



Chevron

Lea County, NM (NAD27 NME)

SD WE 23 Fed P25

1H

OH

Plan: Plan 1 04-20-16

Standard Planning Report

20 April, 2016

HOBBS OCD

OCT 27 2016

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PHOENIX
TECHNOLOGY SERVICES



Phoenix Technology Services

Planning Report



Database: Compass 5000 GCR
Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: SD WE 23 Fed P25
Well: 1H
Wellbore: OH
Design: Plan 1 04-20-16

Local Co-ordinate Reference: Well 1H
TVD Reference: RKB @ 3154.00usft (Pace X30)
MD Reference: RKB @ 3154.00usft (Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project Lea County, NM (NAD27 NME)

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

Site SD WE 23 Fed P25

Site Position: **From:** Map **Northing:** 372,222.00 usft **Latitude:** 32° 1' 17.35050 N
Easting: 713,232.00 usft **Longitude:** 103° 38' 43.16343 W
Position Uncertainty: 0.00 usft **Slot Radius:** 13-3/16" **Grid Convergence:** 0.36°

Well 1H

Well Position **+N/-S** 0.00 usft **Northing:** 372,222.00 usft **Latitude:** 32° 1' 17.35050 N
+E/-W 0.00 usft **Easting:** 713,232.00 usft **Longitude:** 103° 38' 43.16343 W
Position Uncertainty 0.00 usft **Wellhead Elevation:** 0.00 usft **Ground Level:** 3,121.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/20/2016	6.97	59.73	48,020

Design Plan 1 04-20-16

Audit Notes:

Version: **Phase:** PLAN **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	354.53

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,473.68	7.11	256.19	1,472.47	-7.00	-28.48	1.50	1.50	0.00	256.19	
8,414.28	7.11	256.19	8,359.77	-211.96	-862.15	0.00	0.00	0.00	0.00	
9,327.72	89.68	359.73	8,945.08	357.26	-935.37	10.00	9.04	11.34	103.48	
19,222.72	89.68	359.73	9,000.00	10,252.00	-982.00	0.00	0.00	0.00	0.00	BHL - SD WE P25 1H



