

Results of Directional Survey

API number:	30-025-40184		
OGRID:		Operator:	CIMAREX ENERGY CO. OF COLORADO
		Property:	TRISTE DRAW 36 STATE # 1H

surface	ULSTR:	D	36	T	23S	R	32E
				330	FNL	375	FWL

BH Loc	ULSTR:	M	36	T	23S	R	32E
13942	MD	9575.0	TVD	340	FSL	412	FWL
				4940	FNL		

Top Perf/OH	ULSTR:	D	36	T	23S	R	32E
9500	MD	9463.6	TVD	514	FNL	416	FWL

Bot Perf/OH	ULSTR:	M	36	T	23S	R	32E
13896	MD	9574.4	TVD	386	FSL	412	FWL
				4894	FNL		

	MD	N/S	E/W	VD
	9488	-174.27	39.93	9456.26
TOP PERFS/OH	9500	-183.87	40.58	9463.61
	9519	-199.06	41.61	9475.26
	13836	-4504.05	37.35	9573.30
BOT PERFS/OH	13896	-4564.04	37.25	9574.40
	13899	-4567.04	37.24	9574.45

NEXT TO LAST	13899	-4567.04	37.24	9574.45
LAST READING	13942	-4610.04	37.39	9574.98
TD	13942	-4610.04	37.39	9574.98

Surface Location	330	FN	375	FW
Projected BHL	4940	FN	412	FW
Location of				
Top Perfs/OH	514	FN	416	FW
Bottom Perfs/OH	4894	FN	412	FW

SUMMARY of Subsurface Locations

Surface Location	D-36-23S-32E	330	FN	375	FW	Vert. Depth
Top Perfs/OH	D-36-23S-32E	514	FN	416	FW	9463.61
Bottom Perfs/OH	M-36-23S-32E	4894	FN	412	FW	9574.40
Projected TD	M-36-23S-32E	4940	FN	412	FW	9574.98



INTEQ

HOBBS OCD

FEB 22 2012

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SUR: D-36-23s-32e, 330/N & 375/W
BHL: M-36-23s-32e, 4940/N & 412/W
API #30-025-40184

End of Well Report

Cimarex Energy Co.

Lea County, NM

Triste Draw 36 State No. 1H

Precision 77

Well Specifications

Well Name: Triste Draw 36 State No. 1H
Start Date: 10/27/2011
Client: Cimarex Energy Co.
Rig Name: Precision 77
County: Lea County, NM
Field: (Triste Draw) Sec 36, T23S, R32E

Well Location:

NAD83 / TM New Mexico State Planes, Eastern Zone (3001)

Grid Coordinates

Easting: 756986.40'
Northing: 461771.90'

Geographical Coordinates

Latitude: 32°16'03.211"N
Longitude: 103°38'08.299"W

RT: 3,719' above M.S.L.

Date TD Reached: 12/10/2011

Final Depth MD: 13,942'

Final Depth TVD: 9,574.98'



Cimarex Energy Co.

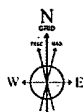
Location: Lee County, TX
Field: (Triste Draw) Sec 36, T23S, R32E
Facility: Triste Draw 36 State No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H PWB



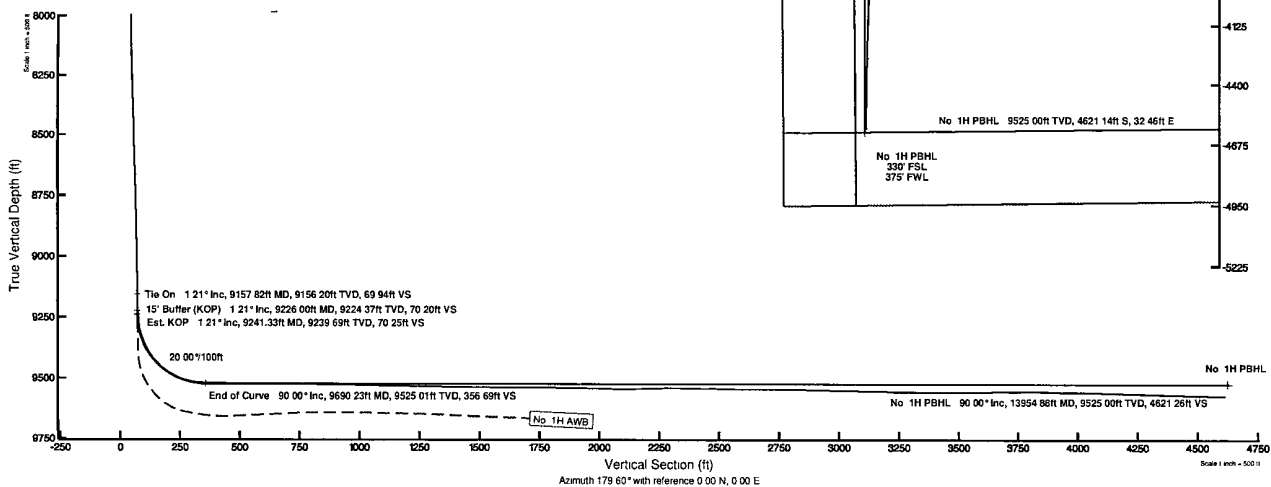
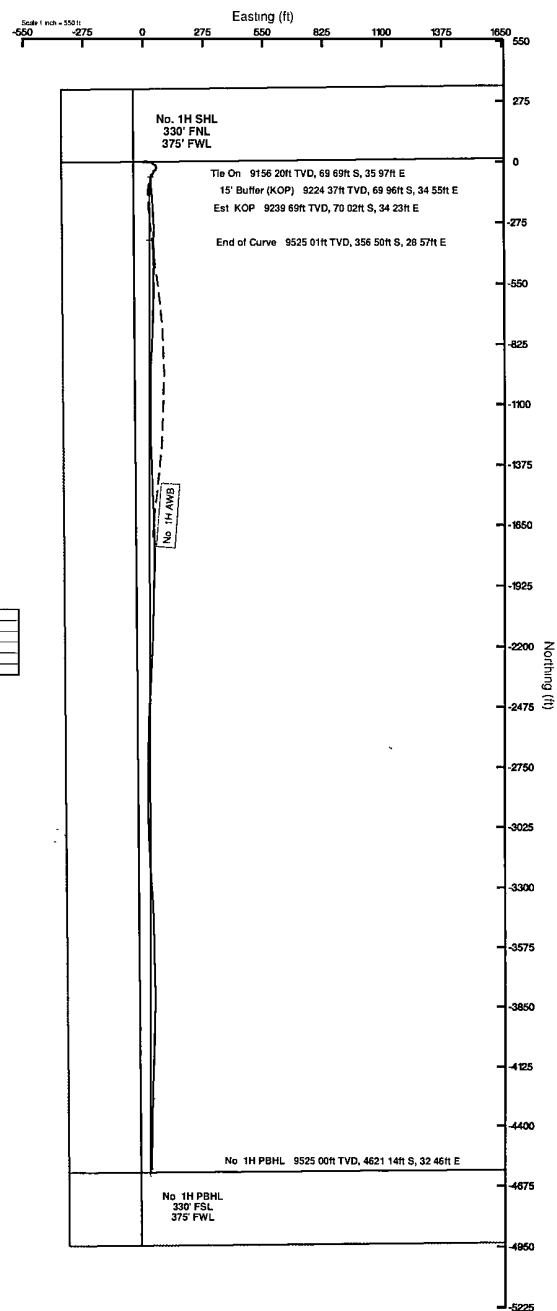
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9157.82	1.210	259.490	9156.20	-69.69	35.97	0.00	69.94
15' Buffer (KOP)	9226.00	1.210	259.490	9224.37	-69.96	34.55	0.00	70.20
Est. KOP	9241.33	1.210	259.490	9239.69	-70.02	34.23	0.00	70.25
End of Curve	9690.23	90.000	179.948	9525.01	-356.50	28.57	20.00	356.69
No. 1H PBHL	13954.88	90.000	179.948	9525.00	-4621.14	32.46	0.00	4621.26



