



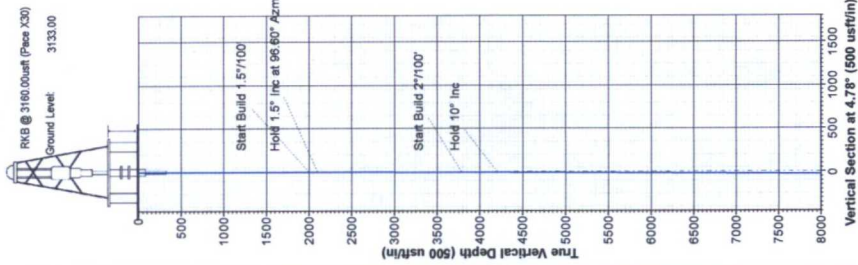
Project: Lea County, NM (NAD27 NME)
Site: SD WE 24 Fed P23
Well: 4H
Wellbore: OH / Job 1514570
Design: Plan 3 02-11-16
Rig: Pace X30



Alignments to Grid North
True North: 0.37°
Magnetic North: 8.65°
Magnetic Field
Strength: 48063.3nT
Dip Angle: 59.75°
Date: 11/16/2015
Model: HDGM

RKB @ 3160.00m (Pace X30)

Ground Level: 3133.00



WELL DETAILS

Ground Level: 3133.00
Easting: 717301.00
Northing: 372253.00
Latitude: 32° 1' 17.39843 N
Longitude: 103° 37' 55.89985 W

SECTION DETAILS

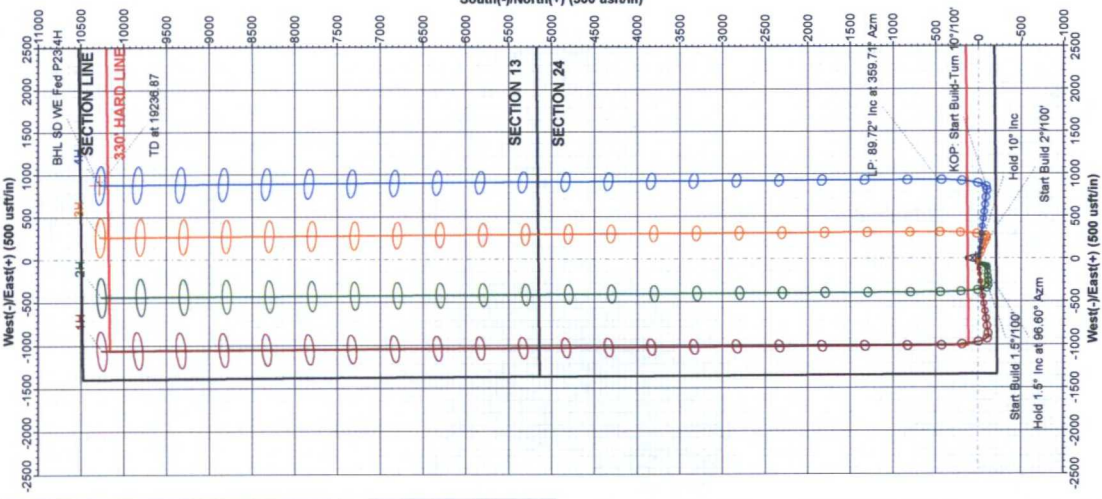
Sec	MD	Inc	Asl	TVD	+N/S	+E/W	Dip	TFace	VFace	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.5°/100'
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	Hold 1.5° Inc at 96.80° Azm
3	2100.00	1.50	96.80	2099.99	-0.15	1.30	1.50	96.80	-0.04	-0.04	Start Build 2°/100'
4	3785.00	1.50	96.80	3784.41	-5.22	45.12	2.00	0.00	-1.45	-1.45	Hold 10° Inc
5	4209.98	10.00	96.80	4208.98	-10.11	87.37	2.00	0.00	-2.80	-2.80	KOP Start Build-Turn 10°/100'
6	8527.68	10.00	96.80	8458.98	-68.34	832.12	0.00	0.00	-26.72	-26.72	LP 88.72° Inc at 359.71° Azm
7	18236.87	89.72	359.71	9633.00	10274.00	880.00	0.00	0.00	0.00	0.00	TD at 18236.87

