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MAR 14 2011

HOBBS

Results of Directional Survey

API number:	30-005-29042		
OGRID:		Operator:	CIMAREX ENERGY CO. OF COLORADO
		Property:	WASP 2 STATE # 2

surface	ULSTR:	L	02	T 15S	R 31E
				1980 FSL	330 FWL

BH Loc	ULSTR:	I	02	T 15S	R 31E
13256 MD		8843.2	TVD	2032 FSL	4929 FWL

Top Perf/OH	ULSTR:	L	02	T 15S	R 31E
8292 MD		8291.4	TVD	1993 FSL	325 FWL

Bot Perf/OH	ULSTR:	I	02	T 15S	R 31E
13256 MD		8843.2	TVD	2032 FSL	4929 FWL

	MD	N/S	E/W	VD
	8200	11.58	-5.39	8199.37
TOP PERFS/OH	8292	12.59	-4.74	8291.36
	8300	12.68	-4.68	8299.36
	13157	50.55	4500.14	8840.48
BOT PERFS/OH	13256	52.19	4599.08	8843.24
	13204	51.33	4547.11	8841.79

NEXT TO LAST	13157	50.55	4500.14	8840.48
LAST READING	13204	51.33	4547.11	8841.79
TD	13256	52.19	4599.08	8843.24

Surface Location	1980 FS	330 FW
Projected BHL	2032 FS	4929 FW
Location of		
Top Perfs/OH	1993 FS	325 FW
Bottom Perfs/OH	2032 FS	4929 FW

SUMMARY of Subsurface Locations

Surface Location	L-02-15S-31E	1980 FS	330 FW	Vert. Depth
Top Perfs/OH	L-02-15S-31E	1993 FS	325 FW	8291.36
Bottom Perfs/OH	I-02-15S-31E	2032 FS	4929 FW	8843.24
Projected TD	I-02-15S-31E	2032 FS	4929 FW	8843.24

30-005-29042

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CIMAREX ENERGY

Abo
Chaves County, NM
Wasp "2" State #2
VH - Job #32K0910726

Survey: Actual

SUR @ L-2-15s-31e, 1980/S & 330/W
BHL @ I-2-15s-31e, 2032/S & 4929/W
API # 30-005-29042

SDI Standard Survey Report

13 October, 2010

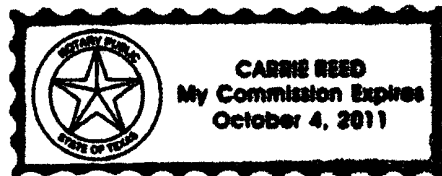
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notorized this date 13th of October, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	CIMAREX ENERGY	Local Co-ordinate Reference:	Well Wasp "2" State #2
Project:	Abo	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Chaves County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Wasp "2" State #2	North Reference:	Grid
Wellbore:	VH - Job #32K0910726	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0910726	Database:	EDM-Regulatory

Project	Abo		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	Wasp "2" State #2, Vertical					
Well Position	+N/-S	0.0 usft	Northing:	743,624.41 usft	Latitude:	33° 2' 35.320 N
	+E/-W	0.0 usft	Easting:	663,474.98 usft	Longitude:	103° 47' 59.500 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	0.0 usft

Wellbore	VH - Job #32K0910726
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	9/28/2010	7.90	60.94	49,222

Design	VH - Job #32K0910726
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Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	344.03

Survey Program		Date	10/13/2010		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	8,370.0	Actual (VH - Job #32K0910726)	Keeper	Keeper Gyro	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0
100.0	0.28	142.78	100.0	-0.2	0.1	142.78	0.2
200.0	0.11	255.12	200.0	-0.4	0.2	153.89	0.5
300.0	0.26	158.51	300.0	-0.6	0.2	163.44	0.7
400.0	0.08	161.80	400.0	-0.9	0.3	162.17	1.0
500.0	0.30	204.75	500.0	-1.2	0.2	170.31	1.2
600.0	0.20	161.74	600.0	-1.6	0.2	174.57	1.6
700.0	0.14	183.89	700.0	-1.9	0.2	174.01	1.9
800.0	0.26	181.11	800.0	-2.3	0.2	175.24	2.3
900.0	0.29	231.85	900.0	-2.7	0.0	180.31	2.7
1,000.0	0.20	188.03	1,000.0	-3.0	-0.2	184.56	3.0
1,100.0	0.40	204.91	1,100.0	-3.5	-0.4	186.72	3.5
1,200.0	0.40	233.16	1,200.0	-4.0	-0.8	191.80	4.1
1,300.0	0.42	223.49	1,300.0	-4.5	-1.4	196.99	4.7
1,400.0	0.55	217.19	1,400.0	-5.1	-1.9	200.45	5.5
1,500.0	0.32	246.40	1,500.0	-5.6	-2.5	203.62	6.1
1,600.0	0.24	196.14	1,600.0	-5.9	-2.8	205.04	6.5

