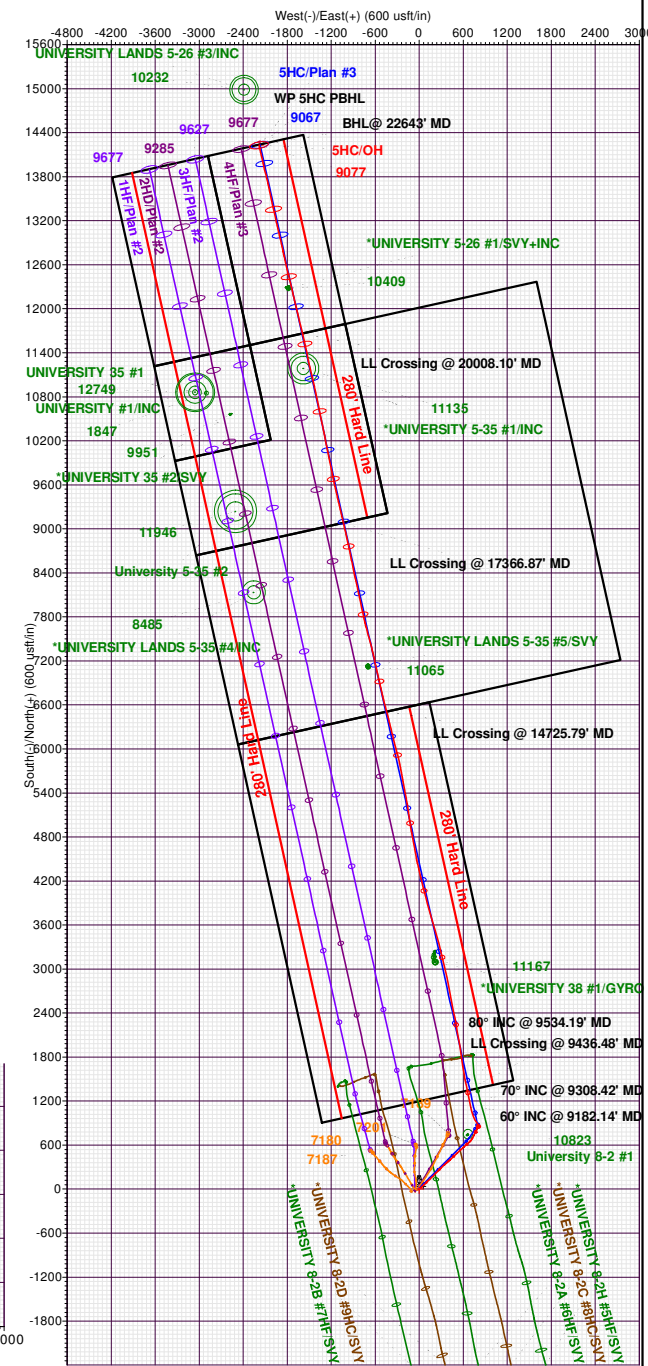




Azimuths to Grid North
 True North: 2.63°
 Magnetic North: 8.28°

Magnetic Field
 Strength: 47207.6nT
 Dip Angle: 59.94°
 Date: 6/25/2024
 Model: HRGM



Ovintiv USA Inc.

Andrews County, TX (TNC NAD 27)

UL Wash Park Pad

UL Wash Park 2D 5HC

OH

Design: OH

Standard Survey Report

25 July, 2024

SDT
Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Project	Andrews County, TX (TNC NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Texas North Central 4202		

Site	UL Wash Park Pad			
Site Position:		Northing:	304,738.00 usft	Latitude: 32.410654
From:	Map	Easting:	514,016.00 usft	Longitude: -102.316727
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	

Well	UL Wash Park 2D 5HC			
Well Position	+N/-S	0.00 usft	Northing:	304,767.00 usft
	+E/-W	0.00 usft	Easting:	514,138.00 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft
Grid Convergence:		-2.63 °	Ground Level:	3,012.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	6/25/2024	5.66	59.94	47,207.56792861

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	347.50

Survey Program	Date	7/25/2024			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
127.00	1,843.00	Survey #1 (OH)	MWD	Geolink MWD	
1,843.00	22,582.00	Survey #2 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	
22,643.00	22,643.00	Survey #3 (OH)	A026Ua_BLIND	OWSG BLIND	

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	
127.00	0.48	261.26	127.00	-0.08	-0.53	0.03	0.38	0.38	0.00	
245.00	0.75	268.90	244.99	-0.17	-1.79	0.22	0.24	0.23	6.47	
411.00	0.48	293.16	410.98	0.08	-3.51	0.84	0.22	-0.16	14.61	
580.00	0.57	307.57	579.98	0.87	-4.83	1.90	0.09	0.05	8.53	
666.00	0.66	312.06	665.97	1.47	-5.54	2.63	0.12	0.10	5.22	
755.00	0.66	325.94	754.96	2.23	-6.20	3.52	0.18	0.00	15.60	
840.00	1.01	328.58	839.96	3.28	-6.87	4.69	0.41	0.41	3.11	

