

WELL LOGS

K Z

API number:	30-025-38477		
OGRID:		Operator:	CIMAREX ENERGY CO
		Property:	PRINCETON 6 FEE # 1

surface	ULSTR:	A	06	T	15S	R	38E
			380	FNL	380	FEL	

BH Loc	ULSTR:	B	06	T	15S	R	38E
			397	FNL	2289	FEL	

Ground Level:	3784	DF:	3806	KB:	3807	
Datum:	KB			TD:	11190	

Land: FEE

Completion Date: (1) 12/12/2007

Date Logs Received: 8/25/2008

Date Logs Due in: (2)

Confidential:	NO			Date out:		
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Confidential period. 90 Days for State & Fee, 1 Year for federal

Date Due In: (1) is equal to Completion Date (1) + 20 days

Logs	Depth interval		
TD LD CN/GR	200	9844	Three Detector Litho-Density
HRLA	4538	9807	High Resolution Laterolog
BHC	4538	9859	Borehole Compensated Sonic
	4538	9787	Hostile Natural Gamma Ray Spectroscopy
	8800	9800	Fullbore Formation Micro Imager

K Z

OCD TOPS

Rustler	2187	Strawn			
Tansill		Atoka			
Yates	3220	Morrow			
7 rvs	3487				
		Austin			
		Chester			
Queen		Miss Lime			
Penrose					
Grayburg	4316				
San Andres	4443				
Glorieta	6688				
Paddock					
Blinbry					
Tubb	7438				
Drinkard	7749				
Abo	8214				
Wolfcamp	9469				

OPERATOR
WELL/LEASE
COUNTY

CIMAREX ENERGY COMPANY
PRINCETON 6 FEE #1
LEA

RIG: 75

STATE OF NEW MEXICO
DEVIATION REPORT

300	1.00
625	1.25
980	1.00
1,254	1.00
1,996	1.00
2,500	2.00
3,076	2.00
3,628	2.00
4,088	2.00
4,458	2.25
4,745	2.00
4,972	2.00
5,194	0.75
5,708	1.00
6,180	0.50
6,799	1.00
7,200	1.00
7,700	1.25
8,183	1.00
8,685	1.00
9,179	1.25
9,763	1.00
9,840	1.00

SUR: A-06-15s-38e, 380/N & 380/E
BHL: B-06-15s-38e, 397/N & 2289/E
API # 30-025-38477

STATE OF TEXAS

BY: Steve Moore

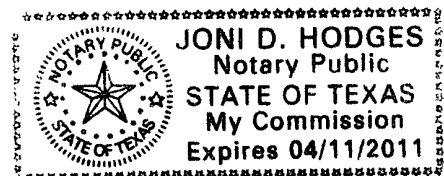
COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTI Drilling Company LLC.

Joni D. Hodges
Notary Public for Midland County, Texas
My Commission Expires: 4/11/11

KE

October 24, 2007, by Steve



Results of Directional Survey

API number:	30-025-38477		
OGRID:		Operator:	CIMAREX ENERGY CO
		Property:	PRINCETON 6 FEE # 1

surface	ULSTR:	A	06	T	15S	R	38E
			380	FNL	380	FEL	

BH Loc	ULSTR:	B	06	T	15S	R	38E
			397	FNL	2289	FEL	

	MD	N/S	E/W	VD
	9662	14.77	-382.92	9441.1
TOP PERFS/OH	9680	13.89	-400.83	9443.93
	9693	13.26	-413.76	9445.98
	11145	-16.88	-1864.41	9429.51
BOT PERFS/OH	11168	-16.88	-1887.41	9429.39
	11190	-16.88	-1909.41	9429.27

NEXT TO LAST	11145	-16.88	-1864.41	9429.51
LAST READING	11190	-16.88	-1909.41	9429.27
TD	11190	-16.88	-1909.41	9429.27

Surface Location	380	FN	380	FE
Projected BHL	397	FN	2289	FE
Location of				
Top Perfs/OH	366	FN	781	FE
Bottom Perfs/OH	397	FN	2267	FE