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	CIMAREX ENERGY	Local Co-ordinate Reference:	Well Wasp "2" State #2
Project:	Abo	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Chaves County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Wasp "2" State #2	North Reference:	Grid
Wellbore:	VH - Job #32K0910726	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0910726	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,700.0	0.30	204.19	1,700.0	-6.4	-2.9	204.74	7.0
1,800.0	0.11	181.31	1,800.0	-6.7	-3.0	204.42	7.4
1,900.0	1.16	89.08	1,900.0	-6.8	-2.0	196.70	7.1
2,000.0	1.22	89.53	1,999.9	-6.8	0.0	179.64	6.8
2,100.0	1.77	88.41	2,099.9	-6.7	2.7	158.44	7.2
2,200.0	1.81	83.20	2,199.9	-6.5	5.8	138.34	8.7
2,300.0	1.84	90.82	2,299.8	-6.3	8.9	125.24	10.9
2,400.0	1.80	88.04	2,399.8	-6.3	12.1	117.42	13.6
2,500.0	1.45	89.62	2,499.7	-6.2	14.9	112.60	16.2
2,600.0	1.40	92.29	2,599.7	-6.3	17.4	109.76	18.5
2,700.0	1.26	81.48	2,699.7	-6.1	19.7	107.30	20.7
2,800.0	0.99	76.08	2,799.6	-5.8	21.7	104.93	22.4
2,900.0	0.84	73.69	2,899.6	-5.4	23.2	103.01	23.8
3,000.0	0.89	75.81	2,999.6	-5.0	24.7	101.38	25.2
3,100.0	0.91	77.39	3,099.6	-4.6	26.2	99.97	26.6
3,200.0	0.68	56.35	3,199.6	-4.1	27.5	98.49	27.8
3,300.0	0.51	30.06	3,299.6	-3.4	28.2	96.85	28.4
3,400.0	0.43	22.73	3,399.6	-2.7	28.5	95.31	28.7
3,500.0	0.44	358.52	3,499.6	-1.9	28.7	93.84	28.7
3,600.0	0.43	346.23	3,599.6	-1.2	28.6	92.36	28.6
3,700.0	0.58	333.62	3,699.6	-0.4	28.3	90.73	28.3
3,800.0	0.62	329.85	3,799.6	0.6	27.8	88.84	27.8
3,900.0	0.71	327.63	3,899.6	1.6	27.2	86.73	27.2
4,000.0	0.75	320.29	3,999.6	2.6	26.4	84.42	26.5
4,100.0	0.73	321.80	4,099.6	3.6	25.6	82.03	25.9
4,200.0	0.57	322.96	4,199.5	4.5	24.9	79.80	25.3
4,300.0	0.56	325.51	4,299.5	5.3	24.3	77.75	24.9
4,400.0	0.53	293.70	4,399.5	5.9	23.6	76.05	24.4
4,500.0	0.59	291.77	4,499.5	6.2	22.7	74.63	23.6
4,600.0	0.75	292.30	4,599.5	6.7	21.6	72.84	22.7
4,700.0	0.68	272.55	4,699.5	7.0	20.5	71.20	21.6
4,800.0	0.75	271.86	4,799.5	7.0	19.2	69.95	20.4
4,900.0	0.83	281.56	4,899.5	7.2	17.8	68.09	19.2
5,000.0	0.71	299.84	4,999.5	7.6	16.6	65.31	18.3
5,100.0	0.59	307.58	5,099.5	8.3	15.6	62.20	17.7
5,200.0	0.44	314.16	5,199.5	8.8	15.0	59.45	17.4
5,300.0	0.34	302.14	5,299.5	9.3	14.4	57.33	17.2
5,400.0	0.37	287.34	5,399.5	9.5	13.9	55.57	16.8
5,500.0	0.55	264.19	5,499.5	9.6	13.1	53.86	16.2
5,600.0	0.58	266.71	5,599.5	9.5	12.1	51.94	15.4
5,700.0	0.61	276.53	5,699.5	9.5	11.1	49.34	14.6
5,800.0	0.69	276.23	5,799.5	9.6	9.9	45.90	13.9
5,900.0	0.68	280.23	5,899.5	9.8	8.8	41.78	13.2
6,000.0	0.66	277.88	5,999.4	10.0	7.6	37.29	12.6

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company:	CIMAREX ENERGY	Local Co-ordinate Reference:	Well Wasp "2" State #2
Project:	Abo	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Chaves County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Wasp "2" State #2	North Reference:	Grid
Wellbore:	VH - Job #32K0910726	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0910726	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
6,100.0	0.66	273.78	6,099.4	10.1	6.5	32.60	12.0
6,200.0	0.69	267.39	6,199.4	10.1	5.3	27.59	11.4
6,300.0	0.61	263.21	6,299.4	10.0	4.2	22.52	10.9
6,400.0	0.34	255.78	6,399.4	9.9	3.3	18.67	10.4
6,500.0	0.50	276.19	6,499.4	9.9	2.6	14.88	10.2
6,600.0	0.60	249.18	6,599.4	9.7	1.7	9.90	9.9
6,700.0	0.66	260.45	6,699.4	9.4	0.6	3.88	9.5
6,800.0	0.58	243.85	6,799.4	9.1	-0.4	357.61	9.1
6,900.0	0.69	254.46	6,899.4	8.7	-1.4	350.81	8.9
7,000.0	0.52	267.28	6,999.4	8.6	-2.4	344.04	8.9
7,100.0	0.46	268.55	7,099.4	8.5	-3.3	338.84	9.1
7,200.0	0.40	266.08	7,199.4	8.5	-4.1	334.50	9.4
7,300.0	0.44	265.03	7,299.4	8.4	-4.8	330.46	9.7
7,400.0	0.42	283.89	7,399.4	8.5	-5.5	326.98	10.1
7,500.0	0.12	348.39	7,499.4	8.7	-5.9	325.82	10.5
7,600.0	0.13	295.67	7,599.4	8.8	-6.0	325.73	10.7
7,700.0	0.04	162.44	7,699.4	8.9	-6.1	325.37	10.8
7,800.0	0.21	341.23	7,799.4	9.0	-6.2	325.58	10.9
7,900.0	0.46	336.70	7,899.4	9.5	-6.4	326.22	11.5
8,000.0	0.29	42.66	7,999.4	10.1	-6.4	327.75	11.9
8,100.0	0.60	36.26	8,099.4	10.7	-5.9	331.18	12.2
8,200.0	0.57	22.46	8,199.4	11.6	-5.4	335.06	12.8
8,300.0	0.94	39.35	8,299.4	12.7	-4.7	339.75	13.5
8,370.0	1.09	37.55	8,369.3	13.6	-3.9	344.03	14.2



Project: Abo
Chaves County, NM
Well: Wasp "2" State #2
Wellbore: VH - Job #32K0910726
Design: VH - Job #32K0910726