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 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP1, Start Build 1.50°/100'									
1,100.00	1.50	256.19	1,099.99	-0.31	-1.27	-0.19	1.50	1.50	0.00
1,200.00	3.00	256.19	1,199.91	-1.25	-5.08	-0.76	1.50	1.50	0.00
1,300.00	4.50	256.19	1,299.69	-2.81	-11.43	-1.71	1.50	1.50	0.00
1,400.00	6.00	256.19	1,399.27	-5.00	-20.32	-3.04	1.50	1.50	0.00
1,473.68	7.11	256.19	1,472.47	-7.00	-28.48	-4.25	1.50	1.50	0.00
Hold 7.11° Inc at 256.19° Azm									
1,500.00	7.11	256.19	1,498.58	-7.78	-31.65	-4.73	0.00	0.00	0.00
1,600.00	7.11	256.19	1,597.82	-10.73	-43.66	-6.52	0.00	0.00	0.00
1,700.00	7.11	256.19	1,697.05	-13.69	-55.67	-8.32	0.00	0.00	0.00
1,800.00	7.11	256.19	1,796.28	-16.64	-67.68	-10.11	0.00	0.00	0.00
1,900.00	7.11	256.19	1,895.51	-19.59	-79.69	-11.90	0.00	0.00	0.00
2,000.00	7.11	256.19	1,994.75	-22.55	-91.70	-13.70	0.00	0.00	0.00
2,100.00	7.11	256.19	2,093.98	-25.50	-103.71	-15.49	0.00	0.00	0.00
2,200.00	7.11	256.19	2,193.21	-28.45	-115.73	-17.29	0.00	0.00	0.00
2,300.00	7.11	256.19	2,292.44	-31.40	-127.74	-19.08	0.00	0.00	0.00
2,400.00	7.11	256.19	2,391.67	-34.36	-139.75	-20.88	0.00	0.00	0.00
2,500.00	7.11	256.19	2,490.91	-37.31	-151.76	-22.67	0.00	0.00	0.00
2,600.00	7.11	256.19	2,590.14	-40.26	-163.77	-24.46	0.00	0.00	0.00
2,700.00	7.11	256.19	2,689.37	-43.22	-175.78	-26.26	0.00	0.00	0.00
2,800.00	7.11	256.19	2,788.60	-46.17	-187.80	-28.05	0.00	0.00	0.00
2,900.00	7.11	256.19	2,887.83	-49.12	-199.81	-29.85	0.00	0.00	0.00
3,000.00	7.11	256.19	2,987.07	-52.08	-211.82	-31.64	0.00	0.00	0.00
3,100.00	7.11	256.19	3,086.30	-55.03	-223.83	-33.44	0.00	0.00	0.00
3,200.00	7.11	256.19	3,185.53	-57.98	-235.84	-35.23	0.00	0.00	0.00
3,300.00	7.11	256.19	3,284.76	-60.93	-247.85	-37.02	0.00	0.00	0.00
3,400.00	7.11	256.19	3,383.99	-63.89	-259.86	-38.82	0.00	0.00	0.00
3,500.00	7.11	256.19	3,483.23	-66.84	-271.88	-40.61	0.00	0.00	0.00
3,600.00	7.11	256.19	3,582.46	-69.79	-283.89	-42.41	0.00	0.00	0.00
3,700.00	7.11	256.19	3,681.69	-72.75	-295.90	-44.20	0.00	0.00	0.00
3,800.00	7.11	256.19	3,780.92	-75.70	-307.91	-46.00	0.00	0.00	0.00
3,900.00	7.11	256.19	3,880.15	-78.65	-319.92	-47.79	0.00	0.00	0.00
4,000.00	7.11	256.19	3,979.39	-81.61	-331.93	-49.58	0.00	0.00	0.00
4,100.00	7.11	256.19	4,078.62	-84.56	-343.94	-51.38	0.00	0.00	0.00
4,200.00	7.11	256.19	4,177.85	-87.51	-355.96	-53.17	0.00	0.00	0.00
4,300.00	7.11	256.19	4,277.08	-90.46	-367.97	-54.97	0.00	0.00	0.00
4,400.00	7.11	256.19	4,376.31	-93.42	-379.98	-56.76	0.00	0.00	0.00
4,500.00	7.11	256.19	4,475.55	-96.37	-391.99	-58.56	0.00	0.00	0.00
4,600.00	7.11	256.19	4,574.78	-99.32	-404.00	-60.35	0.00	0.00	0.00
4,700.00	7.11	256.19	4,674.01	-102.28	-416.01	-62.14	0.00	0.00	0.00
4,800.00	7.11	256.19	4,773.24	-105.23	-428.02	-63.94	0.00	0.00	0.00
4,900.00	7.11	256.19	4,872.48	-108.18	-440.04	-65.73	0.00	0.00	0.00
5,000.00	7.11	256.19	4,971.71	-111.14	-452.05	-67.53	0.00	0.00	0.00



