



Marshall County, WV
 Conner Pad
 Conner 2H
 GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
 As Drilled

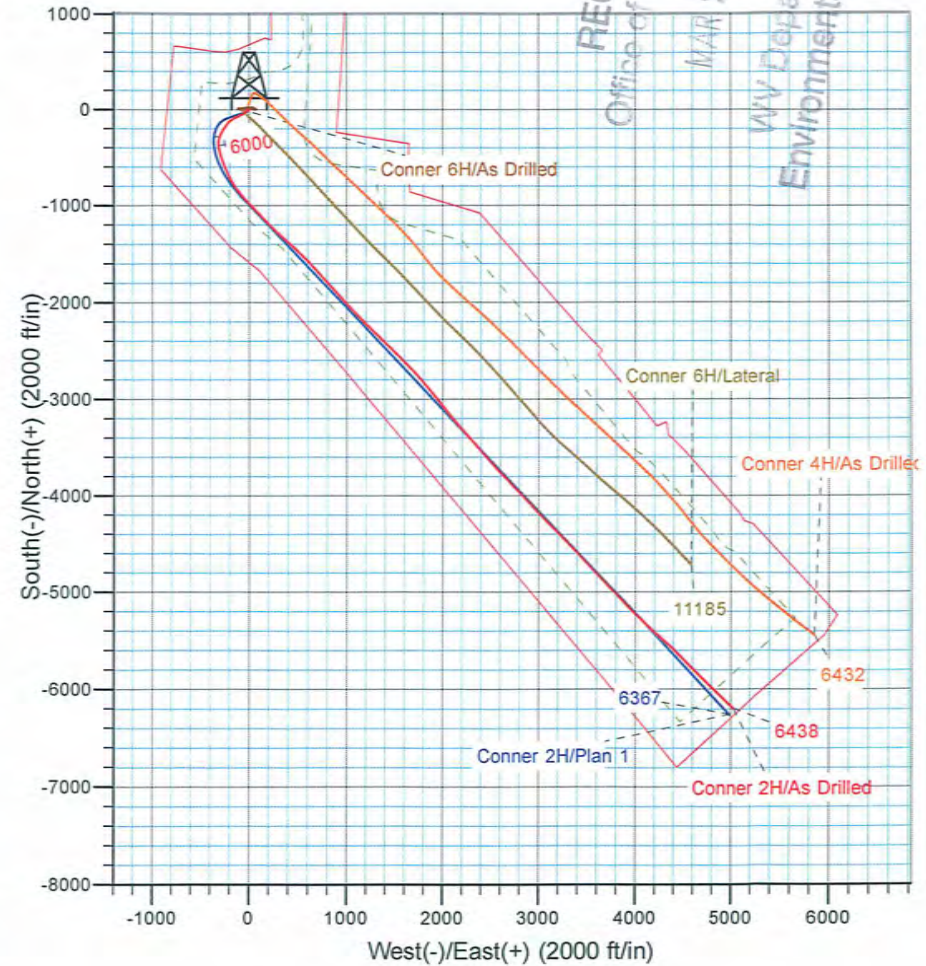
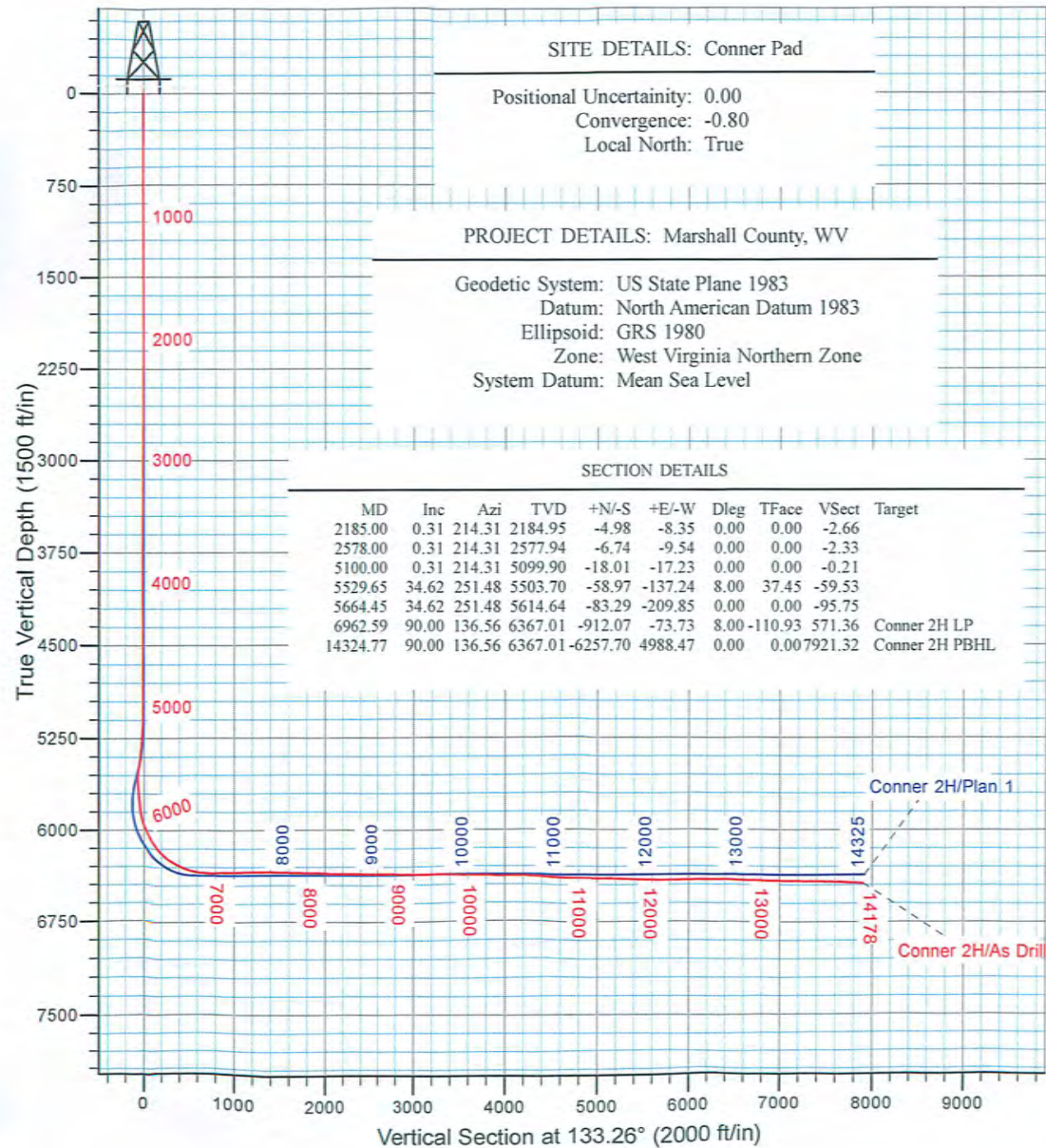