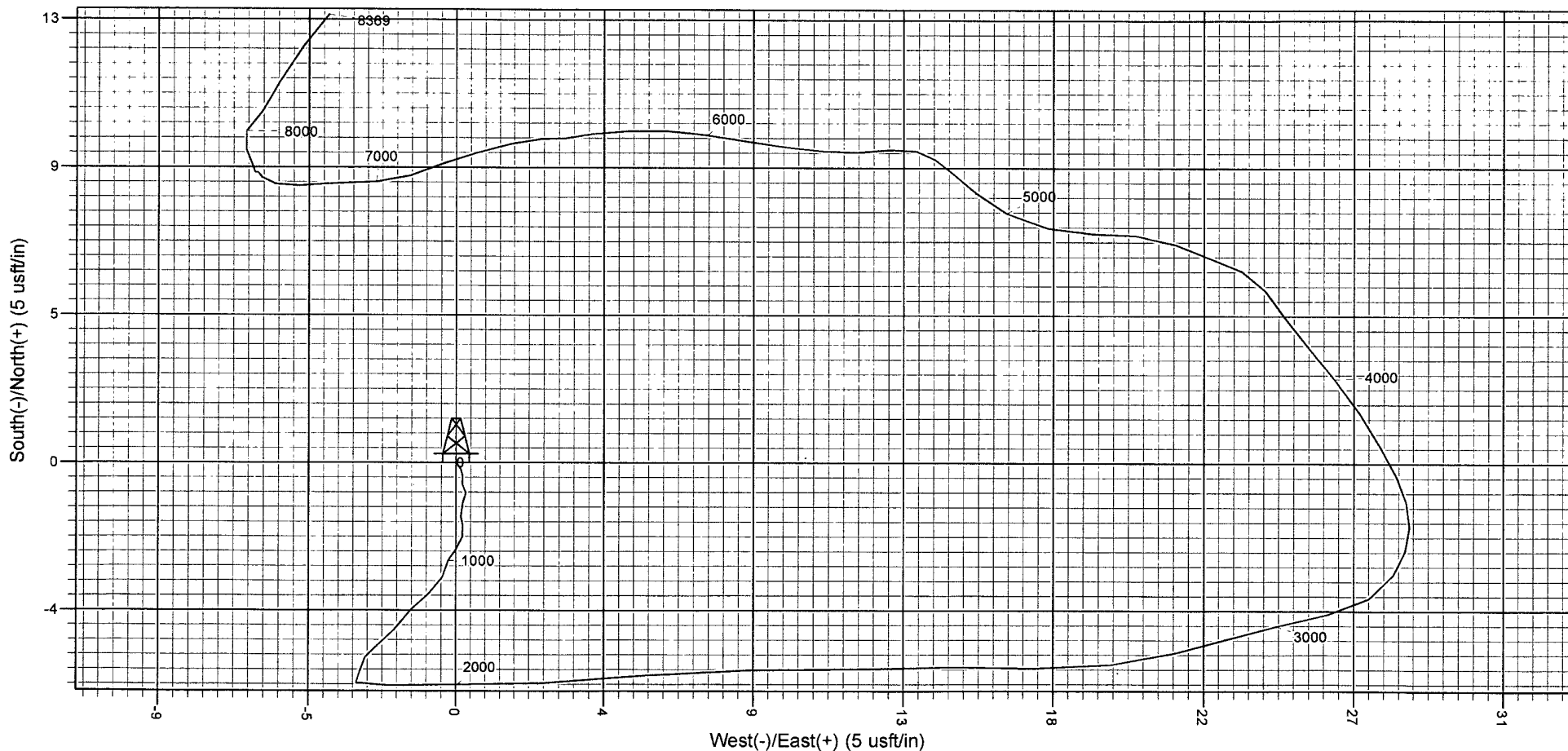


Azimuths to Grid North
True North: -0.29°
Magnetic North: 7.61°

Magnetic Field
Strength: 49222.1snT
Dip Angle: 60.94°
Date: 9/28/2010
Model: BGGM2010

WELL DETAILS: Wasp "2" State #2
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	743624.41	663474.98	$33^\circ 2' 35.320'' \text{ N}$	$103^\circ 47' 59.500'' \text{ W}$	



PROJECT DETAILS: Abo
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Chaves County, NM
Site Centre Latitude: $33^\circ 2' 35.320'' \text{ N}$
Longitude: $103^\circ 47' 59.500'' \text{ W}$
Positional Uncertainty: 0.0
Convergence: 0.29
Local North: Grid



Cimarex Energy Co.

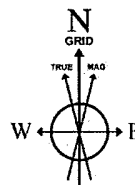
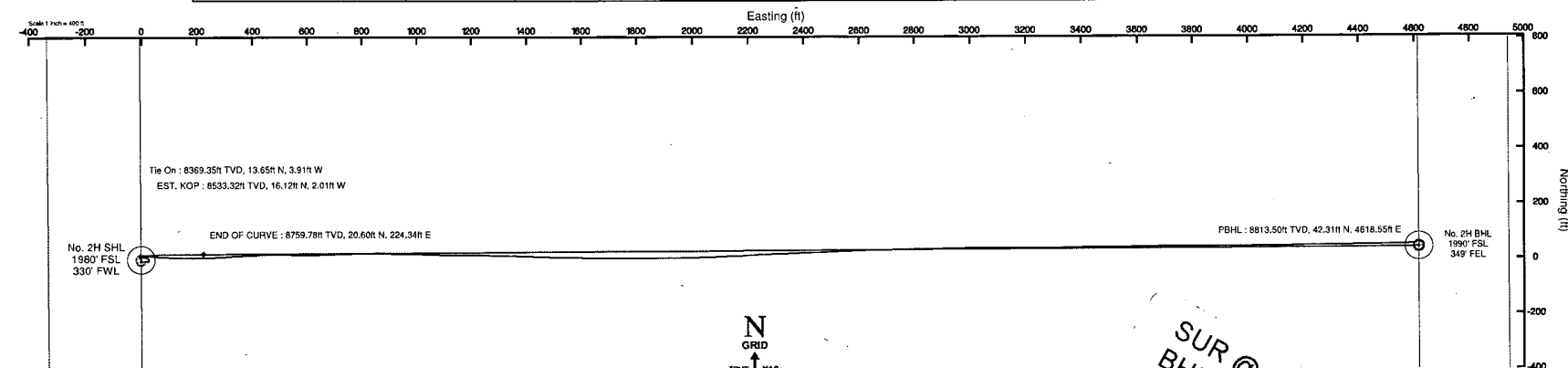
Location: Chaves County, NM
Field: (WASP) Sec 2, T15S, R31E
Facility: WASP 2 St No. 2H

