



HOBBS OCD

OCT 27 2016

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Chevron

Lea County, NM (NAD27 NME)

SD WE 23 Fed P25

2H

OH

Plan: Plan 1 04-20-16

Standard Planning Report

20 April, 2016





Phoenix Technology Services

Planning Report



Database: Compass 5000 GCR
 Company: Chevron
 Project: Lea County, NM (NAD27 NME)
 Site: SD WE 23 Fed P25
 Well: 2H
 Wellbore: OH
 Design: Plan 1 04-20-16

Local Co-ordinate Reference: Well 2H
 TVD Reference: RKB @ 3155.00usft (Pace X30)
 MD Reference: RKB @ 3155.00usft (Pace X30)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project: Lea County, NM (NAD27 NME)
 Map System: US State Plane 1927 (Exact solution)
 Geo Datum: NAD 1927 (NADCON CONUS)
 Map Zone: New Mexico East 3001
 System Datum: Mean Sea Level

Site: SD WE 23 Fed P25
 Site Position: Northing: 372,222.00 usft Latitude: 32° 1' 17.35050 N
 From: Map 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: 2H
 Well Position: +N/-S 0.00 usft Northing: 372,222.00 usft Latitude: 32° 1' 17.34893 N
 +E/-W 25.00 usft Easting: 713,257.00 usft Longitude: 103° 38' 42.87305 W
 Position Uncertainty: 0.00 usft Wellhead Elevation: 0.00 usft Ground Level: 3,122.00 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) +N/-S +E/-W Direction
 (usft) (usft) (usft) (°)
 0.00 0.00 0.00 357.84

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	
1,197.14	2.96	236.33	1,197.05	-2.82	-4.23	1.50	1.50	0.00	236.33	
8,376.05	2.96	236.33	8,366.40	-208.16	-312.44	0.00	0.00	0.00	0.00	
9,289.15	89.68	359.73	8,955.08	361.26	-340.37	10.00	9.50	13.51	123.38	
19,184.15	89.68	359.73	9,010.00	10,256.00	-387.00	0.00	0.00	0.00	0.00	BHL - SD WE P25 2H