DESIGN TARGET DETAILS

Name: BHL SD WE Fed P23 4H
TVD: 9683.00
Easting: 718181.00
Northing: 382527.00
Latitude: 32° 2' 59.01281 N
Longitude: 103° 37' 44.90089 W
Point: -plan this target center

LEGEND

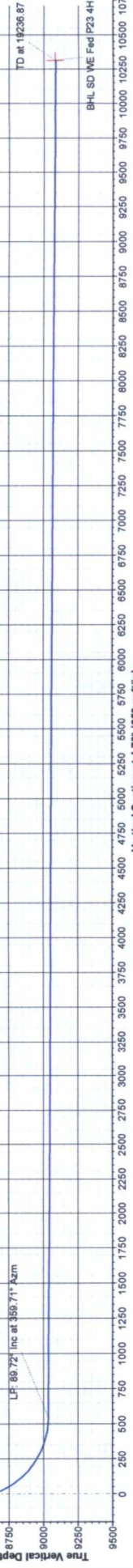
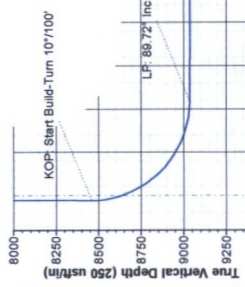
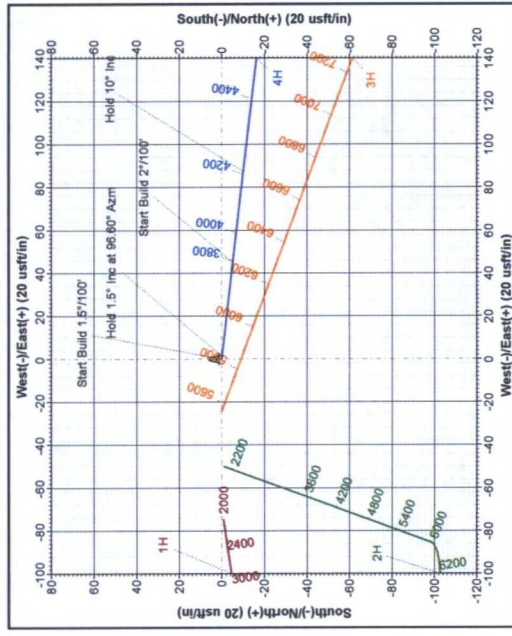
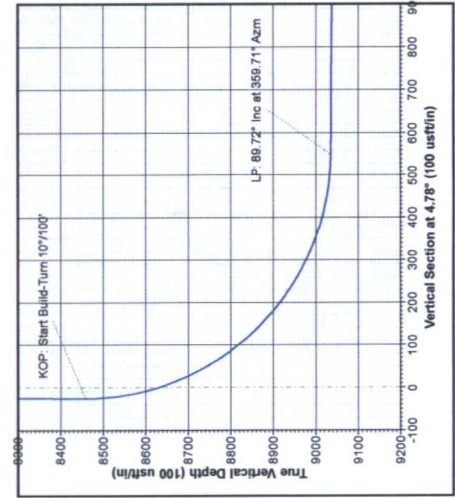
- 2H, OH / Job 1514568, Plan 3 02-11-16 V0
- 1H, OH / Job 1514567, Plan 3 02-11-16 V0
- 3H, OH / Job 1514569, Plan 3 02-11-16 V0
- Plan 3 02-11-16



Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866 East 3001
Zone Name: New Mexico East 3001
Local Origin: Well 4H, Grid North
Latitude: 32° 1' 17.39843 N
Longitude: 103° 37' 55.89985 W
Grid East: 717301.00
Grid North: 372253.00
Scale Factor: 1.000
Geomagnetic Model: HDGM
Sample Date: 11/16/2015
Magnetic Declination: 8.65°
Dip Angle from Horizontal: 59.75°
Magnetic Field Strength: 48063
To convert a Magnetic Direction to a Grid Direction, Add 6.95°
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 4.78° (250 usft/in)