Azimuths to True North
 Magnetic North: -8.63°
 Magnetic Field
 Strength: 52630.65nT
 Dip Angle: 67.36°
 Date: 10/2/2013
 Model: BGM2013

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 WV Department
 Environmental Protection

WELL DETAILS: Conner 2H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	505327.06	1617496.30	39° 52' 50.394 N	80° 45' 2.819 W



LEGEND

- Conner 2H, OH, Plan 1 V0
- Conner 4H, OH, As Drilled V0
- △ Conner 6H, Lateral, Lateral V0
- ⊕ Conner 6H, Pilot, As Drilled V0
- As Drilled

Robert Ebbecke
 12:57, October 30 2013

Scientific Drilling International
 3475 Washington Ave
 Finleyville, PA 15332

51-01596



Chevron Appalachia, LLC

Marshall County, WV

Conner Pad

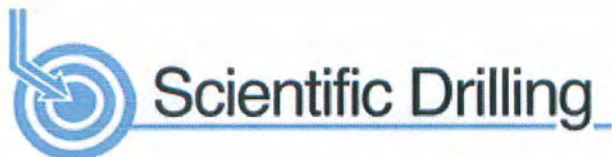
Conner 2H

OH

Design: As Drilled

Standard Survey Report

30 October, 2013



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04/18/2014



Scientific Drilling International
Survey Report

51-01596

Company:	Chevron Appalachia, LLC	Local Co-ordinate Reference:	Well Conner 2H
Project:	Marshall County, WV	TVD Reference:	GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Site:	Conner Pad	MD Reference:	GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Well:	Conner 2H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Project	Marshall County, WV		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	West Virginia Northern Zone		

Site	Conner Pad				
Site Position:		Northing:	505,327.06 usft	Latitude:	39° 52' 50.394 N
From:	Map	Easting:	1,617,496.30 usft	Longitude:	80° 45' 2.819 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.80 °

Well	Conner 2H					
Well Position	+N/-S	0.00 ft	Northing:	505,327.06 usft	Latitude:	39° 52' 50.394 N
	+E/-W	0.00 ft	Easting:	1,617,496.30 usft	Longitude:	80° 45' 2.819 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	1,220.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	10/2/2013	-8.63	67.36	52,631

Design	As Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	133.26	

Survey Program	Date	10/30/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	2,481.00	Gyro Data Survey #3 (OH)	GYD_CT	Gyrodata continuous	
2,596.01	14,178.03	SDI MWD Survey #4 (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	0.26	213.55	100.00	-0.19	-0.13	0.04	0.26	0.26	0.00	
First Gyro Data Gyro Survey										
200.00	0.41	209.17	200.00	-0.69	-0.43	0.16	0.15	0.15	-4.38	
300.00	0.75	219.53	299.99	-1.51	-1.02	0.29	0.35	0.34	10.36	
400.00	0.61	213.16	399.99	-2.46	-1.72	0.43	0.16	-0.14	-6.37	
500.00	0.24	196.84	499.98	-3.10	-2.08	0.62	0.39	-0.37	-16.32	
600.00	0.29	244.55	599.98	-3.41	-2.36	0.62	0.22	0.05	47.71	
700.00	0.04	313.03	699.98	-3.50	-2.62	0.49	0.28	-0.25	68.48	
800.00	0.16	83.40	799.98	-3.46	-2.51	0.55	0.19	0.12	130.37	