RODM (1945.0 to 2012.0) Dr. 90.21° Field 48656 mT
Magnetic North is 7.62 degrees East of True North (at 10/18/2011)
Grid North is 0.37 degrees East of True North
To correct azimuth from True to Grid subtract 0.37 degrees
To correct azimuth from Magnetic to Grid add 7.25 degrees
For example if the Magnetic North Azimuth = 90 degs from the Grid North Azimuth = 90 + 7.25 = 97.25

And reference wellbore in Plan, P. 20101	Grid System: NAD83 / TM New Mexico S.P. Eastern Zone (2011) US feet
True vertical depths are referenced to Rig on No. 1H SHL (RKB)	North Reference: Grid north
Measured depths are referenced to Rig on No. 1H SHL (RKB)	Scale: True distance
Rig on No. 1H SHL (RKB) to Mean Sea Level: 3718 feet	Drifts are as per
Mean Sea Level to Mud Ray (at Slot, No. 1H SHL): 0 feet	Created by: csh/kh on 11/11/2011
Coordinates are in feet referenced to Slot	





Actual Wellpath Report

No. 1H AWP ST01

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lee County, TX	Well	No. 1H
Field	(Triste Draw) Sec 36, T23S, R32E	Wellbore	No. 1H AWP ST01
Facility	Triste Draw 36 State	Sidetrack from	No. 1H AWP at 9157.82 MD

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Gentbry
Scale	0.999962	Report Generated	12/12/2011 at 4:02:20 PM
Convergence at slot	0.37° East	Database/Source file	WA Midland/No. 1H_AWP_ST01.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	756986.40	461771.90	32°16'03.211"N	103°38'08.299"W
Facility Reference Pt			756986.40	461771.90	32°16'03.211"N	103°38'08.299"W
Field Reference Pt			756986.40	461771.90	32°16'03.211"N	103°38'08.299"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 1H SHL (RKB) to GL	3719.00ft
Horizontal Reference Pt	Slot	Rig on No. 1H SHL (RKB) to Mean Sea Level	3719.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RKB)	Rig on No. 1H SHL (RKB) to Mud Line at Slot (No. 1H SHL)	3719.00ft
MD Reference Pt	Rig on No. 1H SHL (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.54°



Actual Wellpath Report

No. 1H AWP ST01

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lee County, TX	Well	No. 1H
Field	(Triste Draw) Sec 36, T23S, R32E	Wellbore	No. 1H AWP ST01
Facility	Triste Draw 36 State	Sidetrack from	No. 1H AWP at 9157.82 MD

