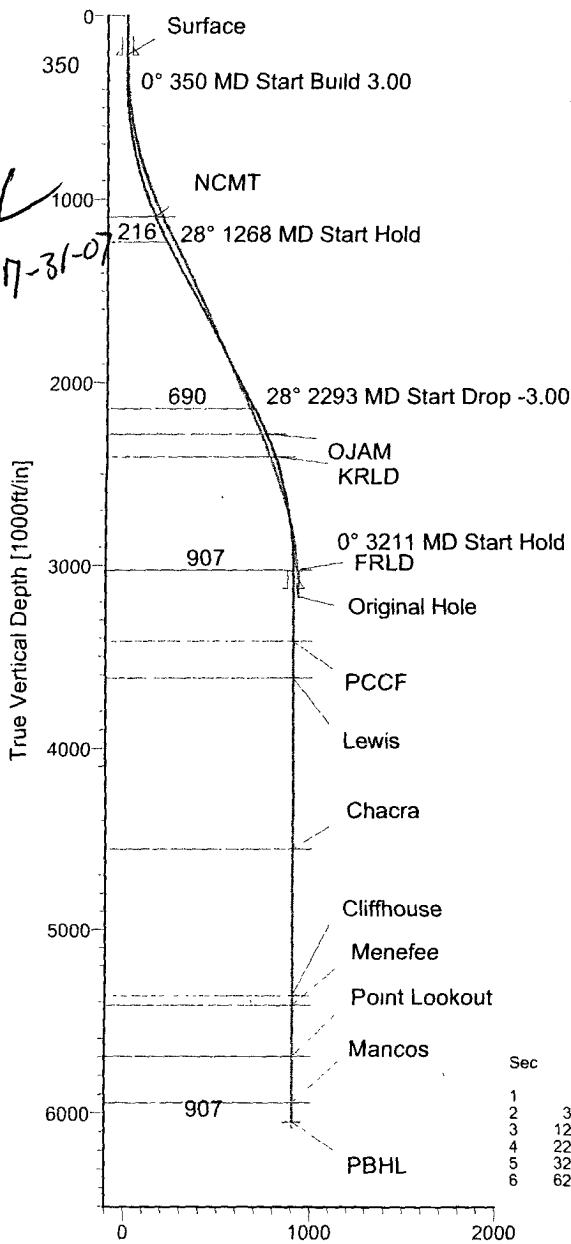
No	TVD	MD	Name	Size
1	213 00	213 00	Surface	13 375
2	3125 00	3310 99	Intermediate	7 000

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Vertical Point	3025 00	-55 00	905 00	0 00	0 00	Point
PBHL	6045 00	-55 00	905 00	0 00	0 00	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0 00	0 00	93 48	0 00	0 00	0 00	0 00	0 00	0 00	
2	350 00	0 00	93 48	350 00	0 00	0 00	0 00	0 00	0 00	
3	1267 85	27 54	93 48	1232 92	-13 12	215 94	3 00	93 48	216 34	
4	2293 14	27 54	93 48	2142 08	-41 88	689 06	0 00	0 00	690 33	
5	3210 99	0 00	93 48	3025 00	-55 00	905 00	3 00	180 00	906 67	Vertical Point
6	6230 99	0 00	93 48	6045 00	-55 00	905 00	0 00	93 48	906 67	PBHL



Vertical Section at 93.48° [1000ft/in]

Ryan Energy Technology
 19510 Oil Center Blvd
 Houston TX 77073
 Ph 281-443-1414
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Ryan The leader in
 UNDERGROUND INTELLIGENCE™

Plan Plan #2 (Well #17A/Original Hole)
 Created By Charlotte Sims Date 10/28/2006
 Checked _____ Date _____
 Reviewed _____ Date _____
 Approved _____ Date _____

Ryan Energy Technologies

Survey Report



Company: ConocoPhillips	Date: 10/28/2006	Time: 10 57 02	Page: 1
Field: San Juan County, NM	Co-ordinate(NE) Reference: Site, San Juan 32-7 #17A, Grid North		
Site: San Juan 32-7 #17A	Vertical (TVD) Reference: SITE 0.0		
Well: Well #17A	Section (VS) Reference: Well (0.00N,0.00E,93.48Azi)		
Wellpath: Original Hole	Survey Calculation Method: Minimum Curvature	Db: Sybase	

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

Site: San Juan 32-7 #17A Sec. 17, T31N, R7W San Juan County, New Mexico	
Site Position: Northing: ft From: Local Only Easting: ft	Latitude: ft Longitude: ft
Position Uncertainty: 0.00 ft	North Reference: Grid
Ground Level: 0.00 ft	Grid Convergence: deg

Well: Well #17A	Slot Name:
Well Position: +N/-S 0.00 ft Northing: ft +E/-W 0.00 ft Easting: ft	Latitude: ft Longitude: ft
Position Uncertainty: 0.00 ft	

Wellpath: Original Hole	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 4/25/2006	Above System Datum: Mean Sea Level
Field Strength: 0 nT	Declination: 0.00 deg
Vertical Section: Depth From (TVD) ft	Mag Dip Angle: 0.00 deg
	+E/-W ft
	Direction deg
0.00	0.00 0.00 93.48

Survey Program for Definitive Wellpath					
Date: 10/28/2006	Validated: No	Version: 0			
Actual From ft	To ft	Survey	Toolcode	Tool Name	
266.00	3258.00	Ryan Energy MWD (266.00-3258.00)	MWD	Standard MWD	
3345.00	3345.00	Projection to Total Depth (334)	Projection	Projection	

