



Project: Lea County, NM (NAD27 NME)
Site: SD WE 24 Fed P23
Well: 1H
Wellbore: OH / Job 1514567
Design: Plan 3 02-11-16
Rig: Pace X30



RKB @ 3160.00ft (Pace X30)

Ground Level: 3133.00

WELL DETAILS

North: 372252.00
East: 717226.00
Northing: 32° 1' 17.39335 N
Easting: 103° 37' 56.77105 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	-E/W	Dlog	TFace	VSet	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00
3	3745.00	1.50	281.67	3744.42	-4.43	-43.30	0.00	281.67	0.00	0.00
4	4170.16	10.00	281.67	4167.05	-12.59	-86.02	2.00	0.01	-4.31	0.00
5	4700.22	10.00	281.67	4698.17	-121.70	-831.61	0.00	0.00	-41.59	0.00
6	4808.22	10.00	281.67	4838.17	-450.13	-935.40	10.00	87.52	537.54	0.00
7	9421.89	88.95	359.71	9017.30	450.13	-935.40	10.00	87.52	537.54	0.00
8	19221.89	88.95	359.71	9025.00	10250.00	-985.00	0.00	0.00	10257.22	0.00

DESIGN TARGET DETAILS

Name	MD	Inc	Azi	TVD	+N/S	-E/W	North	East	Longitude	Shape
BHL SD WE 24 Fed P23 1H	9025.00	0.00	0.00	9025.00	10250.00	-985.00	362502.00	716241.00	103° 38' 7.44247 W	Point

LEGEND

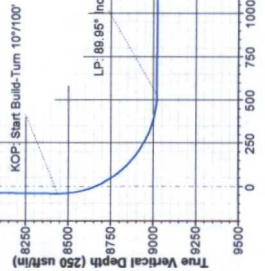
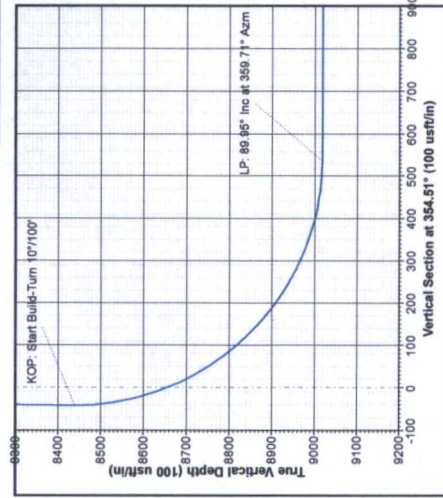
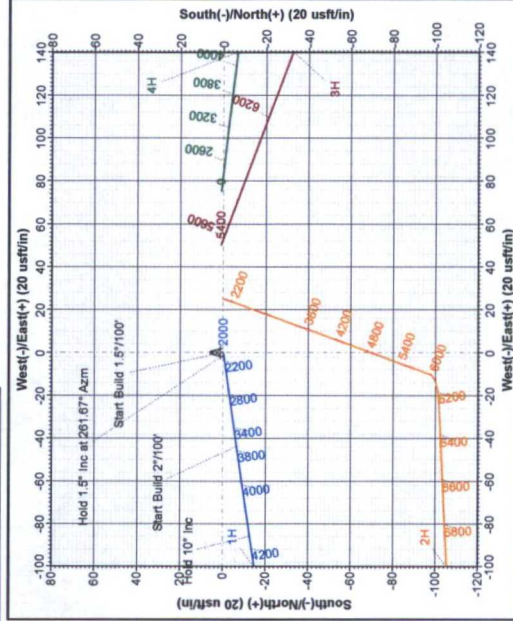
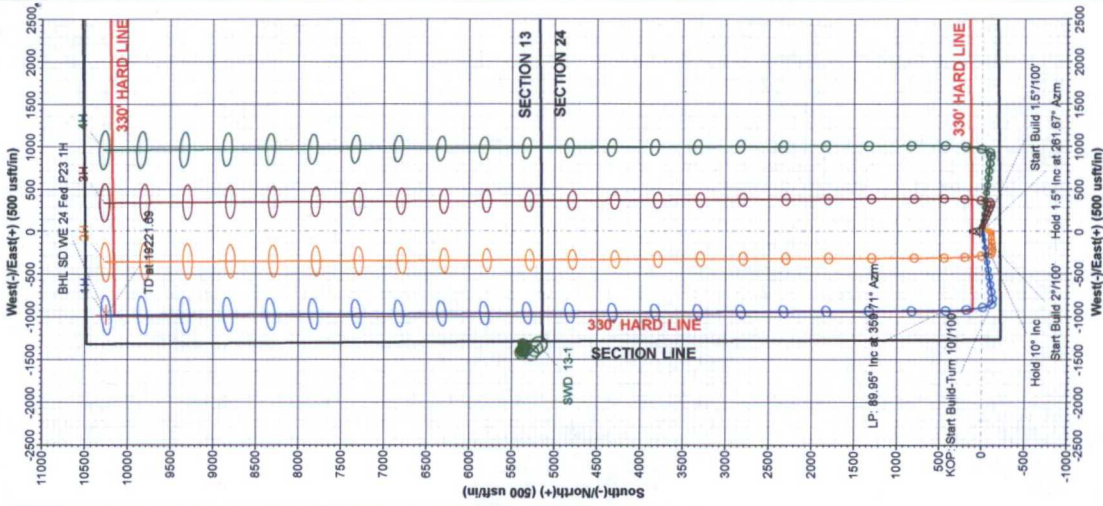
- SMD 13-1, OH / Job 1513029, Surveys (Ensign 769) VO
- 2H, OH / Job 1514568, Plan 3 02-11-16 VO
- 4H, OH / Job 1514570, Plan 3 02-11-16 VO
- 3H, OH / Job 1514569, Plan 3 02-11-16 VO
- Plan 3 02-11-16