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MD Reference: RKB @ 3155.00usft (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)
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	236.33	1,099.99	-0.73	-1.09	-0.68	1.50	1.50	0.00
1,197.14	2.96	236.33	1,197.05	-2.82	-4.23	-2.66	1.50	1.50	0.00
Hold 2.96° Inc at 236.33° Azm									
1,200.00	2.96	236.33	1,199.91	-2.90	-4.36	-2.74	0.00	0.00	0.00
1,300.00	2.96	236.33	1,299.78	-5.76	-8.65	-5.43	0.00	0.00	0.00
1,400.00	2.96	236.33	1,399.64	-8.62	-12.94	-8.13	0.00	0.00	0.00
1,500.00	2.96	236.33	1,499.51	-11.48	-17.24	-10.82	0.00	0.00	0.00
1,600.00	2.96	236.33	1,599.38	-14.34	-21.53	-13.52	0.00	0.00	0.00
1,700.00	2.96	236.33	1,699.24	-17.20	-25.82	-16.22	0.00	0.00	0.00
1,800.00	2.96	236.33	1,799.11	-20.06	-30.12	-18.91	0.00	0.00	0.00
1,900.00	2.96	236.33	1,898.98	-22.92	-34.41	-21.61	0.00	0.00	0.00
2,000.00	2.96	236.33	1,998.84	-25.78	-38.70	-24.31	0.00	0.00	0.00
2,100.00	2.96	236.33	2,098.71	-28.65	-42.99	-27.00	0.00	0.00	0.00
2,200.00	2.96	236.33	2,198.58	-31.51	-47.29	-29.70	0.00	0.00	0.00
2,300.00	2.96	236.33	2,298.44	-34.37	-51.58	-32.40	0.00	0.00	0.00
2,400.00	2.96	236.33	2,398.31	-37.23	-55.87	-35.09	0.00	0.00	0.00
2,500.00	2.96	236.33	2,498.18	-40.09	-60.17	-37.79	0.00	0.00	0.00
2,600.00	2.96	236.33	2,598.04	-42.95	-64.46	-40.49	0.00	0.00	0.00
2,700.00	2.96	236.33	2,697.91	-45.81	-68.75	-43.18	0.00	0.00	0.00
2,800.00	2.96	236.33	2,797.78	-48.67	-73.05	-45.88	0.00	0.00	0.00
2,900.00	2.96	236.33	2,897.65	-51.53	-77.34	-48.57	0.00	0.00	0.00
3,000.00	2.96	236.33	2,997.51	-54.39	-81.63	-51.27	0.00	0.00	0.00
3,100.00	2.96	236.33	3,097.38	-57.25	-85.93	-53.97	0.00	0.00	0.00
3,200.00	2.96	236.33	3,197.25	-60.11	-90.22	-56.66	0.00	0.00	0.00
3,300.00	2.96	236.33	3,297.11	-62.97	-94.51	-59.36	0.00	0.00	0.00
3,400.00	2.96	236.33	3,396.98	-65.83	-98.81	-62.06	0.00	0.00	0.00
3,500.00	2.96	236.33	3,496.85	-68.69	-103.10	-64.75	0.00	0.00	0.00
3,600.00	2.96	236.33	3,596.71	-71.55	-107.39	-67.45	0.00	0.00	0.00
3,700.00	2.96	236.33	3,696.58	-74.41	-111.69	-70.15	0.00	0.00	0.00
3,800.00	2.96	236.33	3,796.45	-77.27	-115.98	-72.84	0.00	0.00	0.00
3,900.00	2.96	236.33	3,896.31	-80.13	-120.27	-75.54	0.00	0.00	0.00
4,000.00	2.96	236.33	3,996.18	-82.99	-124.57	-78.24	0.00	0.00	0.00
4,100.00	2.96	236.33	4,096.05	-85.85	-128.86	-80.93	0.00	0.00	0.00
4,200.00	2.96	236.33	4,195.91	-88.71	-133.15	-83.63	0.00	0.00	0.00
4,300.00	2.96	236.33	4,295.78	-91.57	-137.45	-86.32	0.00	0.00	0.00
4,400.00	2.96	236.33	4,395.65	-94.43	-141.74	-89.02	0.00	0.00	0.00
4,500.00	2.96	236.33	4,495.51	-97.29	-146.03	-91.72	0.00	0.00	0.00
4,600.00	2.96	236.33	4,595.38	-100.15	-150.33	-94.41	0.00	0.00	0.00
4,700.00	2.96	236.33	4,695.25	-103.01	-154.62	-97.11	0.00	0.00	0.00
4,800.00	2.96	236.33	4,795.12	-105.87	-158.91	-99.81	0.00	0.00	0.00
4,900.00	2.96	236.33	4,894.98	-108.73	-163.21	-102.50	0.00	0.00	0.00
5,000.00	2.96	236.33	4,994.85	-111.60	-167.50	-105.20	0.00	0.00	0.00



