

Chevron U.S.A. Inc.

Delaware Basin - Kyle Johnson

Bell Lake 18-23-34

Horizontal Wellbore Prelim Plan

HOBBS OCD

Wellbore #1

NOV 06 2013

RECEIVED

Plan: Preliminary Plan

Standard Planning Report

23 October, 2013

NOV 06 2013

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Planning Report

Database:	EDMSHARE_R5000	Local Co-ordinate Reference:	Site Bell Lake 18-23-34
Company:	Chevron U.S.A. Inc.	TVD Reference:	WELL @ 3549.5ft (Original Well Elev)
Project:	Delaware Basin - Kyle Johnson	MD Reference:	WELL @ 3549.5ft (Original Well Elev)
Site:	Bell Lake 18-23-34	North Reference:	Grid
Well:	Horizontal Wellbore Prelim Plan	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Preliminary Plan		

Project	Delaware Basin - Kyle Johnson		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Bell Lake 18-23-34		
Site Position:		Northing:	145,026.23 m
From:	Lat/Long	Easting:	229,374.54 m
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in
		Latitude:	32° 18' 19.667 N
		Longitude:	103° 30' 57.478 W
		Grid Convergence:	0.44 °

Well	Horizontal Wellbore Prelim Plan		
Well Position	+N/-S	0.0 ft	Northing: 145,026.23 m
	+E/-W	0.0 ft	Easting: 229,374.54 m
Position Uncertainty	0.0 ft	Wellhead Elevation:	Ground Level: 3,525.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	9/25/2013	7.28
			Dip Angle
			(°)
			60.21
			Field Strength
			(nT)
			48,410

Design	Preliminary Plan		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			89.57

Plan Sections:										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,999.5	0.00	0.00	9,999.5	0.0	0.0	0.00	0.00	0.00	0.00	
10,749.5	90.00	89.57	10,477.0	3.6	477.5	12.00	12.00	0.00	89.57	Bell Lake BHL
14,817.4	90.00	89.57	10,477.0	34.3	4,545.2	0.00	0.00	0.00	0.00	Bell Lake BHL

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Planning Report

Database:	EDMSHARE_R5000	Local Co-ordinate Reference:	Site Bell Lake 18-23-34
Company:	Chevron U.S.A. Inc.	TVD Reference:	WELL @ 3549.5ft (Original Well Elev)
Project:	Delaware Basin - Kyle Johnson	MD Reference:	WELL @ 3549.5ft (Original Well Elev)
Site:	Bell Lake 18-23-34	North Reference:	Grid
Well:	Horizontal Wellbore Prelim Plan	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Preliminary Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

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Planned Survey									
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5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,999.5	0.00	0.00	9,999.5	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.06	89.57	10,000.0	0.0	0.0	0.0	12.00	12.00	0.00
10,100.0	12.06	89.57	10,099.3	0.1	10.5	10.5	12.00	12.00	0.00
10,200.0	24.06	89.57	10,194.2	0.3	41.5	41.5	12.00	12.00	0.00
10,300.0	36.06	89.57	10,280.6	0.7	91.5	91.5	12.00	12.00	0.00
10,400.0	48.06	89.57	10,354.7	1.2	158.3	158.4	12.00	12.00	0.00
10,500.0	60.06	89.57	10,413.2	1.8	239.2	239.2	12.00	12.00	0.00
10,600.0	72.06	89.57	10,453.8	2.5	330.4	330.4	12.00	12.00	0.00