WELLPATH DATA (179 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	162.950	0.00	0.00	0.00	0.00	756986.40	461771.90	32°16'03.211"N	103°38'08.299"W	0.00	
30.00	0.000	162.950	30.00	0.00	0.00	0.00	756986.40	461771.90	32°16'03.211"N	103°38'08.299"W	0.00	
252.26	0.230	162.950	252.26	0.43	-0.43	0.13	756986.53	461771.47	32°16'03.207"N	103°38'08.298"W	0.10	
347.00	0.300	121.420	347.00	0.74	-0.74	0.40	756986.80	461771.16	32°16'03.204"N	103°38'08.295"W	0.21	
441.74	0.230	132.530	441.74	1.00	-1.00	0.75	756987.15	461770.90	32°16'03.202"N	103°38'08.291"W	0.09	
536.48	0.390	139.310	536.48	1.38	-1.37	1.10	756987.50	461770.53	32°16'03.198"N	103°38'08.287"W	0.17	
631.22	0.210	203.030	631.21	1.78	-1.77	1.24	756987.64	461770.13	32°16'03.194"N	103°38'08.285"W	0.37	
725.96	0.440	176.470	725.95	2.31	-2.30	1.20	756987.60	461769.60	32°16'03.189"N	103°38'08.286"W	0.28	
820.70	0.300	145.270	820.69	2.87	-2.86	1.36	756987.76	461769.04	32°16'03.183"N	103°38'08.284"W	0.25	
915.44	0.320	112.250	915.43	3.18	-3.17	1.75	756988.15	461768.73	32°16'03.180"N	103°38'08.279"W	0.19	
1010.18	0.110	169.930	1010.17	3.37	-3.36	2.01	756988.41	461768.54	32°16'03.178"N	103°38'08.276"W	0.29	
1104.92	0.110	104.210	1104.91	3.49	-3.47	2.11	756988.51	461768.43	32°16'03.177"N	103°38'08.275"W	0.13	
1199.66	0.110	81.980	1199.65	3.50	-3.48	2.29	756988.69	461768.42	32°16'03.177"N	103°38'08.273"W	0.04	
1294.40	0.490	43.340	1294.39	3.19	-3.17	2.66	756989.06	461768.73	32°16'03.180"N	103°38'08.269"W	0.43	
1389.14	0.440	55.260	1389.12	2.69	-2.67	3.24	756989.63	461769.23	32°16'03.185"N	103°38'08.262"W	0.11	
1483.88	0.500	338.970	1483.86	2.10	-2.08	3.39	756989.79	461769.82	32°16'03.191"N	103°38'08.260"W	0.61	
1578.62	0.400	33.620	1578.60	1.44	-1.41	3.42	756989.82	461770.49	32°16'03.197"N	103°38'08.260"W	0.45	
1673.36	0.440	64.580	1673.34	1.01	-0.98	3.93	756990.33	461770.92	32°16'03.201"N	103°38'08.254"W	0.24	
1768.10	0.350	33.620	1768.08	0.62	-0.59	4.42	756990.82	461771.31	32°16'03.205"N	103°38'08.248"W	0.24	
1862.84	0.480	60.920	1862.81	0.19	-0.15	4.93	756991.33	461771.75	32°16'03.210"N	103°38'08.242"W	0.25	
1957.58	0.210	66.520	1957.55	-0.07	0.11	5.43	756991.83	461772.01	32°16'03.212"N	103°38'08.236"W	0.29	
2052.32	0.340	86.420	2052.29	-0.15	0.20	5.87	756992.27	461772.10	32°16'03.213"N	103°38'08.231"W	0.17	
2147.06	0.220	47.870	2147.03	-0.29	0.34	6.29	756992.69	461772.24	32°16'03.214"N	103°38'08.226"W	0.23	
2241.80	0.240	36.940	2241.77	-0.56	0.62	6.54	756992.94	461772.52	32°16'03.217"N	103°38'08.223"W	0.05	
2336.54	0.190	61.650	2336.51	-0.80	0.85	6.80	756993.20	461772.75	32°16'03.219"N	103°38'08.220"W	0.11	
2431.28	0.300	55.830	2431.25	-1.01	1.06	7.14	756993.54	461772.96	32°16'03.221"N	103°38'08.216"W	0.12	
2526.02	0.250	85.120	2525.99	-1.16	1.22	7.56	756993.96	461773.12	32°16'03.223"N	103°38'08.211"W	0.16	
2620.76	0.540	47.420	2620.72	-1.48	1.54	8.09	756994.49	461773.44	32°16'03.226"N	103°38'08.205"W	0.40	
2715.50	0.280	63.680	2715.46	-1.88	1.95	8.63	756995.03	461773.85	32°16'03.230"N	103°38'08.199"W	0.30	
2810.24	0.250	49.470	2810.20	-2.11	2.18	8.99	756995.39	461774.08	32°16'03.232"N	103°38'08.195"W	0.08	
2904.98	0.360	88.820	2904.94	-2.25	2.32	9.45	756995.85	461774.22	32°16'03.234"N	103°38'08.189"W	0.24	
2999.72	0.150	50.630	2999.68	-2.33	2.41	9.84	756996.24	461774.31	32°16'03.235"N	103°38'08.185"W	0.27	
3094.46	0.260	73.680	3094.42	-2.46	2.55	10.14	756996.54	461774.45	32°16'03.236"N	103°38'08.181"W	0.14	
3189.20	0.270	85.200	3189.16	-2.54	2.63	10.57	756996.97	461774.53	32°16'03.237"N	103°38'08.176"W	0.06	
3283.94	0.440	84.010	3283.89	-2.59	2.68	11.15	756997.55	461774.58	32°16'03.237"N	103°38'08.169"W	0.18	
3378.68	0.360	120.560	3378.63	-2.47	2.57	11.77	756998.17	461774.47	32°16'03.236"N	103°38'08.162"W	0.28	
3473.42	0.510	139.850	3473.37	-2.00	2.10	12.30	756998.70	461774.00	32°16'03.231"N	103°38'08.156"W	0.22	
3568.16	0.450	127.430	3568.11	-1.44	1.55	12.87	756999.27	461773.45	32°16'03.226"N	103°38'08.149"W	0.13	
3662.90	0.670	130.140	3662.84	-0.85	0.96	13.59	756999.99	461772.86	32°16'03.220"N	103°38'08.141"W	0.23	
3757.64	0.560	162.270	3757.58	-0.05	0.17	14.15	757000.55	461772.07	32°16'03.212"N	103°38'08.135"W	0.38	
3852.38	0.530	149.000	3852.31	0.77	-0.65	14.52	757000.92	461771.25	32°16'03.204"N	103°38'08.130"W	0.14	
3947.12	0.430	192.230	3947.05	1.49	-1.37	14.67	757001.07	461770.53	32°16'03.197"N	103°38'08.129"W	0.39	
4041.86	0.420	145.970	4041.79	2.13	-2.01	14.79	757001.19	461769.89	32°16'03.191"N	103°38'08.127"W	0.35	
4136.60	0.730	93.050	4136.52	2.46	-2.33	15.58	757001.98	461769.57	32°16'03.187"N	103°38'08.118"W	0.62	
4231.34	1.650	85.990	4231.24	2.41	-2.27	17.55	757003.95	461769.63	32°16'03.188"N	103°38'08.095"W	0.98	



Actual Wellpath Report

No. 1H AWP ST01

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lee County, TX	Well	No. 1H
Field	(Triste Draw) Sec 36, T23S, R32E	Wellbore	No. 1H AWP ST01
Facility	Triste Draw 36 State	Sidetrack from	No. 1H AWP at 9157.82 MD