Map System: US State Plane 1927 (East solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well 1H, Grid North
Latitude: 32° 1' 17.39335 N
Longitude: 103° 37' 56.77105 W
Grid East: 717226.00
Grid North: 372252.00
Scale Factor: 1.000

Geomagnetic Model: HDGM
Sample Date: 18-Nov-15
Magnetic Declination: 7.02°
Dip Angle from Horizontal: 59.75°
Magnetic Field Strength: 48063
To convert a Magnetic Direction to a True Direction, Add 7.02° East
To convert a True Direction to a Grid Direction, Subtract 0.37°

FORMATION TOP DETAILS

No formation data is available



Vertical Section at 354.51' (250 usft/in)

Created By: Justin Andes Date: 8-42, February 12 2016



Chevron

Lea County, NM (NAD27 NME)
SD WE 24 Fed P23
1H

OH / Job 1514567

Plan: Plan 3 02-11-16

Standard Planning Report

12 February, 2016

HOBBS OCD

JUN 22 2016

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TECHNOLOGY SERVICES



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 1H
Company:	Chevron	TVD Reference:	RKB @ 3160.00usft (Pace X30)
Project:	Lea County, NM (NAD27 NME)	MD Reference:	RKB @ 3160.00usft (Pace X30)
Site:	SD WE 24 Fed P23	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514567		
Design:	Plan 3 02-11-16		

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 24 Fed P23		
Site Position:		Northing:	372,252.00 usft
From:	Map	Easting:	717,226.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 1' 17.39335 N
		Longitude:	103° 37' 56.77105 W
		Grid Convergence:	0.37 °

Well	1H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 1' 17.39335 N
		Longitude:	103° 37' 56.77105 W
		Ground Level:	3,133.00 usft

Wellbore	OH / Job 1514567				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/18/2015	7.02	59.75	48,063

Design	Plan 3 02-11-16			
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	354.51

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	1.50	261.67	2,099.99	-0.19	-1.30	1.50	1.50	0.00	261.67	
3,745.00	1.50	261.67	3,744.42	-6.43	-43.90	0.00	0.00	0.00	0.00	
4,170.16	10.00	261.67	4,167.05	-12.59	-86.02	2.00	2.00	0.00	0.01	
8,508.22	10.00	261.67	8,439.17	-121.70	-831.61	0.00	0.00	0.00	0.00	
9,421.69	89.96	359.71	9,017.30	450.13	-935.40	10.00	8.75	10.73	97.92	
19,221.69	89.96	359.71	9,025.00	10,250.00	-985.00	0.00	0.00	0.00	0.00	BHL SD WE 24 Fed F