SUMMARY of Subsurface Locations

Surface Location	A-06-15S-38E	380	FN	380	FE	Vert. Depth
Top Perfs/OH	A-06-15S-38E	366	FN	781	FE	9443.93
Bottom Perfs/OH	B-06-15S-38E	397	FN	2267	FE	9429.39
Projected TD	B-06-15S-38E	397	FN	2289	FE	9429.27

SUR: A-06-15s-38e, 380/N & 380/E
 BHL: B-06-15s-38e, 397/N & 2289/E
 API # 30-025-38477

BAKER HUGHES

INTEQ

Survey Report

MIN. CURVATURE CALCULATIONS (SPE-3382)

OPERATOR:

Cimarex Energy Co.

WELL:

Princeton 6 FEE #1H

LOCATION:

Lea Co., NM

START:

11/8/2007

FINISH:

JOB #:

1665237

PROPOSED DIRECTION

269.32

MAG to GRID

7.25

STATION NUMBER	SURVEY DEPTH	INC	AZMTH	TVD	N-S	E-W	VERT. SECTION	DLS/ 100
Tie on	8900.00	0.21	286.82	8898.62	20.44	49.79	-50.03	0.00
1	8956.00	2.80	281.80	8954.60	20.75	48.35	-48.60	4.63
2	8971.00	4.40	281.80	8969.57	20.94	47.43	-47.68	10.67
3	8988.00	7.20	281.80	8986.48	21.29	45.75	-46.00	16.47
4	9034.00	12.10	263.80	9031.82	21.36	38.13	-38.38	12.39
5	9065.00	14.20	267.40	9062.01	20.84	31.10	-31.34	7.27
6	9097.00	19.40	267.40	9092.63	20.42	21.86	-22.10	16.25
7	9128.00	23.20	268.10	9121.51	19.98	10.61	-10.85	12.29
8	9160.00	26.10	267.00	9150.59	19.41	-2.72	2.49	9.17
9	9192.00	25.60	266.00	9179.39	18.56	-16.65	16.42	2.07
10	9224.00	29.80	268.40	9207.72	17.85	-31.50	31.28	13.58
11	9255.00	33.70	270.20	9234.07	17.67	-47.80	47.59	12.95
12	9286.00	37.70	270.20	9259.24	17.73	-65.89	65.68	12.90
13	9317.00	40.20	269.80	9283.35	17.73	-85.38	85.16	8.11
14	9348.00	44.90	271.20	9306.18	17.92	-106.33	106.11	15.47
15	9380.00	48.70	270.90	9328.08	18.35	-129.65	129.42	11.89
16	9412.00	51.40	269.50	9348.63	18.43	-154.18	153.95	9.08
17	9443.00	56.20	270.20	9366.93	18.37	-179.19	178.96	15.59
18	9475.00	60.30	269.50	9383.77	18.29	-206.39	206.16	12.95
19	9504.00	63.90	268.40	9397.33	17.82	-232.01	231.78	12.86
20	9536.00	67.60	268.40	9410.47	17.00	-261.17	260.95	11.56
21	9568.00	71.90	269.80	9421.55	16.54	-291.18	290.97	14.05
22	9600.00	76.10	269.50	9430.37	16.35	-321.94	321.72	13.16
23	9631.00	80.20	268.80	9436.73	15.90	-352.26	352.05	13.41
24	9662.00	83.60	267.00	9441.10	14.77	-382.93	382.73	12.38
25	9693.00	86.10	267.40	9443.88	13.26	-413.76	413.58	8.17
26	9725.00	86.40	267.40	9445.97	11.81	-445.66	445.49	0.94
27	9757.00	89.80	267.00	9447.04	10.25	-477.60	477.45	10.70
28	9787.00	93.60	267.00	9446.15	8.68	-507.54	507.40	12.67
29	9819.00	94.90	267.40	9443.77	7.12	-539.42	539.29	4.25
30	9851.00	92.80	267.40	9441.63	5.67	-571.31	571.20	6.56
31	9883.00	90.70	267.40	9440.65	4.22	-603.26	603.17	6.56
