



Company: Devon Energy Production Co., LP

Lease/Well: Gaucho 21 Federal / No. 002H

Rig Name: H&P 416

State/County: New Mexico /Eddy

Latitude: 32.22

GRID North is 0.56 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : 25'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gaucho 21 federal 2h_ed.ut

Minimum Curvature Method

Report Date/Time: 7/31/2012 / 10:37

Vaughn Energy Services

Woodward, Oklahoma

580-254-5000

Surveyor: Nick Harding

Guacho 21 Federal No. 002H / API 30-025-40626

HOBBS OCD
DEC 27 2012
RECEIVED

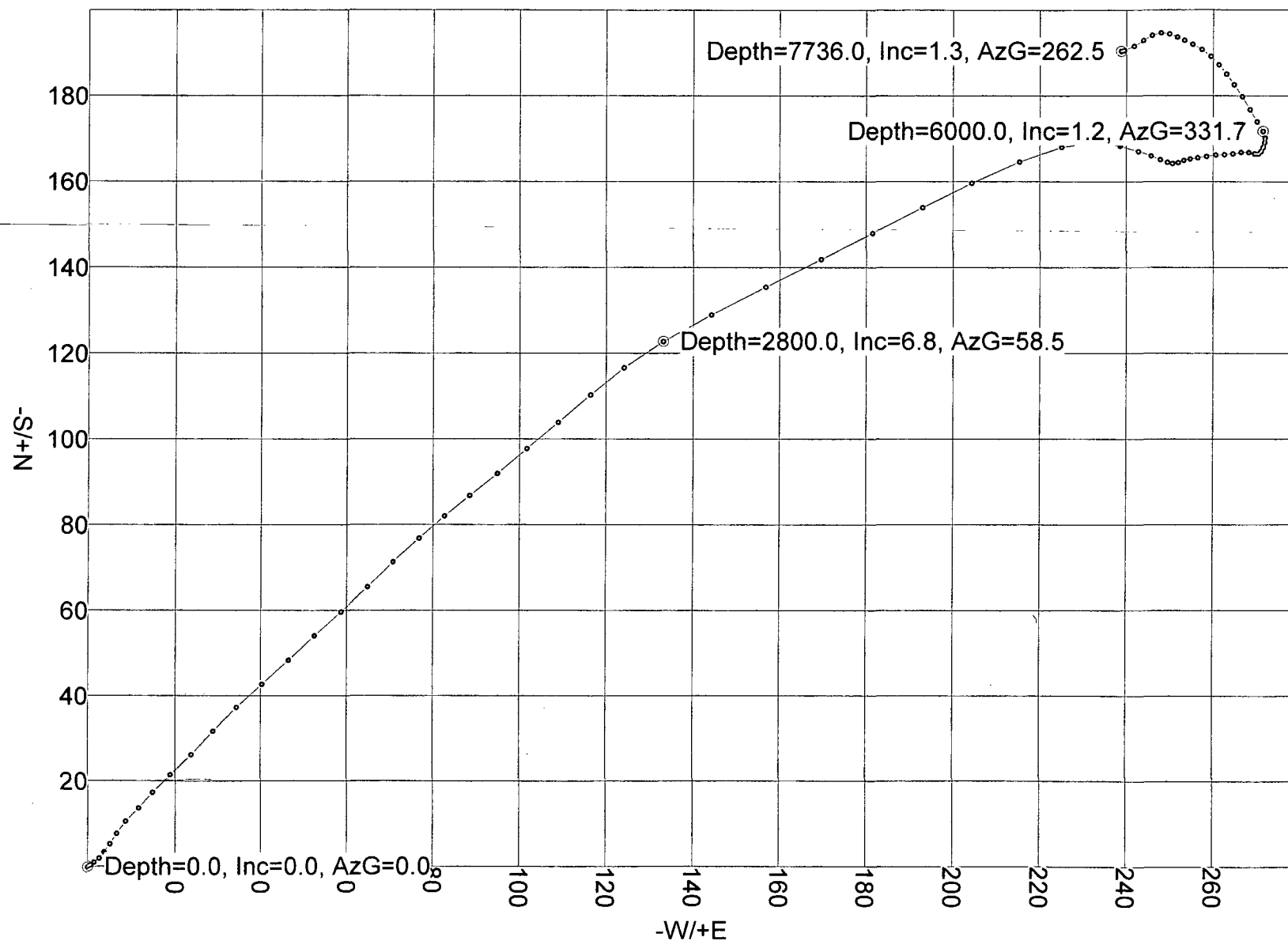
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.61	61.40	100.00	0.26	0.47	0.26	0.53	61.40	0.61
200.00	0.79	50.11	199.99	0.95	1.47	0.95	1.75	56.99	0.22
300.00	0.97	52.27	299.98	1.91	2.66	1.91	3.27	54.34	0.18
400.00	1.18	25.54	399.96	3.36	3.77	3.36	5.05	48.34	0.54
500.00	1.51	41.65	499.93	5.27	5.09	5.27	7.32	44.01	0.49
600.00	1.78	25.07	599.89	7.66	6.62	7.66	10.13	40.85	0.55
700.00	2.30	44.22	699.83	10.51	8.68	10.51	13.63	39.56	0.85
800.00	2.55	43.52	799.74	13.56	11.62	13.56	17.86	40.58	0.25
900.00	3.07	39.10	899.62	17.26	14.84	17.26	22.76	40.69	0.56
1000.00	3.67	49.83	999.45	21.40	18.97	21.40	28.59	41.56	0.87
1100.00	4.11	41.75	1099.22	26.13	23.80	26.13	35.35	42.33	0.70
1200.00	4.47	43.23	1198.94	31.65	28.86	31.65	42.83	42.36	0.37
1300.00	4.54	45.21	1298.63	37.27	34.33	37.27	50.68	42.65	0.17
1400.00	4.74	49.74	1398.30	42.73	40.29	42.73	58.73	43.32	0.42
1500.00	4.86	45.21	1497.95	48.38	46.45	48.38	67.07	43.83	0.40
1600.00	4.68	48.58	1597.61	54.06	52.51	54.06	75.37	44.17	0.33
1700.00	4.85	47.42	1697.26	59.62	58.69	59.62	83.66	44.55	0.19
1800.00	4.91	45.49	1796.90	65.48	64.85	65.48	92.16	44.72	0.18