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 1H
Company:	Chevron	TVD Reference:	RKB @ 3160.00usft (Pace X30)
Project:	Lea County, NM (NAD27 NME)	MD Reference:	RKB @ 3160.00usft (Pace X30)
Site:	SD WE 24 Fed P23	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514567		
Design:	Plan 3 02-11-16		

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
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.5°/100'									
2,100.00	1.50	261.67	2,099.99	-0.19	-1.30	-0.06	1.50	1.50	0.00
Hold 1.5° Inc at 261.67° Azm									
2,200.00	1.50	261.67	2,199.95	-0.57	-3.89	-0.19	0.00	0.00	0.00
2,300.00	1.50	261.67	2,299.92	-0.95	-6.48	-0.32	0.00	0.00	0.00
2,400.00	1.50	261.67	2,399.89	-1.33	-9.07	-0.45	0.00	0.00	0.00
2,500.00	1.50	261.67	2,499.85	-1.71	-11.66	-0.58	0.00	0.00	0.00
2,600.00	1.50	261.67	2,599.82	-2.09	-14.25	-0.71	0.00	0.00	0.00
2,700.00	1.50	261.67	2,699.78	-2.47	-16.84	-0.84	0.00	0.00	0.00
2,800.00	1.50	261.67	2,799.75	-2.84	-19.43	-0.97	0.00	0.00	0.00
2,900.00	1.50	261.67	2,899.71	-3.22	-22.02	-1.10	0.00	0.00	0.00
3,000.00	1.50	261.67	2,999.68	-3.60	-24.61	-1.23	0.00	0.00	0.00
3,100.00	1.50	261.67	3,099.65	-3.98	-27.20	-1.36	0.00	0.00	0.00
3,200.00	1.50	261.67	3,199.61	-4.36	-29.79	-1.49	0.00	0.00	0.00
3,300.00	1.50	261.67	3,299.58	-4.74	-32.38	-1.62	0.00	0.00	0.00
3,400.00	1.50	261.67	3,399.54	-5.12	-34.97	-1.75	0.00	0.00	0.00
3,500.00	1.50	261.67	3,499.51	-5.50	-37.56	-1.88	0.00	0.00	0.00
3,600.00	1.50	261.67	3,599.47	-5.88	-40.15	-2.01	0.00	0.00	0.00
3,700.00	1.50	261.67	3,699.44	-6.26	-42.74	-2.14	0.00	0.00	0.00
3,745.00	1.50	261.67	3,744.42	-6.43	-43.90	-2.20	0.00	0.00	0.00
Start Build 2°/100'									
3,800.00	2.60	261.67	3,799.39	-6.71	-45.85	-2.30	2.00	2.00	0.00
3,900.00	4.60	261.67	3,899.19	-7.62	-52.06	-2.61	2.00	2.00	0.00
4,000.00	6.60	261.67	3,998.70	-9.04	-61.72	-3.09	2.00	2.00	0.00
4,100.00	8.60	261.67	4,097.82	-10.95	-74.80	-3.74	2.00	2.00	0.00
4,170.16	10.00	261.67	4,167.06	-12.59	-86.02	-4.31	2.00	2.00	0.00
Hold 10° Inc									
4,200.00	10.00	261.67	4,196.44	-13.34	-91.15	-4.56	0.00	0.00	0.00
4,300.00	10.00	261.67	4,294.92	-15.86	-108.34	-5.42	0.00	0.00	0.00
4,400.00	10.00	261.67	4,393.40	-18.37	-125.52	-6.28	0.00	0.00	0.00
4,500.00	10.00	261.67	4,491.88	-20.89	-142.71	-7.14	0.00	0.00	0.00
4,600.00	10.00	261.67	4,590.36	-23.40	-159.90	-8.00	0.00	0.00	0.00
4,700.00	10.00	261.67	4,688.84	-25.92	-177.09	-8.86	0.00	0.00	0.00



Phoenix Technology Services

Planning Report



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Company:	Chevron	TVD Reference:	RKB @ 3160.00usft (Pace X30)
Project:	Lea County, NM (NAD27 NME)	MD Reference:	RKB @ 3160.00usft (Pace X30)
Site:	SD WE 24 Fed P23	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514567		
Design:	Plan 3 02-11-16		