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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.00	7.11	256.19	5,070.94	-114.09	-464.06	-69.32	0.00	0.00	0.00
5,200.00	7.11	256.19	5,170.17	-117.04	-476.07	-71.11	0.00	0.00	0.00
5,300.00	7.11	256.19	5,269.40	-119.99	-488.08	-72.91	0.00	0.00	0.00
5,400.00	7.11	256.19	5,368.64	-122.95	-500.09	-74.70	0.00	0.00	0.00
5,500.00	7.11	256.19	5,467.87	-125.90	-512.10	-76.50	0.00	0.00	0.00
5,600.00	7.11	256.19	5,567.10	-128.85	-524.12	-78.29	0.00	0.00	0.00
5,700.00	7.11	256.19	5,666.33	-131.81	-536.13	-80.09	0.00	0.00	0.00
5,800.00	7.11	256.19	5,765.56	-134.76	-548.14	-81.88	0.00	0.00	0.00
5,900.00	7.11	256.19	5,864.80	-137.71	-560.15	-83.67	0.00	0.00	0.00
6,000.00	7.11	256.19	5,964.03	-140.67	-572.16	-85.47	0.00	0.00	0.00
6,100.00	7.11	256.19	6,063.26	-143.62	-584.17	-87.26	0.00	0.00	0.00
6,200.00	7.11	256.19	6,162.49	-146.57	-596.19	-89.06	0.00	0.00	0.00
6,300.00	7.11	256.19	6,261.72	-149.52	-608.20	-90.85	0.00	0.00	0.00
6,400.00	7.11	256.19	6,360.96	-152.48	-620.21	-92.65	0.00	0.00	0.00
6,500.00	7.11	256.19	6,460.19	-155.43	-632.22	-94.44	0.00	0.00	0.00
6,600.00	7.11	256.19	6,559.42	-158.38	-644.23	-96.23	0.00	0.00	0.00
6,700.00	7.11	256.19	6,658.65	-161.34	-656.24	-98.03	0.00	0.00	0.00
6,800.00	7.11	256.19	6,757.88	-164.29	-668.25	-99.82	0.00	0.00	0.00
6,900.00	7.11	256.19	6,857.12	-167.24	-680.27	-101.62	0.00	0.00	0.00
7,000.00	7.11	256.19	6,956.35	-170.20	-692.28	-103.41	0.00	0.00	0.00
7,100.00	7.11	256.19	7,055.58	-173.15	-704.29	-105.21	0.00	0.00	0.00
7,200.00	7.11	256.19	7,154.81	-176.10	-716.30	-107.00	0.00	0.00	0.00
7,300.00	7.11	256.19	7,254.05	-179.05	-728.31	-108.79	0.00	0.00	0.00
7,400.00	7.11	256.19	7,353.28	-182.01	-740.32	-110.59	0.00	0.00	0.00
7,500.00	7.11	256.19	7,452.51	-184.96	-752.33	-112.38	0.00	0.00	0.00
7,600.00	7.11	256.19	7,551.74	-187.91	-764.35	-114.18	0.00	0.00	0.00
7,700.00	7.11	256.19	7,650.97	-190.87	-776.36	-115.97	0.00	0.00	0.00
7,800.00	7.11	256.19	7,750.21	-193.82	-788.37	-117.77	0.00	0.00	0.00
7,900.00	7.11	256.19	7,849.44	-196.77	-800.38	-119.56	0.00	0.00	0.00
8,000.00	7.11	256.19	7,948.67	-199.73	-812.39	-121.35	0.00	0.00	0.00
8,100.00	7.11	256.19	8,047.90	-202.68	-824.40	-123.15	0.00	0.00	0.00
8,200.00	7.11	256.19	8,147.13	-205.63	-836.41	-124.94	0.00	0.00	0.00
8,300.00	7.11	256.19	8,246.37	-208.58	-848.43	-126.74	0.00	0.00	0.00
8,400.00	7.11	256.19	8,345.60	-211.54	-860.44	-128.53	0.00	0.00	0.00
8,414.28	7.11	256.19	8,359.77	-211.96	-862.15	-128.79	0.00	0.00	0.00
KOP2, Start Build-Turn 10.00°/100'									
8,450.00	7.17	285.24	8,395.22	-211.90	-866.45	-128.32	10.00	0.17	81.35
8,500.00	9.76	314.97	8,444.70	-208.08	-872.46	-123.95	10.00	5.18	59.46
8,550.00	13.74	330.07	8,493.65	-199.94	-878.42	-115.27	10.00	7.97	30.19
8,600.00	18.23	338.18	8,541.71	-187.53	-884.30	-102.35	10.00	8.97	16.22
8,650.00	22.92	343.12	8,588.51	-170.94	-890.03	-85.30	10.00	9.39	9.87
8,700.00	27.72	346.43	8,633.70	-150.31	-895.59	-64.23	10.00	9.59	6.64
8,750.00	32.57	348.83	8,676.93	-125.79	-900.93	-39.31	10.00	9.71	4.80
8,800.00	37.46	350.67	8,717.87	-97.56	-906.00	-10.73	10.00	9.78	3.67
8,850.00	42.37	352.13	8,756.21	-65.85	-910.78	21.29	10.00	9.82	2.93
8,900.00	47.30	353.35	8,791.66	-30.89	-915.21	56.52	10.00	9.85	2.43
8,950.00	52.23	354.38	8,823.94	7.05	-919.28	94.67	10.00	9.87	2.07
9,000.00	57.18	355.29	8,852.82	47.68	-922.94	135.47	10.00	9.89	1.81
9,050.00	62.13	356.09	8,878.08	90.69	-926.18	178.59	10.00	9.90	1.62
9,100.00	67.08	356.83	8,899.51	135.76	-928.96	223.72	10.00	9.91	1.48
9,150.00	72.04	357.52	8,916.97	182.54	-931.26	270.51	10.00	9.92	1.37
9,200.00	77.00	358.17	8,930.30	230.68	-933.07	318.60	10.00	9.92	1.30
9,250.00	81.97	358.79	8,939.43	279.81	-934.37	367.63	10.00	9.92	1.25
9,300.00	86.93	359.40	8,944.26	329.55	-935.16	417.22	10.00	9.93	1.21