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	4.69	46.50	1896.55	71.30	70.87	71.30	100.53	44.83	0.24
2000.00	4.68	48.02	1996.21	76.84	76.87	76.84	108.69	45.01	0.12
2100.00	4.25	49.09	2095.91	82.00	82.70	82.00	116.46	45.25	0.44
2200.00	4.40	52.31	2195.62	86.77	88.54	86.77	123.97	45.58	0.28
2300.00	5.00	50.04	2295.29	91.92	94.92	91.92	132.13	45.92	0.63
2400.00	5.30	49.01	2394.88	97.75	101.75	97.75	141.10	46.15	0.31
2500.00	5.55	50.60	2494.44	103.85	108.97	103.85	150.53	46.38	0.29
2600.00	5.70	48.08	2593.95	110.23	116.40	110.23	160.31	46.56	0.29
2700.00	5.78	52.42	2693.45	116.62	124.09	116.62	170.29	46.78	0.44
2800.00	6.77	58.48	2792.85	122.77	133.10	122.77	181.07	47.31	1.19
2900.00	7.86	62.77	2892.04	128.98	144.20	128.98	193.47	48.19	1.22
3000.00	8.37	62.76	2991.04	135.44	156.76	135.44	207.16	49.17	0.51
3100.00	8.10	63.71	3090.01	141.89	169.54	141.89	221.08	50.07	0.31
3200.00	7.48	62.58	3189.09	148.01	181.63	148.01	234.30	50.82	0.64
3300.00	7.38	62.95	3288.25	153.93	193.13	153.93	246.97	51.44	0.11
3400.00	7.10	63.20	3387.45	159.64	204.37	159.64	259.33	52.01	0.28
3500.00	6.67	68.25	3486.73	164.58	215.28	164.58	270.98	52.60	0.74
3600.00	5.20	73.49	3586.19	168.02	225.02	168.02	280.83	53.25	1.56
3700.00	3.85	92.79	3685.88	169.14	232.72	169.14	287.70	53.99	2.02
3800.00	2.96	105.35	3785.70	168.30	238.56	168.30	291.95	54.80	1.16
3900.00	2.08	107.98	3885.61	167.05	242.78	167.05	294.70	55.47	0.88
4000.00	1.46	113.01	3985.56	165.99	245.68	165.99	296.50	55.95	0.64
4100.00	1.20	112.25	4085.53	165.10	247.81	165.10	297.78	56.33	0.26
4200.00	0.78	106.49	4185.52	164.51	249.44	164.51	298.80	56.59	0.42
4300.00	0.67	100.22	4285.51	164.22	250.67	164.22	299.67	56.77	0.14
4400.00	0.85	66.55	4385.50	164.41	251.92	164.41	300.82	56.87	0.47
4500.00	0.80	69.83	4485.49	164.94	253.25	164.94	302.23	56.92	0.07
4600.00	0.93	82.05	4585.48	165.30	254.71	165.30	303.65	57.02	0.22
4700.00	1.05	80.62	4685.46	165.56	256.42	165.56	305.22	57.15	0.12
4800.00	1.31	80.97	4785.44	165.89	258.45	165.89	307.11	57.31	0.26
4900.00	1.23	82.77	4885.42	166.20	260.65	166.20	309.13	57.48	0.09
5000.00	1.09	91.26	4985.40	166.32	262.67	166.32	310.89	57.66	0.22
5100.00	1.10	78.53	5085.38	166.49	264.56	166.49	312.59	57.82	0.24
5200.00	1.12	83.48	5185.36	166.79	266.48	166.79	314.37	57.96	0.10
5300.00	0.91	98.25	5285.34	166.79	268.24	166.79	315.87	58.13	0.33
5400.00	0.69	109.09	5385.33	166.47	269.60	166.47	316.86	58.31	0.27
5500.00	0.40	63.17	5485.33	166.43	270.49	166.43	317.59	58.40	0.50
5600.00	0.60	34.44	5585.33	167.02	271.09	167.02	318.42	58.36	0.31
5700.00	0.66	20.86	5685.32	167.99	271.59	167.99	319.35	58.26	0.16