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)
4,800.00	10.00	261.67	4,787.32	-28.43	-194.27	-9.72	0.00	0.00	0.00
4,900.00	10.00	261.67	4,885.80	-30.95	-211.46	-10.58	0.00	0.00	0.00
5,000.00	10.00	261.67	4,984.28	-33.46	-228.65	-11.44	0.00	0.00	0.00
5,100.00	10.00	261.67	5,082.76	-35.98	-245.83	-12.30	0.00	0.00	0.00
5,200.00	10.00	261.67	5,181.24	-38.49	-263.02	-13.16	0.00	0.00	0.00
5,300.00	10.00	261.67	5,279.72	-41.01	-280.21	-14.02	0.00	0.00	0.00
5,400.00	10.00	261.67	5,378.20	-43.52	-297.40	-14.88	0.00	0.00	0.00
5,500.00	10.00	261.67	5,476.68	-46.04	-314.58	-15.74	0.00	0.00	0.00
5,600.00	10.00	261.67	5,575.16	-48.55	-331.77	-16.60	0.00	0.00	0.00
5,700.00	10.00	261.67	5,673.64	-51.07	-348.96	-17.45	0.00	0.00	0.00
5,800.00	10.00	261.67	5,772.12	-53.58	-366.15	-18.31	0.00	0.00	0.00
5,900.00	10.00	261.67	5,870.60	-56.10	-383.33	-19.17	0.00	0.00	0.00
6,000.00	10.00	261.67	5,969.08	-58.61	-400.52	-20.03	0.00	0.00	0.00
6,100.00	10.00	261.67	6,067.56	-61.13	-417.71	-20.89	0.00	0.00	0.00
6,200.00	10.00	261.67	6,166.04	-63.64	-434.89	-21.75	0.00	0.00	0.00
6,300.00	10.00	261.67	6,264.52	-66.16	-452.08	-22.61	0.00	0.00	0.00
6,400.00	10.00	261.67	6,363.00	-68.68	-469.27	-23.47	0.00	0.00	0.00
6,500.00	10.00	261.67	6,461.48	-71.19	-486.46	-24.33	0.00	0.00	0.00
6,600.00	10.00	261.67	6,559.96	-73.71	-503.64	-25.19	0.00	0.00	0.00
6,700.00	10.00	261.67	6,658.44	-76.22	-520.83	-26.05	0.00	0.00	0.00
6,800.00	10.00	261.67	6,756.92	-78.74	-538.02	-26.91	0.00	0.00	0.00
6,900.00	10.00	261.67	6,855.40	-81.25	-555.20	-27.77	0.00	0.00	0.00
7,000.00	10.00	261.67	6,953.88	-83.77	-572.39	-28.63	0.00	0.00	0.00
7,100.00	10.00	261.67	7,052.36	-86.28	-589.58	-29.49	0.00	0.00	0.00
7,200.00	10.00	261.67	7,150.84	-88.80	-606.77	-30.35	0.00	0.00	0.00
7,300.00	10.00	261.67	7,249.32	-91.31	-623.95	-31.21	0.00	0.00	0.00
7,400.00	10.00	261.67	7,347.80	-93.83	-641.14	-32.07	0.00	0.00	0.00
7,500.00	10.00	261.67	7,446.28	-96.34	-658.33	-32.93	0.00	0.00	0.00
7,600.00	10.00	261.67	7,544.76	-98.86	-675.51	-33.79	0.00	0.00	0.00
7,700.00	10.00	261.67	7,643.24	-101.37	-692.70	-34.64	0.00	0.00	0.00
7,800.00	10.00	261.67	7,741.72	-103.89	-709.89	-35.50	0.00	0.00	0.00
7,900.00	10.00	261.67	7,840.20	-106.40	-727.08	-36.36	0.00	0.00	0.00
8,000.00	10.00	261.67	7,938.68	-108.92	-744.26	-37.22	0.00	0.00	0.00
8,100.00	10.00	261.67	8,037.16	-111.43	-761.45	-38.08	0.00	0.00	0.00
8,200.00	10.00	261.67	8,135.64	-113.95	-778.64	-38.94	0.00	0.00	0.00
8,300.00	10.00	261.67	8,234.12	-116.46	-795.82	-39.80	0.00	0.00	0.00
8,400.00	10.00	261.67	8,332.60	-118.98	-813.01	-40.66	0.00	0.00	0.00
8,508.22	10.00	261.67	8,439.17	-121.70	-831.61	-41.59	0.00	0.00	0.00
KOP: Start Build-Turn 10°/100'									
8,550.00	10.29	285.51	8,480.32	-121.23	-838.80	-40.43	10.00	0.68	57.04
8,600.00	12.58	308.19	8,529.34	-116.66	-847.38	-35.07	10.00	4.58	45.37
8,650.00	16.12	322.55	8,577.79	-107.78	-855.89	-25.42	10.00	7.10	28.72
8,700.00	20.28	331.51	8,625.29	-94.65	-864.25	-11.54	10.00	8.31	17.92
8,750.00	24.74	337.45	8,671.47	-77.36	-872.40	6.45	10.00	8.92	11.87
8,800.00	29.37	341.64	8,716.00	-56.05	-880.28	28.42	10.00	9.25	8.38
8,850.00	34.09	344.76	8,758.51	-30.88	-887.83	54.19	10.00	9.45	6.25
8,900.00	38.87	347.21	8,798.71	-2.04	-894.99	83.58	10.00	9.57	4.89
8,950.00	43.70	349.19	8,836.27	30.25	-901.71	116.37	10.00	9.65	3.96
9,000.00	48.56	350.85	8,870.91	65.74	-907.94	152.29	10.00	9.71	3.32
9,050.00	53.43	352.27	8,902.37	104.16	-913.62	191.08	10.00	9.75	2.85
9,100.00	58.32	353.53	8,930.42	145.22	-918.72	232.44	10.00	9.78	2.51
9,150.00	63.22	354.66	8,954.82	188.61	-923.20	276.06	10.00	9.80	2.26
9,200.00	68.13	355.70	8,975.41	234.00	-927.02	321.60	10.00	9.82	2.07



