



Weatherford

Wft Survey Report X Y's.

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Weatherford

Company: COG Operating Date: 1/16/2013 Time: 06:14:57 Page: 1
Field: Eddy Co, NM (Nad27) Co-ordinate(NE) Reference: Well: Burkett 16 State #16H, Grid North
Site: Burkett 16 State #16H Vertical (TVD) Reference: SITE 3867.5
Well: Burkett 16 State #16H Section (VS) Reference: Well (0.00N,0.00E,269.80Azi)
Wellpath: Lower Lat Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy *Lower Lateral* Start Date: 1/9/2013
Company: Weatherford Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard Tied-to: User Defined

Site: Burkett 16 State #16H

Site Position: Northing: 669245.90 ft Latitude: 32 50 20.358 N
From: Map Easting: 642018.10 ft Longitude: 103 52 15.402 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3849.00 ft Grid Convergence: 0.25 deg

Well: Burkett 16 State #16H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 669245.90 ft Latitude: 32 50 20.358 N
+E/-W 0.00 ft Easting: 642018.10 ft Longitude: 103 52 15.402 W
Position Uncertainty: 0.00 ft

Wellpath: Lower Lat Drilled From: Surface
Current Datum: SITE Height 3867.50 ft Tie-on Depth: 0.00 ft
Magnetic Data: 1/25/2013 Above System Datum: Mean Sea Level
Field Strength: 48818 nT Declination: 7.57 deg
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
ft ft ft deg
0.00 0.00 0.00 269.80

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
5390.00	0.47	175.34	5389.79	-15.11	-15.24	0.00	15.29	669230.79	642002.86	Tie On VES
5575.00	0.85	248.40	5574.78	-16.37	-16.45	0.46	16.51	669229.53	642001.65	First Wft Svy
5607.00	3.78	270.69	5606.75	-16.45	-17.73	9.41	17.79	669229.45	642000.37	
5639.00	6.77	273.79	5638.61	-16.31	-20.67	9.38	20.72	669229.59	641997.43	
5670.00	9.79	277.14	5669.29	-15.86	-25.11	9.86	25.16	669230.04	641992.99	
5702.00	13.60	279.72	5700.62	-14.89	-31.52	12.01	31.57	669231.01	641986.58	
5734.00	17.20	281.51	5731.46	-13.31	-39.86	11.35	39.91	669232.59	641978.24	
5766.00	19.64	282.75	5761.82	-11.18	-49.75	7.72	49.79	669234.72	641968.35	
5798.00	22.72	281.39	5791.66	-8.77	-61.05	9.75	61.08	669237.13	641957.05	
5830.00	26.15	280.83	5820.79	-6.22	-74.04	10.74	74.06	669239.68	641944.06	
5861.00	30.07	278.74	5848.13	-3.76	-88.43	13.04	88.45	669242.14	641929.67	
5893.00	35.22	275.50	5875.06	-1.65	-105.55	16.99	105.56	669244.25	641912.55	
5925.00	39.92	272.18	5900.42	-0.38	-125.01	15.99	125.01	669245.52	641893.09	
5956.00	43.89	270.49	5923.49	0.09	-145.71	13.31	145.70	669245.99	641872.39	
5988.00	47.54	268.50	5945.83	-0.12	-168.61	12.24	168.61	669245.78	641849.49	
6020.00	50.62	267.04	5966.79	-1.07	-192.76	10.22	192.77	669244.83	641825.34	
6052.00	53.23	266.69	5986.52	-2.45	-217.91	8.20	217.92	669243.45	641800.19	
6084.00	56.68	267.49	6004.89	-3.77	-244.08	10.97	244.09	669242.13	641774.02	
6116.00	60.14	267.94	6021.66	-4.86	-271.31	10.88	271.32	669241.04	641746.79	
6147.00	63.13	267.96	6036.38	-5.83	-298.56	9.65	298.58	669240.07	641719.54	
6179.00	66.48	268.14	6050.00	-6.82	-327.50	10.48	327.52	669239.08	641690.60	
6209.00	70.01	268.63	6061.12	-7.60	-355.35	11.86	355.37	669238.30	641662.75	
6241.00	73.77	270.12	6071.06	-7.93	-385.75	12.56	385.78	669237.97	641632.35	
6273.00	76.51	271.33	6079.27	-7.54	-416.68	9.31	416.70	669238.36	641601.42	
6305.00	78.74	272.49	6086.13	-6.49	-447.91	7.82	447.93	669239.41	641570.19	
6337.00	81.15	272.07	6091.72	-5.24	-479.40	7.64	479.41	669240.66	641538.70	
6368.00	84.61	272.40	6095.56	-4.04	-510.13	11.21	510.14	669241.86	641507.97	
6400.00	87.90	272.98	6097.65	-2.54	-542.02	10.44	542.03	669243.36	641476.08	
6432.00	90.28	274.38	6098.16	-0.49	-573.95	8.63	573.95	669245.41	641444.15	
6463.00	90.84	274.05	6097.85	1.79	-604.86	2.10	604.85	669247.69	641413.24	