Scientific Drilling International

Survey Report

Company: Chevron Appalachia, LLC	Local Co-ordinate Reference: Well Conner 2H
Project: Marshall County, WV	TVD Reference: GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Site: Conner Pad	MD Reference: GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Well: Conner 2H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
900.00	0.26	294.77	899.98	-3.35	-2.57	0.42	0.41	0.10	-148.63	
1,000.00	0.18	254.27	999.98	-3.30	-2.93	0.12	0.17	-0.08	-40.50	
1,100.00	0.31	321.38	1,099.98	-3.13	-3.25	-0.22	0.29	0.13	67.11	
1,200.00	0.26	329.58	1,199.98	-2.72	-3.53	-0.71	0.06	-0.05	8.20	
1,300.00	0.27	322.75	1,299.98	-2.34	-3.79	-1.16	0.03	0.01	-6.83	
1,400.00	0.25	322.37	1,399.98	-1.98	-4.07	-1.61	0.02	-0.02	-0.38	
1,500.00	0.24	316.31	1,499.98	-1.65	-4.35	-2.03	0.03	-0.01	-6.06	
1,600.00	0.08	341.35	1,599.97	-1.43	-4.51	-2.30	0.17	-0.16	25.04	
1,700.00	0.19	264.63	1,699.97	-1.38	-4.70	-2.47	0.19	0.11	-76.72	
1,800.00	0.55	224.32	1,799.97	-1.74	-5.20	-2.59	0.42	0.36	-40.31	
1,900.00	0.42	198.90	1,899.97	-2.43	-5.65	-2.45	0.25	-0.13	-25.42	
2,000.00	0.31	219.82	1,999.97	-2.99	-5.95	-2.28	0.17	-0.11	20.92	
2,100.00	0.22	192.70	2,099.97	-3.38	-6.16	-2.17	0.15	-0.09	-27.12	
2,200.00	0.13	227.22	2,199.97	-3.65	-6.29	-2.08	0.13	-0.09	34.52	
2,300.00	0.23	269.36	2,299.97	-3.73	-6.57	-2.23	0.16	0.10	42.14	
2,400.00	0.29	314.72	2,399.96	-3.55	-6.95	-2.63	0.21	0.06	45.36	
2,481.00	0.26	291.85	2,480.96	-3.34	-7.27	-3.01	0.14	-0.04	-28.23	
Last Gyro Data Gyro Survey										
2,596.01	0.15	273.21	2,595.97	-3.23	-7.66	-3.36	0.11	-0.10	-16.21	
First SDI MWD Survey										
2,691.01	0.50	273.42	2,690.97	-3.20	-8.20	-3.78	0.37	0.37	0.22	
2,786.01	0.59	268.09	2,785.96	-3.19	-9.10	-4.44	0.11	0.09	-5.61	
2,880.01	0.84	285.78	2,879.95	-3.02	-10.25	-5.39	0.35	0.27	18.82	
2,975.01	0.91	281.31	2,974.94	-2.68	-11.66	-6.65	0.10	0.07	-4.71	
3,070.01	0.75	302.41	3,069.93	-2.20	-12.92	-7.90	0.36	-0.17	22.21	
3,165.01	0.98	301.92	3,164.92	-1.44	-14.14	-9.31	0.24	0.24	-0.52	
3,259.01	1.11	290.69	3,258.91	-0.69	-15.67	-10.94	0.26	0.14	-11.95	
3,354.01	0.47	265.22	3,353.90	-0.40	-16.92	-12.05	0.75	-0.67	-26.81	
3,449.01	0.55	246.79	3,448.90	-0.61	-17.73	-12.49	0.19	0.08	-19.40	
3,543.01	0.65	254.70	3,542.89	-0.93	-18.66	-12.95	0.14	0.11	8.41	
3,638.01	0.94	267.84	3,637.88	-1.10	-19.95	-13.78	0.36	0.31	13.83	
3,733.01	0.52	234.28	3,732.87	-1.38	-21.08	-14.41	0.61	-0.44	-35.33	
3,828.01	0.38	226.17	3,827.87	-1.85	-21.66	-14.50	0.16	-0.15	-8.54	
3,922.01	0.56	234.68	3,921.87	-2.33	-22.26	-14.61	0.20	0.19	9.05	
4,017.01	0.32	262.67	4,016.87	-2.64	-22.90	-14.87	0.33	-0.25	29.46	
4,112.01	0.98	169.87	4,111.86	-3.47	-23.02	-14.39	1.10	0.69	-97.68	
4,206.01	0.68	180.75	4,205.85	-4.82	-22.89	-13.37	0.36	-0.32	11.57	
4,301.01	0.38	171.94	4,300.85	-5.69	-22.85	-12.74	0.33	-0.32	-9.27	
4,396.01	1.15	184.22	4,395.84	-6.96	-22.88	-11.89	0.82	0.81	12.93	
4,490.01	0.86	180.32	4,489.82	-8.60	-22.95	-10.82	0.32	-0.31	-4.15	
4,585.01	0.94	187.49	4,584.81	-10.09	-23.06	-9.88	0.15	0.08	7.55	
4,680.01	0.74	225.12	4,679.80	-11.29	-23.59	-9.44	0.60	0.21	39.61	
4,775.01	0.57	251.83	4,774.80	-11.87	-24.48	-9.69	0.36	-0.18	28.12	