SDT

Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)
929.00	0.31	96.11	928.95	3.92	-7.04	5.35	1.38	-0.79	143.29
1,015.00	0.70	113.51	1,014.95	3.69	-6.32	4.97	0.48	0.45	20.23
1,104.00	0.79	131.79	1,103.94	3.06	-5.37	4.15	0.28	0.10	20.54
1,192.00	1.05	142.34	1,191.93	2.02	-4.42	2.93	0.35	0.30	11.99
1,280.00	0.35	153.24	1,279.92	1.14	-3.81	1.94	0.81	-0.80	12.39
1,365.00	0.26	258.44	1,364.92	0.87	-3.88	1.69	0.57	-0.11	123.76
1,452.00	0.35	261.43	1,451.92	0.79	-4.34	1.71	0.11	0.10	3.44
1,541.00	0.35	260.38	1,540.92	0.71	-4.88	1.74	0.01	0.00	-1.18
1,628.00	0.40	246.40	1,627.92	0.54	-5.42	1.70	0.12	0.06	-16.07
1,715.00	0.57	240.95	1,714.91	0.21	-6.07	1.52	0.20	0.20	-6.26
1,802.00	0.48	268.90	1,801.91	-0.01	-6.81	1.47	0.31	-0.10	32.13
1,843.00	0.66	258.36	1,842.91	-0.06	-7.22	1.50	0.51	0.44	-25.71
1,897.00	0.64	268.83	1,896.90	-0.13	-7.82	1.57	0.22	-0.04	19.39
1,992.00	1.09	62.96	1,991.90	0.27	-7.55	1.90	1.78	0.47	162.24
2,087.00	4.33	66.26	2,086.78	2.13	-3.46	2.82	3.41	3.41	3.47
2,181.00	4.76	62.81	2,180.48	5.34	3.26	4.51	0.54	0.46	-3.67
2,275.00	7.31	54.70	2,273.96	10.58	11.61	7.81	2.85	2.71	-8.63
2,370.00	8.15	51.52	2,368.09	18.26	21.81	13.10	0.99	0.88	-3.35
2,465.00	12.10	47.06	2,461.60	29.24	34.38	21.10	4.24	4.16	-4.69
2,559.00	12.84	46.05	2,553.38	43.20	49.11	31.54	0.82	0.79	-1.07
2,654.00	13.46	46.75	2,645.89	58.10	64.76	42.70	0.67	0.65	0.74
2,748.00	13.78	46.34	2,737.24	73.32	80.83	54.09	0.36	0.34	-0.44
2,843.00	14.21	46.35	2,829.42	89.18	97.45	65.98	0.45	0.45	0.01
2,938.00	14.55	46.12	2,921.45	105.50	114.49	78.22	0.36	0.36	-0.24
3,032.00	14.91	45.89	3,012.36	122.10	131.69	90.71	0.39	0.38	-0.24
3,127.00	15.16	46.33	3,104.11	139.19	149.45	103.54	0.29	0.26	0.46
3,221.00	15.10	45.30	3,194.85	156.29	167.04	116.43	0.29	-0.06	-1.10
3,316.00	15.29	44.72	3,286.53	173.89	184.65	129.81	0.26	0.20	-0.61
3,410.00	15.27	44.08	3,377.20	191.59	201.98	143.33	0.18	-0.02	-0.68
3,504.00	15.45	44.46	3,467.85	209.42	219.36	156.98	0.22	0.19	0.40
3,599.00	15.82	44.35	3,559.33	227.71	237.28	170.96	0.39	0.39	-0.12
3,694.00	16.14	44.17	3,650.66	246.44	255.53	185.29	0.34	0.34	-0.19
3,788.00	16.76	44.91	3,740.81	265.41	274.20	199.77	0.70	0.66	0.79
3,883.00	17.19	46.52	3,831.67	284.77	294.06	214.38	0.67	0.45	1.69
3,977.00	17.74	47.10	3,921.34	304.08	314.63	228.77	0.61	0.59	0.62
4,071.00	18.17	47.20	4,010.76	323.79	335.87	243.42	0.46	0.46	0.11
4,165.00	18.77	46.63	4,099.92	344.13	357.62	258.57	0.67	0.64	-0.61
4,260.00	18.23	48.41	4,190.01	364.49	379.84	273.64	0.82	-0.57	1.87
4,353.00	16.61	50.61	4,278.74	382.58	401.00	286.72	1.88	-1.74	2.37
4,448.00	14.76	48.09	4,370.20	399.28	420.50	298.81	2.07	-1.95	-2.65
4,542.00	13.65	47.06	4,461.33	414.84	437.53	310.31	1.21	-1.18	-1.10
4,636.00	14.27	46.44	4,552.55	430.38	454.05	321.90	0.68	0.66	-0.66
4,731.00	14.41	46.70	4,644.59	446.55	471.13	334.00	0.16	0.15	0.27