32	9914.00	90.60	267.40	9440.30	2.82	-634.23	634.15	0.32
33	9946.00	90.50	267.70	9439.99	1.45	-666.19	666.13	0.99
34	9978.00	90.40	267.70	9439.74	0.17	-698.17	698.12	0.31
35	10009.00	91.10	268.10	9439.33	-0.97	-729.14	729.10	2.60
36	10041.00	90.80	267.70	9438.80	-2.14	-761.12	761.09	1.56
37	10074.00	91.30	267.70	9438.20	-3.47	-794.09	794.07	1.52
38	10105.00	90.90	267.00	9437.60	-4.90	-825.05	825.05	2.60
39	10137.00	92.20	267.00	9436.74	-6.57	-856.99	857.01	4.06
40	10169.00	92.00	268.10	9435.56	-7.94	-888.94	888.97	3.49
41	10200.00	90.10	268.40	9435.00	-8.89	-919.92	919.96	6.20
42	10232.00	90.10	268.80	9434.94	-9.67	-951.91	951.96	1.25
43	10264.00	89.20	268.40	9435.14	-10.45	-983.90	983.95	3.08
44	10290.00	89.70	268.80	9435.39	-11.09	-1009.89	1009.95	2.46
45	10327.00	90.30	268.80	9435.39	-11.86	-1046.88	1046.95	1.62
46	10358.00	91.20	268.80	9434.98	-12.51	-1077.87	1077.94	2.90
47	10390.00	89.50	269.10	9434.78	-13.10	-1109.86	1109.94	5.39
48	10421.00	87.60	269.50	9435.57	-13.48	-1140.85	1140.93	6.26
49	10453.00	87.20	269.50	9437.02	-13.75	-1172.82	1172.90	1.25
50	10485.00	86.50	269.80	9438.78	-13.95	-1204.77	1204.85	2.38
51	10517.00	86.30	269.50	9440.79	-14.14	-1236.70	1236.78	1.13
52	10548.00	87.80	269.80	9442.38	-14.33	-1267.66	1267.74	4.93
53	10580.00	90.10	269.10	9442.97	-14.64	-1299.65	1299.73	7.51
54	10612.00	92.20	269.10	9442.33	-15.14	-1331.64	1331.72	6.56
55	10643.00	92.20	269.50	9441.14	-15.52	-1362.61	1362.70	1.29
56	10675.00	92.40	269.80	9439.85	-15.72	-1394.59	1394.68	1.13
57	10707.00	92.50	269.10	9438.48	-16.02	-1426.56	1426.65	2.21
58	10738.00	93.00	269.10	9437.00	-16.51	-1457.52	1457.61	1.61
59	10770.00	91.90	269.50	9435.63	-16.90	-1489.48	1489.58	3.66
60	10802.00	90.80	269.50	9434.88	-17.18	-1521.47	1521.57	3.44
61	10833.00	90.80	269.50	9434.44	-17.45	-1552.47	1552.57	0.00
62	10865.00	90.80	269.50	9434.00	-17.73	-1584.47	1584.56	0.00
63	10896.00	90.90	269.80	9433.54	-17.92	-1615.46	1615.56	1.02
64	10928.00	90.80	270.20	9433.06	-17.92	-1647.46	1647.55	1.29
65	10960.00	91.10	269.80	9432.53	-17.92	-1679.45	1679.55	1.56
66	10991.00	91.00	269.80	9431.96	-18.03	-1710.45	1710.54	0.32
67	11022.00	91.60	270.50	9431.26	-17.95	-1741.44	1741.53	2.97
68	11053.00	91.50	270.50	9430.42	-17.68	-1772.43	1772.51	0.32
69	11084.00	90.50	270.50	9429.88	-17.41	-1803.42	1803.50	3.23
70	11115.00	90.30	270.50	9429.66	-17.13	-1834.42	1834.49	0.65
71	11145.00	90.70	270.90	9429.40	-16.77	-1864.42	1864.48	1.89