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9,327.72	89.68	359.73	8,945.08	357.26	-935.37	444.82	10.00	9.93	1.20
LP, 89.68° Inc at 359.73° Azm									
9,400.00	89.68	359.73	8,945.48	429.54	-935.71	516.80	0.00	0.00	0.00
9,500.00	89.68	359.73	8,946.04	529.53	-936.18	616.39	0.00	0.00	0.00
9,600.00	89.68	359.73	8,946.59	629.53	-936.65	715.97	0.00	0.00	0.00
9,700.00	89.68	359.73	8,947.15	729.53	-937.13	815.56	0.00	0.00	0.00
9,800.00	89.68	359.73	8,947.70	829.53	-937.60	915.15	0.00	0.00	0.00
9,900.00	89.68	359.73	8,948.26	929.52	-938.07	1,014.73	0.00	0.00	0.00
10,000.00	89.68	359.73	8,948.81	1,029.52	-938.54	1,114.32	0.00	0.00	0.00
10,100.00	89.68	359.73	8,949.37	1,129.52	-939.01	1,213.91	0.00	0.00	0.00
10,200.00	89.68	359.73	8,949.92	1,229.51	-939.48	1,313.49	0.00	0.00	0.00
10,300.00	89.68	359.73	8,950.48	1,329.51	-939.95	1,413.08	0.00	0.00	0.00
10,400.00	89.68	359.73	8,951.03	1,429.51	-940.42	1,512.67	0.00	0.00	0.00
10,500.00	89.68	359.73	8,951.59	1,529.51	-940.90	1,612.25	0.00	0.00	0.00
10,600.00	89.68	359.73	8,952.14	1,629.50	-941.37	1,711.84	0.00	0.00	0.00
10,700.00	89.68	359.73	8,952.70	1,729.50	-941.84	1,811.43	0.00	0.00	0.00
10,800.00	89.68	359.73	8,953.25	1,829.50	-942.31	1,911.01	0.00	0.00	0.00
10,900.00	89.68	359.73	8,953.81	1,929.50	-942.78	2,010.60	0.00	0.00	0.00
11,000.00	89.68	359.73	8,954.36	2,029.49	-943.25	2,110.19	0.00	0.00	0.00
11,100.00	89.68	359.73	8,954.92	2,129.49	-943.72	2,209.77	0.00	0.00	0.00
11,200.00	89.68	359.73	8,955.47	2,229.49	-944.19	2,309.36	0.00	0.00	0.00
11,300.00	89.68	359.73	8,956.03	2,329.49	-944.67	2,408.95	0.00	0.00	0.00
11,400.00	89.68	359.73	8,956.58	2,429.48	-945.14	2,508.53	0.00	0.00	0.00
11,500.00	89.68	359.73	8,957.14	2,529.48	-945.61	2,608.12	0.00	0.00	0.00
11,600.00	89.68	359.73	8,957.69	2,629.48	-946.08	2,707.71	0.00	0.00	0.00
11,700.00	89.68	359.73	8,958.25	2,729.47	-946.55	2,807.29	0.00	0.00	0.00
11,800.00	89.68	359.73	8,958.80	2,829.47	-947.02	2,906.88	0.00	0.00	0.00
11,900.00	89.68	359.73	8,959.36	2,929.47	-947.49	3,006.47	0.00	0.00	0.00
12,000.00	89.68	359.73	8,959.91	3,029.47	-947.96	3,106.05	0.00	0.00	0.00
12,100.00	89.68	359.73	8,960.47	3,129.46	-948.44	3,205.64	0.00	0.00	0.00
12,200.00	89.68	359.73	8,961.02	3,229.46	-948.91	3,305.23	0.00	0.00	0.00
12,300.00	89.68	359.73	8,961.58	3,329.46	-949.38	3,404.81	0.00	0.00	0.00
12,400.00	89.68	359.73	8,962.13	3,429.46	-949.85	3,504.40	0.00	0.00	0.00
12,500.00	89.68	359.73	8,962.69	3,529.45	-950.32	3,603.99	0.00	0.00	0.00
12,600.00	89.68	359.73	8,963.24	3,629.45	-950.79	3,703.57	0.00	0.00	0.00
12,700.00	89.68	359.73	8,963.80	3,729.45	-951.26	3,803.16	0.00	0.00	0.00
12,800.00	89.68	359.73	8,964.35	3,829.45	-951.73	3,902.75	0.00	0.00	0.00
12,900.00	89.68	359.73	8,964.91	3,929.44	-952.21	4,002.33	0.00	0.00	0.00
13,000.00	89.68	359.73	8,965.46	4,029.44	-952.68	4,101.92	0.00	0.00	0.00
13,100.00	89.68	359.73	8,966.02	4,129.44	-953.15	4,201.51	0.00	0.00	0.00
13,200.00	89.68	359.73	8,966.57	4,229.44	-953.62	4,301.09	0.00	0.00	0.00
13,300.00	89.68	359.73	8,967.13	4,329.43	-954.09	4,400.68	0.00	0.00	0.00
13,400.00	89.68	359.73	8,967.68	4,429.43	-954.56	4,500.27	0.00	0.00	0.00
13,500.00	89.68	359.73	8,968.24	4,529.43	-955.03	4,599.85	0.00	0.00	0.00
13,600.00	89.68	359.73	8,968.79	4,629.42	-955.50	4,699.44	0.00	0.00	0.00
13,700.00	89.68	359.73	8,969.35	4,729.42	-955.98	4,799.03	0.00	0.00	0.00
13,800.00	89.68	359.73	8,969.90	4,829.42	-956.45	4,898.61	0.00	0.00	0.00
13,900.00	89.68	359.73	8,970.46	4,929.42	-956.92	4,998.20	0.00	0.00	0.00
14,000.00	89.68	359.73	8,971.01	5,029.41	-957.39	5,097.79	0.00	0.00	0.00
14,100.00	89.68	359.73	8,971.57	5,129.41	-957.86	5,197.37	0.00	0.00	0.00
14,200.00	89.68	359.73	8,972.12	5,229.41	-958.33	5,296.96	0.00	0.00	0.00
14,300.00	89.68	359.73	8,972.68	5,329.41	-958.80	5,396.55	0.00	0.00	0.00
14,400.00	89.68	359.73	8,973.23	5,429.40	-959.27	5,496.13	0.00	0.00	0.00