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4326.08	2.230	78.780	4325.93	1.98	-1.81	20.72	757007.12	461770.09	32°16'03.192"N	103°38'08.058"W	0.66	
4420.82	2.160	89.420	4420.60	1.63	-1.43	24.31	757010.71	461770.47	32°16'03.196"N	103°38'08.016"W	0.44	
4515.56	2.800	95.820	4515.25	1.88	-1.65	28.40	757014.80	461770.25	32°16'03.193"N	103°38'07.969"W	0.74	
4610.30	2.770	102.430	4609.88	2.65	-2.38	32.93	757019.33	461769.52	32°16'03.186"N	103°38'07.916"W	0.34	
4705.04	3.230	113.580	4704.49	4.24	-3.94	37.62	757024.01	461767.96	32°16'03.170"N	103°38'07.862"W	0.78	
4799.78	2.440	121.900	4799.11	6.41	-6.07	41.77	757028.17	461765.83	32°16'03.149"N	103°38'07.813"W	0.94	
4894.52	2.300	136.410	4893.77	8.88	-8.52	44.80	757031.20	461763.39	32°16'03.124"N	103°38'07.778"W	0.65	
4989.26	2.050	131.210	4988.44	11.39	-11.01	47.38	757033.78	461760.89	32°16'03.099"N	103°38'07.748"W	0.34	
5084.00	1.790	118.590	5083.13	13.24	-12.83	49.96	757036.36	461759.07	32°16'03.081"N	103°38'07.719"W	0.52	
5178.74	1.400	128.780	5177.83	14.69	-14.27	52.16	757038.56	461757.63	32°16'03.067"N	103°38'07.693"W	0.51	
5273.48	1.200	124.540	5272.55	15.99	-15.55	53.88	757040.28	461756.35	32°16'03.054"N	103°38'07.673"W	0.23	
5368.22	0.960	118.040	5367.27	16.94	-16.49	55.40	757041.79	461755.41	32°16'03.045"N	103°38'07.656"W	0.28	
5462.96	0.780	159.590	5462.00	17.92	-17.47	56.32	757042.72	461754.43	32°16'03.035"N	103°38'07.645"W	0.68	
5557.70	0.670	164.320	5556.73	19.06	-18.60	56.70	757043.09	461753.30	32°16'03.024"N	103°38'07.641"W	0.13	
5652.44	0.600	149.010	5651.47	20.02	-19.56	57.10	757043.50	461752.34	32°16'03.014"N	103°38'07.636"W	0.19	
5747.18	0.900	123.720	5746.20	20.87	-20.40	57.98	757044.37	461751.50	32°16'03.006"N	103°38'07.626"W	0.46	
5841.92	0.950	164.830	5840.93	22.05	-21.57	58.80	757045.20	461750.33	32°16'02.994"N	103°38'07.616"W	0.69	
5936.66	0.600	170.970	5935.66	23.30	-22.82	59.08	757045.48	461749.08	32°16'02.982"N	103°38'07.613"W	0.38	
6031.40	0.480	169.140	6030.40	24.18	-23.70	59.24	757045.63	461748.20	32°16'02.973"N	103°38'07.611"W	0.13	
6126.14	0.300	175.080	6125.13	24.82	-24.34	59.33	757045.73	461747.56	32°16'02.967"N	103°38'07.610"W	0.19	
6220.88	0.820	173.240	6219.87	25.74	-25.26	59.43	757045.83	461746.64	32°16'02.958"N	103°38'07.609"W	0.55	
6315.62	0.790	153.810	6314.60	27.00	-26.52	59.80	757046.20	461745.39	32°16'02.945"N	103°38'07.605"W	0.29	
6410.36	0.620	172.790	6409.33	28.10	-27.61	60.15	757046.55	461744.29	32°16'02.934"N	103°38'07.601"W	0.30	
6505.10	0.230	271.880	6504.07	28.60	-28.11	60.03	757046.43	461743.79	32°16'02.929"N	103°38'07.602"W	0.73	
6599.84	0.270	263.330	6598.81	28.62	-28.13	59.62	757046.01	461743.77	32°16'02.929"N	103°38'07.607"W	0.06	
6694.58	0.440	272.550	6693.55	28.62	-28.14	59.03	757045.43	461743.76	32°16'02.929"N	103°38'07.614"W	0.19	
6789.32	0.760	189.920	6788.28	29.22	-28.75	58.56	757044.96	461743.16	32°16'02.923"N	103°38'07.623"W	0.87	
6884.06	0.760	185.460	6883.02	30.46	-29.99	58.39	757044.79	461741.91	32°16'02.911"N	103°38'07.622"W	0.06	
6978.80	0.440	225.720	6977.75	31.34	-30.87	58.07	757044.47	461741.03	32°16'02.902"N	103°38'07.625"W	0.54	
7073.54	0.500	271.340	7072.49	31.58	-31.11	57.40	757043.79	461740.79	32°16'02.900"N	103°38'07.633"W	0.39	
7168.28	0.540	172.140	7167.23	32.01	-31.55	57.04	757043.44	461740.36	32°16'02.896"N	103°38'07.637"W	0.84	
7263.02	0.870	176.990	7261.96	33.17	-32.71	57.14	757043.54	461739.19	32°16'02.884"N	103°38'07.636"W	0.35	
7357.76	1.020	201.230	7356.69	34.67	-34.21	56.88	757043.27	461737.69	32°16'02.869"N	103°38'07.640"W	0.45	
7452.50	0.790	213.790	7451.41	35.99	-35.54	56.21	757042.61	461736.36	32°16'02.856"N	103°38'07.648"W	0.32	
7547.24	0.800	211.710	7546.14	37.09	-36.64	55.50	757041.89	461735.26	32°16'02.845"N	103°38'07.656"W	0.03	
7641.98	1.140	229.040	7640.87	38.27	-37.83	54.44	757040.84	461734.08	32°16'02.834"N	103°38'07.668"W	0.47	
7736.72	1.240	234.430	7735.59	39.47	-39.04	52.89	757039.29	461732.86	32°16'02.822"N	103°38'07.686"W	0.16	
7831.46	1.310	232.640	7830.31	40.71	-40.29	51.20	757037.60	461731.61	32°16'02.809"N	103°38'07.706"W	0.09	
7926.20	0.750	221.440	7925.03	41.82	-41.41	49.93	757036.32	461730.49	32°16'02.798"N	103°38'07.721"W	0.63	
8020.94	1.410	217.200	8019.75	43.20	-42.81	48.81	757035.21	461729.09	32°16'02.785"N	103°38'07.734"W	0.70	
8115.68	1.620	215.920	8114.46	45.20	-44.82	47.32	757033.72	461727.08	32°16'02.765"N	103°38'07.752"W	0.22	
8210.42	1.590	203.600	8209.16	47.48	-47.11	46.01	757032.41	461724.79	32°16'02.742"N	103°38'07.767"W	0.36	
8305.16	1.760	187.050	8303.86	50.12	-49.76	45.30	757031.70	461722.14	32°16'02.716"N	103°38'07.776"W	0.54	
8399.90	1.900	204.710	8398.56	52.99	-52.63	44.47	757030.87	461719.27	32°16'02.688"N	103°38'07.786"W	0.61	
8494.64	1.750	207.810	8493.25	55.68	-55.34	43.14	757029.54	461716.57	32°16'02.661"N	103°38'07.801"W	0.19	



Actual Wellpath Report

No. 1H AWP ST01
Page 4 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lee County, TX	Well	No. 1H
Field	(Triste Draw) Sec 36, T23S, R32E	Wellbore	No. 1H AWP ST01
Facility	Triste Draw 36 State	Sidetrack from	No. 1H AWP at 9157.82 MD