Chevron

Lea County, NM (NAD27 NME)

SD WE 24 Fed P23

4H

OH / Job 1514570

Plan: Plan 3 02-11-16

Standard Planning Report

12 February, 2016





Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 4H
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:	4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514570		
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	4H		
Well Position	+N/-S	1.00 usft	Northing:
	+E/-W	75.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 1' 17.39843 N
		Longitude:	103° 37' 55.89985 W
		Ground Level:	3,133.00 usft

Wellbore	OH / Job 1514570		
Magnetics	Model Name	Sample Date	Declination
			(°)
	HDGM	11/18/2015	7.02
			Dip Angle
			(°)
			59.75
			Field Strength
			(nT)
			48,063

Design	Plan 3 02-11-16		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			4.78

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	96.60	2,099.99	-0.15	1.30	1.50	1.50	0.00	96.60	
3,785.00	1.50	96.60	3,784.41	-5.22	45.12	0.00	0.00	0.00	0.00	
4,209.98	10.00	96.60	4,206.86	-10.11	87.37	2.00	2.00	0.00	0.00	
8,527.68	10.00	96.60	8,458.98	-96.34	832.12	0.00	0.00	0.00	0.00	
9,436.87	89.72	359.71	9,035.19	474.24	929.60	10.00	8.77	-10.66	-96.84	
19,236.87	89.72	359.71	9,083.00	10,274.00	880.00	0.00	0.00	0.00	0.00	BHL SD WE Fed P23



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 4H
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:	4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514570		
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	96.60	2,099.99	-0.15	1.30	-0.04	1.50	1.50	0.00
Hold 1.5° Inc at 96.60° Azm									
2,200.00	1.50	96.60	2,199.95	-0.45	3.90	-0.12	0.00	0.00	0.00
2,300.00	1.50	96.60	2,299.92	-0.75	6.50	-0.21	0.00	0.00	0.00
2,400.00	1.50	96.60	2,399.89	-1.05	9.10	-0.29	0.00	0.00	0.00
2,500.00	1.50	96.60	2,499.85	-1.35	11.70	-0.37	0.00	0.00	0.00
2,600.00	1.50	96.60	2,599.82	-1.65	14.30	-0.46	0.00	0.00	0.00
2,700.00	1.50	96.60	2,699.78	-1.96	16.90	-0.54	0.00	0.00	0.00
2,800.00	1.50	96.60	2,799.75	-2.26	19.50	-0.62	0.00	0.00	0.00
2,900.00	1.50	96.60	2,899.71	-2.56	22.10	-0.71	0.00	0.00	0.00
3,000.00	1.50	96.60	2,999.68	-2.86	24.70	-0.79	0.00	0.00	0.00
3,100.00	1.50	96.60	3,099.65	-3.16	27.30	-0.87	0.00	0.00	0.00
3,200.00	1.50	96.60	3,199.61	-3.46	29.90	-0.96	0.00	0.00	0.00
3,300.00	1.50	96.60	3,299.58	-3.76	32.50	-1.04	0.00	0.00	0.00
3,400.00	1.50	96.60	3,399.54	-4.06	35.10	-1.12	0.00	0.00	0.00
3,500.00	1.50	96.60	3,499.51	-4.36	37.71	-1.21	0.00	0.00	0.00
3,600.00	1.50	96.60	3,599.47	-4.66	40.31	-1.29	0.00	0.00	0.00
3,700.00	1.50	96.60	3,699.44	-4.96	42.91	-1.37	0.00	0.00	0.00
3,785.00	1.50	96.60	3,784.41	-5.22	45.12	-1.45	0.00	0.00	0.00
Start Build 2°/100'									
3,800.00	1.80	96.60	3,799.41	-5.27	45.55	-1.46	2.00	2.00	0.01
3,900.00	3.80	96.60	3,899.28	-5.83	50.40	-1.62	2.00	2.00	0.00
4,000.00	5.80	96.60	3,998.92	-6.79	58.71	-1.88	2.00	2.00	0.00
4,100.00	7.80	96.60	4,098.22	-8.16	70.47	-2.26	2.00	2.00	0.00
4,209.98	10.00	96.60	4,206.87	-10.11	87.37	-2.80	2.00	2.00	0.00
Hold 10° Inc									
4,300.00	10.00	96.60	4,295.52	-11.91	102.90	-3.30	0.00	0.00	0.00
4,400.00	10.00	96.60	4,394.00	-13.91	120.15	-3.86	0.00	0.00	0.00
4,500.00	10.00	96.60	4,492.48	-15.90	137.40	-4.41	0.00	0.00	0.00
4,600.00	10.00	96.60	4,590.96	-17.90	154.65	-4.96	0.00	0.00	0.00
4,700.00	10.00	96.60	4,689.44	-19.90	171.89	-5.52	0.00	0.00	0.00
4,800.00	10.00	96.60	4,787.92	-21.89	189.14	-6.07	0.00	0.00	0.00