Actual Wellpath Report

#1H AWP ST01

Page 1 of 6



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	#1H_SHL
Area	Lea County, NM	Well	#1H
Field	Princeton 6 Fee	Wellbore	#1H AWP ST01
Facility	Princeton 6 Fee #1H	Sidetrack from	#1H AWP OH at 8900.00 MD

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect™ 1.2
North Reference	Grid	User	Victor Hernandez
Scale	1.00007	Report Generated	11/20/07 at 08:08:52
Wellbore last revised	11/12/07	Database/Source file	WA_Midland/#1H_AWP_S

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	0.00	0.00	910342.06	748775.96	33 03 09.230N	103 07 44.492W
Facility Reference Pt			910342.06	748775.96	33 03 09.230N	103 07 44.492W
Field Reference Pt			910342.06	748775.96	33 03 09.230N	103 07 44.492W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on #1H_SHL (RT) to Facility Vertical Datum	0.00 feet
Horizontal Reference Pt	Facility Center	Rig on #1H_SHL (RT) to GRN. LEVEL	3784.00 feet
Vertical Reference Pt	Rig on #1H_SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00 feet
MD Reference Pt	Rig on #1H_SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	GRN. LEVEL	Section Azimuth	269.32°



Actual Wellpath Report

#1H AWP ST01

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**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	#1H_SHL
Area	Lea County, NM	Well	#1H
Field	Princeton 6 Fee	Wellbore	#1H AWP ST01
Facility	Princeton 6 Fee #1H	Sidetrack from	#1H AWP OH at 8900.00 MD

WELLPATH DATA (162 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00	
100.00	0.370	48.340	100.00	-0.24	0.21	0.24	0.37	
200.00	0.480	52.290	200.00	-0.82	0.69	0.81	0.11	
300.00	0.550	45.970	299.99	-1.51	1.28	1.49	0.09	
400.00	0.530	44.680	399.99	-2.18	1.94	2.16	0.02	
500.00	0.290	38.570	499.99	-2.67	2.46	2.64	0.24	
600.00	0.300	49.270	599.98	-3.03	2.83	3.00	0.06	
700.00	0.270	42.110	699.98	-3.39	3.18	3.36	0.05	
800.00	0.230	35.150	799.98	-3.67	3.52	3.63	0.05	
900.00	0.220	23.160	899.98	-3.87	3.86	3.82	0.05	
1000.00	0.180	359.790	999.98	-3.95	4.19	3.90	0.09	
1100.00	0.200	351.850	1099.98	-3.92	4.52	3.87	0.03	
1200.00	0.100	329.170	1199.98	-3.86	4.77	3.80	0.11	
1300.00	0.090	16.730	1299.98	-3.84	4.92	3.78	0.08	
1400.00	0.170	334.090	1399.98	-3.80	5.13	3.74	0.12	
1500.00	0.260	285.520	1499.98	-3.52	5.32	3.45	0.19	
1600.00	0.390	284.880	1599.98	-2.97	5.47	2.91	0.13	
1700.00	0.430	285.120	1699.97	-2.28	5.66	2.21	0.04	
1800.00	0.510	289.900	1799.97	-1.50	5.91	1.43	0.09	
1900.00	0.490	289.920	1899.97	-0.69	6.20	0.61	0.02	
2000.00	0.390	294.400	1999.96	0.02	6.49	-0.10	0.11	
2100.00	0.230	287.520	2099.96	0.52	6.69	-0.60	0.16	
2200.00	0.120	266.610	2199.96	0.82	6.74	-0.90	0.13	
2300.00	0.060	223.490	2299.96	0.96	6.70	-1.04	0.09	
2400.00	0.040	191.660	2399.96	1.00	6.63	-1.08	0.03	
2500.00	0.120	341.270	2499.96	1.04	6.69	-1.12	0.16	
2600.00	0.190	336.770	2599.96	1.14	6.94	-1.22	0.07	
2700.00	0.240	316.420	2699.96	1.34	7.25	-1.43	0.09	
2800.00	0.120	340.620	2799.96	1.52	7.50	-1.61	0.14	
2900.00	0.230	34.300	2899.96	1.44	7.76	-1.53	0.19	
3000.00	0.220	21.790	2999.96	1.25	8.11	-1.35	0.05	
3100.00	0.360	62.020	3099.96	0.90	8.43	-1.00	0.24	
3200.00	0.790	58.470	3199.95	0.03	8.94	-0.13	0.43	
3300.00	1.210	42.920	3299.94	-1.29	10.07	1.17	0.50	
3400.00	1.290	36.320	3399.91	-2.70	11.75	2.56	0.16	
3500.00	1.500	29.820	3499.88	-4.04	13.80	3.88	0.26	
3600.00	1.580	38.670	3599.85	-5.58	16.01	5.39	0.25	
3700.00	1.830	43.850	3699.80	-7.57	18.24	7.36	0.29	
3800.00	2.420	46.580	3799.73	-10.24	20.84	10.00	0.60	
3900.00	2.550	60.280	3899.64	-13.74	23.39	13.46	0.61	