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5,100.00	2.96	236.33	5,094.72	-114.46	-171.79	-107.90	0.00	0.00	0.00
5,200.00	2.96	236.33	5,194.58	-117.32	-176.09	-110.59	0.00	0.00	0.00
5,300.00	2.96	236.33	5,294.45	-120.18	-180.38	-113.29	0.00	0.00	0.00
5,400.00	2.96	236.33	5,394.32	-123.04	-184.67	-115.99	0.00	0.00	0.00
5,500.00	2.96	236.33	5,494.18	-125.90	-188.97	-118.68	0.00	0.00	0.00
5,600.00	2.96	236.33	5,594.05	-128.76	-193.26	-121.38	0.00	0.00	0.00
5,700.00	2.96	236.33	5,693.92	-131.62	-197.55	-124.07	0.00	0.00	0.00
5,800.00	2.96	236.33	5,793.78	-134.48	-201.85	-126.77	0.00	0.00	0.00
5,900.00	2.96	236.33	5,893.65	-137.34	-206.14	-129.47	0.00	0.00	0.00
6,000.00	2.96	236.33	5,993.52	-140.20	-210.43	-132.16	0.00	0.00	0.00
6,100.00	2.96	236.33	6,093.38	-143.06	-214.73	-134.86	0.00	0.00	0.00
6,200.00	2.96	236.33	6,193.25	-145.92	-219.02	-137.56	0.00	0.00	0.00
6,300.00	2.96	236.33	6,293.12	-148.78	-223.31	-140.25	0.00	0.00	0.00
6,400.00	2.96	236.33	6,392.98	-151.64	-227.61	-142.95	0.00	0.00	0.00
6,500.00	2.96	236.33	6,492.85	-154.50	-231.90	-145.65	0.00	0.00	0.00
6,600.00	2.96	236.33	6,592.72	-157.36	-236.19	-148.34	0.00	0.00	0.00
6,700.00	2.96	236.33	6,692.59	-160.22	-240.48	-151.04	0.00	0.00	0.00
6,800.00	2.96	236.33	6,792.45	-163.08	-244.78	-153.74	0.00	0.00	0.00
6,900.00	2.96	236.33	6,892.32	-165.94	-249.07	-156.43	0.00	0.00	0.00
7,000.00	2.96	236.33	6,992.19	-168.80	-253.36	-159.13	0.00	0.00	0.00
7,100.00	2.96	236.33	7,092.05	-171.66	-257.66	-161.82	0.00	0.00	0.00
7,200.00	2.96	236.33	7,191.92	-174.52	-261.95	-164.52	0.00	0.00	0.00
7,300.00	2.96	236.33	7,291.79	-177.38	-266.24	-167.22	0.00	0.00	0.00
7,400.00	2.96	236.33	7,391.65	-180.24	-270.54	-169.91	0.00	0.00	0.00
7,500.00	2.96	236.33	7,491.52	-183.10	-274.83	-172.61	0.00	0.00	0.00
7,600.00	2.96	236.33	7,591.39	-185.96	-279.12	-175.31	0.00	0.00	0.00
7,700.00	2.96	236.33	7,691.25	-188.82	-283.42	-178.00	0.00	0.00	0.00
7,800.00	2.96	236.33	7,791.12	-191.69	-287.71	-180.70	0.00	0.00	0.00
7,900.00	2.96	236.33	7,890.99	-194.55	-292.00	-183.40	0.00	0.00	0.00
8,000.00	2.96	236.33	7,990.85	-197.41	-296.30	-186.09	0.00	0.00	0.00
8,100.00	2.96	236.33	8,090.72	-200.27	-300.59	-188.79	0.00	0.00	0.00
8,200.00	2.96	236.33	8,190.59	-203.13	-304.88	-191.49	0.00	0.00	0.00
8,300.00	2.96	236.33	8,290.45	-205.99	-309.18	-194.18	0.00	0.00	0.00
8,376.05	2.96	236.33	8,366.40	-208.16	-312.44	-196.23	0.00	0.00	0.00
KOP2, Start Build-Turn 10.00°/100'									
8,400.00	2.59	287.01	8,390.33	-208.35	-313.47	-196.38	10.00	-1.55	211.61
8,450.00	6.27	336.64	8,440.19	-205.51	-315.64	-193.46	10.00	7.37	99.27
8,500.00	11.04	346.98	8,489.60	-198.33	-317.80	-186.21	10.00	9.54	20.67
8,550.00	15.95	351.07	8,538.21	-186.87	-319.95	-174.67	10.00	9.82	8.18
8,600.00	20.91	353.26	8,585.63	-171.21	-322.06	-158.94	10.00	9.91	4.39
8,650.00	25.88	354.64	8,631.51	-151.47	-324.13	-139.15	10.00	9.94	2.76
8,700.00	30.86	355.61	8,675.49	-127.81	-326.13	-115.42	10.00	9.96	1.92
8,750.00	35.84	356.32	8,717.24	-100.40	-328.05	-87.96	10.00	9.97	1.43
8,800.00	40.83	356.88	8,756.45	-69.45	-329.88	-56.96	10.00	9.98	1.12
8,850.00	45.82	357.34	8,792.81	-35.20	-331.60	-22.67	10.00	9.98	0.92
8,900.00	50.81	357.73	8,826.06	2.09	-333.20	14.66	10.00	9.98	0.77
8,950.00	55.80	358.06	8,855.92	42.15	-334.67	54.74	10.00	9.99	0.67
9,000.00	60.80	358.36	8,882.19	84.65	-335.99	97.26	10.00	9.99	0.60
9,050.00	65.79	358.63	8,904.65	129.29	-337.16	141.91	10.00	9.99	0.54
9,100.00	70.79	358.88	8,923.14	175.72	-338.16	188.34	10.00	9.99	0.50
9,150.00	75.78	359.12	8,937.52	223.58	-339.00	236.20	10.00	9.99	0.47
9,200.00	80.78	359.34	8,947.67	272.52	-339.66	285.13	10.00	9.99	0.45
9,250.00	85.77	359.56	8,953.53	322.16	-340.13	334.75	10.00	9.99	0.44
9,289.15	89.68	359.73	8,955.08	361.26	-340.37	373.84	10.00	9.99	0.43