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.62	11.03	5785.31	169.06	271.90	169.06	320.18	58.13	0.12
5900.00	0.69	0.83	5885.31	170.20	272.02	170.20	320.88	57.97	0.14
6000.00	1.21	331.69	5985.29	171.74	271.52	171.74	321.28	57.69	0.69
6100.00	1.77	326.60	6085.26	173.95	270.17	173.95	321.33	57.22	0.57
6200.00	1.97	331.56	6185.21	176.75	268.51	176.75	321.46	56.64	0.26
6300.00	2.03	327.83	6285.15	179.76	266.74	179.76	321.66	56.02	0.15
6400.00	1.81	324.43	6385.09	182.55	264.88	182.55	321.69	55.43	0.25
6500.00	1.68	325.02	6485.04	185.04	263.12	185.04	321.67	54.88	0.14
6600.00	1.54	316.45	6585.00	187.21	261.35	187.21	321.49	54.38	0.28
6700.00	1.63	314.94	6684.96	189.19	259.42	189.19	321.08	53.90	0.10
6800.00	1.37	298.45	6784.93	190.77	257.36	190.77	320.35	53.45	0.50
6900.00	1.40	299.69	6884.90	191.94	255.25	191.94	319.36	53.06	0.04
7000.00	1.02	291.03	6984.88	192.87	253.35	192.87	318.41	52.72	0.42
7100.00	1.12	299.36	7084.86	193.67	251.67	193.67	317.56	52.42	0.18
7200.00	1.13	286.62	7184.84	194.43	249.87	194.43	316.61	52.11	0.25
7300.00	1.16	265.91	7284.82	194.64	247.93	194.64	315.20	51.87	0.41
7400.00	1.33	246.02	7384.80	194.09	245.86	194.09	313.24	51.71	0.46
7500.00	1.40	232.94	7484.77	192.88	243.82	192.88	310.89	51.65	0.32
7600.00	1.48	244.09	7584.74	191.59	241.69	191.59	308.41	51.60	0.29
7700.00	1.27	248.08	7684.71	190.61	239.50	190.61	306.09	51.48	0.23
7736.00	1.28	262.49	7720.70	190.41	238.73	190.41	305.37	51.42	0.89



Vaughn Energy Services
Woodward, Oklahoma
580-254-5000
Surveyor: Nick Harding
Guacho 21 Federal No. 002H / API 30-025-40626



VES Survey Date: 07/23/2012



Weatherford®

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy
20 North Broadway
Oklahoma City, OK, 73102

Date: August 3, 2012

Attention: Kurtis Schmitz

Re: Devon Energy
Well: Gaucho 21 Federal #2H
Lea County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Seth Cash MWD Supervisor	2H	7853' MD 12535' MD	7/22/2010 8/2/2010	Measurement While Drilling

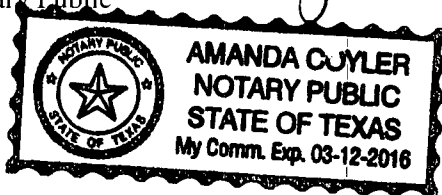
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesse Aguilar
Area Manager

On this, the 6th day of August, 2012, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Amanda Cuyler
Notary Public