Phoenix Technology Services

Planning Report



Database: Compass 5000 GCR
 Company: Chevron
 Project: Lea County, NM (NAD27 NME)
 Site: SD WE 24 Fed P23
 Well: 1H
 Wellbore: OH / Job 1514567
 Design: Plan 3 02-11-16

Local Co-ordinate Reference: Well 1H
 TVD Reference: RKB @ 3160.00usft (Pace X30)
 MD Reference: RKB @ 3160.00usft (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)
9,250.00	73.05	356.67	8,992.02	281.04	-930.15	368.73	10.00	9.83	1.94
9,300.00	77.97	357.58	9,004.53	329.37	-932.57	417.07	10.00	9.84	1.84
9,350.00	82.89	358.47	9,012.83	378.63	-934.27	466.27	10.00	9.85	1.77
9,400.00	87.82	359.34	9,016.88	428.44	-935.22	515.94	10.00	9.85	1.73
9,421.69	89.95	359.71	9,017.30	450.13	-935.40	537.54	10.00	9.85	1.72
LP: 89.95° Inc at 359.71° Azm									
9,500.00	89.96	359.71	9,017.36	528.44	-935.79	615.53	0.00	0.00	0.00
9,600.00	89.96	359.71	9,017.44	628.44	-936.30	715.12	0.00	0.00	0.00
9,700.00	89.96	359.71	9,017.52	728.43	-936.81	814.71	0.00	0.00	0.00
9,800.00	89.96	359.71	9,017.60	828.43	-937.31	914.29	0.00	0.00	0.00
9,900.00	89.96	359.71	9,017.68	928.43	-937.82	1,013.88	0.00	0.00	0.00
10,000.00	89.96	359.71	9,017.76	1,028.43	-938.33	1,113.47	0.00	0.00	0.00
10,100.00	89.96	359.71	9,017.84	1,128.43	-938.83	1,213.06	0.00	0.00	0.00
10,200.00	89.96	359.71	9,017.91	1,228.43	-939.34	1,312.65	0.00	0.00	0.00
10,300.00	89.96	359.71	9,017.99	1,328.43	-939.84	1,412.24	0.00	0.00	0.00
10,400.00	89.96	359.71	9,018.07	1,428.43	-940.35	1,511.83	0.00	0.00	0.00
10,500.00	89.96	359.71	9,018.15	1,528.42	-940.86	1,611.41	0.00	0.00	0.00
10,600.00	89.96	359.71	9,018.23	1,628.42	-941.36	1,711.00	0.00	0.00	0.00
10,700.00	89.96	359.71	9,018.31	1,728.42	-941.87	1,810.59	0.00	0.00	0.00
10,800.00	89.96	359.71	9,018.39	1,828.42	-942.37	1,910.18	0.00	0.00	0.00
10,900.00	89.96	359.71	9,018.46	1,928.42	-942.88	2,009.77	0.00	0.00	0.00
11,000.00	89.96	359.71	9,018.54	2,028.42	-943.39	2,109.36	0.00	0.00	0.00
11,100.00	89.96	359.71	9,018.62	2,128.42	-943.89	2,208.95	0.00	0.00	0.00
11,200.00	89.96	359.71	9,018.70	2,228.41	-944.40	2,308.53	0.00	0.00	0.00
11,300.00	89.96	359.71	9,018.78	2,328.41	-944.90	2,408.12	0.00	0.00	0.00
11,400.00	89.96	359.71	9,018.86	2,428.41	-945.41	2,507.71	0.00	0.00	0.00