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LP, 89.68° Inc at 359.73° Azm									
9,300.00	89.68	359.73	8,955.14	372.12	-340.42	384.69	0.00	0.00	0.00
9,400.00	89.68	359.73	8,955.70	472.11	-340.89	484.63	0.00	0.00	0.00
9,500.00	89.68	359.73	8,956.25	572.11	-341.37	584.58	0.00	0.00	0.00
9,600.00	89.68	359.73	8,956.81	672.11	-341.84	684.52	0.00	0.00	0.00
9,700.00	89.68	359.73	8,957.36	772.11	-342.31	784.46	0.00	0.00	0.00
9,800.00	89.68	359.73	8,957.92	872.10	-342.78	884.41	0.00	0.00	0.00
9,900.00	89.68	359.73	8,958.47	972.10	-343.25	984.35	0.00	0.00	0.00
10,000.00	89.68	359.73	8,959.03	1,072.10	-343.72	1,084.30	0.00	0.00	0.00
10,100.00	89.68	359.73	8,959.58	1,172.10	-344.19	1,184.24	0.00	0.00	0.00
10,200.00	89.68	359.73	8,960.14	1,272.09	-344.66	1,284.18	0.00	0.00	0.00
10,300.00	89.68	359.73	8,960.69	1,372.09	-345.14	1,384.13	0.00	0.00	0.00
10,400.00	89.68	359.73	8,961.25	1,472.09	-345.61	1,484.07	0.00	0.00	0.00
10,500.00	89.68	359.73	8,961.80	1,572.08	-346.08	1,584.02	0.00	0.00	0.00
10,600.00	89.68	359.73	8,962.36	1,672.08	-346.55	1,683.96	0.00	0.00	0.00
10,700.00	89.68	359.73	8,962.91	1,772.08	-347.02	1,783.90	0.00	0.00	0.00
10,800.00	89.68	359.73	8,963.47	1,872.08	-347.49	1,883.85	0.00	0.00	0.00
10,900.00	89.68	359.73	8,964.02	1,972.07	-347.96	1,983.79	0.00	0.00	0.00
11,000.00	89.68	359.73	8,964.58	2,072.07	-348.43	2,083.74	0.00	0.00	0.00
11,100.00	89.68	359.73	8,965.13	2,172.07	-348.91	2,183.68	0.00	0.00	0.00
11,200.00	89.68	359.73	8,965.69	2,272.07	-349.38	2,283.62	0.00	0.00	0.00
11,300.00	89.68	359.73	8,966.24	2,372.06	-349.85	2,383.57	0.00	0.00	0.00
11,400.00	89.68	359.73	8,966.80	2,472.06	-350.32	2,483.51	0.00	0.00	0.00
11,500.00	89.68	359.73	8,967.35	2,572.06	-350.79	2,583.46	0.00	0.00	0.00
11,600.00	89.68	359.73	8,967.91	2,672.06	-351.26	2,683.40	0.00	0.00	0.00
11,700.00	89.68	359.73	8,968.46	2,772.05	-351.73	2,783.34	0.00	0.00	0.00
11,800.00	89.68	359.73	8,969.02	2,872.05	-352.20	2,883.29	0.00	0.00	0.00