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 4H
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:	4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514570		
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)
4,900.00	10.00	96.60	4,886.40	-23.89	206.39	-6.63	0.00	0.00	0.00
5,000.00	10.00	96.60	4,984.88	-25.89	223.64	-7.18	0.00	0.00	0.00
5,100.00	10.00	96.60	5,083.37	-27.89	240.89	-7.73	0.00	0.00	0.00
5,200.00	10.00	96.60	5,181.85	-29.88	258.14	-8.29	0.00	0.00	0.00
5,300.00	10.00	96.60	5,280.33	-31.88	275.39	-8.84	0.00	0.00	0.00
5,400.00	10.00	96.60	5,378.81	-33.88	292.64	-9.40	0.00	0.00	0.00
5,500.00	10.00	96.60	5,477.29	-35.87	309.88	-9.95	0.00	0.00	0.00
5,600.00	10.00	96.60	5,575.77	-37.87	327.13	-10.50	0.00	0.00	0.00
5,700.00	10.00	96.60	5,674.25	-39.87	344.38	-11.06	0.00	0.00	0.00
5,800.00	10.00	96.60	5,772.73	-41.87	361.63	-11.61	0.00	0.00	0.00
5,900.00	10.00	96.60	5,871.21	-43.86	378.88	-12.17	0.00	0.00	0.00
6,000.00	10.00	96.60	5,969.69	-45.86	396.13	-12.72	0.00	0.00	0.00
6,100.00	10.00	96.60	6,068.17	-47.86	413.38	-13.27	0.00	0.00	0.00
6,200.00	10.00	96.60	6,166.66	-49.85	430.63	-13.83	0.00	0.00	0.00
6,300.00	10.00	96.60	6,265.14	-51.85	447.87	-14.38	0.00	0.00	0.00
6,400.00	10.00	96.60	6,363.62	-53.85	465.12	-14.94	0.00	0.00	0.00
6,500.00	10.00	96.60	6,462.10	-55.84	482.37	-15.49	0.00	0.00	0.00
6,600.00	10.00	96.60	6,560.58	-57.84	499.62	-16.04	0.00	0.00	0.00
6,700.00	10.00	96.60	6,659.06	-59.84	516.87	-16.60	0.00	0.00	0.00
6,800.00	10.00	96.60	6,757.54	-61.84	534.12	-17.15	0.00	0.00	0.00
6,900.00	10.00	96.60	6,856.02	-63.83	551.37	-17.71	0.00	0.00	0.00
7,000.00	10.00	96.60	6,954.50	-65.83	568.62	-18.26	0.00	0.00	0.00
7,100.00	10.00	96.60	7,052.98	-67.83	585.86	-18.81	0.00	0.00	0.00
7,200.00	10.00	96.60	7,151.46	-69.82	603.11	-19.37	0.00	0.00	0.00
7,300.00	10.00	96.60	7,249.95	-71.82	620.36	-19.92	0.00	0.00	0.00