Weatherford

WFT Survey Report X & Y's



Company: Devon Energy Field: Lea County, New Mexico (NAD 83) Site: Gaucho 21 Federal #2H Well: Gaucho 21 Fed #2H Wellpath: 1		Date: 8/2/2012 Co-ordinate(NE) Reference: Well: Gaucho 21 Fed #2H, Grid North Vertical (TVD) Reference: SITE 3464.0 Section (VS) Reference: Well (0.00N,0.00E,359.74Azi) Survey Calculation Method: Minimum Curvature		Time: 05:34:57 Page: 1 Db: Sybase						
Survey: Wft Svy Company: Weatherford International Ltd. Tool: MWD;MWD - Standard		Start Date: 7/25/2012 Engineer: Keith Noack Tied-to: User Defined								
Field: Lea County, New Mexico (NAD 83) Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level		Map Zone: New Mexico, Eastern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010								
Site: Gaucho 21 Federal #2H Site Position: From: Map Position Uncertainty: 0.00 ft Ground Level: 3439.00 ft		Northing: 499732.43 ft Easting: 804059.05 ft Latitude: 32 22 15.456 N Longitude: 103 28 56.592 W North Reference: Grid Grid Convergence: 0.46 deg								
Well: Gaucho 21 Fed #2H Well Position: +N/-S 0.00 ft Position Uncertainty: 0.00 ft		Slot Name: Well Position: +N/-S 0.00 ft Position Uncertainty: 0.00 ft								
Wellpath: 1 Current Datum: SITE Magnetic Data: 7/15/2012 Field Strength: 48632 nT Vertical Section: Depth From (TVD) ft		Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 7.42 deg Mag Dip Angle: 60.31 deg +N/-S ft +E/-W ft Direction deg								
0.00		0.00								
0.00		359.74								
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
7736.00	1.28	262.49	7720.70	190.41	238.73	0.00	189.32	499922.84	804297.78	Tie On VES First Wft Svy
7853.00	3.14	321.10	7837.62	192.73	235.42	2.31	191.66	499925.16	804294.47	
7885.00	6.36	339.99	7869.51	195.08	234.26	11.06	194.02	499927.51	804293.31	
7915.00	9.78	342.15	7899.21	199.07	232.91	11.44	198.01	499931.50	804291.96	
7947.00	11.08	344.91	7930.68	204.63	231.28	4.35	203.57	499937.06	804290.33	
7979.00	8.86	349.04	7962.20	210.01	230.01	7.28	208.97	499942.44	804289.06	
8010.00	10.41	359.00	7992.76	215.16	229.51	7.33	214.12	499947.59	804288.56	
8042.00	13.07	6.73	8024.09	221.64	229.88	9.64	220.60	499954.07	804288.93	
8073.00	15.84	9.09	8054.10	229.31	230.96	9.13	228.25	499961.74	804290.01	
8105.00	18.13	9.35	8084.71	238.53	232.46	7.16	237.47	499970.96	804291.51	
8137.00	21.13	5.86	8114.84	249.18	233.86	10.06	248.12	499981.61	804292.91	
8168.00	23.60	357.44	8143.52	260.95	234.15	13.03	259.88	499993.38	804293.20	
8200.00	26.67	8.09	8172.50	274.47	234.88	17.05	273.40	500006.90	804293.93	
8231.00	28.02	10.56	8200.04	288.51	237.19	5.69	287.43	500020.94	804296.24	
8263.00	30.52	10.73	8227.95	303.89	240.08	7.82	302.80	500036.32	804299.13	
8294.00	33.74	10.76	8254.20	320.08	243.16	10.39	318.98	500052.51	804302.21	
8326.00	36.80	9.92	8280.32	338.26	246.47	9.68	337.14	500070.69	804305.52	
8357.00	40.71	10.02	8304.49	357.37	249.83	12.61	356.23	500089.80	804308.88	
8389.00	43.60	7.73	8328.21	378.59	253.13	10.23	377.43	500111.02	804312.18	
8420.00	46.49	7.51	8350.11	400.33	256.03	9.34	399.16	500132.76	804315.08	
8452.00	49.03	7.73	8371.62	423.81	259.18	7.95	422.63	500156.24	804318.23	
8483.00	52.21	6.59	8391.29	447.58	262.16	10.64	446.38	500180.01	804321.21	
8515.00	55.28	6.42	8410.21	473.21	265.08	9.60	472.01	500205.64	804324.13	
8547.00	59.05	6.54	8427.56	499.92	268.11	11.79	498.70	500232.35	804327.16	



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WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Site: Gaucho 21 Federal #2H
Well: Gaucho 21 Fed #2H
Wellpath: 1