Phoenix Technology Services

Planning Report



Database: Compass 5000 GCR
 Company: Chevron
 Project: Lea County, NM (NAD27 NME)
 Site: SD WE 23 Fed P25
 Well: 1H
 Wellbore: OH
 Design: Plan 1 04-20-16

Local Co-ordinate Reference: Well 1H
 TVD Reference: RKB @ 3154.00usft (Pace X30)
 MD Reference: RKB @ 3154.00usft (Pace X30)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,500.00	89.68	359.73	8,973.79	5,529.40	-959.75	5,595.72	0.00	0.00	0.00
14,600.00	89.68	359.73	8,974.34	5,629.40	-960.22	5,695.31	0.00	0.00	0.00
14,700.00	89.68	359.73	8,974.90	5,729.40	-960.69	5,794.89	0.00	0.00	0.00
14,800.00	89.68	359.73	8,975.45	5,829.39	-961.16	5,894.48	0.00	0.00	0.00
14,900.00	89.68	359.73	8,976.01	5,929.39	-961.63	5,994.07	0.00	0.00	0.00
15,000.00	89.68	359.73	8,976.56	6,029.39	-962.10	6,093.65	0.00	0.00	0.00
15,100.00	89.68	359.73	8,977.12	6,129.38	-962.57	6,193.24	0.00	0.00	0.00
15,200.00	89.68	359.73	8,977.67	6,229.38	-963.04	6,292.83	0.00	0.00	0.00
15,300.00	89.68	359.73	8,978.23	6,329.38	-963.51	6,392.41	0.00	0.00	0.00
15,400.00	89.68	359.73	8,978.78	6,429.38	-963.99	6,492.00	0.00	0.00	0.00
15,500.00	89.68	359.73	8,979.34	6,529.37	-964.46	6,591.59	0.00	0.00	0.00
15,600.00	89.68	359.73	8,979.89	6,629.37	-964.93	6,691.17	0.00	0.00	0.00
15,700.00	89.68	359.73	8,980.45	6,729.37	-965.40	6,790.76	0.00	0.00	0.00
15,800.00	89.68	359.73	8,981.00	6,829.37	-965.87	6,890.35	0.00	0.00	0.00
15,900.00	89.68	359.73	8,981.56	6,929.36	-966.34	6,989.93	0.00	0.00	0.00
16,000.00	89.68	359.73	8,982.11	7,029.36	-966.81	7,089.52	0.00	0.00	0.00
16,100.00	89.68	359.73	8,982.67	7,129.36	-967.28	7,189.11	0.00	0.00	0.00
16,200.00	89.68	359.73	8,983.22	7,229.36	-967.76	7,288.69	0.00	0.00	0.00
16,300.00	89.68	359.73	8,983.78	7,329.35	-968.23	7,388.28	0.00	0.00	0.00
16,400.00	89.68	359.73	8,984.33	7,429.35	-968.70	7,487.87	0.00	0.00	0.00
16,500.00	89.68	359.73	8,984.89	7,529.35	-969.17	7,587.45	0.00	0.00	0.00
16,600.00	89.68	359.73	8,985.44	7,629.35	-969.64	7,687.04	0.00	0.00	0.00