7,400.00	10.00	96.60	7,348.43	-73.82	637.61	-20.48	0.00	0.00	0.00
7,500.00	10.00	96.60	7,446.91	-75.82	654.86	-21.03	0.00	0.00	0.00
7,600.00	10.00	96.60	7,545.39	-77.81	672.11	-21.58	0.00	0.00	0.00
7,700.00	10.00	96.60	7,643.87	-79.81	689.36	-22.14	0.00	0.00	0.00
7,800.00	10.00	96.60	7,742.35	-81.81	706.61	-22.69	0.00	0.00	0.00
7,900.00	10.00	96.60	7,840.83	-83.80	723.85	-23.25	0.00	0.00	0.00
8,000.00	10.00	96.60	7,939.31	-85.80	741.10	-23.80	0.00	0.00	0.00
8,100.00	10.00	96.60	8,037.79	-87.80	758.35	-24.36	0.00	0.00	0.00
8,200.00	10.00	96.60	8,136.27	-89.79	775.60	-24.91	0.00	0.00	0.00
8,300.00	10.00	96.60	8,234.75	-91.79	792.85	-25.46	0.00	0.00	0.00
8,400.00	10.00	96.60	8,333.24	-93.79	810.10	-26.02	0.00	0.00	0.00
8,500.00	10.00	96.60	8,431.72	-95.79	827.35	-26.57	0.00	0.00	0.00
8,527.68	10.00	96.60	8,458.98	-96.34	832.12	-26.72	0.00	0.00	0.00
KOP: Start Build-Turn 10°/100'									
8,550.00	9.98	83.71	8,480.96	-96.35	835.97	-26.42	10.00	-0.09	-57.76
8,600.00	11.60	58.17	8,530.10	-93.22	844.55	-22.58	10.00	3.24	-51.09
8,650.00	14.80	41.15	8,578.79	-85.76	853.03	-14.44	10.00	6.40	-34.03
8,700.00	18.79	30.63	8,626.66	-74.02	861.34	-2.05	10.00	7.98	-21.05
8,750.00	23.16	23.81	8,673.35	-58.08	869.42	14.50	10.00	8.75	-13.63
8,800.00	27.73	19.11	8,718.49	-38.08	877.20	35.08	10.00	9.15	-9.42
8,850.00	32.43	15.65	8,761.75	-14.16	884.63	59.54	10.00	9.39	-6.90
8,900.00	37.19	13.00	8,802.79	13.49	891.65	87.68	10.00	9.53	-5.31
8,950.00	42.01	10.87	8,841.31	44.66	898.21	119.29	10.00	9.63	-4.26
9,000.00	46.85	9.10	8,877.00	79.12	904.25	154.13	10.00	9.69	-3.53
9,050.00	51.72	7.60	8,909.61	116.61	909.74	191.95	10.00	9.74	-3.01
9,100.00	56.61	6.29	8,938.87	156.83	914.62	232.44	10.00	9.77	-2.63
9,150.00	61.50	5.11	8,964.58	199.49	918.87	275.30	10.00	9.80	-2.35
9,200.00	66.41	4.04	8,986.53	244.26	922.44	320.21	10.00	9.81	-2.14