SDT

Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)	
4,825.00	14.32	45.64	4,735.65	462.70	487.96	346.12	0.30	-0.10	-1.13	
4,919.00	14.30	45.75	4,826.74	478.93	504.59	358.37	0.04	-0.02	0.12	
5,013.00	13.83	47.06	4,917.92	494.69	521.13	370.17	0.60	-0.50	1.39	
5,107.00	13.74	47.22	5,009.21	509.92	537.54	381.49	0.10	-0.10	0.17	
5,201.00	14.04	47.68	5,100.46	525.18	554.17	392.79	0.34	0.32	0.49	
5,295.00	14.61	48.35	5,191.54	540.74	571.46	404.23	0.63	0.61	0.71	
5,389.00	15.39	48.75	5,282.33	556.84	589.69	416.01	0.84	0.83	0.43	
5,484.00	16.21	47.87	5,373.74	574.05	609.01	428.63	0.90	0.86	-0.93	
5,578.00	17.33	47.75	5,463.75	592.26	629.10	442.06	1.19	1.19	-0.13	
5,672.00	18.50	48.31	5,553.19	611.59	650.60	456.28	1.26	1.24	0.60	
5,766.00	19.22	48.40	5,642.14	631.79	673.31	471.08	0.77	0.77	0.10	
5,860.00	17.81	44.54	5,731.27	652.31	694.96	486.43	1.99	-1.50	-4.11	
5,954.00	13.34	33.30	5,821.82	671.63	711.01	501.82	5.72	-4.76	-11.96	
6,048.00	12.40	31.44	5,913.46	689.30	722.23	516.65	1.09	-1.00	-1.98	
6,143.00	11.37	28.10	6,006.42	706.27	731.96	531.10	1.30	-1.08	-3.52	
6,237.00	11.22	27.51	6,098.60	722.55	740.55	545.14	0.20	-0.16	-0.63	
6,331.00	9.27	25.48	6,191.10	737.50	748.03	558.12	2.11	-2.07	-2.16	
6,426.00	9.52	26.08	6,284.82	751.46	754.78	570.29	0.28	0.26	0.63	
6,521.00	9.49	26.43	6,378.52	765.53	761.72	582.52	0.07	-0.03	0.37	
6,616.00	9.82	26.73	6,472.17	779.78	768.85	594.89	0.35	0.35	0.32	
6,712.00	10.14	26.50	6,566.72	794.66	776.30	607.80	0.34	0.33	-0.24	
6,807.00	10.36	24.17	6,660.21	809.93	783.53	621.15	0.49	0.23	-2.45	
6,902.00	9.93	15.91	6,753.72	825.61	789.27	635.21	1.60	-0.45	-8.69	
6,997.00	5.94	10.16	6,847.80	838.33	792.39	646.95	4.28	-4.20	-6.05	
7,092.00	2.65	14.55	6,942.52	845.29	793.80	653.45	3.48	-3.46	4.62	
7,187.00	0.84	61.85	7,037.47	847.75	794.97	655.59	2.28	-1.91	49.79	
7,261.00	0.91	78.29	7,111.46	848.12	796.02	655.73	0.35	0.09	22.22	
7,329.00	0.85	78.08	7,179.46	848.34	797.05	655.71	0.09	-0.09	-0.31	
7,424.00	0.85	93.16	7,274.45	848.44	798.44	655.52	0.23	0.00	15.87	
7,518.00	0.94	100.55	7,368.43	848.26	799.89	655.03	0.16	0.10	7.86	
7,613.00	1.01	105.43	7,463.42	847.90	801.47	654.33	0.11	0.07	5.14	
7,707.00	0.83	111.73	7,557.41	847.43	802.90	653.56	0.22	-0.19	6.70	
7,802.00	0.72	91.51	7,652.40	847.15	804.13	653.03	0.31	-0.12	-21.28	
7,896.00	0.68	67.71	7,746.39	847.35	805.24	652.98	0.31	-0.04	-25.32	
7,990.00	0.62	69.19	7,840.39	847.74	806.23	653.15	0.07	-0.06	1.57	
8,085.00	0.69	61.54	7,935.38	848.20	807.21	653.38	0.12	0.07	-8.05	
8,180.00	0.68	41.61	8,030.37	848.89	808.09	653.87	0.25	-0.01	-20.98	
8,274.00	0.66	43.35	8,124.37	849.70	808.83	654.50	0.03	-0.02	1.85	
8,368.00	1.42	16.36	8,218.35	851.21	809.53	655.82	0.94	0.81	-28.71	
8,463.00	1.76	8.73	8,313.32	853.79	810.09	658.21	0.42	0.36	-8.03	
8,557.00	1.25	0.16	8,407.28	856.24	810.31	660.56	0.59	-0.54	-9.12	
8,651.00	5.31	349.09	8,501.11	861.54	809.49	665.91	4.35	4.32	-11.78	
8,745.00	15.51	326.43	8,593.47	876.32	801.69	682.03	11.49	10.85	-24.11	
8,840.00	24.82	324.47	8,682.55	903.19	783.04	712.30	9.82	9.80	-2.06	