11,500.00	89.96	359.71	9,018.94	2,528.41	-945.92	2,607.30	0.00	0.00	0.00
11,600.00	89.96	359.71	9,019.01	2,628.41	-946.42	2,706.89	0.00	0.00	0.00
11,700.00	89.96	359.71	9,019.09	2,728.41	-946.93	2,806.48	0.00	0.00	0.00
11,800.00	89.96	359.71	9,019.17	2,828.41	-947.44	2,906.07	0.00	0.00	0.00
11,900.00	89.96	359.71	9,019.25	2,928.41	-947.94	3,005.65	0.00	0.00	0.00
12,000.00	89.96	359.71	9,019.33	3,028.40	-948.45	3,105.24	0.00	0.00	0.00
12,100.00	89.96	359.71	9,019.41	3,128.40	-948.95	3,204.83	0.00	0.00	0.00
12,200.00	89.96	359.71	9,019.49	3,228.40	-949.46	3,304.42	0.00	0.00	0.00
12,300.00	89.96	359.71	9,019.56	3,328.40	-949.97	3,404.01	0.00	0.00	0.00
12,400.00	89.96	359.71	9,019.64	3,428.40	-950.47	3,503.60	0.00	0.00	0.00
12,500.00	89.96	359.71	9,019.72	3,528.40	-950.98	3,603.19	0.00	0.00	0.00
12,600.00	89.96	359.71	9,019.80	3,628.40	-951.48	3,702.77	0.00	0.00	0.00
12,700.00	89.96	359.71	9,019.88	3,728.39	-951.99	3,802.36	0.00	0.00	0.00
12,800.00	89.96	359.71	9,019.96	3,828.39	-952.50	3,901.95	0.00	0.00	0.00
12,900.00	89.96	359.71	9,020.04	3,928.39	-953.00	4,001.54	0.00	0.00	0.00
13,000.00	89.96	359.71	9,020.11	4,028.39	-953.51	4,101.13	0.00	0.00	0.00
13,100.00	89.96	359.71	9,020.19	4,128.39	-954.02	4,200.72	0.00	0.00	0.00
13,200.00	89.96	359.71	9,020.27	4,228.39	-954.52	4,300.31	0.00	0.00	0.00
13,300.00	89.96	359.71	9,020.35	4,328.39	-955.03	4,399.89	0.00	0.00	0.00
13,400.00	89.96	359.71	9,020.43	4,428.39	-955.53	4,499.48	0.00	0.00	0.00
13,500.00	89.96	359.71	9,020.51	4,528.38	-956.04	4,599.07	0.00	0.00	0.00
13,600.00	89.96	359.71	9,020.58	4,628.38	-956.55	4,698.66	0.00	0.00	0.00
13,700.00	89.96	359.71	9,020.66	4,728.38	-957.05	4,798.25	0.00	0.00	0.00
13,800.00	89.96	359.71	9,020.74	4,828.38	-957.56	4,897.84	0.00	0.00	0.00
13,900.00	89.96	359.71	9,020.82	4,928.38	-958.06	4,997.42	0.00	0.00	0.00
14,000.00	89.96	359.71	9,020.90	5,028.38	-958.57	5,097.01	0.00	0.00	0.00
14,100.00	89.96	359.71	9,020.98	5,128.38	-959.08	5,196.60	0.00	0.00	0.00
14,200.00	89.96	359.71	9,021.06	5,228.38	-959.58	5,296.19	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 24 Fed P23
Well: 1H
Wellbore: OH / Job 1514567
Design: Plan 3 02-11-16