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8589.38	1.880	207.850	8587.94	58.33	-57.99	41.74	757028.13	461713.91	32°16'02.635"N	103°38'07.818"W	0.14	
8684.12	1.750	184.780	8682.63	61.13	-60.80	40.89	757027.29	461711.10	32°16'02.607"N	103°38'07.828"W	0.78	
8778.86	1.540	183.040	8777.34	63.85	-63.52	40.70	757027.10	461708.39	32°16'02.580"N	103°38'07.830"W	0.23	
8873.60	1.250	199.040	8872.05	66.09	-65.77	40.30	757026.70	461706.14	32°16'02.558"N	103°38'07.835"W	0.51	
8968.34	1.310	214.540	8966.76	67.95	-67.63	39.35	757025.74	461704.27	32°16'02.540"N	103°38'07.846"W	0.37	
9063.08	1.230	241.050	9061.48	69.32	-69.02	37.84	757024.24	461702.88	32°16'02.526"N	103°38'07.864"W	0.62	
9157.82	1.210	259.490	9156.20	69.98	-69.69	35.97	757022.37	461702.21	32°16'02.519"N	103°38'07.886"W	0.41	
9267.00	6.200	173.200	9265.16	76.05	-75.76	35.53	757021.93	461696.14	32°16'02.459"N	103°38'07.891"W	5.71	
9299.00	11.500	181.900	9296.77	80.96	-80.67	35.63	757022.03	461691.23	32°16'02.411"N	103°38'07.891"W	17.04	
9330.00	17.500	177.900	9326.77	88.71	-88.43	35.70	757022.10	461683.48	32°16'02.334"N	103°38'07.890"W	19.61	
9362.00	23.600	176.700	9356.72	99.93	-99.64	36.25	757022.64	461672.27	32°16'02.223"N	103°38'07.885"W	19.11	
9393.00	30.000	176.700	9384.37	113.88	-113.59	37.05	757023.45	461658.32	32°16'02.085"N	103°38'07.877"W	20.65	
9425.00	36.600	177.300	9411.10	131.42	-131.12	37.96	757024.36	461640.78	32°16'01.912"N	103°38'07.867"W	20.65	
9456.00	43.400	177.700	9434.84	151.33	-151.02	38.82	757025.22	461620.89	32°16'01.715"N	103°38'07.859"W	21.95	
9488.00	50.000	176.900	9456.77	174.58	-174.27	39.93	757026.33	461597.64	32°16'01.485"N	103°38'07.848"W	20.70	
9519.00	56.700	175.400	9475.26	199.40	-199.06	41.61	757028.01	461572.84	32°16'01.239"N	103°38'07.830"W	21.96	
9551.00	63.200	175.600	9491.28	227.01	-226.66	43.78	757030.18	461545.25	32°16'00.966"N	103°38'07.807"W	20.32	
9582.00	70.100	176.700	9503.56	255.41	-255.04	45.69	757032.08	461516.87	32°16'00.685"N	103°38'07.787"W	22.49	
9614.00	76.800	177.500	9512.67	286.03	-285.66	47.23	757033.63	461486.25	32°16'00.382"N	103°38'07.771"W	21.07	
9649.00	84.000	179.800	9518.50	320.51	-320.14	48.04	757034.44	461451.78	32°16'00.041"N	103°38'07.764"W	21.57	
9680.00	86.300	179.700	9521.13	351.40	-351.02	48.17	757034.57	461420.89	32°15'59.735"N	103°38'07.765"W	7.43	
9712.00	88.100	180.000	9522.69	383.36	-382.98	48.26	757034.66	461388.93	32°15'59.419"N	103°38'07.766"W	5.70	
9743.00	88.800	180.300	9523.53	414.35	-413.97	48.18	757034.57	461357.95	32°15'59.112"N	103°38'07.770"W	2.46	
9807.00	89.700	179.800	9524.36	478.34	-477.96	48.12	757034.52	461293.95	32°15'58.479"N	103°38'07.775"W	1.61	
9869.00	90.400	180.200	9524.31	540.34	-539.96	48.12	757034.52	461231.96	32°15'57.865"N	103°38'07.780"W	1.30	
9932.00	89.700	181.400	9524.26	603.32	-602.96	47.24	757033.64	461168.97	32°15'57.242"N	103°38'07.795"W	2.21	
9995.00	90.200	181.400	9524.31	666.29	-665.94	45.70	757032.10	461105.99	32°15'56.619"N	103°38'07.818"W	0.79	
10059.00	88.500	182.100	9525.04	730.23	-729.90	43.75	757030.15	461042.03	32°15'55.986"N	103°38'07.845"W	2.87	
10121.00	88.600	182.300	9526.61	792.14	-791.84	41.37	757027.77	460980.10	32°15'55.374"N	103°38'07.878"W	0.36	
10185.00	88.600	182.400	9528.17	856.05	-855.76	38.74	757025.14	460916.17	32°15'54.741"N	103°38'07.913"W	0.16	
10247.00	89.800	182.400	9529.03	917.96	-917.70	36.15	757022.55	460854.24	32°15'54.129"N	103°38'07.948"W	1.94	
10311.00	88.900	181.500	9529.76	981.90	-981.66	33.97	757020.37	460790.28	32°15'53.496"N	103°38'07.978"W	1.99	
10374.00	88.500	180.000	9531.19	1044.87	-1044.63	33.15	757019.54	460727.31	32°15'52.873"N	103°38'07.993"W	2.46	
10437.00	88.600	180.100	9532.78	1107.85	-1107.61	33.09	757019.49	460664.33	32°15'52.250"N	103°38'07.998"W	0.22	
10500.00	89.900	180.100	9533.61	1170.84	-1170.61	32.98	757019.38	460601.34	32°15'51.626"N	103°38'08.004"W	2.06	
10563.00	88.400	178.200	9534.54	1233.82	-1233.59	33.92	757020.31	460538.36	32°15'51.003"N	103°38'07.998"W	3.84	
10626.00	89.100	177.900	9535.92	1296.79	-1296.54	36.06	757022.46	460475.41	32°15'50.380"N	103°38'07.978"W	1.21	
10688.00	89.300	177.800	9536.78	1358.75	-1358.49	38.38	757024.78	460413.47	32°15'49.767"N	103°38'07.955"W	0.36	
10751.00	89.300	178.200	9537.55	1421.73	-1421.44	40.58	757026.98	460350.51	32°15'49.144"N	103°38'07.934"W	0.63	
10814.00	89.200	178.100	9538.38	1484.70	-1484.41	42.62	757029.02	460287.55	32°15'48.521"N	103°38'07.916"W	0.22	
10877.00	89.400	177.400	9539.15	1547.67	-1547.35	45.09	757031.49	460224.61	32°15'47.898"N	103°38'07.891"W	1.16	
10940.00	89.600	177.600	9539.70	1610.62	-1610.29	47.84	757034.24	460161.67	32°15'47.275"N	103°38'07.864"W	0.45	
11003.00	89.800	177.800	9540.03	1673.59	-1673.24	50.37	757036.76	460098.73	32°15'46.652"N	103°38'07.840"W	0.45	
11066.00	89.600	179.300	9540.36	1736.58	-1736.22	51.96	757038.36	460035.75	32°15'46.028"N	103°38'07.826"W	2.40	
11128.00	89.000	180.000	9541.11	1798.57	-1798.21	52.34	757038.74	459973.76	32°15'45.415"N	103°38'07.826"W	1.49	