Slot: No. 2H SHL
Well: No. 2H
Wellbore: No. 2H PWB



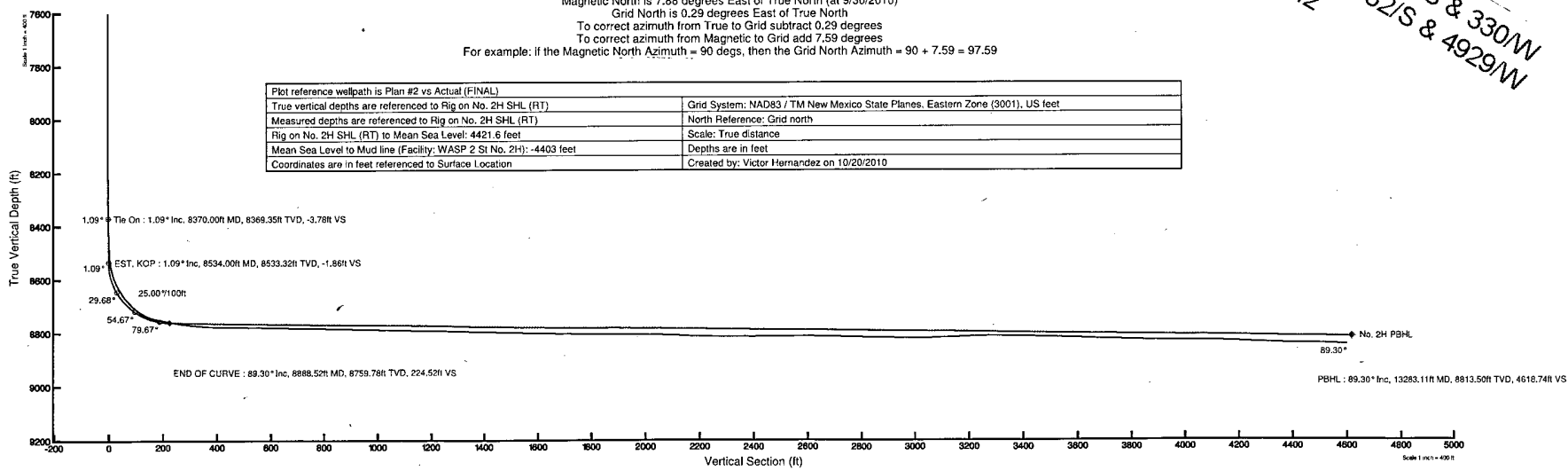
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8370.00	1.090	37.550	8369.35	13.65	-3.91	0.00	-3.78
EST. KOP	8534.00	1.090	37.550	8533.32	16.12	-2.01	0.00	-1.86
END OF CURVE	8888.52	89.300	89.717	8759.78	20.60	224.34	25.00	224.52
PBHL	13283.11	89.300	89.717	8813.50	42.31	4618.55	0.00	4618.74



BGGM (1945.0 to 2011.0) Dip: 60.94° Field: 49218.5 nT
Magnetic North is 7.88 degrees East of True North (at 9/30/2010)
Grid North is 0.29 degrees East of True North
To correct azimuth from True to Grid subtract 0.29 degrees
To correct azimuth from Magnetic to Grid add 7.59 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.59 = 97.59

SUR @ L-2-15s-31e, 1980/S & 330/W
BHL @ I-2-15s-31e, 2032/S & 4929/W
API # 30-005-29042



Plot reference wellpath is Plan #2 vs Actual (FINAL)	
True vertical depths are referenced to Rig on No. 2H SHL (RT)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 2H SHL (RT)	North Reference: Grid north
Rig on No. 2H SHL (RT) to Mean Sea Level: 4421.6 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: WASP 2 St No. 2H): -4403 feet	Depths are in feet
Coordinates are in feet referenced to Surface Location	Created by: Victor Hernandez on 10/20/2010



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWB
Facility	WASP 2 St No. 2H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.99994	Report Generated	10/20/2010 at 10:13:19 AM
Convergence at slot	0.29° East	Database/Source file	WA_Midland/No._2H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	704808.80	743648.50	33°02'35.319"N	103°47'59.501"W
Facility Reference Pt			704808.80	743648.50	33°02'35.319"N	103°47'59.501"W
Field Reference Pt			704819.20	742043.80	33°02'19.441"N	103°47'59.475"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 2H SHL (RT) to GL	18.60ft
Horizontal Reference Pt	Surface Location	Rig on No. 2H SHL (RT) to Mean Sea Level	4421.60ft
Vertical Reference Pt	Rig on No. 2H SHL (RT)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 2H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.48°



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWP
Facility	WASP 2 St No. 2H		

WELLPATH DATA (174 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	142.780	0.00	0.00	0.00	0.00	704808.80	743648.50	33°02'35.319"N	103°47'59.501"W	0.00
100.00	0.280	142.780	100.00	0.15	-0.19	0.15	704808.95	743648.31	33°02'35.317"N	103°47'59.499"W	0.28
200.00	0.110	255.120	200.00	0.20	-0.41	0.20	704809.00	743648.09	33°02'35.315"N	103°47'59.499"W	0.34
300.00	0.260	158.510	300.00	0.19	-0.65	0.19	704808.99	743647.85	33°02'35.313"N	103°47'59.499"W	0.29
400.00	0.080	161.800	400.00	0.29	-0.93	0.30	704809.10	743647.57	33°02'35.310"N	103°47'59.498"W	0.18
500.00	0.300	204.750	500.00	0.20	-1.23	0.21	704809.01	743647.27	33°02'35.307"N	103°47'59.499"W	0.25
600.00	0.200	161.740	600.00	0.14	-1.63	0.16	704808.96	743646.87	33°02'35.303"N	103°47'59.499"W	0.21
700.00	0.140	183.890	700.00	0.18	-1.92	0.20	704809.00	743646.58	33°02'35.300"N	103°47'59.499"W	0.09
800.00	0.260	181.110	800.00	0.17	-2.27	0.19	704808.99	743646.23	33°02'35.297"N	103°47'59.499"W	0.12
900.00	0.290	231.850	899.99	-0.04	-2.65	-0.01	704808.79	743645.85	33°02'35.293"N	103°47'59.501"W	0.24
1000.00	0.200	188.030	999.99	-0.27	-2.98	-0.24	704808.56	743645.52	33°02'35.290"N	103°47'59.504"W	0.20
1100.00	0.400	204.910	1099.99	-0.44	-3.47	-0.41	704808.39	743645.03	33°02'35.285"N	103°47'59.506"W	0.22
1200.00	0.400	233.160	1199.99	-0.87	-4.00	-0.84	704807.96	743644.50	33°02'35.280"N	103°47'59.511"W	0.20
1300.00	0.420	223.490	1299.99	-1.41	-4.47	-1.37	704807.43	743644.03	33°02'35.275"N	103°47'59.517"W	0.07
1400.00	0.550	217.190	1399.98	-1.96	-5.12	-1.91	704806.89	743643.38	33°02'35.269"N	103°47'59.524"W	0.14
1500.00	0.320	246.400	1499.98	-2.51	-5.62	-2.46	704806.34	743642.88	33°02'35.264"N	103°47'59.530"W	0.31
1600.00	0.240	196.140	1599.98	-2.82	-5.93	-2.77	704806.03	743642.57	33°02'35.261"N	103°47'59.534"W	0.25
1700.00	0.300	204.190	1699.98	-2.99	-6.37	-2.94	704805.87	743642.13	33°02'35.257"N	103°47'59.536"W	0.07
1800.00	0.110	181.310	1799.98	-3.11	-6.70	-3.04	704805.76	743641.80	33°02'35.253"N	103°47'59.537"W	0.20
1900.00	1.160	89.080	1899.97	-2.10	-6.78	-2.03	704806.77	743641.72	33°02'35.252"N	103°47'59.525"W	1.17
2000.00	1.220	89.530	1999.95	-0.02	-6.76	0.04	704808.84	743641.74	33°02'35.253"N	103°47'59.501"W	0.06
2100.00	1.770	88.410	2099.92	2.59	-6.71	2.65	704811.45	743641.79	33°02'35.253"N	103°47'59.470"W	0.55
2200.00	1.810	83.200	2199.87	5.70	-6.48	5.76	704814.56	743642.02	33°02'35.255"N	103°47'59.434"W	0.17
2300.00	1.840	90.820	2299.82	8.88	-6.31	8.94	704817.74	743642.19	33°02'35.256"N	103°47'59.396"W	0.24
2400.00	1.800	88.040	2399.77	12.05	-6.28	12.11	704820.91	743642.22	33°02'35.257"N	103°47'59.359"W	0.10
2500.00	1.450	89.620	2499.73	14.89	-6.22	14.95	704823.74	743642.28	33°02'35.257"N	103°47'59.326"W	0.35
2600.00	1.400	92.290	2599.69	17.37	-6.26	17.43	704826.23	743642.24	33°02'35.257"N	103°47'59.297"W	0.08
2700.00	1.260	81.480	2699.67	19.68	-6.15	19.74	704828.54	743642.35	33°02'35.258"N	103°47'59.270"W	0.29
2800.00	0.990	76.080	2799.65	21.61	-5.78	21.67	704830.46	743642.72	33°02'35.261"N	103°47'59.247"W	0.29
2900.00	0.840	73.690	2899.64	23.16	-5.36	23.21	704832.01	743643.14	33°02'35.265"N	103°47'59.229"W	0.15