Date: 8/2/2012 Time: 05:34:57 Page: 2
Co-ordinate(NE) Reference: Well: Gaucho 21 Fed #2H, Grid North
Vertical (TVD) Reference: SITE 3464.0
Section (VS) Reference: Well (0.00N,0.00E,359.74Azi)
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
8578.00	63.67	6.13	8442.41	526.96	271.11	14.95	525.72	500259.39	804330.16	
8610.00	68.37	3.84	8455.42	556.08	273.64	16.08	554.83	500288.51	804332.69	
8642.00	73.84	0.00	8465.78	586.32	274.64	20.52	585.06	500318.75	804333.69	
8673.00	80.08	358.13	8472.77	616.50	274.14	20.97	615.25	500348.93	804333.19	
8705.00	85.03	357.31	8476.91	648.19	272.88	15.68	646.95	500380.62	804331.93	
8736.00	86.57	357.44	8479.19	679.07	271.46	4.99	677.84	500411.50	804330.51	
8768.00	89.66	358.32	8480.24	711.03	270.28	10.04	709.80	500443.46	804329.33	
8799.00	93.43	358.70	8479.40	742.00	269.47	12.22	740.77	500474.43	804328.52	
8831.00	94.07	359.00	8477.31	773.93	268.83	2.21	772.70	500506.36	804327.88	
8863.00	94.13	358.95	8475.02	805.84	268.26	0.24	804.62	500538.27	804327.31	
8894.00	94.12	358.64	8472.79	836.75	267.61	1.00	835.53	500569.18	804326.66	
8926.00	93.84	358.28	8470.57	868.67	266.75	1.42	867.45	500601.10	804325.80	
8957.00	94.06	358.04	8468.43	899.58	265.76	1.05	898.36	500632.01	804324.81	
8989.00	93.43	357.38	8466.34	931.48	264.48	2.85	930.27	500663.91	804323.53	
9020.00	92.40	356.77	8464.77	962.40	262.90	3.86	961.20	500694.83	804321.95	
9052.00	92.46	356.63	8463.41	994.32	261.06	0.48	993.12	500726.75	804320.11	
9084.00	92.80	356.77	8461.94	1026.23	259.22	1.15	1025.05	500758.66	804318.27	
9147.00	92.17	356.63	8459.21	1089.07	255.60	1.02	1087.90	500821.50	804314.65	
9178.00	92.34	356.77	8457.99	1119.99	253.82	0.71	1118.83	500852.42	804312.87	
9241.00	90.11	355.63	8456.64	1182.84	249.64	3.98	1181.69	500915.27	804308.69	
9273.00	89.94	355.14	8456.63	1214.73	247.07	1.62	1213.60	500947.16	804306.12	
9367.00	89.71	354.19	8456.92	1308.32	238.33	1.04	1307.23	501040.75	804297.38	
9462.00	89.94	354.11	8457.21	1402.83	228.65	0.26	1401.78	501135.26	804287.70	
9556.00	90.40	357.40	8456.93	1496.56	221.69	3.53	1495.53	501228.99	804280.74	
9650.00	90.23	354.66	8456.41	1590.32	215.18	2.92	1589.33	501322.75	804274.23	
9745.00	90.97	354.93	8455.42	1684.92	206.56	0.83	1683.97	501417.35	804265.61	
9839.00	90.40	354.69	8454.29	1778.53	198.06	0.66	1777.61	501510.96	804257.11	
9934.00	90.40	354.69	8453.63	1873.12	189.27	0.00	1872.24	501605.55	804248.32	
10029.00	89.71	354.17	8453.54	1967.67	180.05	0.91	1966.83	501700.10	804239.10	
10123.00	91.66	356.15	8452.42	2061.32	172.12	2.96	2060.52	501793.75	804231.17	
10218.00	90.46	356.42	8450.66	2156.10	165.96	1.29	2155.33	501888.53	804225.01	
10312.00	91.09	356.84	8449.39	2249.93	160.44	0.81	2249.18	501982.36	804219.49	
10407.00	90.86	356.44	8447.77	2344.75	154.87	0.49	2344.03	502077.18	804213.92	
10502.00	92.97	355.64	8444.60	2439.47	148.32	2.38	2438.77	502171.90	804207.37	
10596.00	93.14	355.40	8439.59	2533.05	140.98	0.31	2532.38	502265.48	804200.03	
10691.00	93.03	355.43	8434.47	2627.61	133.40	0.12	2626.97	502360.04	804192.45	
10785.00	92.80	355.90	8429.69	2721.21	126.31	0.56	2720.61	502453.64	804185.36	
10880.00	93.48	356.02	8424.49	2815.84	119.62	0.73	2815.26	502548.27	804178.67	
10974.00	91.43	355.55	8420.46	2909.49	112.72	2.24	2908.95	502641.92	804171.77	
11069.00	91.60	355.99	8417.95	3004.20	105.72	0.50	3003.69	502736.63	804164.77	
11164.00	89.71	355.20	8416.87	3098.91	98.42	2.16	3098.43	502831.34	804157.47	
11258.00	89.37	355.69	8417.62	3192.61	90.95	0.63	3192.16	502925.04	804150.00	
11353.00	89.09	355.69	8418.90	3287.33	83.82	0.29	3286.91	503019.76	804142.87	
11447.00	88.97	356.10	8420.49	3381.07	77.09	0.45	3380.69	503113.50	804136.14	
11542.00	90.63	355.42	8420.82	3475.81	70.06	1.89	3475.46	503208.24	804129.11	
11637.00	90.29	355.69	8420.06	3570.52	62.70	0.46	3570.20	503302.95	804121.75	
11731.00	92.06	355.20	8418.13	3664.20	55.24	1.95	3663.91	503396.63	804114.29	
11826.00	91.54	355.15	8415.15	3758.82	47.25	0.55	3758.56	503491.25	804106.30	
11921.00	91.14	355.16	8412.92	3853.45	39.23	0.42	3853.23	503585.88	804098.28	
12015.00	89.77	355.03	8412.18	3947.10	31.19	1.46	3946.92	503679.53	804090.24	
12110.00	89.66	354.95	8412.65	4041.74	22.90	0.14	4041.59	503774.17	804081.95	
12204.00	90.29	355.23	8412.69	4135.39	14.85	0.73	4135.28	503867.82	804073.90	