16,700.00	89.68	359.73	8,986.00	7,729.34	-970.11	7,786.63	0.00	0.00	0.00
16,800.00	89.68	359.73	8,986.55	7,829.34	-970.58	7,886.21	0.00	0.00	0.00
16,900.00	89.68	359.73	8,987.11	7,929.34	-971.05	7,985.80	0.00	0.00	0.00
17,000.00	89.68	359.73	8,987.66	8,029.33	-971.53	8,085.39	0.00	0.00	0.00
17,100.00	89.68	359.73	8,988.22	8,129.33	-972.00	8,184.97	0.00	0.00	0.00
17,200.00	89.68	359.73	8,988.77	8,229.33	-972.47	8,284.56	0.00	0.00	0.00
17,300.00	89.68	359.73	8,989.33	8,329.33	-972.94	8,384.15	0.00	0.00	0.00
17,400.00	89.68	359.73	8,989.88	8,429.32	-973.41	8,483.73	0.00	0.00	0.00
17,500.00	89.68	359.73	8,990.44	8,529.32	-973.88	8,583.32	0.00	0.00	0.00
17,600.00	89.68	359.73	8,990.99	8,629.32	-974.35	8,682.91	0.00	0.00	0.00
17,700.00	89.68	359.73	8,991.55	8,729.32	-974.82	8,782.49	0.00	0.00	0.00
17,800.00	89.68	359.73	8,992.10	8,829.31	-975.30	8,882.08	0.00	0.00	0.00
17,900.00	89.68	359.73	8,992.66	8,929.31	-975.77	8,981.67	0.00	0.00	0.00
18,000.00	89.68	359.73	8,993.21	9,029.31	-976.24	9,081.25	0.00	0.00	0.00
18,100.00	89.68	359.73	8,993.77	9,129.31	-976.71	9,180.84	0.00	0.00	0.00
18,200.00	89.68	359.73	8,994.32	9,229.30	-977.18	9,280.43	0.00	0.00	0.00
18,300.00	89.68	359.73	8,994.88	9,329.30	-977.65	9,380.01	0.00	0.00	0.00
18,400.00	89.68	359.73	8,995.43	9,429.30	-978.12	9,479.60	0.00	0.00	0.00
18,500.00	89.68	359.73	8,995.99	9,529.29	-978.59	9,579.19	0.00	0.00	0.00
18,600.00	89.68	359.73	8,996.54	9,629.29	-979.07	9,678.77	0.00	0.00	0.00
18,700.00	89.68	359.73	8,997.10	9,729.29	-979.54	9,778.36	0.00	0.00	0.00
18,800.00	89.68	359.73	8,997.65	9,829.29	-980.01	9,877.95	0.00	0.00	0.00
18,900.00	89.68	359.73	8,998.21	9,929.28	-980.48	9,977.53	0.00	0.00	0.00
19,000.00	89.68	359.73	8,998.76	10,029.28	-980.95	10,077.12	0.00	0.00	0.00
19,100.00	89.68	359.73	8,999.32	10,129.28	-981.42	10,176.71	0.00	0.00	0.00
19,200.00	89.68	359.73	8,999.87	10,229.28	-981.89	10,276.29	0.00	0.00	0.00
19,222.72	89.68	359.73	9,000.00	10,252.00	-982.00	10,298.92	0.00	0.00	0.00