11,900.00	89.68	359.73	8,969.57	2,972.05	-352.67	2,983.23	0.00	0.00	0.00
12,000.00	89.68	359.73	8,970.13	3,072.04	-353.15	3,083.18	0.00	0.00	0.00
12,100.00	89.68	359.73	8,970.68	3,172.04	-353.62	3,183.12	0.00	0.00	0.00
12,200.00	89.68	359.73	8,971.24	3,272.04	-354.09	3,283.06	0.00	0.00	0.00
12,300.00	89.68	359.73	8,971.79	3,372.04	-354.56	3,383.01	0.00	0.00	0.00
12,400.00	89.68	359.73	8,972.35	3,472.03	-355.03	3,482.95	0.00	0.00	0.00
12,500.00	89.68	359.73	8,972.90	3,572.03	-355.50	3,582.90	0.00	0.00	0.00
12,600.00	89.68	359.73	8,973.46	3,672.03	-355.97	3,682.84	0.00	0.00	0.00
12,700.00	89.68	359.73	8,974.01	3,772.03	-356.44	3,782.78	0.00	0.00	0.00
12,800.00	89.68	359.73	8,974.57	3,872.02	-356.92	3,882.73	0.00	0.00	0.00
12,900.00	89.68	359.73	8,975.12	3,972.02	-357.39	3,982.67	0.00	0.00	0.00
13,000.00	89.68	359.73	8,975.68	4,072.02	-357.86	4,082.62	0.00	0.00	0.00
13,100.00	89.68	359.73	8,976.23	4,172.02	-358.33	4,182.56	0.00	0.00	0.00
13,200.00	89.68	359.73	8,976.79	4,272.01	-358.80	4,282.50	0.00	0.00	0.00
13,300.00	89.68	359.73	8,977.34	4,372.01	-359.27	4,382.45	0.00	0.00	0.00
13,400.00	89.68	359.73	8,977.90	4,472.01	-359.74	4,482.39	0.00	0.00	0.00
13,500.00	89.68	359.73	8,978.45	4,572.01	-360.21	4,582.34	0.00	0.00	0.00
13,600.00	89.68	359.73	8,979.01	4,672.00	-360.69	4,682.28	0.00	0.00	0.00
13,700.00	89.68	359.73	8,979.56	4,772.00	-361.16	4,782.22	0.00	0.00	0.00
13,800.00	89.68	359.73	8,980.12	4,872.00	-361.63	4,882.17	0.00	0.00	0.00
13,900.00	89.68	359.73	8,980.67	4,971.99	-362.10	4,982.11	0.00	0.00	0.00
14,000.00	89.68	359.73	8,981.23	5,071.99	-362.57	5,082.06	0.00	0.00	0.00
14,100.00	89.68	359.73	8,981.78	5,171.99	-363.04	5,182.00	0.00	0.00	0.00
14,200.00	89.68	359.73	8,982.34	5,271.99	-363.51	5,281.94	0.00	0.00	0.00
14,300.00	89.68	359.73	8,982.89	5,371.98	-363.98	5,381.89	0.00	0.00	0.00
14,400.00	89.68	359.73	8,983.45	5,471.98	-364.46	5,481.83	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: 2H
Wellbore: OH
Design: Plan 1 04-20-16