Phoenix Technology Services

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 4H
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:	4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514570		
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)
9,250.00	71.32	3.05	9,004.55	290.79	925.32	366.82	10.00	9.83	-1.98
9,300.00	76.24	2.12	9,018.51	338.74	927.48	414.78	10.00	9.84	-1.87
9,350.00	81.16	1.22	9,028.30	387.73	928.91	463.72	10.00	9.84	-1.79
9,400.00	86.09	0.35	9,033.85	437.40	929.58	513.28	10.00	9.85	-1.75
9,436.87	89.72	359.71	9,035.19	474.24	929.60	549.99	10.00	9.85	-1.73
LP: 89.72° Inc at 359.71° Azm									
9,500.00	89.72	359.71	9,035.50	537.37	929.28	612.87	0.00	0.00	0.00
9,600.00	89.72	359.71	9,035.99	637.37	928.78	712.48	0.00	0.00	0.00
9,700.00	89.72	359.71	9,036.48	737.37	928.27	812.09	0.00	0.00	0.00
9,800.00	89.72	359.71	9,036.97	837.36	927.76	911.70	0.00	0.00	0.00
9,900.00	89.72	359.71	9,037.45	937.36	927.26	1,011.31	0.00	0.00	0.00
10,000.00	89.72	359.71	9,037.94	1,037.36	926.75	1,110.91	0.00	0.00	0.00
10,100.00	89.72	359.71	9,038.43	1,137.36	926.25	1,210.52	0.00	0.00	0.00
10,200.00	89.72	359.71	9,038.92	1,237.35	925.74	1,310.13	0.00	0.00	0.00
10,300.00	89.72	359.71	9,039.40	1,337.35	925.23	1,409.74	0.00	0.00	0.00
10,400.00	89.72	359.71	9,039.89	1,437.35	924.73	1,509.35	0.00	0.00	0.00
10,500.00	89.72	359.71	9,040.38	1,537.35	924.22	1,608.96	0.00	0.00	0.00
10,600.00	89.72	359.71	9,040.87	1,637.34	923.71	1,708.56	0.00	0.00	0.00
10,700.00	89.72	359.71	9,041.36	1,737.34	923.21	1,808.17	0.00	0.00	0.00
10,800.00	89.72	359.71	9,041.84	1,837.34	922.70	1,907.78	0.00	0.00	0.00
10,900.00	89.72	359.71	9,042.33	1,937.34	922.20	2,007.39	0.00	0.00	0.00
11,000.00	89.72	359.71	9,042.82	2,037.33	921.69	2,107.00	0.00	0.00	0.00
11,100.00	89.72	359.71	9,043.31	2,137.33	921.18	2,206.61	0.00	0.00	0.00
11,200.00	89.72	359.71	9,043.79	2,237.33	920.68	2,306.21	0.00	0.00	0.00
11,300.00	89.72	359.71	9,044.28	2,337.33	920.17	2,405.82	0.00	0.00	0.00
11,400.00	89.72	359.71	9,044.77	2,437.32	919.67	2,505.43	0.00	0.00	0.00
11,500.00	89.72	359.71	9,045.26	2,537.32	919.16	2,605.04	0.00	0.00	0.00
11,600.00	89.72	359.71	9,045.75	2,637.32	918.65	2,704.65	0.00	0.00	0.00
11,700.00	89.72	359.71	9,046.23	2,737.32	918.15	2,804.25	0.00	0.00	0.00
11,800.00	89.72	359.71	9,046.72	2,837.31	917.64	2,903.86	0.00	0.00	0.00
11,900.00	89.72	359.71	9,047.21	2,937.31	917.13	3,003.47	0.00	0.00	0.00
12,000.00	89.72	359.71	9,047.70	3,037.31	916.63	3,103.08	0.00	0.00	0.00
12,100.00	89.72	359.71	9,048.19	3,137.31	916.12	3,202.69	0.00	0.00	0.00
12,200.00	89.72	359.71	9,048.67	3,237.30	915.62	3,302.30	0.00	0.00	0.00
12,300.00	89.72	359.71	9,049.16	3,337.30	915.11	3,401.90	0.00	0.00	0.00
12,400.00	89.72	359.71	9,049.65	3,437.30	914.60	3,501.51	0.00	0.00	0.00
12,500.00	89.72	359.71	9,050.14	3,537.30	914.10	3,601.12	0.00	0.00	0.00
12,600.00	89.72	359.71	9,050.62	3,637.29	913.59	3,700.73	0.00	0.00	0.00