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWB
Facility	WASP 2 St No. 2H		

WELLPATH DATA (174 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
3000.00	0.890	75.810	2999.62	24.62	-4.97	24.66	704833.46	743643.53	33°02'35.269"N	103°47'59.212"W	0.06
3100.00	0.910	77.390	3099.61	26.15	-4.60	26.19	704834.99	743643.90	33°02'35.273"N	103°47'59.194"W	0.03
3200.00	0.680	56.350	3199.60	27.42	-4.10	27.46	704836.26	743644.40	33°02'35.277"N	103°47'59.179"W	0.37
3300.00	0.510	30.060	3299.60	28.15	-3.39	28.18	704836.98	743645.11	33°02'35.284"N	103°47'59.170"W	0.32
3400.00	0.430	22.730	3399.59	28.52	-2.65	28.55	704837.34	743645.85	33°02'35.292"N	103°47'59.166"W	0.10
3500.00	0.440	358.520	3499.59	28.66	-1.92	28.68	704837.48	743646.58	33°02'35.299"N	103°47'59.164"W	0.18
3600.00	0.430	346.230	3599.59	28.57	-1.18	28.58	704837.38	743647.32	33°02'35.306"N	103°47'59.165"W	0.09
3700.00	0.580	333.620	3699.58	28.26	-0.36	28.27	704837.07	743648.14	33°02'35.314"N	103°47'59.169"W	0.19
3800.00	0.620	329.850	3799.58	27.77	0.56	27.77	704836.57	743649.06	33°02'35.324"N	103°47'59.175"W	0.06
3900.00	0.710	327.630	3899.57	27.18	1.55	27.17	704835.97	743650.05	33°02'35.333"N	103°47'59.182"W	0.09
4000.00	0.750	320.290	3999.56	26.44	2.58	26.42	704835.22	743651.08	33°02'35.344"N	103°47'59.191"W	0.10
4100.00	0.730	321.800	4099.56	25.64	3.58	25.60	704834.40	743652.08	33°02'35.354"N	103°47'59.200"W	0.03
4200.00	0.570	322.960	4199.55	24.95	4.48	24.91	704833.71	743652.98	33°02'35.362"N	103°47'59.208"W	0.16
4300.00	0.560	325.510	4299.54	24.38	5.28	24.33	704833.13	743653.78	33°02'35.370"N	103°47'59.215"W	0.03
4400.00	0.530	293.700	4399.54	23.69	5.87	23.63	704832.43	743654.37	33°02'35.376"N	103°47'59.223"W	0.30
4500.00	0.590	291.770	4499.54	22.79	6.25	22.73	704831.53	743654.75	33°02'35.380"N	103°47'59.234"W	0.06
4600.00	0.750	292.300	4599.53	21.71	6.69	21.65	704830.45	743655.19	33°02'35.384"N	103°47'59.246"W	0.16
4700.00	0.680	272.550	4699.52	20.51	6.96	20.45	704829.25	743655.46	33°02'35.387"N	103°47'59.260"W	0.25
4800.00	0.750	271.860	4799.51	19.27	7.01	19.20	704828.00	743655.51	33°02'35.388"N	103°47'59.275"W	0.07
4900.00	0.830	281.560	4899.50	17.91	7.18	17.84	704826.64	743655.68	33°02'35.389"N	103°47'59.291"W	0.16
5000.00	0.710	299.840	4999.49	16.66	7.63	16.59	704825.39	743656.13	33°02'35.394"N	103°47'59.306"W	0.27
5100.00	0.590	307.580	5099.49	15.72	8.25	15.65	704824.45	743656.75	33°02'35.400"N	103°47'59.317"W	0.15
5200.00	0.440	314.160	5199.48	15.04	8.83	14.96	704823.76	743657.33	33°02'35.406"N	103°47'59.325"W	0.16
5300.00	0.340	302.140	5299.48	14.52	9.26	14.44	704823.24	743657.76	33°02'35.410"N	103°47'59.331"W	0.13
5400.00	0.370	287.340	5399.48	13.96	9.51	13.88	704822.68	743658.01	33°02'35.413"N	103°47'59.337"W	0.10
5500.00	0.550	264.190	5499.48	13.18	9.56	13.09	704821.89	743658.06	33°02'35.413"N	103°47'59.347"W	0.26
5600.00	0.580	266.710	5599.47	12.20	9.48	12.11	704820.91	743657.98	33°02'35.413"N	103°47'59.358"W	0.04
5700.00	0.610	276.530	5699.47	11.16	9.51	11.08	704819.87	743658.01	33°02'35.413"N	103°47'59.370"W	0.11
5800.00	0.690	276.230	5799.46	10.04	9.64	9.95	704818.75	743658.14	33°02'35.414"N	103°47'59.384"W	0.08
5900.00	0.680	280.230	5899.45	8.86	9.81	8.77	704817.56	743658.31	33°02'35.416"N	103°47'59.398"W	0.05



