



Weatherford
DIRECTIONAL SERVICES

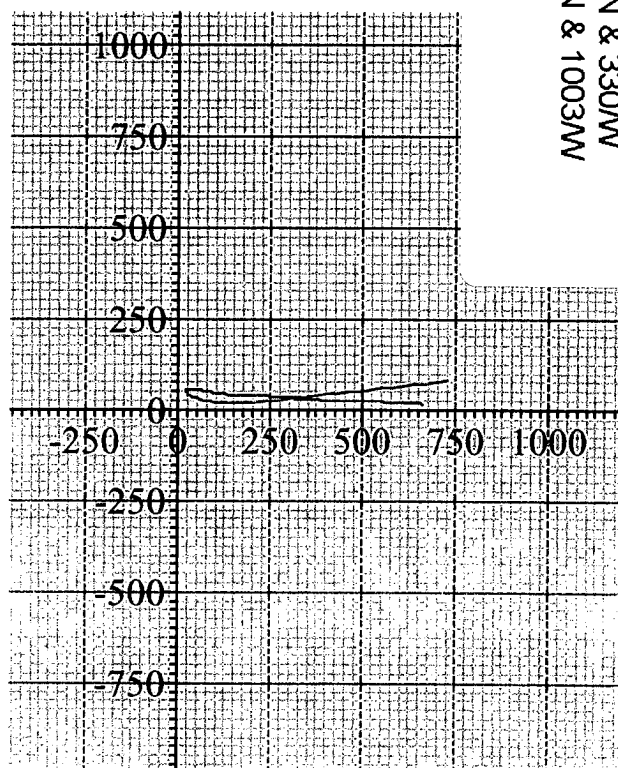
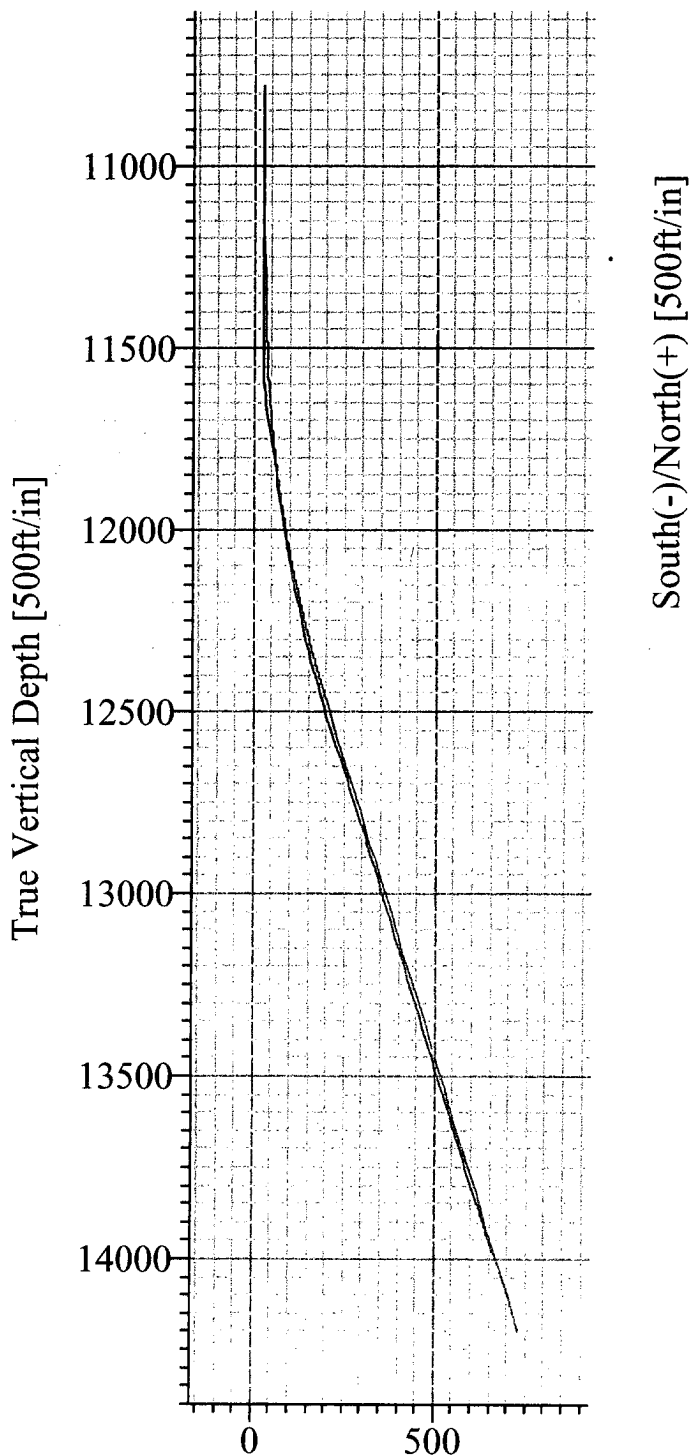
PATTERSON PETROLEUM