Actual Wellpath Report

#1H AWP ST01

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**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	#1H_SHL
Area	Lea County, NM	Well	#1H
Field	Princeton 6 Fee	Wellbore	#1H AWP ST01
Facility	Princeton 6 Fee #1H	Sidetrack from	#1H AWP OH at 8900.00 MD

WELLPATH DATA (162 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
4000.00	2.500	64.600	3999.54	-17.67	25.43	17.37	0.20	
4100.00	2.290	66.050	4099.46	-21.48	27.18	21.16	0.22	
4200.00	2.320	69.120	4199.38	-25.22	28.71	24.88	0.13	
4300.00	1.940	64.110	4299.31	-28.65	30.17	28.29	0.42	
4400.00	1.890	62.730	4399.25	-31.66	31.67	31.28	0.07	
4500.00	1.820	62.510	4499.20	-34.55	33.15	34.15	0.07	
4600.00	1.540	72.460	4599.16	-37.25	34.29	36.84	0.40	
4700.00	1.550	74.250	4699.12	-39.84	35.06	39.43	0.05	
4800.00	1.470	80.460	4799.09	-42.42	35.64	41.99	0.18	
4900.00	1.500	80.340	4899.05	-44.98	36.08	44.55	0.03	
5000.00	1.450	85.180	4999.02	-47.53	36.40	47.10	0.13	
5100.00	1.540	86.890	5098.98	-50.14	36.58	49.70	0.10	
5200.00	1.450	88.080	5198.95	-52.74	36.70	52.31	0.10	
5300.00	1.320	92.750	5298.92	-55.16	36.68	54.72	0.17	
5400.00	1.270	95.180	5398.90	-57.41	36.53	56.98	0.07	
5500.00	1.210	98.620	5498.87	-59.55	36.27	59.13	0.10	
5600.00	1.020	106.900	5598.85	-61.44	35.85	61.02	0.25	
5700.00	1.050	124.060	5698.84	-63.05	35.08	62.63	0.31	
5800.00	1.250	141.100	5798.82	-64.47	33.72	64.08	0.39	
5900.00	1.210	144.760	5898.79	-65.75	32.01	65.37	0.09	
6000.00	1.010	150.160	5998.78	-66.78	30.38	66.42	0.23	
6100.00	0.880	165.730	6098.76	-67.39	28.87	67.05	0.29	
6200.00	0.870	180.180	6198.75	-67.55	27.37	67.23	0.22	
6300.00	0.900	196.940	6298.74	-67.30	25.86	67.00	0.26	
6400.00	0.930	203.560	6398.73	-66.73	24.36	66.45	0.11	
6500.00	0.840	207.240	6498.71	-66.06	22.97	65.79	0.11	
6600.00	0.690	212.080	6598.71	-65.39	21.81	65.13	0.16	
6700.00	0.610	219.250	6698.70	-64.72	20.88	64.48	0.11	
6800.00	0.560	229.600	6798.69	-64.00	20.15	63.77	0.12	
6900.00	0.430	234.940	6898.69	-63.32	19.62	63.09	0.14	
7000.00	0.400	251.860	6998.69	-62.68	19.30	62.45	0.13	
7100.00	0.440	268.380	7098.68	-61.96	19.18	61.73	0.13	
7200.00	0.430	277.270	7198.68	-61.20	19.22	60.98	0.07	
7300.00	0.390	280.980	7298.68	-60.50	19.33	60.27	0.05	
7400.00	0.450	290.080	7398.68	-59.80	19.53	59.57	0.09	
7500.00	0.440	251.020	7498.67	-59.07	19.54	58.84	0.30	
7600.00	0.510	260.790	7598.67	-58.26	19.34	58.03	0.11	
7700.00	0.530	250.110	7698.67	-57.38	19.11	57.16	0.10	
7800.00	0.580	244.720	7798.66	-56.49	18.74	56.27	0.07	
7900.00	0.620	240.800	7898.66	-55.55	18.26	55.34	0.06	