Actual Wellpath Report

No. 1H AWP ST01

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BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lee County, TX	Well	No. 1H
Field	(Triste Draw) Sec 36, T23S, R32E	Wellbore	No. 1H AWP ST01
Facility	Triste Draw 36 State	Sidetrack from	No. 1H AWP at 9157.82 MD

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11191.00	89.200	181.500	9542.10	1861.55	-1861.19	51.51	757037.91	459910.78	32°15'44.792"N	103°38'07.840"W	2.40	
11254.00	89.300	182.100	9542.93	1924.50	-1924.16	49.54	757035.93	459847.82	32°15'44.169"N	103°38'07.868"W	0.97	
11316.00	89.300	181.600	9543.69	1986.44	-1986.12	47.53	757033.93	459785.86	32°15'43.556"N	103°38'07.896"W	0.81	
11380.00	87.200	180.900	9545.64	2050.38	-2050.07	46.14	757032.54	459721.91	32°15'42.923"N	103°38'07.917"W	3.46	
11442.00	90.700	181.700	9546.78	2112.33	-2112.03	44.73	757031.13	459659.95	32°15'42.310"N	103°38'07.938"W	5.79	
11506.00	91.200	181.700	9545.72	2176.27	-2176.00	42.83	757029.23	459595.99	32°15'41.677"N	103°38'07.965"W	0.78	
11569.00	92.100	182.700	9543.90	2239.18	-2238.92	40.42	757026.82	459533.07	32°15'41.055"N	103°38'07.998"W	2.13	
11631.00	89.800	182.700	9542.87	2301.07	-2300.84	37.50	757023.90	459471.15	32°15'40.442"N	103°38'08.037"W	3.71	
11694.00	88.800	183.200	9543.64	2363.95	-2363.75	34.25	757020.65	459408.24	32°15'39.820"N	103°38'08.079"W	1.77	
11757.00	89.000	183.200	9544.85	2426.81	-2426.64	30.74	757017.14	459345.35	32°15'39.198"N	103°38'08.125"W	0.32	
11821.00	89.400	183.100	9545.75	2490.68	-2490.54	27.22	757013.62	459281.46	32°15'38.566"N	103°38'08.171"W	0.64	
11884.00	89.000	182.000	9546.63	2553.58	-2553.47	24.42	757010.82	459218.53	32°15'37.944"N	103°38'08.208"W	1.86	
11947.00	89.600	180.600	9547.40	2616.55	-2616.45	22.99	757009.39	459155.56	32°15'37.321"N	103°38'08.230"W	2.42	
12072.00	90.000	180.200	9547.83	2741.53	-2741.44	22.12	757008.52	459030.57	32°15'36.084"N	103°38'08.249"W	0.45	
12135.00	88.800	181.000	9548.49	2804.52	-2804.43	21.46	757007.86	458967.58	32°15'35.461"N	103°38'08.262"W	2.29	
12198.00	88.400	180.300	9550.03	2867.48	-2867.41	20.74	757007.14	458904.60	32°15'34.837"N	103°38'08.275"W	1.28	
12261.00	88.600	179.300	9551.68	2930.46	-2930.39	20.96	757007.36	458841.63	32°15'34.214"N	103°38'08.277"W	1.62	
12324.00	88.800	178.400	9553.11	2993.44	-2993.36	22.23	757008.63	458778.66	32°15'33.591"N	103°38'08.267"W	1.46	
12387.00	89.000	178.100	9554.32	3056.41	-3056.32	24.15	757010.55	458715.70	32°15'32.968"N	103°38'08.250"W	0.57	
12450.00	88.900	177.700	9555.47	3119.38	-3119.26	26.46	757012.86	458652.76	32°15'32.345"N	103°38'08.227"W	0.65	
12513.00	88.300	176.400	9557.01	3182.30	-3182.16	29.70	757016.10	458589.87	32°15'31.722"N	103°38'08.194"W	2.27	
12576.00	89.000	176.600	9558.50	3245.19	-3245.03	33.55	757019.94	458527.00	32°15'31.100"N	103°38'08.154"W	1.16	
12638.00	88.800	175.500	9559.69	3307.06	-3306.87	37.82	757024.21	458465.17	32°15'30.488"N	103°38'08.109"W	1.80	
12701.00	88.800	176.700	9561.01	3369.94	-3369.70	42.10	757028.50	458402.33	32°15'29.866"N	103°38'08.064"W	1.90	
12764.00	91.900	178.500	9560.62	3432.89	-3432.64	44.74	757031.14	458339.40	32°15'29.243"N	103°38'08.038"W	5.69	
12828.00	90.800	179.000	9559.11	3496.86	-3496.60	46.13	757032.53	458275.43	32°15'28.610"N	103°38'08.027"W	1.89	
12891.00	89.600	178.400	9558.89	3559.85	-3559.59	47.56	757033.96	458212.46	32°15'27.987"N	103°38'08.015"W	2.13	
12954.00	91.000	177.900	9558.56	3622.83	-3622.55	49.60	757035.99	458149.49	32°15'27.364"N	103°38'07.996"W	2.36	
13017.00	89.900	178.900	9558.07	3685.82	-3685.52	51.35	757037.75	458086.52	32°15'26.740"N	103°38'07.980"W	2.36	
13080.00	90.900	178.500	9557.63	3748.81	-3748.50	52.78	757039.18	458023.55	32°15'26.117"N	103°38'07.969"W	1.71	
13143.00	90.400	180.200	9556.91	3811.80	-3811.49	53.50	757039.90	457960.56	32°15'25.494"N	103°38'07.965"W	2.81	
13206.00	87.400	180.800	9558.12	3874.77	-3874.47	52.95	757039.35	457897.58	32°15'24.871"N	103°38'07.976"W	4.86	
13269.00	88.400	181.300	9560.43	3937.71	-3937.42	51.80	757038.19	457834.64	32°15'24.248"N	103°38'07.994"W	1.77	
13332.00	89.800	182.300	9561.42	4000.65	-4000.38	49.82	757036.21	457771.68	32°15'23.625"N	103°38'08.022"W	2.73	
13395.00	89.600	181.800	9561.75	4063.59	-4063.33	47.56	757033.96	457708.73	32°15'23.002"N	103°38'08.053"W	0.85	
13458.00	88.200	181.800	9562.96	4126.52	-4126.29	45.58	757031.98	457645.77	32°15'22.379"N	103°38'08.081"W	2.22	
13521.00	88.300	181.800	9564.89	4189.45	-4189.23	43.61	757030.01	457582.84	32°15'21.757"N	103°38'08.109"W	0.16	
13584.00	88.700	181.300	9566.53	4252.39	-4252.19	41.90	757028.30	457519.88	32°15'21.134"N	103°38'08.133"W	1.02	
13646.00	88.300	181.400	9568.16	4314.33	-4314.15	40.44	757026.84	457457.92	32°15'20.521"N	103°38'08.155"W	0.67	
13710.00	88.300	180.800	9570.06	4378.28	-4378.11	39.21	757025.61	457393.97	32°15'19.888"N	103°38'08.174"W	0.94	
13773.00	88.600	181.100	9571.76	4441.24	-4441.07	38.17	757024.57	457331.00	32°15'19.265"N	103°38'08.191"W	0.67	
13836.00	88.600	180.400	9573.30	4504.20	-4504.05	37.35	757023.74	457268.03	32°15'18.642"N	103°38'08.205"W	1.11	
13899.00	89.300	179.800	9574.45	4567.19	-4567.04	37.24	757023.64	457205.04	32°15'18.019"N	103°38'08.212"W	1.46	
13942.00	89.300	179.800	9574.98	4610.19	-4610.04	37.39	757023.79	457162.05	32°15'17.593"N	103°38'08.213"W	0.00	Proj. to Bit