TD at 19222.72



Phoenix Technology Services

Planning Report



Database: Compass 5000 GCR
Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: SD WE 23 Fed P25
Well: 1H
Wellbore: OH
Design: Plan 1 04-20-16

Local Co-ordinate Reference: Well 1H
TVD Reference: RKB @ 3154.00usft (Pace X30)
MD Reference: RKB @ 3154.00usft (Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
BHL - SD WE P25 1H	0.00	0.00	9,000.00	10,252.00	-982.00	382,474.00	712,250.00	32° 2' 58.86574 N	103° 38' 53.81409 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
1,000.00	1,000.00	0.00	0.00	KOP1, Start Build 1.50°/100'
1,473.68	1,472.47	-7.00	-28.48	Hold 7.11° Inc at 256.19° Azm
8,414.28	8,359.77	-211.96	-862.15	KOP2, Start Build-Turn 10.00°/100'
9,327.72	8,945.08	357.26	-935.37	LP, 89.68° Inc at 359.73° Azm
19,222.72	9,000.00	10,252.00	-982.00	TD at 19222.72



HOBBS OCD

OCT 27 2016

RECEIVED

Project: Lea County, NM (NAD27 NME)
Site: SD WE 23 Fed P25
Well: 1H
Wellbore: OH
Design: Plan 1 04-20-16
Rig: Pace X30