SDT

Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)
8,934.00	34.12	332.08	8,764.33	942.64	759.17	755.98	10.65	9.89	8.10
9,028.00	42.67	338.94	8,837.96	995.79	735.32	813.03	10.15	9.10	7.30
9,122.00	54.69	346.18	8,899.96	1,063.06	714.62	883.19	14.02	12.79	7.70
9,182.14	60.00	347.59	8,932.40	1,112.35	703.16	933.80	9.04	8.82	2.35
60° INC @ 9182.14' MD									
9,216.00	62.99	348.32	8,948.56	1,141.45	696.95	963.55	9.04	8.84	2.15
9,308.42	70.00	348.71	8,985.40	1,224.46	680.10	1,048.23	7.60	7.59	0.43
70° INC @ 9308.42' MD									
9,310.00	70.12	348.72	8,985.94	1,225.91	679.81	1,049.72	7.60	7.59	0.40
9,404.00	73.40	348.95	9,015.36	1,313.49	662.52	1,138.96	3.50	3.49	0.24
9,436.48	74.91	348.28	9,024.22	1,344.12	656.36	1,170.19	5.04	4.64	-2.05
LL Crossing @ 9436.48' MD									
9,499.00	77.81	347.03	9,038.97	1,403.46	643.37	1,230.94	5.04	4.64	-2.01
9,534.19	80.00	348.20	9,045.74	1,437.19	635.96	1,265.47	7.02	6.21	3.32
80° INC @ 9534.19' MD									
9,593.00	83.66	350.12	9,054.10	1,494.35	625.02	1,323.65	7.02	6.23	3.27
9,687.00	88.13	350.51	9,060.83	1,586.75	609.25	1,417.27	4.77	4.76	0.41
9,782.00	89.12	351.53	9,063.11	1,680.55	594.43	1,512.06	1.50	1.04	1.07
9,876.00	89.76	351.19	9,064.03	1,773.48	580.31	1,605.84	0.77	0.68	-0.36
9,970.00	91.19	351.32	9,063.25	1,866.38	566.02	1,699.63	1.53	1.52	0.14
10,065.00	90.94	351.11	9,061.48	1,960.25	551.51	1,794.42	0.34	-0.26	-0.22
10,159.00	90.46	349.61	9,060.33	2,052.92	535.77	1,888.29	1.68	-0.51	-1.60
10,253.00	89.12	349.90	9,060.68	2,145.41	519.05	1,982.22	1.46	-1.43	0.31
10,348.00	91.36	350.55	9,060.28	2,239.03	502.93	2,077.10	2.46	2.36	0.68
10,442.00	86.54	349.11	9,062.00	2,331.51	486.34	2,170.98	5.35	-5.13	-1.53
10,536.00	86.12	348.80	9,068.02	2,423.58	468.37	2,264.75	0.55	-0.45	-0.33
10,630.00	87.52	348.14	9,073.23	2,515.53	449.61	2,358.59	1.65	1.49	-0.70
10,724.00	88.14	348.52	9,076.79	2,607.52	430.61	2,452.51	0.77	0.66	0.40
10,819.00	88.36	349.66	9,079.69	2,700.76	412.64	2,547.43	1.22	0.23	1.20
10,913.00	87.91	349.91	9,082.75	2,793.22	395.97	2,641.31	0.55	-0.48	0.27
11,007.00	88.28	347.51	9,085.88	2,885.35	377.58	2,735.23	2.58	0.39	-2.55
11,102.00	87.60	346.33	9,089.29	2,977.82	356.10	2,830.16	1.43	-0.72	-1.24
11,195.00	90.66	346.90	9,090.70	3,068.27	334.57	2,923.13	3.35	3.29	0.61
11,289.00	91.44	346.40	9,088.98	3,159.71	312.87	3,017.10	0.99	0.83	-0.53
11,383.00	91.27	346.46	9,086.76	3,251.06	290.82	3,111.06	0.19	-0.18	0.06
11,477.00	90.49	345.87	9,085.32	3,342.33	268.35	3,205.02	1.04	-0.83	-0.63
11,571.00	89.62	345.54	9,085.22	3,433.41	245.14	3,298.97	0.99	-0.93	-0.35
11,665.00	91.11	342.78	9,084.63	3,523.83	219.49	3,392.80	3.34	1.59	-2.94
11,759.00	91.58	342.41	9,082.42	3,613.50	191.38	3,486.43	0.64	0.50	-0.39
11,853.00	92.12	342.69	9,079.38	3,703.13	163.20	3,580.03	0.65	0.57	0.30
11,947.00	91.70	344.36	9,076.25	3,793.22	136.56	3,673.75	1.83	-0.45	1.78
12,041.00	91.19	345.87	9,073.88	3,884.03	112.42	3,767.63	1.70	-0.54	1.61
12,135.00	90.85	345.03	9,072.21	3,975.00	88.81	3,861.56	0.96	-0.36	-0.89
12,229.00	91.69	345.25	9,070.12	4,065.83	64.71	3,955.45	0.92	0.89	0.23