Weatherford

WFT Survey Report X & Y's



Weatherford

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Site: Gaucho 21 Federal #2H
Well: Gaucho 21 Fed #2H
Wellpath: 1

Date: 8/2/2012 Time: 05:34:57 Page: 3
Co-ordinate(NE) Reference: Well: Gaucho 21 Fed #2H, Grid North
Vertical (TVD) Reference: SITE 3464.0
Section (VS) Reference: Well (0.00N,0.00E,359.74Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

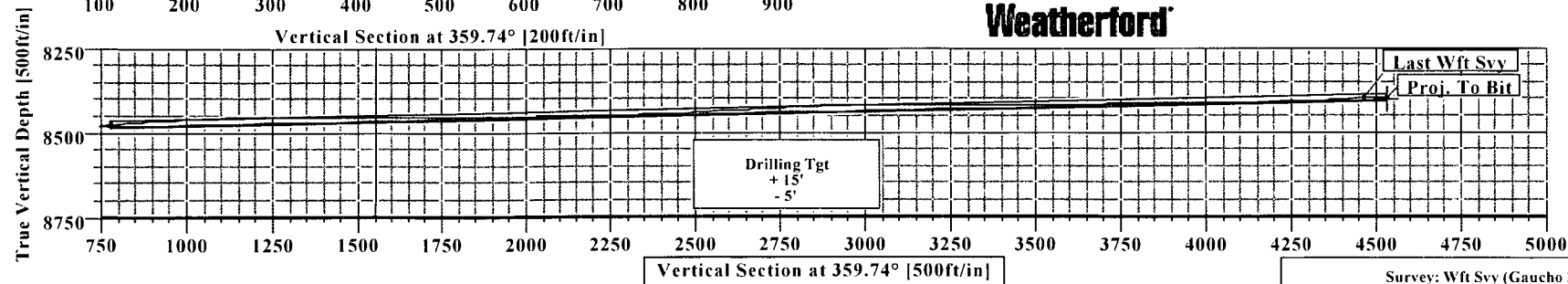
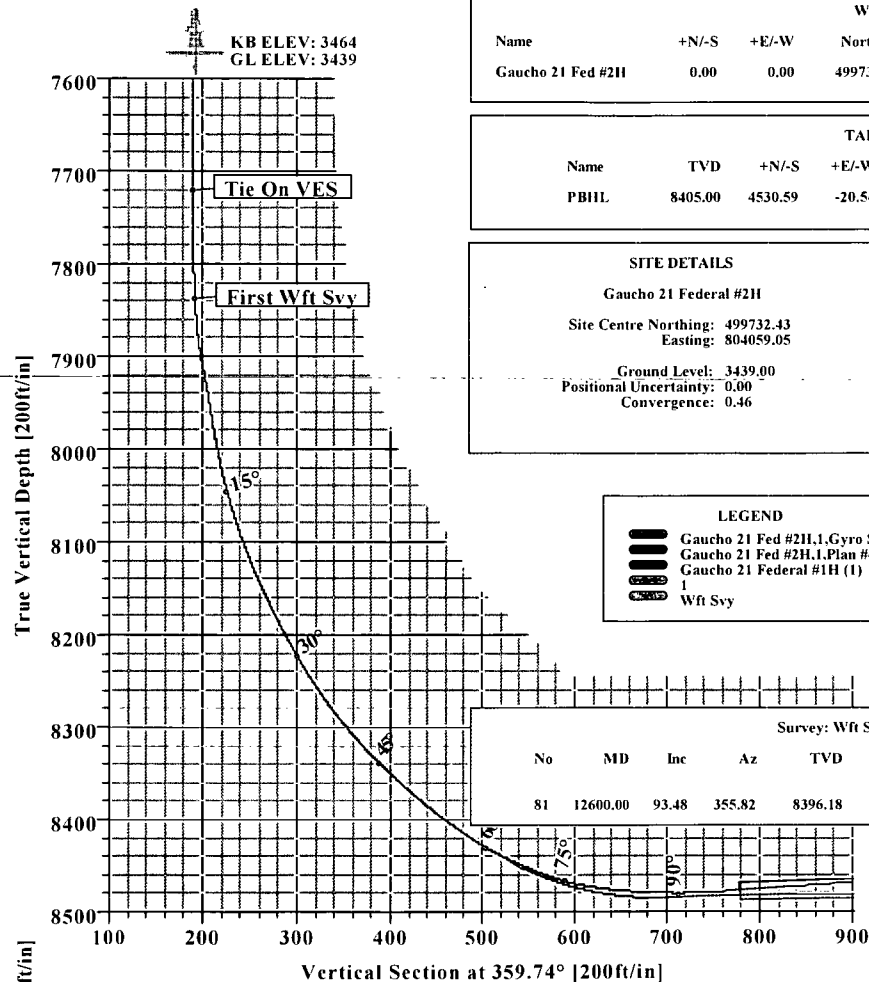
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
12299.00	91.48	355.44	8411.22	4230.06	7.13	1.27	4229.99	503962.49	804066.18	
12394.00	92.69	355.80	8407.77	4324.72	-0.12	1.33	4324.68	504057.15	804058.93	
12488.00	93.26	355.56	8402.89	4418.33	-7.20	0.66	4418.31	504150.76	804051.85	
12535.00	93.48	355.82	8400.13	4465.11	-10.72	0.72	4465.12	504197.54	804048.33	Last Wft Svy
12600.00	93.48	355.82	8396.18	4529.82	-15.45	0.00	4529.84	504262.25	804043.60	Proj. To Bit