ALPHA 7 #2

Lea County, New Mexico

Actual vs. Plan

SUR: D-7-15s-34e, 695/N & 330/W
BHL: D-7-15s-34e, 678/N & 1003/W
API # 30-025-36914



West(-)/East(+) [500ft/in]



RECEIVED
Hobbs
OCD

Azimuths to Grid North
True North: -0.42°
Magnetic North: 8.21°

Magnetic Field
Strength: 49962nT
Dip Angle: 61.20°
Date: 11/22/2004
Model: igrf2000

Vertical Section at 83.58° [500ft/in]

LEGEND

- Well #2,1,Final
- Plan #3

Company: Patterson Petroleum
Field: Wildcat Missippian
Site: Alpha 7
Well: Well #2
Wellpath: 1

Date: 1/12/2005
Co-ordinate(NE) Reference: Well: Well #2, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: User (0.00N,0.00E,83.58Azi)
Survey Calculation Method: Minimum Curvature

Time: 09:09:25
Page: 1
Db: Sybase

Field: Wildcat Missippian

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: igrf2000

Site: Alpha 7
 Sec 7, T 15 S, R 34 E
 Lea County, New Mexico

Site Position: Northing: 741693.00 ft Latitude: 33 2 11.633 N
From: Map Easting: 737727.00 ft Longitude: 103 33 27.415 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 0.00 ft Grid Convergence: 0.42 deg

Well: Well #2

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 741693.00 ft Latitude: 33 2 11.633 N
 +E/-W 0.00 ft Easting: 737727.00 ft Longitude: 103 33 27.415 W
Position Uncertainty: 0.00 ft

Wellpath: 1

Current Datum: SITE Height 0.00 ft
Magnetic Data: 11/22/2004
Field Strength: 49962 nT
Vertical Section: Depth From (TVD) +N/-S
 ft ft
 0.00 0.00 0.00 83.58

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 8.64 deg
Mag Dip Angle: 61.20 deg
Direction: deg

Survey: Final

Start Date: 1/4/2005

Company: Weatherford International, Inc
Tool:

Engineer: Ybes Ortiz
Tied-to: User Defined

Survey: Final

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
10780.00	1.53	345.52	10778.85	43.46	24.18	741736.46	737751.18	33	2	12.061 N	103	33	27.127 W
10894.00	1.60	301.50	10892.81	45.77	22.44	741738.77	737749.44	33	2	12.084 N	103	33	27.147 W
11084.00	1.30	122.30	11082.79	46.00	22.00	741739.00	737749.00	33	2	12.087 N	103	33	27.153 W
11203.00	1.80	353.20	11201.77	47.13	22.92	741740.13	737749.92	33	2	12.098 N	103	33	27.142 W
11344.00	2.10	323.30	11342.69	51.40	21.12	741744.40	737748.12	33	2	12.140 N	103	33	27.163 W
11376.00	2.10	322.90	11374.67	52.34	20.41	741745.34	737747.41	33	2	12.150 N	103	33	27.171 W
11407.00	1.80	335.90	11405.65	53.24	19.87	741746.24	737746.87	33	2	12.159 N	103	33	27.177 W
11439.00	1.40	357.00	11437.64	54.09	19.65	741747.09	737746.65	33	2	12.167 N	103	33	27.180 W
11470.00	1.20	25.50	11468.63	54.76	19.76	741747.76	737746.76	33	2	12.174 N	103	33	27.178 W
11502.00	1.20	31.50	11500.63	55.35	20.08	741748.35	737747.08	33	2	12.179 N	103	33	27.174 W
11532.00	1.20	31.80	11530.62	55.88	20.41	741748.88	737747.41	33	2	12.185 N	103	33	27.170 W
11563.00	1.20	43.80	11561.61	56.39	20.81	741749.39	737747.81	33	2	12.190 N	103	33	27.166 W
11595.00	2.50	68.80	11593.59	56.89	21.69	741749.89	737748.69	33	2	12.194 N	103	33	27.155 W
11625.00	4.90	84.60	11623.53	57.24	23.58	741750.24	737750.58	33	2	12.198 N	103	33	27.133 W
11656.00	6.90	89.20	11654.37	57.40	26.76	741750.40	737753.76	33	2	12.199 N	103	33	27.096 W
11688.00	8.60	90.90	11686.07	57.38	31.07	741750.38	737758.07	33	2	12.199 N	103	33	27.045 W
11719.00	9.10	94.80	11716.70	57.14	35.83	741750.14	737762.83	33	2	12.196 N	103	33	26.989 W
11751.00	9.30	97.60	11748.29	56.59	40.92	741749.59	737767.92	33	2	12.190 N	103	33	26.930 W
11782.00	9.00	97.20	11778.90	55.95	45.81	741748.95	737772.81	33	2	12.183 N	103	33	26.872 W
11813.00	8.80	97.20	11809.52	55.35	50.56	741748.35	737777.56	33	2	12.177 N	103	33	26.816 W
11844.00	9.00	99.00	11840.15	54.68	55.31	741747.68	737782.31	33	2	12.170 N	103	33	26.761 W
11876.00	9.00	99.00	11871.76	53.89	60.26	741746.89	737787.26	33	2	12.162 N	103	33	26.703 W
11907.00	9.30	101.80	11902.36	53.00	65.10	741746.00	737792.10	33	2	12.153 N	103	33	26.646 W

Company: Patterson Petroleum
Field: Wildcat Missippian
Site: Alpha 7
Well: Well #2
Wellpath: 1

Date: 1/12/2005 Time: 09:09:25 Page: 2
Co-ordinate(N/E) Reference: Well: Well #2, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: User (0.00N,0.00E,83.58Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Final