SDT

Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)
12,323.00	89.06	346.70	9,069.51	4,157.02	41.93	4,049.41	3.19	-2.80	1.54
12,418.00	88.05	346.98	9,071.90	4,249.49	20.31	4,144.37	1.10	-1.06	0.29
12,512.00	88.14	346.96	9,075.03	4,341.02	-0.87	4,238.31	0.10	0.10	-0.02
12,606.00	88.47	346.41	9,077.81	4,432.46	-22.51	4,332.26	0.68	0.35	-0.59
12,701.00	89.85	350.14	9,079.20	4,525.44	-41.81	4,427.22	4.19	1.45	3.93
12,795.00	90.35	350.18	9,079.04	4,618.06	-57.87	4,521.12	0.53	0.53	0.04
12,889.00	89.62	348.83	9,079.06	4,710.49	-74.99	4,615.06	1.63	-0.78	-1.44
12,983.00	89.06	348.89	9,080.15	4,802.71	-93.15	4,709.03	0.60	-0.60	0.06
13,078.00	90.49	350.90	9,080.52	4,896.23	-109.82	4,803.94	2.60	1.51	2.12
13,172.00	90.52	351.06	9,079.69	4,989.06	-124.56	4,897.76	0.17	0.03	0.17
13,266.00	89.45	351.69	9,079.72	5,082.00	-138.65	4,991.54	1.32	-1.14	0.67
13,360.00	89.15	352.09	9,080.86	5,175.05	-151.91	5,085.26	0.53	-0.32	0.43
13,455.00	88.95	349.68	9,082.44	5,268.83	-166.96	5,180.07	2.55	-0.21	-2.54
13,549.00	88.87	349.25	9,084.23	5,361.23	-184.14	5,274.00	0.47	-0.09	-0.46
13,643.00	88.31	349.36	9,086.54	5,453.57	-201.58	5,367.93	0.61	-0.60	0.12
13,737.00	89.51	349.31	9,088.33	5,545.92	-218.98	5,461.86	1.28	1.28	-0.05
13,831.00	88.31	349.85	9,090.12	5,638.36	-235.97	5,555.78	1.40	-1.28	0.57
13,926.00	89.29	349.09	9,092.11	5,731.73	-253.33	5,650.70	1.31	1.03	-0.80
14,020.00	87.58	346.28	9,094.67	5,823.52	-273.37	5,744.65	3.50	-1.82	-2.99
14,114.00	87.24	346.18	9,098.92	5,914.73	-295.72	5,838.53	0.38	-0.36	-0.11
14,209.00	89.43	345.02	9,101.68	6,006.70	-319.33	5,933.43	2.61	2.31	-1.22
14,303.00	89.76	346.14	9,102.35	6,097.73	-342.74	6,027.37	1.24	0.35	1.19
14,397.00	90.01	346.73	9,102.54	6,189.11	-364.79	6,121.36	0.68	0.27	0.63
14,491.00	90.15	346.46	9,102.40	6,280.55	-386.58	6,215.35	0.32	0.15	-0.29
14,585.00	90.35	346.15	9,101.99	6,371.88	-408.84	6,309.32	0.39	0.21	-0.33
14,725.79	89.99	345.06	9,101.58	6,508.24	-443.84	6,450.03	0.82	-0.26	-0.78
LL Crossing @ 14725.79' MD									
14,772.00	89.87	344.70	9,101.63	6,552.85	-455.89	6,496.20	0.82	-0.26	-0.78
14,866.00	89.82	345.57	9,101.89	6,643.70	-480.01	6,590.11	0.93	-0.05	0.93
14,961.00	90.80	347.76	9,101.38	6,736.14	-501.92	6,685.10	2.53	1.03	2.31
15,055.00	90.74	347.17	9,100.11	6,827.89	-522.32	6,779.09	0.63	-0.06	-0.63
15,149.00	91.02	346.89	9,098.67	6,919.48	-543.41	6,873.07	0.42	0.30	-0.30
15,243.00	91.05	346.52	9,096.97	7,010.94	-565.02	6,967.05	0.39	0.03	-0.39
15,337.00	91.86	347.95	9,094.58	7,102.59	-585.79	7,061.01	1.75	0.86	1.52
15,432.00	92.45	347.94	9,091.01	7,195.43	-605.61	7,155.94	0.62	0.62	-0.01
15,526.00	90.71	346.74	9,088.42	7,287.10	-626.21	7,249.90	2.25	-1.85	-1.28
15,620.00	89.85	345.15	9,087.96	7,378.28	-649.03	7,343.86	1.92	-0.91	-1.69
15,714.00	89.90	345.19	9,088.16	7,469.15	-673.09	7,437.78	0.07	0.05	0.04
15,808.00	89.90	344.78	9,088.33	7,559.94	-697.45	7,531.69	0.44	0.00	-0.44
15,902.00	90.07	344.75	9,088.35	7,650.64	-722.15	7,625.59	0.18	0.18	-0.03
15,996.00	89.54	347.67	9,088.67	7,741.92	-744.55	7,719.55	3.16	-0.56	3.11
16,091.00	89.48	347.97	9,089.49	7,834.77	-764.59	7,814.55	0.32	-0.06	0.32
16,185.00	89.62	347.90	9,090.22	7,926.69	-784.24	7,908.54	0.17	0.15	-0.07