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 Office of Oil and Gas
 MAR 28 2014
 WV Department of Environmental Protection
 COMASS-001-01-170
 04/18/2014



Scientific Drilling International Survey Report

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,869.01	0.65	263.55	4,868.79	-12.08	-25.45	-10.26	0.16	0.09	12.47	
4,964.01	0.59	262.44	4,963.79	-12.21	-26.47	-10.91	0.06	-0.06	-1.17	
5,001.01	0.91	259.16	5,000.78	-12.29	-26.95	-11.21	0.87	0.86	-8.86	
5,095.01	12.56	226.39	5,093.98	-19.50	-35.11	-12.20	12.56	12.39	-34.86	
5,190.01	15.49	232.50	5,186.15	-34.35	-52.66	-14.81	3.45	3.08	6.43	
5,285.01	20.29	240.15	5,276.54	-50.29	-77.03	-21.63	5.62	5.05	8.05	
5,379.01	23.46	242.42	5,363.76	-67.07	-107.76	-32.51	3.49	3.37	2.41	
5,474.01	27.78	245.34	5,449.41	-85.07	-144.66	-47.05	4.74	4.55	3.07	
5,568.01	30.66	236.03	5,531.48	-107.61	-184.47	-60.59	5.72	3.06	-9.90	
5,662.01	33.54	216.34	5,611.32	-142.03	-219.84	-62.77	11.50	3.06	-20.95	
5,756.01	28.79	215.25	5,691.73	-181.45	-248.31	-56.48	5.09	-5.05	-1.16	
5,850.01	28.14	208.90	5,774.39	-219.35	-272.09	-47.83	3.29	-0.69	-6.76	
5,943.01	33.25	205.78	5,854.34	-261.54	-293.79	-34.72	5.75	5.49	-3.35	
6,037.01	40.78	193.42	5,929.44	-314.76	-312.18	-11.64	11.23	8.01	-13.15	
6,131.01	41.80	171.28	6,000.45	-375.91	-314.57	28.53	15.52	1.09	-23.55	
6,225.01	43.35	169.11	6,069.68	-438.57	-303.72	79.37	2.27	1.65	-2.31	
6,320.01	47.65	160.49	6,136.31	-503.77	-285.81	137.10	7.89	4.53	-9.07	
6,415.01	56.99	158.14	6,194.32	-573.99	-259.20	204.60	10.02	9.83	-2.47	
6,509.01	64.35	156.05	6,240.34	-649.40	-227.27	279.53	8.07	7.83	-2.22	
6,603.01	69.21	152.27	6,277.40	-727.08	-189.60	360.20	6.35	5.17	-4.02	
6,698.01	73.82	147.54	6,307.53	-804.96	-144.40	446.49	6.77	4.85	-4.98	
6,792.01	77.06	140.99	6,331.18	-878.74	-91.27	535.74	7.57	3.45	-6.97	
6,887.01	86.30	136.08	6,344.92	-949.05	-29.08	629.21	10.99	9.73	-5.17	
6,982.01	88.59	137.18	6,349.15	-1,018.03	36.08	723.95	2.67	2.41	1.16	
7,077.01	91.61	136.01	6,348.99	-1,087.04	101.36	818.77	3.41	3.18	-1.23	
7,171.01	91.01	136.06	6,346.84	-1,154.68	166.59	912.64	0.64	-0.64	0.05	
7,266.01	90.50	135.68	6,345.59	-1,222.86	232.74	1,007.53	0.67	-0.54	-0.40	
7,360.01	91.37	131.52	6,344.05	-1,287.66	300.78	1,101.50	4.52	0.93	-4.43	
7,455.02	91.24	131.59	6,341.89	-1,350.67	371.86	1,196.43	0.16	-0.14	0.07	
7,550.02	88.83	132.38	6,341.83	-1,414.21	442.47	1,291.40	2.67	-2.54	0.83	
7,645.02	89.40	134.51	6,343.30	-1,479.52	511.43	1,386.38	2.32	0.60	2.24	
7,739.02	89.13	135.37	6,344.50	-1,545.92	577.96	1,480.33	0.96	-0.29	0.91	
7,833.02	89.13	137.03	6,345.93	-1,613.75	643.01	1,574.19	1.77	0.00	1.77	
7,928.02	88.99	137.75	6,347.49	-1,683.66	707.32	1,668.93	0.77	-0.15	0.76	
8,022.02	88.96	138.11	6,349.17	-1,753.43	770.29	1,762.61	0.38	-0.03	0.38	
8,117.02	88.52	138.44	6,351.26	-1,824.31	833.50	1,857.22	0.58	-0.46	0.35	
8,211.02	88.82	137.92	6,353.44	-1,894.35	896.16	1,950.85	0.64	0.32	-0.55	
8,305.02	87.99	138.01	6,356.06	-1,964.14	959.08	2,044.49	0.89	-0.88	0.10	
8,400.02	90.54	137.66	6,357.28	-2,034.54	1,022.84	2,139.18	2.71	2.68	-0.37	
8,495.02	90.17	136.81	6,356.69	-2,104.28	1,087.34	2,233.95	0.98	-0.39	-0.89	
8,589.02	89.16	134.92	6,357.24	-2,171.74	1,152.79	2,327.84	2.28	-1.07	-2.01	
8,682.02	88.29	134.11	6,359.31	-2,236.93	1,219.09	2,420.79	1.28	-0.94	-0.87	
8,776.02	90.67	134.82	6,360.16	-2,302.76	1,286.17	2,514.76	2.64	2.53	0.76	
8,869.02	89.87	134.73	6,359.72	-2,368.27	1,352.19	2,607.73	0.87	-0.86	-0.10	