12,700.00	89.72	359.71	9,051.11	3,737.29	913.09	3,800.34	0.00	0.00	0.00
12,800.00	89.72	359.71	9,051.60	3,837.29	912.58	3,899.94	0.00	0.00	0.00
12,900.00	89.72	359.71	9,052.09	3,937.29	912.07	3,999.55	0.00	0.00	0.00
13,000.00	89.72	359.71	9,052.58	4,037.28	911.57	4,099.16	0.00	0.00	0.00
13,100.00	89.72	359.71	9,053.06	4,137.28	911.06	4,198.77	0.00	0.00	0.00
13,200.00	89.72	359.71	9,053.55	4,237.28	910.55	4,298.38	0.00	0.00	0.00
13,300.00	89.72	359.71	9,054.04	4,337.28	910.05	4,397.99	0.00	0.00	0.00
13,400.00	89.72	359.71	9,054.53	4,437.27	909.54	4,497.59	0.00	0.00	0.00
13,500.00	89.72	359.71	9,055.01	4,537.27	909.04	4,597.20	0.00	0.00	0.00
13,600.00	89.72	359.71	9,055.50	4,637.27	908.53	4,696.81	0.00	0.00	0.00
13,700.00	89.72	359.71	9,055.99	4,737.27	908.02	4,796.42	0.00	0.00	0.00
13,800.00	89.72	359.71	9,056.48	4,837.26	907.52	4,896.03	0.00	0.00	0.00
13,900.00	89.72	359.71	9,056.97	4,937.26	907.01	4,995.64	0.00	0.00	0.00
14,000.00	89.72	359.71	9,057.45	5,037.26	906.51	5,095.24	0.00	0.00	0.00
14,100.00	89.72	359.71	9,057.94	5,137.26	906.00	5,194.85	0.00	0.00	0.00
14,200.00	89.72	359.71	9,058.43	5,237.25	905.49	5,294.46	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:	4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514570		
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)
14,300.00	89.72	359.71	9,058.92	5,337.25	904.99	5,394.07	0.00	0.00	0.00
14,400.00	89.72	359.71	9,059.41	5,437.25	904.48	5,493.68	0.00	0.00	0.00
14,500.00	89.72	359.71	9,059.89	5,537.25	903.98	5,593.28	0.00	0.00	0.00
14,600.00	89.72	359.71	9,060.38	5,637.24	903.47	5,692.89	0.00	0.00	0.00
14,700.00	89.72	359.71	9,060.87	5,737.24	902.96	5,792.50	0.00	0.00	0.00
14,800.00	89.72	359.71	9,061.36	5,837.24	902.46	5,892.11	0.00	0.00	0.00
14,900.00	89.72	359.71	9,061.84	5,937.24	901.95	5,991.72	0.00	0.00	0.00
15,000.00	89.72	359.71	9,062.33	6,037.23	901.44	6,091.33	0.00	0.00	0.00
15,100.00	89.72	359.71	9,062.82	6,137.23	900.94	6,190.93	0.00	0.00	0.00
15,200.00	89.72	359.71	9,063.31	6,237.23	900.43	6,290.54	0.00	0.00	0.00
15,300.00	89.72	359.71	9,063.80	6,337.23	899.93	6,390.15	0.00	0.00	0.00
15,400.00	89.72	359.71	9,064.28	6,437.23	899.42	6,489.76	0.00	0.00	0.00
15,500.00	89.72	359.71	9,064.77	6,537.22	898.91	6,589.37	0.00	0.00	0.00
15,600.00	89.72	359.71	9,065.26	6,637.22	898.41	6,688.97	0.00	0.00	0.00
15,700.00	89.72	359.71	9,065.75	6,737.22	897.90	6,788.58	0.00	0.00	0.00
15,800.00	89.72	359.71	9,066.23	6,837.22	897.40	6,888.19	0.00	0.00	0.00
15,900.00	89.72	359.71	9,066.72	6,937.21	896.89	6,987.80	0.00	0.00	0.00
16,000.00	89.72	359.71	9,067.21	7,037.21	896.38	7,087.41	0.00	0.00	0.00
16,100.00	89.72	359.71	9,067.70	7,137.21	895.88	7,187.02	0.00	0.00	0.00
16,200.00	89.72	359.71	9,068.19	7,237.21	895.37	7,286.62	0.00	0.00	0.00
16,300.00	89.72	359.71	9,068.67	7,337.20	894.86	7,386.23	0.00	0.00	0.00
16,400.00	89.72	359.71	9,069.16	7,437.20	894.36	7,485.84	0.00	0.00	0.00