SDT Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)	
16,280.00	89.71	347.78	9,090.78	8,019.56	-804.25	8,003.54	0.16	0.09	-0.13	
16,374.00	90.38	347.57	9,090.71	8,111.39	-824.32	8,097.54	0.75	0.71	-0.22	
16,469.00	90.43	347.84	9,090.03	8,204.21	-844.54	8,192.53	0.29	0.05	0.28	
16,564.00	90.85	347.07	9,088.97	8,296.94	-865.18	8,287.53	0.92	0.44	-0.81	
16,658.00	92.51	348.11	9,086.22	8,388.70	-885.37	8,381.48	2.08	1.77	1.11	
16,753.00	89.51	348.40	9,084.54	8,481.68	-904.70	8,476.45	3.17	-3.16	0.31	
16,847.00	89.26	348.17	9,085.55	8,573.72	-923.79	8,570.43	0.36	-0.27	-0.24	
16,941.00	88.14	348.28	9,087.68	8,665.72	-942.96	8,664.40	1.20	-1.19	0.12	
17,036.00	87.38	348.09	9,091.40	8,758.63	-962.40	8,759.32	0.82	-0.80	-0.20	
17,130.00	87.38	347.65	9,095.69	8,850.44	-982.13	8,853.22	0.47	0.00	-0.47	
17,224.00	91.05	347.50	9,096.98	8,942.21	-1,002.35	8,947.19	3.91	3.90	-0.16	
17,319.00	91.55	347.28	9,094.83	9,034.90	-1,023.09	9,042.17	0.57	0.53	-0.23	
17,366.87	91.28	346.82	9,093.64	9,081.53	-1,033.81	9,090.02	1.11	-0.56	-0.96	
LL Crossing @ 17366.87' MD										
17,413.00	91.02	346.38	9,092.72	9,126.40	-1,044.50	9,136.14	1.11	-0.56	-0.96	
17,508.00	91.84	346.73	9,090.35	9,218.77	-1,066.58	9,231.09	0.94	0.86	0.37	
17,602.00	92.45	347.23	9,086.83	9,310.28	-1,087.74	9,325.02	0.84	0.65	0.53	
17,696.00	93.04	347.05	9,082.33	9,401.82	-1,108.64	9,418.91	0.66	0.63	-0.19	
17,791.00	93.60	346.95	9,076.83	9,494.23	-1,129.97	9,513.75	0.60	0.59	-0.11	
17,886.00	90.88	347.46	9,073.11	9,586.79	-1,150.99	9,608.67	2.91	-2.86	0.54	
17,980.00	91.55	347.57	9,071.12	9,678.55	-1,171.31	9,702.65	0.72	0.71	0.12	
18,074.00	89.82	349.14	9,070.00	9,770.60	-1,190.28	9,796.62	2.49	-1.84	1.67	
18,168.00	89.37	348.27	9,070.66	9,862.78	-1,208.69	9,890.60	1.04	-0.48	-0.93	
18,262.00	90.21	348.44	9,071.01	9,954.84	-1,227.67	9,984.59	0.91	0.89	0.18	
18,357.00	91.95	348.62	9,069.21	10,047.92	-1,246.55	10,079.55	1.84	1.83	0.19	
18,451.00	91.05	348.83	9,066.75	10,140.08	-1,264.92	10,173.50	0.98	-0.96	0.22	
18,545.00	91.16	348.90	9,064.94	10,232.29	-1,283.07	10,267.45	0.14	0.12	0.07	
18,639.00	88.73	348.56	9,065.03	10,324.47	-1,301.44	10,361.42	2.61	-2.59	-0.36	
18,733.00	89.20	347.99	9,066.73	10,416.49	-1,320.54	10,455.40	0.79	0.50	-0.61	
18,827.00	90.21	348.58	9,067.21	10,508.53	-1,339.63	10,549.39	1.24	1.07	0.63	
18,921.00	90.27	348.47	9,066.82	10,600.65	-1,358.33	10,643.37	0.13	0.06	-0.12	
19,015.00	90.83	347.95	9,065.92	10,692.66	-1,377.53	10,737.36	0.81	0.60	-0.55	
19,110.00	89.99	348.51	9,065.24	10,785.66	-1,396.91	10,832.35	1.06	-0.88	0.59	
19,204.00	88.95	347.89	9,066.11	10,877.67	-1,416.13	10,926.33	1.29	-1.11	-0.66	
19,298.00	89.43	347.72	9,067.44	10,969.54	-1,435.99	11,020.32	0.54	0.51	-0.18	
19,392.00	87.49	346.44	9,069.96	11,061.12	-1,457.00	11,114.28	2.47	-2.06	-1.36	
19,485.00	86.96	346.18	9,074.46	11,151.37	-1,478.98	11,207.15	0.63	-0.57	-0.28	
19,580.00	88.73	347.47	9,078.04	11,243.80	-1,500.62	11,302.07	2.30	1.86	1.36	
19,674.00	90.49	348.45	9,078.68	11,335.73	-1,520.22	11,396.06	2.14	1.87	1.04	
19,768.00	90.63	348.32	9,077.76	11,427.80	-1,539.15	11,490.04	0.20	0.15	-0.14	
19,862.00	91.83	347.55	9,075.74	11,519.70	-1,558.79	11,584.02	1.52	1.28	-0.82	
19,956.00	92.70	347.06	9,072.03	11,611.33	-1,579.43	11,677.94	1.06	0.93	-0.52	
20,008.10	91.18	346.58	9,070.26	11,662.02	-1,591.30	11,730.01	3.06	-2.91	-0.93	
LL Crossing @ 20008.10' MD										

SDT

Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)
20,050.00	89.96	346.19	9,069.84	11,702.74	-1,601.17	11,771.90	3.06	-2.91	-0.92
20,144.00	89.17	346.56	9,070.56	11,794.09	-1,623.31	11,865.87	0.93	-0.84	0.39
20,238.00	89.37	346.46	9,071.76	11,885.49	-1,645.24	11,959.85	0.24	0.21	-0.11
20,333.00	91.61	346.32	9,070.94	11,977.82	-1,667.59	12,054.83	2.36	2.36	-0.15
20,427.00	89.34	346.57	9,070.16	12,069.19	-1,689.62	12,148.80	2.43	-2.41	0.27
20,521.00	88.39	346.74	9,072.03	12,160.63	-1,711.31	12,242.77	1.03	-1.01	0.18
20,615.00	89.15	346.31	9,074.04	12,252.02	-1,733.21	12,336.73	0.93	0.81	-0.46
20,710.00	89.26	346.39	9,075.36	12,344.33	-1,755.62	12,431.71	0.14	0.12	0.08
20,804.00	89.54	346.26	9,076.35	12,435.66	-1,777.85	12,525.68	0.33	0.30	-0.14
20,898.00	90.49	346.94	9,076.32	12,527.10	-1,799.63	12,619.67	1.24	1.01	0.72
20,992.00	91.61	347.34	9,074.60	12,618.72	-1,820.55	12,713.65	1.27	1.19	0.43
21,086.00	92.20	347.63	9,071.47	12,710.44	-1,840.91	12,807.60	0.70	0.63	0.31
21,181.00	88.87	347.97	9,070.59	12,803.28	-1,860.98	12,902.58	3.52	-3.51	0.36
21,275.00	89.37	346.90	9,072.03	12,895.01	-1,881.43	12,996.56	1.26	0.53	-1.14
21,369.00	89.73	347.07	9,072.77	12,986.59	-1,902.59	13,090.56	0.42	0.38	0.18
21,464.00	90.46	346.75	9,072.61	13,079.13	-1,924.11	13,185.55	0.84	0.77	-0.34
21,558.00	89.48	347.39	9,072.66	13,170.74	-1,945.14	13,279.55	1.25	-1.04	0.68
21,652.00	89.73	347.20	9,073.31	13,262.44	-1,965.82	13,373.54	0.33	0.27	-0.20
21,746.00	89.85	347.61	9,073.65	13,354.17	-1,986.31	13,467.54	0.45	0.13	0.44
21,840.00	90.77	347.69	9,073.14	13,446.00	-2,006.42	13,561.54	0.98	0.98	0.09
21,934.00	89.26	348.31	9,073.12	13,537.94	-2,025.96	13,655.53	1.74	-1.61	0.66
22,028.00	89.40	347.91	9,074.22	13,629.92	-2,045.33	13,749.52	0.45	0.15	-0.43
22,123.00	87.97	346.32	9,076.40	13,722.49	-2,066.50	13,844.49	2.25	-1.51	-1.67
22,217.00	88.16	346.50	9,079.57	13,813.81	-2,088.58	13,938.42	0.28	0.20	0.19
22,311.00	88.61	346.59	9,082.22	13,905.19	-2,110.44	14,032.37	0.49	0.48	0.10
22,405.00	90.32	347.30	9,083.10	13,996.76	-2,131.67	14,126.36	1.97	1.82	0.76
22,499.00	91.33	347.07	9,081.75	14,088.40	-2,152.52	14,220.34	1.10	1.07	-0.24
22,582.00	91.92	346.87	9,079.39	14,169.23	-2,171.23	14,303.31	0.75	0.71	-0.24
22,643.00	91.92	346.87	9,077.35	14,228.61	-2,185.07	14,364.27	0.00	0.00	0.00
BHL@ 22643' MD									