Actual Wellpath Report

#1H AWP ST01

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**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	#1H_SHL
Area	Lea County, NM	Well	#1H
Field	Princeton 6 Fee	Wellbore	#1H AWP ST01
Facility	Princeton 6 Fee #1H	Sidetrack from	#1H AWP OH at 8900.00 MD

WELLPATH DATA (162 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
8000.00	0.490	252.670	7998.65	-54.67	17.87	54.46	0.17	
8100.00	0.600	252.440	8098.65	-53.76	17.58	53.55	0.11	
8200.00	0.570	257.220	8198.64	-52.77	17.31	52.57	0.06	
8300.00	0.430	292.910	8298.64	-51.94	17.35	51.74	0.33	
8400.00	0.520	319.750	8398.63	-51.30	17.84	51.10	0.24	
8500.00	0.550	342.610	8498.63	-50.88	18.65	50.66	0.21	
8600.00	0.430	355.380	8598.63	-50.71	19.48	50.49	0.16	
8700.00	0.170	7.760	8698.63	-50.71	20.00	50.48	0.27	
8800.00	0.330	294.190	8798.62	-50.47	20.27	50.23	0.33	
8900.00	0.210	286.820	8898.62	-50.03	20.44	49.79	0.12	
8956.00	2.800	281.800	8954.60	-48.60	20.75	48.36	4.63	
8971.00	4.400	281.800	8969.57	-47.68	20.94	47.44	10.67	
8988.00	7.200	281.800	8986.48	-46.00	21.29	45.75	16.47	
9034.00	12.100	263.800	9031.83	-38.38	21.36	38.13	12.39	
9065.00	14.200	267.400	9062.01	-31.35	20.84	31.10	7.27	
9097.00	19.400	267.400	9092.64	-22.11	20.42	21.87	16.25	
9128.00	23.200	268.100	9121.51	-10.85	19.98	10.62	12.29	
9160.00	26.100	267.000	9150.59	2.48	19.40	-2.71	9.17	
9192.00	25.600	266.000	9179.39	16.42	18.55	-16.64	2.07	
9224.00	29.800	268.400	9207.72	31.28	17.85	-31.49	13.58	
9255.00	33.700	270.200	9234.07	47.59	17.66	-47.80	12.95	
9286.00	37.700	270.200	9259.24	65.67	17.72	-65.89	12.90	
9317.00	40.200	269.800	9283.35	85.15	17.72	-85.37	8.11	
9348.00	44.900	271.200	9306.18	106.11	17.92	-106.33	15.47	
9380.00	48.700	270.900	9328.08	129.42	18.34	-129.65	11.89	
9412.00	51.400	269.500	9348.63	153.94	18.42	-154.17	9.08	
9443.00	56.200	270.200	9366.93	178.95	18.36	-179.18	15.59	
9475.00	60.300	269.500	9383.77	206.15	18.29	-206.39	12.95	
9504.00	63.900	268.400	9397.34	231.78	17.81	-232.01	12.86	
9536.00	67.600	268.400	9410.48	260.95	17.00	-261.17	11.56	
9568.00	71.900	269.800	9421.55	290.96	16.53	-291.18	14.05	
9600.00	76.100	269.500	9430.37	321.71	16.34	-321.93	13.16	
9631.00	80.200	268.800	9436.73	352.05	15.89	-352.26	13.41	
9662.00	83.600	267.000	9441.10	382.72	14.77	-382.92	12.38	
9693.00	86.100	267.400	9443.88	413.57	13.26	-413.76	8.17	
9725.00	86.400	267.400	9445.98	445.49	11.81	-445.66	0.94	
9757.00	89.800	267.000	9447.04	477.44	10.25	-477.60	10.70	
9787.00	93.600	267.000	9446.15	507.40	8.68	-507.54	12.67	
9819.00	94.900	267.400	9443.78	539.29	7.12	-539.41	4.25	
9851.00	92.800	267.400	9441.63	571.20	5.67	-571.30	6.56	