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 1H
RKB @ 3160.00usft (Pace X30)
RKB @ 3160.00usft (Pace X30)
Grid
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)
14,300.00	89.96	359.71	9,021.13	5,328.37	-960.09	5,395.78	0.00	0.00	0.00
14,400.00	89.96	359.71	9,021.21	5,428.37	-960.60	5,495.37	0.00	0.00	0.00
14,500.00	89.96	359.71	9,021.29	5,528.37	-961.10	5,594.96	0.00	0.00	0.00
14,600.00	89.96	359.71	9,021.37	5,628.37	-961.61	5,694.54	0.00	0.00	0.00
14,700.00	89.96	359.71	9,021.45	5,728.37	-962.11	5,794.13	0.00	0.00	0.00
14,800.00	89.96	359.71	9,021.53	5,828.37	-962.62	5,893.72	0.00	0.00	0.00
14,900.00	89.96	359.71	9,021.61	5,928.37	-963.13	5,993.31	0.00	0.00	0.00
15,000.00	89.96	359.71	9,021.68	6,028.36	-963.63	6,092.90	0.00	0.00	0.00
15,100.00	89.96	359.71	9,021.76	6,128.36	-964.14	6,192.49	0.00	0.00	0.00
15,200.00	89.96	359.71	9,021.84	6,228.36	-964.64	6,292.08	0.00	0.00	0.00
15,300.00	89.96	359.71	9,021.92	6,328.36	-965.15	6,391.66	0.00	0.00	0.00
15,400.00	89.96	359.71	9,022.00	6,428.36	-965.66	6,491.25	0.00	0.00	0.00
15,500.00	89.96	359.71	9,022.08	6,528.36	-966.16	6,590.84	0.00	0.00	0.00
15,600.00	89.96	359.71	9,022.16	6,628.36	-966.67	6,690.43	0.00	0.00	0.00
15,700.00	89.96	359.71	9,022.23	6,728.36	-967.18	6,790.02	0.00	0.00	0.00
15,800.00	89.96	359.71	9,022.31	6,828.35	-967.68	6,889.61	0.00	0.00	0.00
15,900.00	89.96	359.71	9,022.39	6,928.35	-968.19	6,989.20	0.00	0.00	0.00
16,000.00	89.96	359.71	9,022.47	7,028.35	-968.69	7,088.78	0.00	0.00	0.00
16,100.00	89.96	359.71	9,022.55	7,128.35	-969.20	7,188.37	0.00	0.00	0.00
16,200.00	89.96	359.71	9,022.63	7,228.35	-969.71	7,287.96	0.00	0.00	0.00
16,300.00	89.96	359.71	9,022.71	7,328.35	-970.21	7,387.55	0.00	0.00	0.00
16,400.00	89.96	359.71	9,022.78	7,428.35	-970.72	7,487.14	0.00	0.00	0.00
16,500.00	89.96	359.71	9,022.86	7,528.35	-971.22	7,586.73	0.00	0.00	0.00
16,600.00	89.96	359.71	9,022.94	7,628.34	-971.73	7,686.32	0.00	0.00	0.00
16,700.00	89.96	359.71	9,023.02	7,728.34	-972.24	7,785.90	0.00	0.00	0.00
16,800.00	89.96	359.71	9,023.10	7,828.34	-972.74	7,885.49	0.00	0.00	0.00
16,900.00	89.96	359.71	9,023.18	7,928.34	-973.25	7,985.08	0.00	0.00	0.00
17,000.00	89.96	359.71	9,023.26	8,028.34	-973.76	8,084.67	0.00	0.00	0.00
17,100.00	89.96	359.71	9,023.33	8,128.34	-974.26	8,184.26	0.00	0.00	0.00
17,200.00	89.96	359.71	9,023.41	8,228.34	-974.77	8,283.85	0.00	0.00	0.00
17,300.00	89.96	359.71	9,023.49	8,328.33	-975.27	8,383.44	0.00	0.00	0.00