TARGETS

Name	MD	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape
------	----	-----	-------	------	-----------	------------	----------	-----------	-------

	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			
No. 1H PBHL		9525.00	-4621.14	32.46	757018.86	457150.94	32°15'17.484"N	103°38'08.271"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 1H AWB ST01					Ref Wellpath: No. 1H AWP ST01				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment			Wellbore	
30.00	9157.82	Generic gyro - northseeking (Standard)			Gyro < 252.26 - 9347.30 >			No. 1H AWB	
9157.82	13942.00	NaviTrak (Standard)			MWD ST01 < 9267 - XXXXX >			No. 1H AWB ST01	



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November 15, 2011

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FEB 22 2012

Cimarex Energy Company
600 N. Marienfeld St., Ste. 600
Midland, TX 79701

RECEIVED

Attn: Carolyn Larson

SUR: D-36-23s-32e, 330/N & 375/W
BHL: M-36-23s-32e, 4940/N & 412/W
API #30-025-40184

Re: Triste Draw 36 State 1H

Please find enclosed a copy of the survey from 0' to 9347.30' ran on the above referenced well.

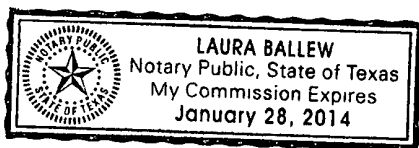
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 15th day of November, A.D., 2011, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas



Company: Cimarex Energy
Lease/Well: Triste Draw 36 State/1H

Location: S36 T.23S R32E

Rig Name: Precision 77

State/County: New Mexico/Lea

Latitude: 32.27

GRID North is 0.37 Degrees East of True North

VS-Azi: 179.60 Degrees



RKB : 30 feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: tristedraw361-01_ed.ut

Minimum Curvature Method

Report Date/Time: 11/15/2011 / 14:41

Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Ray Seago

Triste Draw 36 State 1H

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	****
252.26	0.23	162.95	252.26	-0.49	0.15	0.49	0.51	162.95	0.09
347.00	0.30	121.42	347.00	-0.80	0.42	0.81	0.91	152.64	0.21
441.74	0.23	132.53	441.74	-1.06	0.77	1.07	1.31	144.19	0.09
536.48	0.39	139.31	536.48	-1.43	1.12	1.44	1.82	142.11	0.17
631.22	0.21	203.03	631.21	-1.84	1.26	1.85	2.23	145.67	0.37
725.96	0.44	176.47	725.95	-2.37	1.21	2.38	2.66	152.92	0.28
820.70	0.30	145.27	820.69	-2.94	1.38	2.95	3.24	154.91	0.25
915.44	0.32	112.25	915.43	-3.24	1.76	3.26	3.69	151.51	0.19
1010.18	0.11	169.93	1010.17	-3.43	2.02	3.44	3.98	149.54	0.29
1104.92	0.11	104.21	1104.91	-3.54	2.12	3.56	4.13	149.08	0.13
1199.66	0.11	81.98	1199.65	-3.55	2.30	3.57	4.23	147.10	0.04
1294.40	0.49	43.34	1294.39	-3.25	2.66	3.26	4.20	140.62	0.43
1389.14	0.44	55.26	1389.12	-2.75	3.24	2.77	4.25	130.28	0.11
1483.88	0.50	338.97	1483.86	-2.15	3.39	2.18	4.02	122.45	0.61
1578.62	0.40	33.62	1578.60	-1.49	3.42	1.52	3.74	113.56	0.45
1673.36	0.44	64.58	1673.34	-1.06	3.94	1.09	4.08	105.06	0.24
1768.10	0.35	33.62	1768.08	-0.66	4.43	0.69	4.48	98.53	0.24
1862.84	0.48	60.92	1862.81	-0.23	4.94	0.27	4.94	92.68	0.25