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWB
Facility	WASP 2 St No. 2H		

WELLPATH DATA (174 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
6000.00	0.660	277.880	5999.45	7.70	9.99	7.61	704816.41	743658.49	33°02'35.418"N	103°47'59.411"W	0.03
6100.00	0.660	273.780	6099.44	6.56	10.11	6.47	704815.27	743658.61	33°02'35.419"N	103°47'59.425"W	0.05
6200.00	0.690	267.390	6199.43	5.38	10.12	5.29	704814.09	743658.62	33°02'35.419"N	103°47'59.438"W	0.08
6300.00	0.610	263.210	6299.43	4.25	10.03	4.16	704812.96	743658.53	33°02'35.418"N	103°47'59.452"W	0.09
6400.00	0.340	255.780	6399.42	3.43	9.90	3.34	704812.14	743658.40	33°02'35.417"N	103°47'59.461"W	0.28
6500.00	0.500	276.190	6499.42	2.71	9.87	2.62	704811.42	743658.37	33°02'35.417"N	103°47'59.470"W	0.22
6600.00	0.600	249.180	6599.42	1.79	9.73	1.70	704810.50	743658.23	33°02'35.416"N	103°47'59.481"W	0.27
6700.00	0.660	260.450	6699.41	0.73	9.45	0.64	704809.44	743657.95	33°02'35.413"N	103°47'59.493"W	0.14
6800.00	0.580	243.850	6799.40	-0.30	9.13	-0.38	704808.42	743657.63	33°02'35.410"N	103°47'59.505"W	0.20
6900.00	0.690	254.460	6899.40	-1.34	8.75	-1.42	704807.38	743657.25	33°02'35.406"N	103°47'59.517"W	0.16
7000.00	0.520	267.280	6999.39	-2.37	8.56	-2.45	704806.35	743657.06	33°02'35.404"N	103°47'59.529"W	0.22
7100.00	0.460	268.550	7099.39	-3.22	8.53	-3.30	704805.50	743657.03	33°02'35.404"N	103°47'59.539"W	0.06
7200.00	0.400	266.080	7199.39	-3.97	8.50	-4.05	704804.75	743657.00	33°02'35.404"N	103°47'59.548"W	0.06
7300.00	0.440	265.030	7299.38	-4.71	8.44	-4.78	704804.02	743656.94	33°02'35.403"N	103°47'59.557"W	0.04
7400.00	0.420	283.890	7399.38	-5.44	8.50	-5.52	704803.28	743657.00	33°02'35.404"N	103°47'59.565"W	0.14
7500.00	0.120	348.390	7499.38	-5.82	8.69	-5.90	704802.90	743657.19	33°02'35.406"N	103°47'59.570"W	0.38
7600.00	0.130	295.670	7599.38	-5.94	8.84	-6.02	704802.78	743657.34	33°02'35.407"N	103°47'59.571"W	0.11
7700.00	0.040	162.440	7699.38	-6.03	8.85	-6.11	704802.69	743657.35	33°02'35.407"N	103°47'59.572"W	0.16
7800.00	0.210	341.230	7799.38	-6.08	8.99	-6.16	704802.64	743657.49	33°02'35.409"N	103°47'59.573"W	0.25
7900.00	0.460	336.700	7899.38	-6.29	9.54	-6.38	704802.42	743658.04	33°02'35.414"N	103°47'59.575"W	0.25
8000.00	0.290	42.660	7999.37	-6.27	10.09	-6.37	704802.43	743658.59	33°02'35.420"N	103°47'59.575"W	0.43
8100.00	0.600	36.260	8099.37	-5.79	10.70	-5.89	704802.91	743659.20	33°02'35.426"N	103°47'59.570"W	0.31
8200.00	0.570	22.460	8199.37	-5.28	11.58	-5.39	704803.41	743660.08	33°02'35.434"N	103°47'59.564"W	0.14
8300.00	0.940	39.350	8299.36	-4.56	12.68	-4.68	704804.12	743661.17	33°02'35.445"N	103°47'59.555"W	0.43
8370.00	1.090	37.550	8369.35	-3.78	13.65	-3.91	704804.89	743662.15	33°02'35.455"N	103°47'59.546"W	0.22
8501.00	2.400	81.700	8500.29	-0.29	15.03	-0.43	704808.37	743663.53	33°02'35.468"N	103°47'59.505"W	1.36
8534.00	7.400	92.100	8533.16	2.51	15.05	2.38	704811.18	743663.55	33°02'35.468"N	103°47'59.472"W	15.33
8565.00	13.800	94.000	8563.61	8.20	14.72	8.07	704816.87	743663.22	33°02'35.465"N	103°47'59.405"W	20.67
8597.00	19.900	93.600	8594.22	17.45	14.11	17.32	704826.12	743662.61	33°02'35.458"N	103°47'59.297"W	19.07
8629.00	26.800	94.700	8623.59	30.08	13.18	29.96	704838.76	743661.68	33°02'35.448"N	103°47'59.148"W	21.60



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWB
Facility	WASP 2 St No. 2H		