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIE LINE
266.00	1.40	39.30	265.97	2.51	2.06	1.90	0.53	0.53	0.00	MWD
359.00	2.60	85.70	358.92	3.55	4.88	4.66	2.07	1.29	49.89	MWD
451.00	6.00	97.30	450.65	3.10	11.73	11.52	3.80	3.70	12.61	MWD
542.00	8.60	103.00	540.91	0.96	23.08	22.98	2.96	2.86	6.26	MWD
635.00	11.10	103.30	632.53	-2.66	38.57	38.66	2.69	2.69	0.32	MWD
727.00	14.30	100.90	722.27	-6.85	58.35	58.66	3.52	3.48	-2.61	MWD
822.00	16.90	98.40	813.76	-11.09	83.54	84.06	2.83	2.74	-2.63	MWD
916.00	19.60	95.60	903.02	-14.62	112.75	113.43	3.02	2.87	-2.98	MWD
1010.00	21.90	94.90	990.92	-17.66	145.91	146.72	2.46	2.45	-0.74	MWD
1104.00	24.20	94.90	1077.41	-20.80	182.58	183.51	2.45	2.45	0.00	MWD
1196.00	26.90	94.20	1160.41	-23.94	222.13	223.18	2.95	2.93	-0.76	MWD
1288.00	26.40	94.20	1242.63	-26.96	263.29	264.44	0.54	-0.54	0.00	MWD
1382.00	25.60	94.20	1327.12	-29.98	304.38	305.64	0.85	-0.85	0.00	MWD
1476.00	24.80	93.50	1412.17	-32.67	344.31	345.66	0.91	-0.85	-0.74	MWD
1570.00	23.90	93.50	1497.81	-35.03	383.00	384.42	0.96	-0.96	0.00	MWD
1665.00	22.80	94.50	1585.03	-37.65	420.56	422.07	1.23	-1.16	1.05	MWD
1760.00	24.60	94.90	1672.01	-40.79	458.61	460.24	1.90	1.89	0.42	MWD
1853.00	23.60	93.80	1756.90	-43.67	496.48	498.21	1.18	-1.08	-1.18	MWD
1944.00	23.30	94.20	1840.39	-46.20	532.60	534.42	0.37	-0.33	0.44	MWD
2039.00	23.40	94.90	1927.61	-49.19	570.13	572.07	0.31	0.11	0.74	MWD
2133.00	25.00	93.80	2013.35	-52.10	608.55	610.59	1.77	1.70	-1.17	MWD

Ryan Energy Technologies

Survey Report



Company: ConocoPhillips Field: San Juan County, NM Site: San Juan 32-7 #17A Well: Well #17A Wellpath: Original Hole	Date: 10/28/2006 Co-ordinate(NE) Reference: Site San Juan 32-7 #17A, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N, 0.00E, 93.48Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2227.00	24.40	93.80	2098.74	-54.70	647.75	649.87	0.64	-0.64	0.00	MWD
2322.00	23.50	93.20	2185.56	-57.06	686.24	688.44	0.98	-0.95	-0.63	MWD
2416.00	21.80	93.80	2272.31	-59.26	722.37	724.63	1.83	-1.81	0.64	MWD
2511.00	20.00	93.80	2361.06	-61.51	756.18	758.52	1.89	-1.89	0.00	MWD
2604.00	21.00	96.30	2448.17	-64.39	788.62	791.07	1.43	1.08	2.69	MWD
2667.00	20.50	93.10	2507.08	-66.22	810.85	813.38	1.97	-0.79	-5.08	MWD
2730.00	18.90	92.10	2566.39	-67.20	832.07	834.61	2.60	-2.54	-1.59	MWD
2792.00	17.00	90.00	2625.37	-67.56	851.17	853.70	3.24	-3.06	-3.39	MWD
2853.00	15.70	86.80	2683.91	-67.10	868.33	870.80	2.59	-2.13	-5.25	MWD
2916.00	13.30	84.30	2744.90	-65.91	884.05	886.42	3.94	-3.81	-3.97	MWD
2977.00	11.00	84.70	2804.53	-64.67	896.83	899.10	3.77	-3.77	0.66	MWD
3039.00	8.70	84.30	2865.61	-63.66	907.39	909.58	3.71	-3.71	-0.65	MWD
3102.00	6.80	83.30	2928.03	-62.75	915.83	917.95	3.02	-3.02	-1.59	MWD
3165.00	4.60	83.30	2990.72	-62.02	922.05	924.11	3.49	-3.49	0.00	MWD
3199.38	3.99	86.02	3025.00	-61.78	924.61	926.65	1.88	-1.79	7.92	Vertical Point
3227.00	3.50	88.90	3052.56	-61.70	926.41	928.44	1.88	-1.76	10.41	MWD
3258.00	3.00	90.70	3083.51	-61.69	928.16	930.20	1.65	-1.61	5.81	MWD
3345.00	3.00	90.70	3170.39	-61.74	932.72	934.75	0.00	0.00	0.00	PROJECTED to TD

Targets

Name	Description	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
Vertical Point			3025.00	-55.00	905.00			0	0	0.000 S	0	0	0.000 W
PBHL			6045.00	-55.00	905.00			0	0	0.000 S	0	0	0.000 W