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Site: Burkett 16 State #16H	Vertical (TVD) Reference: SITE 3867.5		
Well: Burkett 16 State #16H	Section (VS) Reference: Well (0.00N,0.00E,269.80Azi)		
Wellpath: Lower Lat	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
6559.00	90.98	273.97	6096.33	8.50	-700.61	0.17	700.58	669254.40	641317.49	
6654.00	91.19	274.00	6094.53	15.10	-795.37	0.22	795.31	669261.00	641222.73	
6749.00	90.21	272.92	6093.37	20.84	-890.18	1.54	890.11	669266.74	641127.92	
6845.00	89.37	270.71	6093.72	23.88	-986.13	2.46	986.04	669269.78	641031.97	
6940.00	90.77	269.69	6093.60	24.21	-1081.13	1.82	1081.03	669270.11	640936.97	
7036.00	90.84	269.35	6092.26	23.40	-1177.11	0.36	1177.02	669269.30	640840.99	
7131.00	92.38	268.37	6089.59	21.52	-1272.05	1.92	1271.97	669267.42	640746.05	
7226.00	91.82	268.21	6086.10	18.68	-1366.95	0.61	1366.87	669264.58	640651.15	
7322.00	91.19	267.90	6083.58	15.43	-1462.86	0.73	1462.79	669261.33	640555.24	
7417.00	90.42	267.17	6082.25	11.34	-1557.76	1.12	1557.71	669257.24	640460.34	
7512.00	91.96	268.13	6080.28	7.45	-1652.65	1.91	1652.62	669253.35	640365.45	
7608.00	92.45	268.82	6076.58	4.89	-1748.55	0.88	1748.52	669250.79	640269.55	
7703.00	91.75	268.77	6073.10	2.90	-1843.46	0.74	1843.44	669248.80	640174.64	
7798.00	91.61	269.70	6070.32	1.63	-1938.41	0.99	1938.39	669247.53	640079.69	
7893.00	91.54	271.42	6067.70	2.56	-2033.37	1.81	2033.35	669248.46	639984.73	
7989.00	91.26	271.43	6065.36	4.94	-2129.31	0.29	2129.28	669250.84	639888.79	
8084.00	90.49	271.40	6063.91	7.29	-2224.27	0.81	2224.23	669253.19	639793.83	
8179.00	90.63	271.82	6062.98	9.96	-2319.23	0.47	2319.18	669255.86	639698.87	
8274.00	89.79	270.66	6062.63	12.01	-2414.20	1.51	2414.14	669257.91	639603.90	
8370.00	89.02	270.59	6063.63	13.06	-2510.19	0.81	2510.13	669258.96	639507.91	
8464.00	92.17	269.68	6062.65	13.28	-2604.17	3.49	2604.11	669259.18	639413.93	
8559.00	91.75	269.78	6059.40	12.83	-2699.11	0.45	2699.05	669258.73	639318.99	
8654.00	90.98	269.22	6057.14	12.01	-2794.08	1.00	2794.02	669257.91	639224.02	
8750.00	90.70	268.90	6055.73	10.43	-2890.06	0.44	2890.00	669256.33	639128.04	
8845.00	89.65	269.17	6055.44	8.83	-2985.04	1.14	2984.99	669254.73	639033.06	
8941.00	91.19	269.40	6054.74	7.63	-3081.03	1.62	3080.99	669253.53	638937.07	
9036.00	91.40	269.80	6052.59	6.97	-3176.00	0.48	3175.96	669252.87	638842.10	
9093.00	92.03	271.29	6050.89	7.51	-3232.97	2.84	3232.93	669253.41	638785.13	Last Wft Svy
9151.00	92.03	271.29	6048.83	8.82	-3290.92	0.00	3290.87	669254.72	638727.18	Proj. To Bit Lo

Annotation

MD ft	TVD ft	
5390.00	5389.79	Tie On VES
5575.00	5574.78	First Wft Svy
9093.00	6050.89	Last Wft Svy
9151.00	6048.83	Proj. To Bit Lower Lat