WELLPATH DATA (174 stations)											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
8661.00	32.700	95.200	8651.36	45.88	11.80	45.77	704854.57	743660.30	33°02'35.434"N	103°47'58.963"W	18.45
8692.00	39.800	94.200	8676.34	64.12	10.32	64.03	704872.82	743658.81	33°02'35.418"N	103°47'58.748"W	22.98
8724.00	46.500	92.200	8699.67	85.94	9.12	85.87	704894.66	743657.62	33°02'35.405"N	103°47'58.492"W	21.37
8755.00	54.400	91.500	8719.40	109.81	8.36	109.74	704918.53	743656.85	33°02'35.397"N	103°47'58.211"W	25.54
8786.00	63.800	92.400	8735.30	136.35	7.44	136.29	704945.08	743655.94	33°02'35.386"N	103°47'57.900"W	30.42
8791.00	65.600	92.200	8737.44	140.87	7.26	140.81	704949.60	743655.76	33°02'35.384"N	103°47'57.847"W	36.18
8819.00	74.500	92.500	8746.98	167.13	6.18	167.08	704975.87	743654.68	33°02'35.372"N	103°47'57.538"W	31.80
8850.00	79.700	89.300	8753.90	197.32	5.71	197.28	705006.07	743654.21	33°02'35.366"N	103°47'57.183"W	19.56
8881.00	79.900	88.700	8759.39	227.83	6.25	227.78	705036.57	743654.75	33°02'35.370"N	103°47'56.825"W	2.01
8913.00	80.500	87.800	8764.84	259.36	7.21	259.30	705068.08	743655.71	33°02'35.378"N	103°47'56.455"W	3.35
8945.00	83.600	87.000	8769.26	291.02	8.65	290.96	705099.74	743657.15	33°02'35.390"N	103°47'56.083"W	10.00
8977.00	85.300	85.200	8772.36	322.82	10.81	322.73	705131.51	743659.31	33°02'35.410"N	103°47'55.709"W	7.72
9008.00	86.800	85.800	8774.49	353.67	13.24	353.56	705162.34	743661.74	33°02'35.433"N	103°47'55.347"W	5.21
9040.00	88.500	88.400	8775.81	385.61	14.86	385.49	705194.26	743663.36	33°02'35.447"N	103°47'54.972"W	9.70
9072.00	89.600	86.700	8776.34	417.58	16.23	417.45	705226.23	743664.72	33°02'35.459"N	103°47'54.596"W	6.33
9104.00	90.300	87.200	8776.36	449.55	17.93	449.41	705258.18	743666.43	33°02'35.474"N	103°47'54.221"W	2.69
9135.00	89.900	89.100	8776.31	480.54	18.93	480.39	705289.16	743667.43	33°02'35.482"N	103°47'53.857"W	6.26
9167.00	88.200	92.500	8776.84	512.52	18.48	512.38	705321.14	743666.98	33°02'35.476"N	103°47'53.481"W	11.88
9198.00	88.100	94.300	8777.84	543.43	16.65	543.30	705352.07	743665.14	33°02'35.457"N	103°47'53.118"W	5.81
9230.00	88.700	90.700	8778.74	575.37	15.25	575.26	705384.02	743663.75	33°02'35.441"N	103°47'52.743"W	11.40
9293.00	89.100	87.600	8779.94	638.35	16.18	638.23	705446.99	743664.68	33°02'35.447"N	103°47'52.003"W	4.96
9356.00	89.400	87.500	8780.77	701.31	18.88	701.17	705509.92	743667.38	33°02'35.471"N	103°47'51.263"W	0.50
9419.00	89.000	88.600	8781.65	764.28	21.02	764.12	705572.88	743669.52	33°02'35.489"N	103°47'50.524"W	1.86
9483.00	89.200	89.100	8782.65	828.27	22.31	828.10	705636.85	743670.80	33°02'35.498"N	103°47'49.772"W	0.84
9547.00	88.400	93.100	8784.00	892.22	21.08	892.06	705700.81	743669.58	33°02'35.483"N	103°47'49.021"W	6.37
9610.00	88.600	89.300	8785.65	955.16	19.76	955.02	705763.76	743668.26	33°02'35.467"N	103°47'48.281"W	6.04
9674.00	88.300	92.400	8787.38	1019.11	18.81	1018.98	705827.71	743667.31	33°02'35.454"N	103°47'47.530"W	4.86
9737.00	88.400	91.300	8789.19	1082.03	16.78	1081.92	705890.65	743665.28	33°02'35.431"N	103°47'46.791"W	1.75
9800.00	89.000	90.500	8790.62	1144.99	15.79	1144.89	705953.62	743664.29	33°02'35.418"N	103°47'46.051"W	1.59
9864.00	89.400	90.200	8791.51	1208.98	15.40	1208.89	706017.61	743663.90	33°02'35.411"N	103°47'45.299"W	0.78



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWB
Facility	WASP 2 St No. 2H		

WELLPATH DATA (174 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
9927.00	89.200	91.500	8792.28	1271.95	14.46	1271.87	706080.59	743662.96	33°02'35.398"N	103°47'44.559"W	2.09
9990.00	89.000	91.400	8793.27	1334.91	12.87	1334.84	706143.56	743661.37	33°02'35.379"N	103°47'43.820"W	0.35
10054.00	88.700	92.800	8794.56	1398.82	10.52	1398.79	706207.50	743659.02	33°02'35.353"N	103°47'43.069"W	2.24
10117.00	88.800	91.700	8795.93	1461.73	8.05	1461.72	706270.43	743656.55	33°02'35.325"N	103°47'42.330"W	1.75
10181.00	88.900	90.800	8797.22	1525.69	6.66	1525.69	706334.40	743655.16	33°02'35.308"N	103°47'41.578"W	1.41
10244.00	89.300	91.600	8798.21	1588.65	5.34	1588.67	706397.37	743653.84	33°02'35.292"N	103°47'40.839"W	1.42
10308.00	88.900	90.900	8799.21	1652.61	3.94	1652.65	706461.34	743652.44	33°02'35.275"N	103°47'40.087"W	1.26
10371.00	88.500	90.100	8800.64	1715.59	3.39	1715.63	706524.32	743651.89	33°02'35.266"N	103°47'39.347"W	1.42
10434.00	88.900	89.500	8802.07	1778.57	3.61	1778.61	706587.30	743652.11	33°02'35.265"N	103°47'38.607"W	1.14
10497.00	89.000	89.300	8803.22	1841.56	4.27	1841.60	706650.28	743652.77	33°02'35.269"N	103°47'37.867"W	0.35
10561.00	89.200	89.900	8804.23	1905.55	4.72	1905.59	706714.27	743653.22	33°02'35.270"N	103°47'37.116"W	0.99
10624.00	89.100	89.500	8805.16	1968.54	5.05	1968.58	706777.26	743653.55	33°02'35.270"N	103°47'36.376"W	0.65
10687.00	88.700	89.200	8806.37	2031.53	5.76	2031.56	706840.24	743654.26	33°02'35.274"N	103°47'35.636"W	0.79
10750.00	87.700	87.100	8808.35	2094.48	7.79	2094.50	706903.16	743656.29	33°02'35.291"N	103°47'34.896"W	3.69
10814.00	87.900	87.300	8810.81	2158.38	10.92	2158.37	706967.04	743659.42	33°02'35.318"N	103°47'34.146"W	0.44
10877.00	88.700	87.000	8812.68	2221.30	14.05	2221.27	707029.93	743662.55	33°02'35.346"N	103°47'33.407"W	1.36
10940.00	89.700	88.100	8813.56	2284.26	16.74	2284.20	707092.86	743665.24	33°02'35.369"N	103°47'32.667"W	2.36
11004.00	89.500	87.800	8814.00	2348.23	19.03	2348.16	707156.81	743667.53	33°02'35.389"N	103°47'31.916"W	0.56
11067.00	90.300	87.900	8814.11	2411.21	21.39	2411.11	707219.76	743669.89	33°02'35.409"N	103°47'31.176"W	1.28
11130.00	90.400	87.500	8813.73	2474.18	23.92	2474.06	707282.71	743672.42	33°02'35.431"N	103°47'30.437"W	0.65
11194.00	91.000	87.700	8812.95	2538.14	26.60	2538.00	707346.64	743675.10	33°02'35.454"N	103°47'29.685"W	0.99
11257.00	89.400	87.800	8812.73	2601.11	29.08	2600.95	707409.59	743677.57	33°02'35.475"N	103°47'28.946"W	2.54
11320.00	88.800	89.000	8813.72	2664.08	30.83	2663.91	707472.55	743679.33	33°02'35.490"N	103°47'28.206"W	2.13
11384.00	88.700	88.500	8815.11	2728.06	32.23	2727.88	707536.51	743680.73	33°02'35.500"N	103°47'27.455"W	0.80
11447.00	88.400	88.500	8816.71	2791.03	33.88	2790.84	707599.47	743682.38	33°02'35.513"N	103°47'26.715"W	0.48
11510.00	88.900	89.400	8818.19	2854.01	35.03	2853.81	707662.44	743683.53	33°02'35.521"N	103°47'25.975"W	1.63
11574.00	89.000	89.000	8819.37	2918.00	35.93	2917.80	707726.41	743684.42	33°02'35.527"N	103°47'25.223"W	0.64
11637.00	89.200	88.300	8820.35	2980.99	37.41	2980.77	707789.38	743685.91	33°02'35.538"N	103°47'24.484"W	1.16
11700.00	90.300	89.800	8820.63	3043.98	38.45	3043.76	707852.37	743686.95	33°02'35.546"N	103°47'23.744"W	2.95
11764.00	92.100	90.400	8819.29	3107.96	38.34	3107.74	707916.35	743686.84	33°02'35.541"N	103°47'22.992"W	2.96