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Planning Report

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Company:	Chevron U.S.A. Inc.	TVD Reference:	WELL @ 3549.5ft (Original Well Elev)
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Wellbore:	Wellbore #1		
Design:	Preliminary Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,700.0	84.06	89.57	10,474.4	3.2	428.0	428.1	12.00	12.00	0.00	
10,749.5	90.00	89.57	10,477.0	3.6	477.5	477.5	12.00	12.00	0.00	
10,800.0	90.00	89.57	10,477.0	4.0	527.9	528.0	0.00	0.00	0.00	
10,900.0	90.00	89.57	10,477.0	4.7	627.9	628.0	0.00	0.00	0.00	
11,000.0	90.00	89.57	10,477.0	5.5	727.9	728.0	0.00	0.00	0.00	
11,100.0	90.00	89.57	10,477.0	6.2	827.9	828.0	0.00	0.00	0.00	
11,200.0	90.00	89.57	10,477.0	7.0	927.9	928.0	0.00	0.00	0.00	
11,300.0	90.00	89.57	10,477.0	7.8	1,027.9	1,028.0	0.00	0.00	0.00	
11,400.0	90.00	89.57	10,477.0	8.5	1,127.9	1,128.0	0.00	0.00	0.00	
11,500.0	90.00	89.57	10,477.0	9.3	1,227.9	1,228.0	0.00	0.00	0.00	
11,600.0	90.00	89.57	10,477.0	10.0	1,327.9	1,328.0	0.00	0.00	0.00	
11,700.0	90.00	89.57	10,477.0	10.8	1,427.9	1,428.0	0.00	0.00	0.00	
11,800.0	90.00	89.57	10,477.0	11.5	1,527.9	1,528.0	0.00	0.00	0.00	
11,900.0	90.00	89.57	10,477.0	12.3	1,627.9	1,628.0	0.00	0.00	0.00	
12,000.0	90.00	89.57	10,477.0	13.0	1,727.9	1,728.0	0.00	0.00	0.00	
12,100.0	90.00	89.57	10,477.0	13.8	1,827.9	1,828.0	0.00	0.00	0.00	
12,200.0	90.00	89.57	10,477.0	14.5	1,927.9	1,928.0	0.00	0.00	0.00	
12,300.0	90.00	89.57	10,477.0	15.3	2,027.9	2,028.0	0.00	0.00	0.00	
12,400.0	90.00	89.57	10,477.0	16.1	2,127.9	2,128.0	0.00	0.00	0.00	
12,500.0	90.00	89.57	10,477.0	16.8	2,227.9	2,228.0	0.00	0.00	0.00	
12,600.0	90.00	89.57	10,477.0	17.6	2,327.9	2,328.0	0.00	0.00	0.00	
12,700.0	90.00	89.57	10,477.0	18.3	2,427.9	2,428.0	0.00	0.00	0.00	
12,800.0	90.00	89.57	10,477.0	19.1	2,527.9	2,528.0	0.00	0.00	0.00	
12,900.0	90.00	89.57	10,477.0	19.8	2,627.9	2,628.0	0.00	0.00	0.00	
13,000.0	90.00	89.57	10,477.0	20.6	2,727.9	2,728.0	0.00	0.00	0.00	
13,100.0	90.00	89.57	10,477.0	21.3	2,827.9	2,828.0	0.00	0.00	0.00	
13,200.0	90.00	89.57	10,477.0	22.1	2,927.9	2,928.0	0.00	0.00	0.00	
13,300.0	90.00	89.57	10,477.0	22.8	3,027.9	3,028.0	0.00	0.00	0.00	
13,400.0	90.00	89.57	10,477.0	23.6	3,127.9	3,128.0	0.00	0.00	0.00	
13,500.0	90.00	89.57	10,477.0	24.4	3,227.9	3,228.0	0.00	0.00	0.00	
13,600.0	90.00	89.57	10,477.0	25.1	3,327.9	3,328.0	0.00	0.00	0.00	
13,700.0	90.00	89.57	10,477.0	25.9	3,427.9	3,428.0	0.00	0.00	0.00	
13,800.0	90.00	89.57	10,477.0	26.6	3,527.9	3,528.0	0.00	0.00	0.00	
13,900.0	90.00	89.57	10,477.0	27.4	3,627.9	3,628.0	0.00	0.00	0.00	
14,000.0	90.00	89.57	10,477.0	28.1	3,727.9	3,728.0	0.00	0.00	0.00	
14,100.0	90.00	89.57	10,477.0	28.9	3,827.9	3,828.0	0.00	0.00	0.00	
14,200.0	90.00	89.57	10,477.0	29.6	3,927.9	3,928.0	0.00	0.00	0.00	
14,300.0	90.00	89.57	10,477.0	30.4	4,027.9	4,028.0	0.00	0.00	0.00	
14,400.0	90.00	89.57	10,477.0	31.2	4,127.8	4,128.0	0.00	0.00	0.00	
14,500.0	90.00	89.57	10,477.0	31.9	4,227.8	4,228.0	0.00	0.00	0.00	
14,600.0	90.00	89.57	10,477.0	32.7	4,327.8	4,328.0	0.00	0.00	0.00	
14,700.0	90.00	89.57	10,477.0	33.4	4,427.8	4,428.0	0.00	0.00	0.00	
14,800.0	90.00	89.57	10,477.0	34.2	4,527.8	4,528.0	0.00	0.00	0.00	
14,817.4	90.00	89.57	10,477.0	34.3	4,545.2	4,545.3	0.00	0.00	0.00	

chevron
Planning Report

Database:	EDMSHARE_R5000	Local Co-ordinate Reference:	Site Bell Lake 18-23-34
Company:	Chevron U.S.A. Inc.	TVD Reference:	WELL @ 3549.5ft (Original Well Elev)
Project:	Delaware Basin - Kyle Johnson	MD Reference:	WELL @ 3549.5ft (Original Well Elev)
Site:	Bell Lake 18-23-34	North Reference:	Grid
Well:	Horizontal Wellbore Prelim Plan	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Preliminary Plan		

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting			
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(m)	(m)	Latitude	Longitude	
Bell Lake BHL	0.00	90.00	10,477.0	34.3	4,545.2	145,036.69	230,759.91	32° 18' 19.660 N	103° 30' 4.520 W	
- plan hits target center										
- Rectangle (sides W0.0 H0.0 D0.0)										