Local Co-ordinate Reference: Well 2H
TVD Reference: RKB @ 3155.00usft (Pace X30)
MD Reference: RKB @ 3155.00usft (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	8,984.00	5,571.98	-364.93	5,581.78	0.00	0.00	0.00
14,600.00	89.68	359.73	8,984.56	5,671.98	-365.40	5,681.72	0.00	0.00	0.00
14,700.00	89.68	359.73	8,985.11	5,771.97	-365.87	5,781.66	0.00	0.00	0.00
14,800.00	89.68	359.73	8,985.67	5,871.97	-366.34	5,881.61	0.00	0.00	0.00
14,900.00	89.68	359.73	8,986.22	5,971.97	-366.81	5,981.55	0.00	0.00	0.00
15,000.00	89.68	359.73	8,986.78	6,071.97	-367.28	6,081.50	0.00	0.00	0.00
15,100.00	89.68	359.73	8,987.33	6,171.96	-367.75	6,181.44	0.00	0.00	0.00
15,200.00	89.68	359.73	8,987.89	6,271.96	-368.23	6,281.38	0.00	0.00	0.00
15,300.00	89.68	359.73	8,988.44	6,371.96	-368.70	6,381.33	0.00	0.00	0.00
15,400.00	89.68	359.73	8,989.00	6,471.95	-369.17	6,481.27	0.00	0.00	0.00
15,500.00	89.68	359.73	8,989.55	6,571.95	-369.64	6,581.22	0.00	0.00	0.00
15,600.00	89.68	359.73	8,990.11	6,671.95	-370.11	6,681.16	0.00	0.00	0.00
15,700.00	89.68	359.73	8,990.66	6,771.95	-370.58	6,781.10	0.00	0.00	0.00
15,800.00	89.68	359.73	8,991.22	6,871.94	-371.05	6,881.05	0.00	0.00	0.00
15,900.00	89.68	359.73	8,991.77	6,971.94	-371.52	6,980.99	0.00	0.00	0.00
16,000.00	89.68	359.73	8,992.33	7,071.94	-372.00	7,080.94	0.00	0.00	0.00
16,100.00	89.68	359.73	8,992.88	7,171.94	-372.47	7,180.88	0.00	0.00	0.00
16,200.00	89.68	359.73	8,993.44	7,271.93	-372.94	7,280.82	0.00	0.00	0.00
16,300.00	89.68	359.73	8,993.99	7,371.93	-373.41	7,380.77	0.00	0.00	0.00
16,400.00	89.68	359.73	8,994.55	7,471.93	-373.88	7,480.71	0.00	0.00	0.00
16,500.00	89.68	359.73	8,995.10	7,571.93	-374.35	7,580.66	0.00	0.00	0.00
16,600.00	89.68	359.73	8,995.66	7,671.92	-374.82	7,680.60	0.00	0.00	0.00
16,700.00	89.68	359.73	8,996.21	7,771.92	-375.29	7,780.54	0.00	0.00	0.00
16,800.00	89.68	359.73	8,996.77	7,871.92	-375.77	7,880.49	0.00	0.00	0.00
16,900.00	89.68	359.73	8,997.32	7,971.92	-376.24	7,980.43	0.00	0.00	0.00
17,000.00	89.68	359.73	8,997.88	8,071.91	-376.71	8,080.38	0.00	0.00	0.00
17,100.00	89.68	359.73	8,998.43	8,171.91	-377.18	8,180.32	0.00	0.00	0.00
17,200.00	89.68	359.73	8,998.99	8,271.91	-377.65	8,280.26	0.00	0.00	0.00
17,300.00	89.68	359.73	8,999.54	8,371.90	-378.12	8,380.21	0.00	0.00	0.00
17,400.00	89.68	359.73	9,000.10	8,471.90	-378.59	8,480.15	0.00	0.00	0.00
17,500.00	89.68	359.73	9,000.65	8,571.90	-379.06	8,580.10	0.00	0.00	0.00
17,600.00	89.68	359.73	9,001.21	8,671.90	-379.54	8,680.04	0.00	0.00	0.00
17,700.00	89.68	359.73	9,001.76	8,771.89	-380.01	8,779.98	0.00	0.00	0.00
17,800.00	89.68	359.73	9,002.32	8,871.89	-380.48	8,879.93	0.00	0.00	0.00
17,900.00	89.68	359.73	9,002.87	8,971.89	-380.95	8,979.87	0.00	0.00	0.00
18,000.00	89.68	359.73	9,003.43	9,071.89	-381.42	9,079.82	0.00	0.00	0.00
18,100.00	89.68	359.73	9,003.98	9,171.88	-381.89	9,179.76	0.00	0.00	0.00
18,200.00	89.68	359.73	9,004.54	9,271.88	-382.36	9,279.70	0.00	0.00	0.00
18,300.00	89.68	359.73	9,005.09	9,371.88	-382.83	9,379.65	0.00	0.00	0.00
18,400.00	89.68	359.73	9,005.65	9,471.88	-383.30	9,479.59	0.00	0.00	0.00
18,500.00	89.68	359.73	9,006.20	9,571.87	-383.78	9,579.54	0.00	0.00	0.00
18,600.00	89.68	359.73	9,006.76	9,671.87	-384.25	9,679.48	0.00	0.00	0.00
18,700.00	89.68	359.73	9,007.31	9,771.87	-384.72	9,779.42	0.00	0.00	0.00
18,800.00	89.68	359.73	9,007.87	9,871.86	-385.19	9,879.37	0.00	0.00	0.00
18,900.00	89.68	359.73	9,008.42	9,971.86	-385.66	9,979.31	0.00	0.00	0.00
19,000.00	89.68	359.73	9,008.98	10,071.86	-386.13	10,079.26	0.00	0.00	0.00
19,100.00	89.68	359.73	9,009.53	10,171.86	-386.60	10,179.20	0.00	0.00	0.00
19,184.15	89.68	359.73	9,010.00	10,256.00	-387.00	10,263.30	0.00	0.00	0.00