SDT

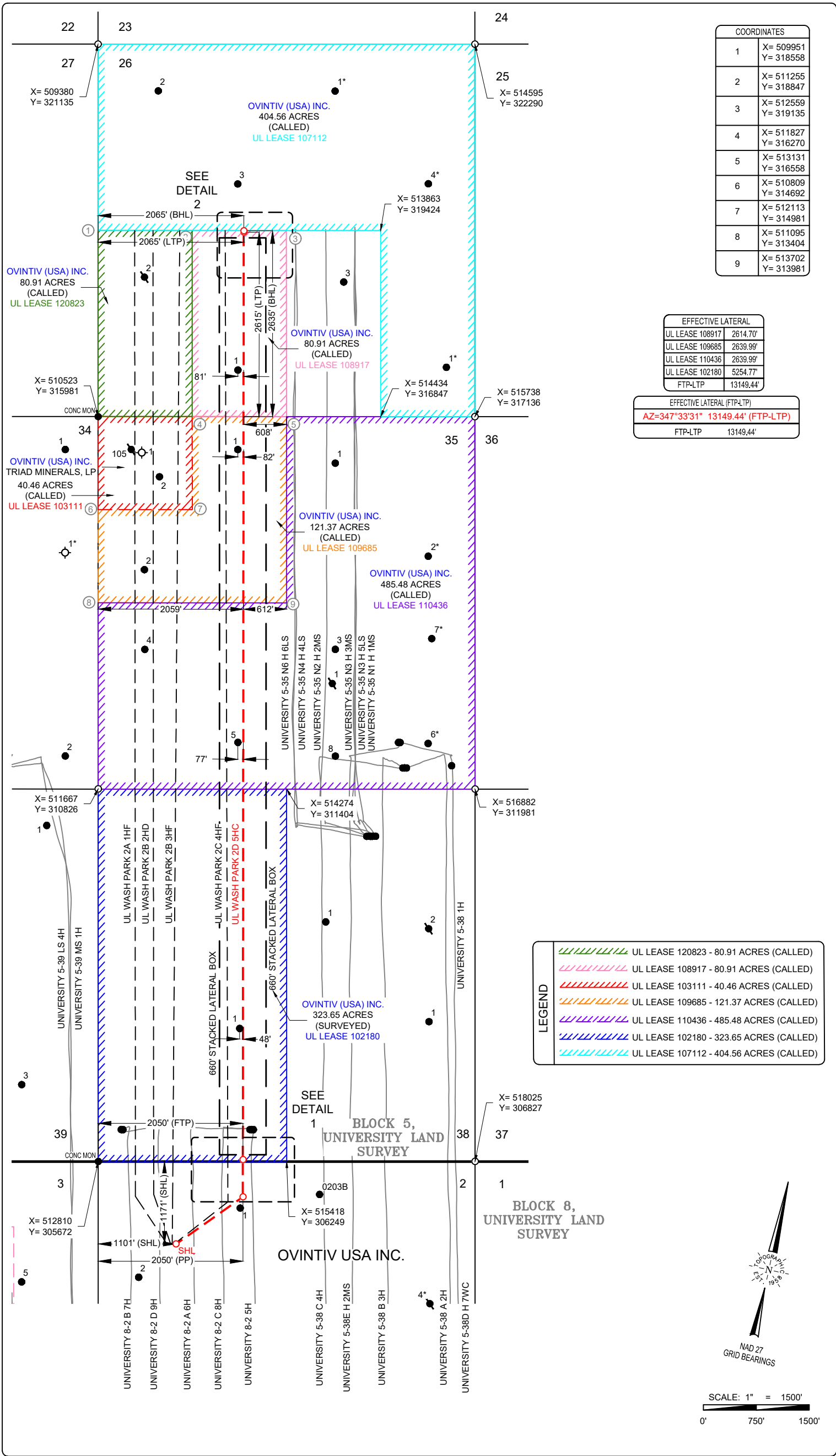
Survey Report

Company:	Ovintiv USA Inc.	Local Co-ordinate Reference:	Well UL Wash Park 2D 5HC
Project:	Andrews County, TX (TNC NAD 27)	TVD Reference:	3012+25 @ 3037.00usft (H&P 379)
Site:	UL Wash Park Pad	MD Reference:	3012+25 @ 3037.00usft (H&P 379)
Well:	UL Wash Park 2D 5HC	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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
WP 5HC SHL - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	304,767.00	514,138.00	32.410749	-102.316336
WP 5HC PBHL - actual wellpath misses target center by 19.62usft at 22643.00usft MD (9077.35 TVD, 14228.61 N, -2185.07 E) - Point	0.00	0.00	9,067.00	14,233.00	-2,169.00	319,000.00	511,969.00	32.449559	-102.325475
WP 5HC BHL - actual wellpath hits target center - Point	0.00	0.00	9,077.35	14,228.61	-2,185.07	318,995.60	511,952.93	32.449545	-102.325526

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,182.14	8,932.40	1,112.35	703.16	60° INC @ 9182.14' MD	
9,308.42	8,985.40	1,224.46	680.10	70° INC @ 9308.42' MD	
9,436.48	9,024.22	1,344.12	656.36	LL Crossing @ 9436.48' MD	
9,534.19	9,045.74	1,437.19	635.96	80° INC @ 9534.19' MD	
14,725.79	9,101.58	6,508.24	-443.84	LL Crossing @ 14725.79' MD	
17,366.87	9,093.64	9,081.53	-1,033.81	LL Crossing @ 17366.87' MD	
20,008.10	9,070.26	11,662.02	-1,591.30	LL Crossing @ 20008.10' MD	
22,643.00	9,077.35	14,228.61	-2,185.07	BHL@ 22643' MD	

Checked By: _____ Approved By: _____ Date: _____



LEASE NAME & WELL NO.:
UL WASH PARK 2D 5HC
TOPOGRAPHY & VEGETATION:
NATURAL MESQUITE PASTURE

NEAREST TOWN IN COUNTY:
±14.8 MILES NORTHEAST OF ANDREWS, TEXAS

LOCATION DESCRIPTION:

SHL/PP: SECTION 2, BLOCK 8,
UNIVERSITY LAND SURVEY
FTP: SECTION 38, BLOCK 5,
UNIVERSITY LAND SURVEY
LTP/BHL: SECTION 26, BLOCK 5,
UNIVERSITY LAND SURVEY
ANDREWS COUNTY, TEXAS

Surface Hole Location:

GROUND ELEVATION:

SHL Ground Elevation: 3011'

COORDINATES:

NAD 27 TX-NC ZONE:

X = 514138 Y = 304767

LAT.: N 32°24'38.70" LONG.: W 102°18'58.81"