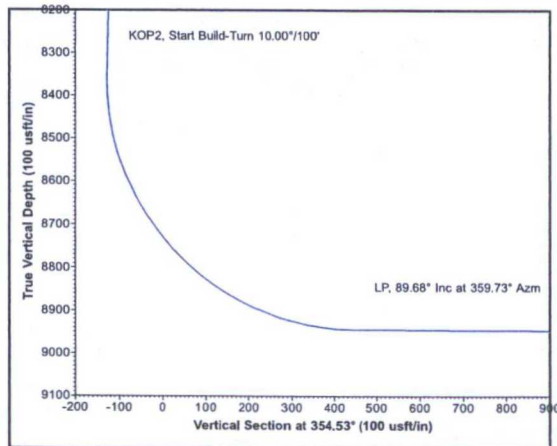
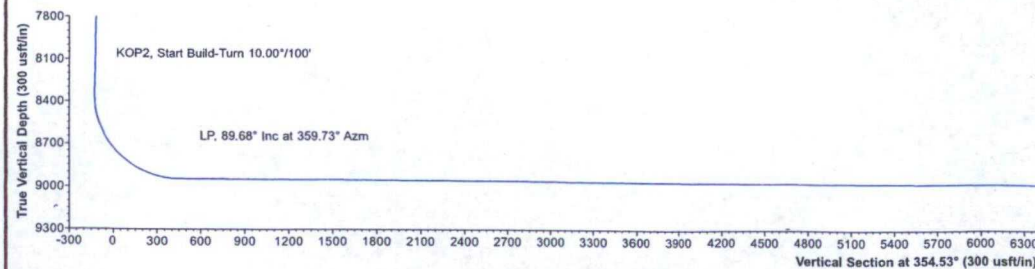
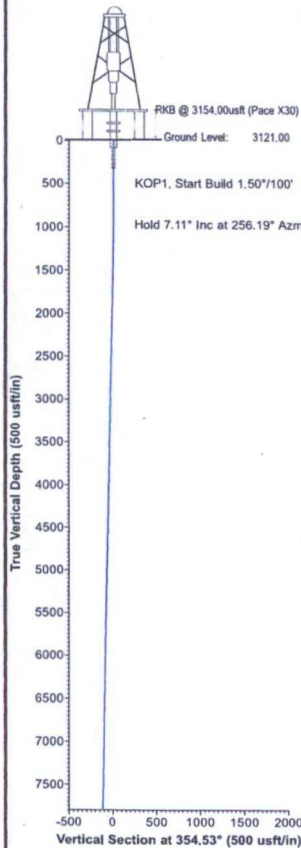


PHOENIX
TECHNOLOGY SERVICES



Azimuths to Grid North
True North: -0.36°
Magnetic North: 6.60°

Magnetic Field
Strength: 48020.2nT
Dip Angle: 59.73°
Date: 4/20/2016
Model: HDGM



WELL DETAILS											
			Ground Level: 3121.00		Latitude		Longitude				
+N/-S		+E/-W		Northing		Easting		32° 1' 17.35050 N		103° 38' 43.16343 W	
0.00		0.00		37222.00		713232.00					

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00		KOP1, Start Build 1.50°/100°
3	1473.68	7.11	256.19	1472.47	-7.00	-28.48	1.50	256.19	-4.25		Hold 7.11° Inc at 256.19° Azm
4	8414.28	7.11	256.19	8359.77	-211.96	-862.15	0.00	0.00	-128.79		KOP2, Start Build-Turn 10.00°/100°
5	9327.72	89.68	359.73	8945.08	357.26	-935.37	10.00	103.48	444.82		LP, 89.68° Inc at 359.73° Azm
6	19222.72	89.68	359.73	9000.00	10252.00	-982.00	0.00	0.00	10298.92	BHL - SD WE P25 1H	TD at 19222.72

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL - SD WE P25 1H	9000.00	10252.00	-982.00	382474.00	712250.00	32° 2' 58.86574 N	103° 38' 53.81408 W

LEGEND

- 3H, OH, Plan 1 04-20-16 V0
- 4H, OH, Plan 1 04-20-16 V0
- 2H, OH, Plan 1 04-20-16 V0
- Plan 1 04-20-16

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well 1H, Grid North
Latitude: 32° 1' 17.35050 N
Longitude: 103° 38' 43.16343 W
Grid East: 713232.00
Grid North: 372222.00
Scale Factor: 1.000
Geomagnetic Model: HDGM
Sample Date: 20-Apr-16
Magnetic Declination: 6.97°
Dip Angle from Horizontal: 59.73°
Magnetic Field Strength: 48020
To convert a Magnetic Direction to a Grid Direction, Add 6.60°
To convert a Magnetic Direction to a True Direction, Add 6.97° East
To convert a True Direction to a Grid Direction, Subtract 0.36°

FORMATION TOP DETAILS

No formation data is available