Scientific Drilling International

Survey Report

Company: Chevron Appalachia, LLC	Local Co-ordinate Reference: Well Conner 2H
Project: Marshall County, WV	TVD Reference: GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Site: Conner Pad	MD Reference: GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Well: Conner 2H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,961.02	88.69	133.24	6,360.88	-2,432.15	1,418.38	2,699.71	2.07	-1.28	-1.62	
9,054.02	88.32	134.25	6,363.31	-2,496.43	1,485.54	2,792.67	1.16	-0.40	1.09	
9,148.02	89.63	135.49	6,364.99	-2,562.73	1,552.14	2,886.62	1.92	1.39	1.32	
9,241.02	88.89	134.37	6,366.19	-2,628.41	1,617.98	2,979.57	1.44	-0.80	-1.20	
9,335.02	90.00	137.99	6,367.10	-2,696.22	1,683.05	3,073.43	4.03	1.18	3.85	
9,427.02	89.26	136.00	6,367.69	-2,763.49	1,745.79	3,165.22	2.31	-0.80	-2.16	
9,520.02	89.56	139.85	6,368.65	-2,832.50	1,808.10	3,257.89	4.15	0.32	4.14	
9,613.02	88.79	140.19	6,369.99	-2,903.76	1,867.84	3,350.24	0.91	-0.83	0.37	
9,707.02	88.32	141.70	6,372.36	-2,976.73	1,927.05	3,443.36	1.68	-0.50	1.61	
9,800.02	87.88	141.18	6,375.44	-3,049.41	1,984.99	3,535.36	0.73	-0.47	-0.56	
9,893.02	90.50	140.21	6,376.76	-3,121.36	2,043.89	3,627.56	3.00	2.82	-1.04	
9,986.02	90.23	140.09	6,376.17	-3,192.76	2,103.48	3,719.89	0.32	-0.29	-0.13	
10,079.02	89.13	139.09	6,376.69	-3,263.56	2,163.76	3,812.32	1.60	-1.18	-1.08	
10,172.02	88.42	137.96	6,378.67	-3,333.23	2,225.34	3,904.90	1.43	-0.76	-1.22	
10,266.02	90.60	139.20	6,379.48	-3,403.71	2,287.52	3,998.49	2.67	2.32	1.32	
10,359.02	90.10	138.81	6,378.91	-3,473.90	2,348.53	4,091.02	0.68	-0.54	-0.42	
10,452.02	90.00	138.71	6,378.83	-3,543.83	2,409.83	4,183.59	0.15	-0.11	-0.11	
10,546.02	88.96	137.50	6,379.68	-3,613.80	2,472.60	4,277.25	1.70	-1.11	-1.29	
10,641.02	88.39	137.08	6,381.88	-3,683.58	2,537.02	4,371.99	0.75	-0.60	-0.44	