Actual Wellpath Report

#1H AWP ST01

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**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	#1H_SHL
Area	Lea County, NM	Well	#1H
Field	Princeton 6 Fee	Wellbore	#1H AWP ST01
Facility	Princeton 6 Fee #1H	Sidetrack from	#1H AWP OH at 8900.00 MD

WELLPATH DATA (162 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
9883.00	90.700	267.400	9440.65	603.16	4.22	-603.25	6.56	
9914.00	90.600	267.400	9440.30	634.14	2.81	-634.22	0.32	
9946.00	90.500	267.700	9439.99	666.13	1.45	-666.19	0.99	
9978.00	90.400	267.700	9439.74	698.11	0.16	-698.16	0.31	
10009.00	91.100	268.100	9439.34	729.10	-0.97	-729.14	2.60	
10041.00	90.800	267.700	9438.81	761.08	-2.15	-761.11	1.56	
10074.00	91.300	267.700	9438.20	794.07	-3.47	-794.08	1.52	
10105.00	90.900	267.000	9437.61	825.04	-4.90	-825.04	2.60	
10137.00	92.200	267.000	9436.74	857.00	-6.58	-856.99	4.06	
10169.00	92.000	268.100	9435.57	888.97	-7.94	-888.93	3.49	
10200.00	90.100	268.400	9435.00	919.95	-8.89	-919.91	6.20	
10232.00	90.100	268.800	9434.94	951.95	-9.67	-951.90	1.25	
10264.00	89.200	268.400	9435.14	983.95	-10.45	-983.89	3.08	
10290.00	89.700	268.800	9435.39	1009.94	-11.09	-1009.88	2.46	
10327.00	90.300	268.800	9435.39	1046.94	-11.87	-1046.88	1.62	
10358.00	91.200	268.800	9434.98	1077.94	-12.51	-1077.87	2.90	
10390.00	89.500	269.100	9434.79	1109.94	-13.10	-1109.86	5.39	
10421.00	87.600	269.500	9435.57	1140.92	-13.48	-1140.85	6.26	
10453.00	87.200	269.500	9437.02	1172.89	-13.76	-1172.81	1.25	
10485.00	86.500	269.800	9438.78	1204.84	-13.95	-1204.76	2.38	
10517.00	86.300	269.500	9440.79	1236.78	-14.15	-1236.70	1.13	
10548.00	87.800	269.800	9442.39	1267.74	-14.34	-1267.66	4.93	
10580.00	90.100	269.100	9442.97	1299.73	-14.64	-1299.65	7.51	
10612.00	92.200	269.100	9442.33	1331.72	-15.15	-1331.63	6.56	
10643.00	92.200	269.500	9441.14	1362.70	-15.53	-1362.61	1.29	
10675.00	92.400	269.800	9439.86	1394.67	-15.72	-1394.58	1.13	
10707.00	92.500	269.100	9438.49	1426.64	-16.03	-1426.55	2.21	
10738.00	93.000	269.100	9437.00	1457.60	-16.51	-1457.51	1.61	
10770.00	91.900	269.500	9435.63	1489.58	-16.90	-1489.48	3.66	