LAT.: N 32.4107487 LONG.: W 102.3163361

SURVEY LINE PERPENDICULARS:

1171' FNL & 1101' FWL (SEC. 2)

LEASE LINE PERPENDICULARS:

OFF LEASE

Penetration Point:

COORDINATES:

NAD 27 TX-NC ZONE:

X = 514920 Y = 305625

LAT.: N 32°24'47.53" LONG.: W 102°18'50.16"

LAT.: N 32.4132029 LONG.: W 102.3139327

SURVEY LINE PERPENDICULARS:

502' FNL & 2050' FWL (SEC. 2)

LEASE LINE PERPENDICULARS:

OFF LEASE

First Take Point:

COORDINATES:

NAD 27 TX-NC ZONE:

X = 514806 Y = 306139

LAT.: N 32°24'52.57" LONG.: W 102°18'51.76"

LAT.: N 32.4146022 LONG.: W 102.3143767

SURVEY LINE PERPENDICULARS:

25' FSL & 2050' FWL (SEC. 38)

LEASE LINE PERPENDICULARS:

25' FSL & 621' FEL

Last Take Point:

COORDINATES:

NAD 27 TX-NC ZONE:

X = 511973 Y = 318980

LAT.: N 32°26'58.22" LONG.: W 102°19'31.65"

LAT.: N 32.4495049 LONG.: W 102.3254576

SURVEY LINE PERPENDICULARS:

2615' FSL & 2065' FWL (SEC. 26)

LEASE LINE PERPENDICULARS:

25' FNL & 605' FEL

Bottom Hole Location:

COORDINATES:

NAD 27 TX-NC ZONE:

X = 511969 Y = 319000

LAT.: N 32°26'58.41" LONG.: W 102°19'31.71"

LAT.: N 32.4495580 LONG.: W 102.3254745

SURVEY LINE PERPENDICULARS:

2635' FSL & 2065' FWL (SEC. 26)

LEASE LINE PERPENDICULARS:

5' FNL & 605' FEL

LEGEND

- Section Line
- Block Line
- Found Monument
- Calculated Corner

COGO: 762-107318 | Surveyed: 06/13/22

Drawn By: EAH; 04/03/24

Revision: DCR (5) | 05/22/24

All Coordinates are in NAD 27 TX-NC Zone unless otherwise noted.

CERTIFICATION:

This well location shown on this permit plat was surveyed on the ground under my direct supervision. This plat is for Texas Railroad Commission permit purpose only and should not be considered a boundary survey.

William J. Keating
Texas Reg. No. 5041



TOPOGRAPHIC
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TEXAS FIRM REGISTRATION NO. 10042500
WWW.TOPOGRAPHIC.COM

Signature Date
5/22/24

Special Notes:

Lease Information provided by client

*Unable to locate these wells on the ground. The coordinates provided were plotted per R.R.C. data base and aerial imagery.