17,400.00	89.96	359.71	9,023.57	8,428.33	-975.78	8,483.02	0.00	0.00	0.00
17,500.00	89.96	359.71	9,023.65	8,528.33	-976.29	8,582.61	0.00	0.00	0.00
17,600.00	89.96	359.71	9,023.73	8,628.33	-976.79	8,682.20	0.00	0.00	0.00
17,700.00	89.96	359.71	9,023.81	8,728.33	-977.30	8,781.79	0.00	0.00	0.00
17,800.00	89.96	359.71	9,023.88	8,828.33	-977.80	8,881.38	0.00	0.00	0.00
17,900.00	89.96	359.71	9,023.96	8,928.33	-978.31	8,980.97	0.00	0.00	0.00
18,000.00	89.96	359.71	9,024.04	9,028.33	-978.82	9,080.56	0.00	0.00	0.00
18,100.00	89.96	359.71	9,024.12	9,128.32	-979.32	9,180.14	0.00	0.00	0.00
18,200.00	89.96	359.71	9,024.20	9,228.32	-979.83	9,279.73	0.00	0.00	0.00
18,300.00	89.96	359.71	9,024.28	9,328.32	-980.33	9,379.32	0.00	0.00	0.00
18,400.00	89.96	359.71	9,024.35	9,428.32	-980.84	9,478.91	0.00	0.00	0.00
18,500.00	89.96	359.71	9,024.43	9,528.32	-981.35	9,578.50	0.00	0.00	0.00
18,600.00	89.96	359.71	9,024.51	9,628.32	-981.85	9,678.09	0.00	0.00	0.00
18,700.00	89.96	359.71	9,024.59	9,728.32	-982.36	9,777.68	0.00	0.00	0.00
18,800.00	89.96	359.71	9,024.67	9,828.32	-982.87	9,877.26	0.00	0.00	0.00
18,900.00	89.96	359.71	9,024.75	9,928.31	-983.37	9,976.85	0.00	0.00	0.00
19,000.00	89.96	359.71	9,024.83	10,028.31	-983.88	10,076.44	0.00	0.00	0.00
19,100.00	89.96	359.71	9,024.90	10,128.31	-984.38	10,176.03	0.00	0.00	0.00
19,200.00	89.96	359.71	9,024.98	10,228.31	-984.89	10,275.62	0.00	0.00	0.00
19,221.69	89.96	359.71	9,025.00	10,250.00	-985.00	10,297.22	0.00	0.00	0.00

TD at 19221.69



Phoenix Technology Services
Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 1H
Company:	Chevron	TVD Reference:	RKB @ 3160.00usft (Pace X30)
Project:	Lea County, NM (NAD27 NME)	MD Reference:	RKB @ 3160.00usft (Pace X30)
Site:	SD WE 24 Fed P23	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514567		
Design:	Plan 3 02-11-16		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL SD WE 24 Fed P23 - plan hits target center - Point	0.00	0.00	9,025.00	10,250.00	-985.00	382,502.00	716,241.00	32° 2' 58.88988 N	103° 38' 7.44247 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.00	2,000.00	0.00	0.00	Start Build 1.5°/100'
2,100.00	2,099.99	-0.19	-1.30	Hold 1.5° Inc at 261.67° Azm
3,745.00	3,744.42	-6.43	-43.90	Start Build 2°/100'
4,170.16	4,167.06	-12.59	-86.02	Hold 10° Inc
8,508.22	8,439.17	-121.70	-831.61	KOP: Start Build-Turn 10°/100'
9,421.69	9,017.30	450.13	-935.40	LP: 89.95° Inc at 359.71° Azm
19,221.69	9,025.00	10,250.00	-985.00	TD at 19221.69