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
1957.58	0.21	66.52	1957.55	0.03	5.45	0.01	5.45	89.66	0.29
2052.32	0.34	86.42	2052.29	0.12	5.88	-0.08	5.88	88.85	0.17
2147.06	0.22	47.87	2147.03	0.26	6.30	-0.22	6.30	87.64	0.22
2241.80	0.24	36.94	2241.77	0.54	6.55	-0.50	6.58	85.26	0.05
2336.54	0.19	61.65	2336.51	0.78	6.81	-0.73	6.85	83.50	0.11
2431.28	0.30	55.83	2431.25	0.99	7.15	-0.94	7.22	82.11	0.13
2526.02	0.25	85.12	2525.99	1.15	7.56	-1.10	7.65	81.36	0.16
2620.76	0.54	47.42	2620.72	1.47	8.10	-1.41	8.23	79.71	0.40
2715.50	0.28	63.68	2715.46	1.88	8.64	-1.82	8.84	77.74	0.30
2810.24	0.25	49.47	2810.20	2.11	9.00	-2.05	9.24	76.79	0.08
2904.98	0.36	88.82	2904.94	2.25	9.45	-2.19	9.72	76.59	0.24
2999.72	0.15	50.63	2999.68	2.34	9.84	-2.27	10.12	76.64	0.27
3094.46	0.26	73.68	3094.42	2.48	10.14	-2.40	10.44	76.28	0.14
3189.20	0.27	85.20	3189.16	2.55	10.57	-2.48	10.87	76.41	0.06
3283.94	0.44	84.01	3283.89	2.61	11.15	-2.53	11.45	76.82	0.19
3378.68	0.36	120.56	3378.63	2.50	11.77	-2.42	12.04	78.02	0.28
3473.42	0.51	139.85	3473.37	2.03	12.30	-1.94	12.47	80.65	0.22
3568.16	0.45	127.43	3568.11	1.48	12.87	-1.39	12.95	83.46	0.12
3662.90	0.67	130.14	3662.84	0.89	13.59	-0.80	13.62	86.24	0.22
3757.64	0.56	162.27	3757.58	0.10	14.15	0.00	14.15	89.60	0.37
3852.38	0.53	149.00	3852.31	-0.72	14.52	0.82	14.54	92.84	0.14
3947.12	0.43	192.23	3947.05	-1.45	14.67	1.55	14.74	95.64	0.39
4041.86	0.42	145.97	4041.79	-2.09	14.79	2.19	14.93	98.04	0.35
4136.60	0.73	93.05	4136.52	-2.41	15.58	2.52	15.77	98.78	0.62
4231.34	1.65	85.99	4231.24	-2.34	17.55	2.47	17.70	97.61	0.98
4326.08	2.23	78.78	4325.93	-1.89	20.72	2.03	20.80	95.21	0.67
4420.82	2.16	89.42	4420.60	-1.51	24.31	1.68	24.35	93.56	0.44
4515.56	2.80	95.82	4515.25	-1.73	28.39	1.93	28.44	93.49	0.74
4610.30	2.77	102.43	4609.88	-2.46	32.94	2.69	33.03	94.27	0.34
4705.04	3.23	113.58	4704.49	-4.02	37.62	4.28	37.83	96.10	0.78
4799.78	2.44	121.90	4799.11	-6.15	41.77	6.44	42.22	98.37	0.94
4894.52	2.30	136.41	4893.77	-8.59	44.79	8.90	45.61	100.86	0.65
4989.26	2.05	131.21	4988.44	-11.09	47.38	11.42	48.66	103.17	0.33
5084.00	1.79	118.59	5083.13	-12.91	49.95	13.26	51.60	104.49	0.53
5178.74	1.40	128.78	5177.83	-14.34	52.15	14.71	54.09	105.38	0.51
5273.48	1.20	124.54	5272.55	-15.63	53.87	16.00	56.09	106.18	0.23
5368.22	0.96	118.04	5367.27	-16.57	55.39	16.95	57.81	106.65	0.29
5462.96	0.78	159.59	5462.00	-17.54	56.31	17.94	58.98	107.30	0.67
5557.70	0.67	164.32	5556.73	-18.68	56.69	19.08	59.69	108.24	0.14

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
5652.44	0.60	149.01	5651.47	-19.64	57.09	20.04	60.38	108.98	0.19
5747.18	0.90	123.72	5746.20	-20.48	57.97	20.88	61.48	109.46	0.46
5841.92	0.95	164.83	5840.93	-21.65	58.79	22.06	62.65	110.21	0.68
5936.66	0.60	170.97	5935.66	-22.89	59.07	23.31	63.35	111.19	0.37
6031.40	0.48	169.14	6030.40	-23.77	59.22	24.19	63.82	111.87	0.14
6126.14	0.30	175.08	6125.13	-24.41	59.32	24.82	64.14	112.37	0.19
6220.88	0.82	173.24	6219.87	-25.32	59.42	25.74	64.59	113.08	0.55
6315.62	0.79	153.81	6314.60	-26.58	59.79	27.00	65.43	113.97	0.29
6410.36	0.62	172.79	6409.33	-27.68	60.14	28.10	66.21	114.71	0.30
6505.10	0.23	271.88	6504.07	-28.18	60.01	28.60	66.30	115.16	0.74
6599.84	0.27	263.33	6598.81	-28.20	59.60	28.62	65.94	115.32	0.05
6694.58	0.44	272.55	6693.55	-28.21	59.02	28.62	65.42	115.55	0.19
6789.32	0.76	189.92	6788.28	-28.82	58.55	29.23	65.26	116.21	0.88
6884.06	0.76	185.46	6883.02	-30.07	58.38	30.47	65.67	117.25	0.06
6978.80	0.44	225.72	6977.75	-30.94	58.06	31.35	65.79	118.05	0.54
7073.54	0.50	271.34	7072.49	-31.18	57.39	31.58	65.32	118.52	0.39
7168.28	0.54	172.14	7167.23	-31.62	57.04	32.02	65.22	119.00	0.84
7263.02	0.87	176.99	7261.96	-32.78	57.14	33.18	65.87	119.85	0.35
7357.76	1.02	201.23	7356.69	-34.29	56.87	34.69	66.41	121.09	0.45
7452.50	0.79	213.79	7451.41	-35.62	56.20	36.01	66.54	122.37	0.32
7547.24	0.80	211.71	7546.14	-36.73	55.49	37.11	66.54	123.50	0.03
7641.98	1.14	229.04	7640.87	-37.91	54.43	38.29	66.33	124.86	0.47
7736.72	1.24	234.43	7735.59	-39.12	52.88	39.49	65.78	126.49	0.16
7831.46	1.31	232.64	7830.31	-40.37	51.19	40.73	65.20	128.26	0.09
7926.20	0.75	221.44	7925.03	-41.50	49.92	41.84	64.92	129.74	0.62
8020.94	1.41	217.20	8019.75	-42.89	48.80	43.23	64.97	131.31	0.70
8115.68	1.62	215.92	8114.46	-44.91	47.31	45.24	65.23	133.51	0.22
8210.42	1.59	203.60	8209.16	-47.20	46.00	47.52	65.91	135.74	0.37
8305.16	1.76	187.05	8303.86	-49.85	45.29	50.16	67.35	137.74	0.54
8399.90	1.90	204.71	8398.56	-52.72	44.46	53.03	68.97	139.86	0.61
8494.64	1.75	207.81	8493.25	-55.43	43.13	55.73	70.23	142.12	0.19
8589.38	1.88	207.85	8587.94	-58.08	41.73	58.37	71.52	144.31	0.14
8684.12	1.75	184.78	8682.63	-60.90	40.88	61.18	73.35	146.13	0.78
8778.86	1.54	183.04	8777.34	-63.61	40.69	63.89	75.51	147.39	0.23
8873.60	1.25	199.04	8872.05	-65.85	40.29	66.13	77.20	148.54	0.51
8968.34	1.31	214.54	8966.76	-67.72	39.33	68.00	78.32	149.85	0.37
9063.08	1.23	241.05	9061.48	-69.11	37.83	69.38	78.79	151.31	0.62
9157.82	1.21	259.49	9156.20	-69.79	35.95	70.04	78.50	152.75	0.41
9252.56	1.30	228.58	9250.92	-70.68	34.16	70.92	78.50	154.21	0.71

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
9347.30	2.30	240.72	9345.61	-72.32	31.70	72.54	78.96	156.33	1.12



Vaughn Energy Services
Fort Worth, Texas
817-741-3610
Surveyor: Ray Seago
Triste Draw 36 State 1H