10802.00	90.800	269.500	9434.88	1521.57	-17.18	-1521.47	3.44	
10833.00	90.800	269.500	9434.45	1552.56	-17.45	-1552.46	0.00	
10865.00	90.800	269.500	9434.00	1584.56	-17.73	-1584.46	0.00	
10896.00	90.900	269.800	9433.54	1615.56	-17.92	-1615.46	1.02	
10928.00	90.800	270.200	9433.06	1647.55	-17.92	-1647.45	1.29	
10960.00	91.100	269.800	9432.53	1679.54	-17.92	-1679.45	1.56	
10991.00	91.000	269.800	9431.97	1710.54	-18.03	-1710.44	0.32	
11022.00	91.600	270.500	9431.26	1741.52	-17.95	-1741.43	2.97	
11053.00	91.500	270.500	9430.42	1772.51	-17.68	-1772.42	0.32	
11084.00	90.500	270.500	9429.88	1803.50	-17.41	-1803.42	3.23	
11116.00	90.300	270.500	9429.66	1835.49	-17.13	-1835.41	0.62	



Actual Wellpath Report

#1H AWP ST01

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	#1H_SHL
Area	Lea County, NM	Well	#1H
Field	Princeton 6 Fee	Wellbore	#1H AWB ST01
Facility	Princeton 6 Fee #1H	Sidetrack from	#1H AWB OH at 8900.00 MD

WELLPATH DATA (162 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
11145.00	90.300	270.500	9429.51	1864.48	-16.88	-1864.41	0.00	
11190.00	90.300	270.500	9429.27	1909.47	-16.48	-1909.41	0.00	Proj. To Bit

TARGETS

Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
#1H BHL		9395.00	-22.96	-1929.00	908412.94	748753.00	33 03 09.221N	103 08 07.156W	point

WELLPATH COMPOSITION Ref Wellbore: #1H AWB ST01 Ref Wellpath: #1H AWP ST01

Start MD [feet]	End MD [feet]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8900.00	Unknown Tool (Standard)	Gyro	#1H AWB OH
8900.00	11190.00	NaviTrak (Standard)	MWD	#1H AWB ST01



Plot reference wellpath is #1H AWB ST01	
True vertical depths are referenced to Rig on #1H_BHL (RT)	Grid System: NAD83 / T.M. New Mexico State Planes: Eastern Zone (3000) US feet
Measured depths are referenced to Rig on #1H_BHL (RT)	North Reference: Grid north
Rig on #1H_BHL (RT) to GRN LEVEL: 3784 feet	Scale: True distance
GRN LEVEL to Mud line (Facility - Princeton 6 Fee #1H): -1784 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	
Created by: hettvic on 11/29/2007	

Cimarex Energy Co.

Location: Lea County, NM
Field: Princeton 6 Fee
Facility: Princeton 6 Fee #1H

Slot: #1H_SHL
Well: #1H
Wellbore: #1H AWB ST01