TD at 19184.15



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 2H
Company:	Chevron	TVD Reference:	RKB @ 3155.00usft (Pace X30)
Project:	Lea County, NM (NAD27 NME)	MD Reference:	RKB @ 3155.00usft (Pace X30)
Site:	SD WE 23 Fed P25	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 04-20-16		

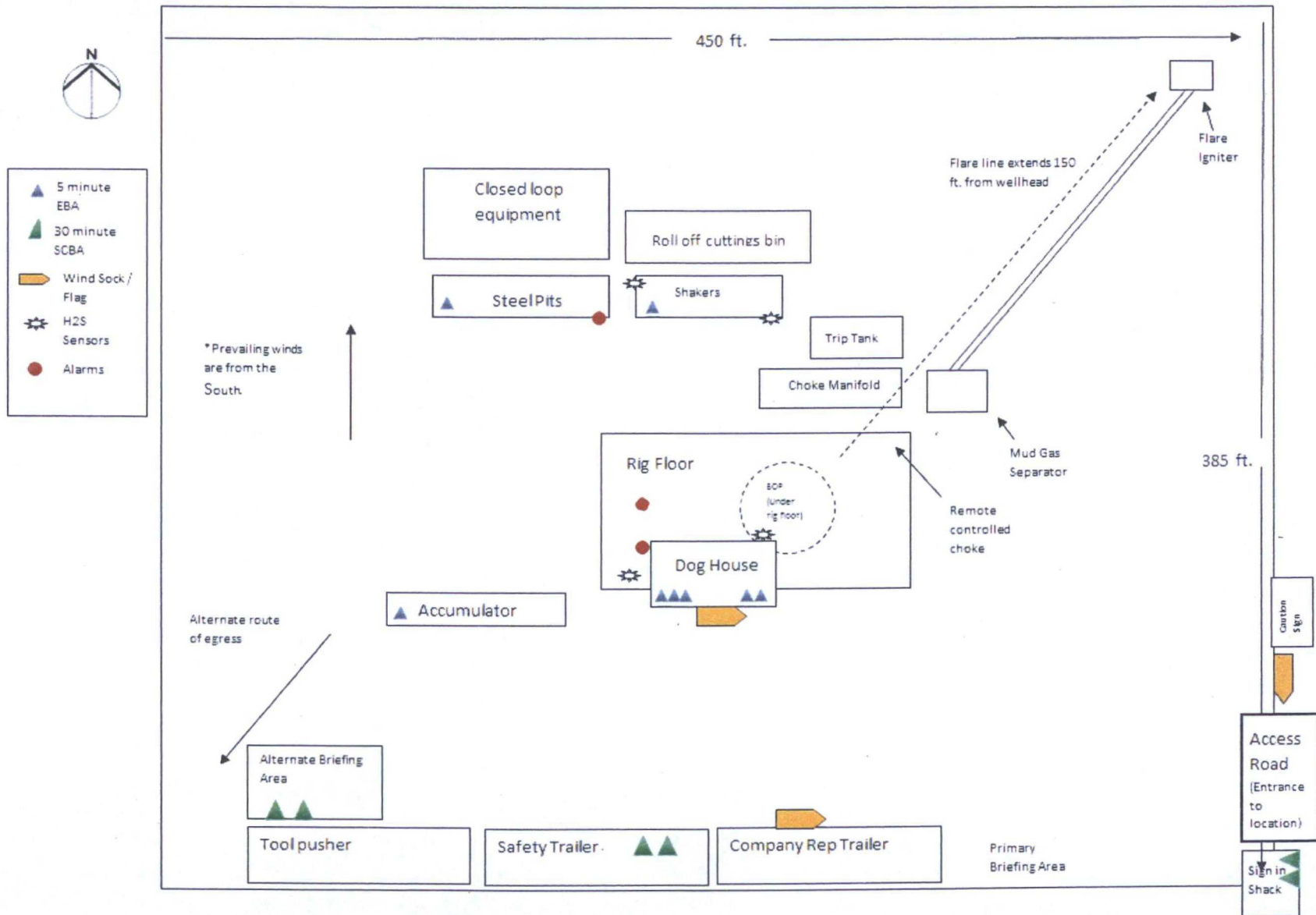
Design Targets

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 2H	0.00	0.01	9,010.00	10,256.00	-387.00	382,478.00	712,870.00	32° 2' 58.86634 N	103° 38' 46.61030 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'
1,197.14	1,197.05	-2.82	-4.23	Hold 2.96° Inc at 236.33° Azm
8,376.05	8,366.40	-208.16	-312.44	KOP2, Start Build-Turn 10.00°/100'
9,289.15	8,955.08	361.26	-340.37	LP, 89.68° Inc at 359.73° Azm
19,184.15	9,010.00	10,256.00	-387.00	TD at 19184.15

H₂S Preparedness and Contingency Plan Summary



HOBBS OCD
OCT 27 2016
RECEIVED



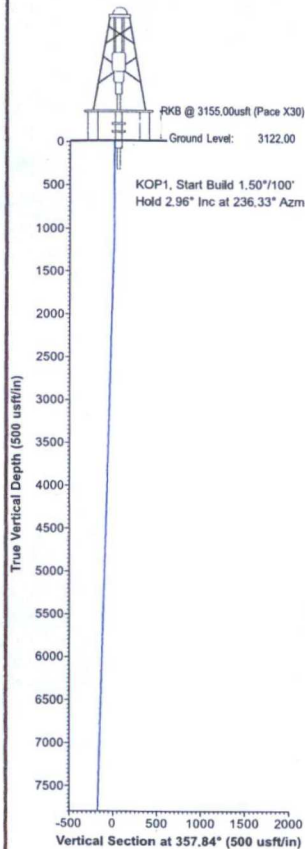
HOBBS OCD

OCT 27 2016
RECEIVED

Project: Lea County, NM (NAD27 NME)
Site: SD WE 23 Fed P25
Well: 2H
Wellbore: OH
Design: Plan 1 04-20-16
Rig: Pace X30



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						