Annotation

MD ft	TVD ft	
7736.00	7720.70	Tie On VES
7853.00	7837.62	First Wft Svy
12535.00	8400.13	Last Wft Svy
12600.00	8396.18	Proj. To Bit

devon

Gaucha 21 Federal #2H Lea County, New Mexico

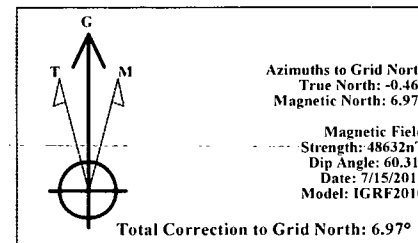


SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	
1	8581.00	61.61	6.07	8444.73	529.09	271.19	0.00	0.00	527.86		
2	8753.73	91.19	355.63	8485.00	694.87	272.68	18.08	-20.45	693.62		
3	12601.48	91.19	355.63	8405.00	4530.59	-20.54	0.00	0.00	4530.64	PBHL	

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Gaucha 21 Fed #2H	0.00	0.00	499732.43	804059.05	32°22'15.456N	103°28'56.592W	N/A

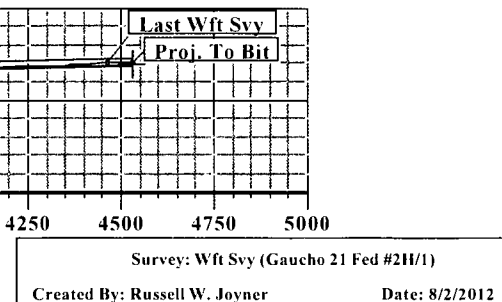
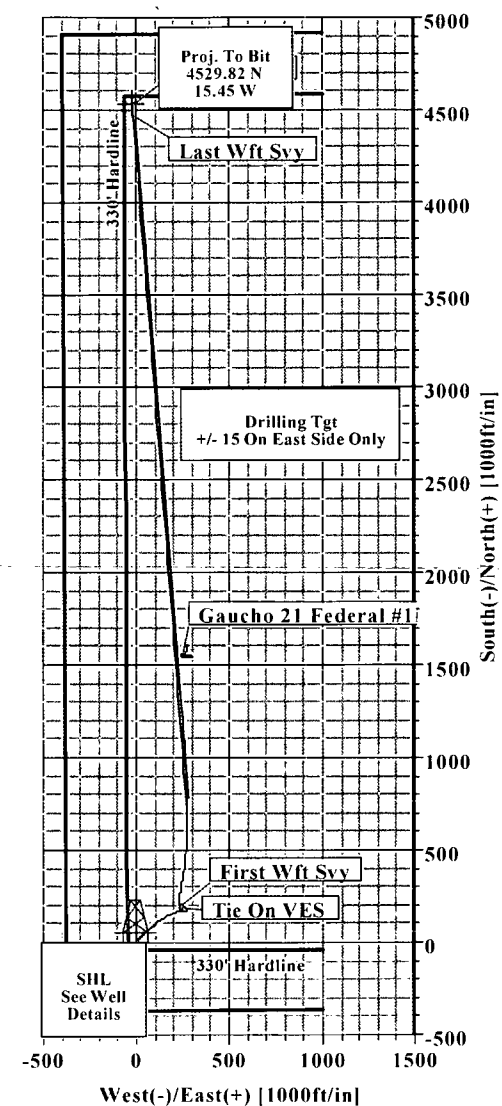
TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8405.00	4530.59	-20.54	504263.02	804038.51	Rectangle (3763x15)

SITE DETAILS		
Gaucha 21 Federal #2H		
Site Centre Northing:	499732.43	
Easting:	804059.05	
Ground Level:	3439.00	
Positional Uncertainty:	0.00	
Convergence:	0.46	



FIELD DETAILS	
Lea County, New Mexico (NAD 83)	
Geodetic System:	US State Plane Coordinate System 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico, Eastern Zone
Magnetic Model:	IGRF2010
System Datum:	Mean Sea Level
Local North:	Grid North

Survey: Wft Svy (Gaucha 21 Fed #2H/1)										
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
81	12600.00	93.48	355.82	8396.18	4529.82	-15.45	0.00	180.00	4529.84	



Survey: Wft Svy (Gaucha 21 Fed #2H/1)
Created By: Russell W. Joyner
Date: 8/2/2012



Stimulations Summary

District PERMIAN BASIN		County LEA		Field Name OJO CHISO		Project Group PB NEW MEXICO		State/Province NM		