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
11939.00	9.30	101.80	11933.94	51.94	70.17	741744.94	737797.17	33	2	12.142 N	103	33	26.586 W
11970.00	9.70	101.40	11964.52	50.92	75.18	741743.92	737802.18	33	2	12.131 N	103	33	26.528 W
12001.00	9.70	102.50	11995.07	49.83	80.29	741742.83	737807.29	33	2	12.120 N	103	33	26.468 W
12032.00	10.00	101.80	12025.62	48.72	85.47	741741.72	737812.47	33	2	12.109 N	103	33	26.407 W
12063.00	10.60	100.10	12056.12	47.67	90.91	741740.67	737817.91	33	2	12.098 N	103	33	26.343 W
12095.00	10.60	99.00	12087.57	46.69	96.72	741739.69	737823.72	33	2	12.088 N	103	33	26.275 W
12126.00	10.40	98.60	12118.05	45.83	102.30	741738.83	737829.30	33	2	12.079 N	103	33	26.209 W
12157.00	10.20	97.60	12148.55	45.05	107.79	741738.05	737834.79	33	2	12.071 N	103	33	26.145 W
12189.00	10.40	95.80	12180.04	44.38	113.47	741737.38	737840.47	33	2	12.064 N	103	33	26.078 W
12221.00	10.90	94.10	12211.49	43.87	119.36	741736.87	737846.36	33	2	12.059 N	103	33	26.009 W
12252.00	12.30	93.70	12241.85	43.45	125.58	741736.45	737852.58	33	2	12.054 N	103	33	25.936 W
12284.00	13.60	93.40	12273.04	43.01	132.74	741736.01	737859.74	33	2	12.049 N	103	33	25.852 W
12315.00	14.10	94.10	12303.14	42.52	140.14	741735.52	737867.14	33	2	12.044 N	103	33	25.765 W
12346.00	14.60	94.40	12333.17	41.95	147.80	741734.95	737874.80	33	2	12.037 N	103	33	25.675 W
12377.00	15.10	94.40	12363.13	41.34	155.73	741734.34	737882.73	33	2	12.031 N	103	33	25.582 W
12409.00	15.10	94.10	12394.03	40.72	164.04	741733.72	737891.04	33	2	12.024 N	103	33	25.485 W
12441.00	14.80	92.70	12424.94	40.23	172.28	741733.23	737899.28	33	2	12.019 N	103	33	25.388 W
12472.00	15.00	90.90	12454.90	39.98	180.25	741732.98	737907.25	33	2	12.016 N	103	33	25.294 W
12504.00	15.00	89.80	12485.81	39.93	188.53	741732.93	737915.53	33	2	12.015 N	103	33	25.197 W
12534.00	17.60	90.20	12514.60	39.93	196.95	741732.93	737923.95	33	2	12.014 N	103	33	25.098 W
12564.00	19.50	91.30	12543.04	39.80	206.49	741732.80	737933.49	33	2	12.012 N	103	33	24.986 W
12596.00	19.40	92.30	12573.22	39.47	217.14	741732.47	737944.14	33	2	12.008 N	103	33	24.861 W
12627.00	19.20	92.70	12602.48	39.02	227.37	741732.02	737954.37	33	2	12.003 N	103	33	24.741 W
12658.00	18.60	92.70	12631.80	38.55	237.40	741731.55	737964.40	33	2	11.997 N	103	33	24.623 W
12689.00	18.50	93.00	12661.19	38.06	247.25	741731.06	737974.25	33	2	11.992 N	103	33	24.507 W
12721.00	18.00	93.00	12691.58	37.53	257.26	741730.53	737984.26	33	2	11.986 N	103	33	24.390 W
12752.00	17.60	93.40	12721.10	37.00	266.72	741730.00	737993.72	33	2	11.980 N	103	33	24.279 W
12783.00	17.20	94.80	12750.68	36.34	275.97	741729.34	738002.97	33	2	11.973 N	103	33	24.170 W
12814.00	17.10	95.50	12780.30	35.52	285.07	741728.52	738012.07	33	2	11.964 N	103	33	24.063 W
12846.00	17.60	95.50	12810.85	34.61	294.57	741727.61	738021.57	33	2	11.954 N	103	33	23.952 W
12877.00	18.10	94.80	12840.35	33.75	304.04	741726.75	738031.04	33	2	11.945 N	103	33	23.841 W
12909.00	18.30	94.40	12870.75	32.95	314.00	741725.95	738041.00	33	2	11.936 N	103	33	23.724 W
12940.00	17.40	95.50	12900.26	32.13	323.47	741725.13	738050.47	33	2	11.928 N	103	33	23.613 W
12970.00	16.70	96.20	12928.94	31.24	332.22	741724.24	738059.22	33	2	11.918 N	103	33	23.510 W
13002.00	16.50	95.10	12959.61	30.34	341.31	741723.34	738068.31	33	2	11.908 N	103	33	23.403 W
13033.00	16.50	93.70	12989.33	29.66	350.09	741722.66	738077.09	33	2	11.901 N	103	33	23.300 W
13065.00	17.20	92.70	13019.96	29.15	359.35	741722.15	738086.35	33	2	11.895 N	103	33	23.192 W
13096.00	18.10	93.00	13049.50	28.68	368.74	741721.68	738095.74	33	2	11.890 N	103	33	23.081 W
13128.00	17.80	94.40	13079.94	28.04	378.58	741721.04	738105.58	33	2	11.883 N	103	33	22.966 W
13159.00	17.60	94.40	13109.47	27.32	387.98	741720.32	738114.98	33	2	11.875 N	103	33	22.855 W
13191.00	17.40	94.40	13139.99	26.58	397.57	741719.58	738124.57	33	2	11.867 N	103	33	22.743 W
13222.00	17.10	94.10	13169.60	25.90	406.74	741718.90	738133.74	33	2	11.860 N	103	33	22.635 W
13253.00	17.20	92.30	13199.22	25.39	415.86	741718.39	738142.86	33	2	11.854 N	103	33	22.528 W
13284.00	17.40	90.60	13228.82	25.16	425.08	741718.16	738152.08	33	2	11.851 N	103	33	22.420 W
13316.00	17.40	90.20	13259.35	25.09	434.65	741718.09	738161.65	33	2	11.850 N	103	33	22.307 W
13347.00	16.90	90.20	13288.98	25.06	443.79	741718.06	738170.79	33	2	11.849 N	103	33	22.200 W
13396.00	16.00	91.30	13335.97	24.88	457.66	741717.88	738184.66	33	2	11.846 N	103	33	22.037 W
13428.00	16.00	90.90	13366.73	24.71	466.48	741717.71	738193.48	33	2	11.844 N	103	33	21.934 W
13460.00	16.70	91.30	13397.44	24.54	475.49	741717.54	738202.49	33	2	11.841 N	103	33	21.828 W
13491.00	17.40	89.80	13427.07	24.45	484.58	741717.45	738211.58	33	2	11.840 N	103	33	21.721 W
13523.00	17.60	90.60	13457.59	24.42	494.20	741717.42	738221.20	33	2	11.839 N	103	33	21.608 W
13554.00	18.00	90.90	13487.11	24.30	503.67	741717.30	738230.67	33	2	11.837 N	103	33	21.497 W