+N-S	+E-W	Northing	Ground Level	Easting	Latitude	Longitude
0.00	0.00	372222.00	3122.00	713257.00	32° 1' 17.34892 N	103° 38' 42.87305 W

SECTION DETAILS												
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target	Annotation	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		KOP1, Start Build 1.50°/100'	
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00		Hold 2.96° Inc at 236.33° Azm	
3	1197.14	2.96	236.33	1197.05	-2.82	-4.23	1.50	236.33	-2.66		KOP2, Start Build-Turn 10.00°/100'	
4	8376.05	2.96	236.33	8366.40	-208.16	-312.44	0.00	0.00	-196.23		LP, 89.68° Inc at 359.73° Azm	
5	9289.15	89.68	359.73	8955.08	361.26	-340.37	10.00	123.38	373.84		TD at 19184.15	
6	19184.15	89.68	359.73	9010.00	10256.00	-387.00	0.00	0.00	10263.30	BHL - SD WE P25 2H		

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude
BHL - SD WE P25 2H	9010.00	10256.00	-387.00	382478.00	712870.00	32° 2' 58.86634 N

LEGEND

- 1H, OH, Plan 1 04-20-16 V0
- 3H, OH, Plan 1 04-20-16 V0
- 4H, 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 2H, Grid North
Latitude: 32° 1' 17.34892 N
Longitude: 103° 38' 42.87305 W
Grid East: 713257.00
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