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWP
Facility	WASP 2 St No. 2H		

WELLPATH DATA (174 stations)											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
11827.00	92.500	90.300	8816.76	3170.90	37.96	3170.69	707979.29	743686.46	33°02'35.534"N	103°47'22.253"W	0.65
11891.00	92.400	89.700	8814.03	3234.84	37.96	3234.63	708043.23	743686.46	33°02'35.531"N	103°47'21.501"W	0.95
11954.00	90.500	89.300	8812.43	3297.82	38.51	3297.60	708106.20	743687.01	33°02'35.533"N	103°47'20.762"W	3.08
12018.00	89.400	89.500	8812.49	3361.82	39.18	3361.60	708170.19	743687.68	33°02'35.536"N	103°47'20.010"W	1.75
12081.00	88.300	89.200	8813.75	3424.80	39.89	3424.58	708233.17	743688.39	33°02'35.540"N	103°47'19.270"W	1.81
12144.00	88.500	89.400	8815.51	3487.78	40.66	3487.55	708296.14	743689.16	33°02'35.545"N	103°47'18.530"W	0.45
12207.00	88.400	89.500	8817.21	3550.76	41.27	3550.53	708359.11	743689.76	33°02'35.547"N	103°47'17.790"W	0.22
12271.00	87.500	89.100	8819.50	3614.71	42.05	3614.48	708423.06	743690.55	33°02'35.552"N	103°47'17.039"W	1.54
12334.00	87.900	89.200	8822.03	3677.66	42.98	3677.42	708485.99	743691.48	33°02'35.558"N	103°47'16.300"W	0.65
12398.00	88.500	89.600	8824.04	3741.63	43.65	3741.39	708549.95	743692.15	33°02'35.561"N	103°47'15.548"W	1.13
12461.00	88.700	89.200	8825.58	3804.61	44.31	3804.36	708612.93	743692.81	33°02'35.564"N	103°47'14.808"W	0.71
12524.00	88.700	90.000	8827.01	3867.59	44.75	3867.35	708675.91	743693.25	33°02'35.566"N	103°47'14.068"W	1.27
12588.00	89.400	89.700	8828.07	3931.58	44.92	3931.34	708739.89	743693.42	33°02'35.564"N	103°47'13.317"W	1.19
12651.00	89.500	90.100	8828.68	3994.58	45.03	3994.33	708802.88	743693.53	33°02'35.562"N	103°47'12.577"W	0.65
12714.00	89.700	89.700	8829.12	4057.58	45.14	4057.33	708865.88	743693.64	33°02'35.560"N	103°47'11.837"W	0.71
12777.00	88.300	89.400	8830.22	4120.56	45.63	4120.32	708928.86	743694.13	33°02'35.561"N	103°47'11.097"W	2.27
12841.00	87.600	89.000	8832.51	4184.52	46.53	4184.27	708992.81	743695.02	33°02'35.567"N	103°47'10.345"W	1.26
12904.00	88.200	89.500	8834.81	4247.48	47.35	4247.22	709055.76	743695.85	33°02'35.572"N	103°47'09.606"W	1.24
12976.00	88.700	89.100	8836.76	4319.45	48.23	4319.19	709127.72	743696.73	33°02'35.577"N	103°47'08.760"W	0.89
13031.00	88.600	89.500	8838.06	4374.44	48.90	4374.17	709182.70	743697.40	33°02'35.581"N	103°47'08.115"W	0.75
13094.00	89.100	89.100	8839.32	4437.42	49.67	4437.15	709245.68	743698.17	33°02'35.585"N	103°47'07.375"W	1.02
13157.00	88.800	89.300	8840.48	4500.41	50.55	4500.14	709308.66	743699.05	33°02'35.590"N	103°47'06.635"W	0.57
13204.00	88.000	88.800	8841.79	4547.39	51.33	4547.11	709355.63	743699.83	33°02'35.596"N	103°47'06.083"W	2.01
13256.00	88.000	88.800	8843.60	4599.36	52.42	4599.07	709407.58	743700.91	33°02'35.604"N	103°47'05.472"W	0.00



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(WASP) Sec 2, T15S, R31E	Wellbore	No. 2H AWB
Facility	WASP 2 St No. 2H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 2H PBHL		8813.50	42.31	4618.55	709427.06	743690.81	33°02'35.503"N	103°47'05.244"W	point

WELLPATH COMPOSITION					Ref Wellbore: No. 2H AWB	Ref Wellpath: No. 2H AWP
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment	Wellbore	
0.00	8370.00	Gyrodatta relative depth - Continuous gyro		GYRO (100 - 8370)	No. 2H AWB	
8370.00	13204.00	NaviTrak (Standard)		MWD (8501 - 13204)	No. 2H AWB	
13204.00	13256.00	Blind Drilling (std)		Projection to bit	No. 2H AWB	