16,500.00	89.72	359.71	9,069.65	7,537.20	893.85	7,585.45	0.00	0.00	0.00
16,600.00	89.72	359.71	9,070.14	7,637.20	893.35	7,685.06	0.00	0.00	0.00
16,700.00	89.72	359.71	9,070.62	7,737.19	892.84	7,784.67	0.00	0.00	0.00
16,800.00	89.72	359.71	9,071.11	7,837.19	892.33	7,884.27	0.00	0.00	0.00
16,900.00	89.72	359.71	9,071.60	7,937.19	891.83	7,983.88	0.00	0.00	0.00
17,000.00	89.72	359.71	9,072.09	8,037.19	891.32	8,083.49	0.00	0.00	0.00
17,100.00	89.72	359.71	9,072.58	8,137.18	890.82	8,183.10	0.00	0.00	0.00
17,200.00	89.72	359.71	9,073.06	8,237.18	890.31	8,282.71	0.00	0.00	0.00
17,300.00	89.72	359.71	9,073.55	8,337.18	889.80	8,382.31	0.00	0.00	0.00
17,400.00	89.72	359.71	9,074.04	8,437.18	889.30	8,481.92	0.00	0.00	0.00
17,500.00	89.72	359.71	9,074.53	8,537.17	888.79	8,581.53	0.00	0.00	0.00
17,600.00	89.72	359.71	9,075.02	8,637.17	888.28	8,681.14	0.00	0.00	0.00
17,700.00	89.72	359.71	9,075.50	8,737.17	887.78	8,780.75	0.00	0.00	0.00
17,800.00	89.72	359.71	9,075.99	8,837.17	887.27	8,880.36	0.00	0.00	0.00
17,900.00	89.72	359.71	9,076.48	8,937.16	886.77	8,979.96	0.00	0.00	0.00
18,000.00	89.72	359.71	9,076.97	9,037.16	886.26	9,079.57	0.00	0.00	0.00
18,100.00	89.72	359.71	9,077.45	9,137.16	885.75	9,179.18	0.00	0.00	0.00
18,200.00	89.72	359.71	9,077.94	9,237.16	885.25	9,278.79	0.00	0.00	0.00
18,300.00	89.72	359.71	9,078.43	9,337.15	884.74	9,378.40	0.00	0.00	0.00
18,400.00	89.72	359.71	9,078.92	9,437.15	884.24	9,478.01	0.00	0.00	0.00
18,500.00	89.72	359.71	9,079.41	9,537.15	883.73	9,577.61	0.00	0.00	0.00
18,600.00	89.72	359.71	9,079.89	9,637.15	883.22	9,677.22	0.00	0.00	0.00
18,700.00	89.72	359.71	9,080.38	9,737.14	882.72	9,776.83	0.00	0.00	0.00
18,800.00	89.72	359.71	9,080.87	9,837.14	882.21	9,876.44	0.00	0.00	0.00
18,900.00	89.72	359.71	9,081.36	9,937.14	881.71	9,976.05	0.00	0.00	0.00
19,000.00	89.72	359.71	9,081.84	10,037.14	881.20	10,075.65	0.00	0.00	0.00
19,100.00	89.72	359.71	9,082.33	10,137.13	880.69	10,175.26	0.00	0.00	0.00
19,200.00	89.72	359.71	9,082.82	10,237.13	880.19	10,274.87	0.00	0.00	0.00
19,236.87	89.72	359.71	9,083.00	10,274.00	880.00	10,311.60	0.00	0.00	0.00
TD at 19236.87									



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:	4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH / Job 1514570		
Design:	Plan 3 02-11-16		

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 Fed P23 4H	0.00	0.01	9,083.00	10,274.00	880.00	382,527.00	718,181.00	32° 2' 59.01261 N	103° 37' 44.90069 W
- plan hits target center									
- Point									

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
		(usft)	(usft)		
2,000.00	2,000.00	0.00	0.00	Start Build 1.5°/100'	
2,100.00	2,099.99	-0.15	1.30	Hold 1.5° Inc at 96.60° Azm	
3,785.00	3,784.41	-5.22	45.12	Start Build 2°/100'	
4,209.98	4,206.87	-10.11	87.37	Hold 10° Inc	
8,527.68	8,458.98	-96.34	832.12	KOP: Start Build-Turn 10°/100'	
9,436.87	9,035.19	474.24	929.60	LP: 89.72° Inc at 359.71° Azm	
19,236.87	9,083.00	10,274.00	880.00	TD at 19236.87	