10,736.02	87.78	136.90	6,385.05	-3,753.01	2,601.79	4,466.73	0.67	-0.64	-0.19	
10,830.02	87.32	137.02	6,389.07	-3,821.65	2,665.88	4,560.45	0.51	-0.49	0.13	
10,924.02	88.05	136.65	6,392.87	-3,890.16	2,730.14	4,654.19	0.87	0.78	-0.39	
11,019.02	87.72	137.17	6,396.37	-3,959.49	2,794.99	4,748.93	0.65	-0.35	0.55	
11,113.02	90.44	137.07	6,397.88	-4,028.35	2,858.94	4,842.70	2.90	2.89	-0.11	
11,208.02	90.17	136.87	6,397.38	-4,097.80	2,923.77	4,937.50	0.35	-0.28	-0.21	
11,302.02	90.30	137.15	6,396.99	-4,166.56	2,987.86	5,031.30	0.33	0.14	0.30	
11,397.02	88.42	134.74	6,398.05	-4,234.82	3,053.91	5,126.17	3.22	-1.98	-2.54	
11,491.02	88.32	134.88	6,400.73	-4,301.04	3,120.57	5,220.10	0.18	-0.11	0.15	
11,585.02	87.99	136.03	6,403.75	-4,368.00	3,186.47	5,313.98	1.27	-0.35	1.22	
11,680.02	87.58	135.84	6,407.43	-4,436.21	3,252.49	5,408.81	0.48	-0.43	-0.20	
11,774.02	87.52	136.52	6,411.44	-4,503.97	3,317.52	5,502.60	0.73	-0.06	0.72	
11,869.02	89.60	136.21	6,413.83	-4,572.70	3,383.05	5,597.43	2.21	2.19	-0.33	
11,963.02	89.30	137.14	6,414.73	-4,641.08	3,447.54	5,691.25	1.04	-0.32	0.99	
12,058.02	91.51	137.49	6,414.06	-4,710.90	3,511.94	5,786.01	2.36	2.33	0.37	
12,152.02	91.01	137.22	6,412.00	-4,780.03	3,575.61	5,879.74	0.60	-0.53	-0.29	
12,245.02	91.01	136.86	6,410.36	-4,848.08	3,638.98	5,972.53	0.39	0.00	-0.39	
12,340.02	90.94	136.86	6,408.74	-4,917.39	3,703.93	6,067.33	0.07	-0.07	0.00	
12,435.03	90.17	136.25	6,407.82	-4,986.36	3,769.25	6,162.16	1.03	-0.81	-0.64	
12,530.03	90.17	136.60	6,407.54	-5,055.18	3,834.73	6,257.02	0.37	0.00	0.37	
12,625.03	89.30	135.72	6,407.98	-5,123.70	3,900.53	6,351.90	1.30	-0.92	-0.93	
12,719.03	88.86	135.20	6,409.49	-5,190.69	3,966.46	6,445.81	0.72	-0.47	-0.55	
12,814.03	89.50	134.13	6,410.85	-5,257.47	4,034.02	6,540.77	1.31	0.67	-1.13	
12,909.03	89.23	133.12	6,411.90	-5,323.01	4,102.78	6,635.76	1.10	-0.28	-1.06	