Company: Patterson Petroleum
Field: Wildcat Mississippian
Site: Alpha 7
Well: Well #2
Wellpath: 1

Date: 1/12/2005 Time: 09:09:25 Page: 3
Co-ordinate(NE) Reference: Well: Well #2, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: User (0.00N,0.00E,83.58Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Final

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
13586.00	18.50	91.30	13517.50	24.10	513.69	741717.10	738240.69	33	2	11.834 N	103	33	21.379 W
13617.00	18.10	91.60	13546.93	23.86	523.42	741716.86	738250.42	33	2	11.831 N	103	33	21.265 W
13649.00	17.40	92.30	13577.41	23.53	533.17	741716.53	738260.17	33	2	11.827 N	103	33	21.150 W
13680.00	16.50	92.00	13607.06	23.19	542.21	741716.19	738269.21	33	2	11.823 N	103	33	21.044 W
13712.00	16.50	91.60	13637.74	22.90	551.29	741715.90	738278.29	33	2	11.819 N	103	33	20.938 W
13743.00	16.50	92.70	13667.47	22.57	560.09	741715.57	738287.09	33	2	11.816 N	103	33	20.834 W
13774.00	16.90	94.10	13697.16	22.04	568.98	741715.04	738295.98	33	2	11.810 N	103	33	20.730 W
13806.00	17.80	94.40	13727.70	21.33	578.50	741714.33	738305.50	33	2	11.802 N	103	33	20.618 W
13837.00	18.50	94.10	13757.16	20.62	588.13	741713.62	738315.13	33	2	11.794 N	103	33	20.505 W
13869.00	18.80	92.30	13787.48	20.05	598.34	741713.05	738325.34	33	2	11.788 N	103	33	20.385 W
13901.00	18.80	91.60	13817.77	19.70	608.65	741712.70	738335.65	33	2	11.784 N	103	33	20.264 W
13932.00	18.80	91.30	13847.12	19.44	618.63	741712.44	738345.63	33	2	11.780 N	103	33	20.147 W
14041.00	17.60	94.00	13950.66	17.90	652.63	741710.90	738379.63	33	2	11.763 N	103	33	19.748 W
14072.00	17.60	93.40	13980.21	17.29	661.99	741710.29	738388.99	33	2	11.756 N	103	33	19.638 W