Surface Legal Location SEC21 T22S R34E		API/UWI 3002540626		Latitude (°) 32° 22' 15.465" N	Longitude (°) 103° 28' 56.573" W	Ground Elev... 3,438.90	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,463.90	Tubing Head Elevation (ft)	
HYDRAULIC FRAC , 8/20/2012 10:32 , DELAWARE, OH , 12,111.0 ftkB - 12,548.0 ftkB, BHI , 264010 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	5047.60	0.0	1,521.0	4,533.0	1,521.0	5,972.0	74	7,669.0	80	4.00
HYDRAULIC FRAC , 8/20/2012 14:14 , DELAWARE, OH , 11,531.0 ftkB - 11,968.0 ftkB, BHI , 262782 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	4975.40	0.0	1,592.0	5,162.0	1,592.0	5,310.0	80	7,505.0	80	4.00
HYDRAULIC FRAC , 8/20/2012 19:59 , DELAWARE, OH , 10,951.0 ftkB - 11,388.0 ftkB, BHI , 302814 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	5256.20	0.0	1,826.0	5,180.0	1,826.0	5,093.0	80	7,033.0	80	4.00
HYDRAULIC FRAC , 8/21/2012 08:16 , DELAWARE, OH , 10,371.0 ftkB - 10,808.0 ftkB, BHI , 265588 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	4964.60	0.0	1,640.0	5,736.0	1,640.0	5,634.0	80	7,555.0	80	4.00
HYDRAULIC FRAC , 8/21/2012 11:20 , DELAWARE, OH , 9,791.0 ftkB - 10,228.0 ftkB, BHI , 262128 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	4934.80	0.0	1,646.0	5,571.0	1,646.0	5,614.0	80	7,110.0	81	4.00
HYDRAULIC FRAC , 8/21/2012 14:30 , DELAWARE, OH , 9,211.0 ftkB - 9,648.0 ftkB, BHI , 252193 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	4777.40	0.0	1,575.0	5,504.0	1,575.0	6,072.0	78	7,400.0	80	4.00
HYDRAULIC FRAC , 8/21/2012 17:28 , DELAWARE, OH , 8,625.0 ftkB - 9,068.0 ftkB, BHI , 251431 LBS; OTTAWA 0 LBS										
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max (...)
258,750.0	4846.70	0.0	1,464.0	6,666.0	1,464.0	5,859.0	79	7,414.0	81	4.00