Scientific Drilling International

Survey Report

Company: Chevron Appalachia, LLC	Local Co-ordinate Reference: Well Conner 2H
Project: Marshall County, WV	TVD Reference: GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Site: Conner Pad	MD Reference: GL 1220' & KB 32' @ 1252.00ft (Nabors X7)
Well: Conner 2H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,004.03	89.26	132.63	6,413.15	-5,387.64	4,172.39	6,730.75	0.52	0.03	-0.52	
13,099.03	89.33	131.27	6,414.32	-5,451.14	4,243.04	6,825.72	1.43	0.07	-1.43	
13,193.03	88.49	130.03	6,416.11	-5,512.36	4,314.34	6,919.60	1.59	-0.89	-1.32	
13,288.03	88.46	132.37	6,418.64	-5,574.91	4,385.79	7,014.50	2.46	-0.03	2.46	
13,382.03	89.40	135.68	6,420.39	-5,640.22	4,453.36	7,108.46	3.66	1.00	3.52	
13,476.03	89.70	135.43	6,421.13	-5,707.32	4,519.18	7,202.38	0.42	0.32	-0.27	
13,570.03	89.70	135.55	6,421.62	-5,774.36	4,585.07	7,296.31	0.13	0.00	0.13	
13,664.03	89.40	134.52	6,422.36	-5,840.86	4,651.50	7,390.26	1.14	-0.32	-1.10	
13,757.03	89.30	133.86	6,423.42	-5,905.68	4,718.18	7,483.24	0.72	-0.11	-0.71	
13,851.03	88.42	133.04	6,425.29	-5,970.31	4,786.41	7,577.22	1.28	-0.94	-0.87	
13,945.03	87.89	133.46	6,428.31	-6,034.69	4,854.84	7,671.17	0.72	-0.56	0.45	
14,039.03	87.41	132.96	6,432.17	-6,098.99	4,923.29	7,765.10	0.74	-0.51	-0.53	
14,122.03	87.38	133.23	6,435.94	-6,155.64	4,983.84	7,848.01	0.33	-0.04	0.33	
Last SDI MWD Survey										
14,178.03	87.38	133.23	6,438.50	-6,193.96	5,024.60	7,903.95	0.00	0.00	0.00	
Projection to Bit										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Coal Target	0.00	0.00	784.00	0.00	0.00	505,327.06	1,617,496.30	39° 52' 50.394 N	80° 45' 2.819 W	
- actual wellpath misses target center by 4.30ft at 784.02ft MD (784.00 TVD, -3.46 N, -2.55 E)										
- Circle (radius 7.66)										
Conner 2H LP	0.00	0.00	6,367.01	-912.07	-73.73	504,416.11	1,617,409.88	39° 52' 41.380 N	80° 45' 3.765 W	
- actual wellpath misses target center by 29.37ft at 6833.46ft MD (6339.04 TVD, -909.86 N, -65.06 E)										
- Point										
Conner 2H PBHL	0.00	0.00	6,367.01	-6,257.70	4,988.47	499,000.53	1,622,397.15	39° 51' 48.544 N	80° 43' 58.843 W	
- actual wellpath misses target center by 102.37ft at 14178.03ft MD (6438.50 TVD, -6193.96 N, 5024.60 E)										
- Point										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
100.00	100.00	-0.19	-0.13	First Gyro Data Gyro Survey	
2,481.00	2,480.96	-3.34	-7.27	Last Gyro Data Gyro Survey	
2,596.01	2,595.97	-3.23	-7.66	First SDI MWD Survey	
14,122.03	6,435.94	-6,155.64	4,983.84	Last SDI MWD Survey	
14,178.03	6,438.50	-6,193.96	5,024.60	Projection to Bit	

Checked By: _____ Approved By: _____ Date: _____