

# **Unit Petroleum**

**Reno County, Kansas [NAD 83]**

**Section 24 T25S-R10W**

**Urban 24 #1H**

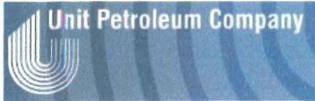
**OH**

**Design: OH**

## **Standard Survey Report**

**27 December, 2013**





Unit Petroleum  
 Project: Reno County, Kansas [NAD 83]  
 Site: Section 24 T265-R10W  
 Well: Urban 24 #1H  
 Wellbore: OH  
 Design: Design #4  
 Lat: 37° 52' 7.706 N  
 Long: 98° 21' 50.248 W  
 Pad GL: 1716.00  
 KB: RKB 14' @ 1730.00usft (UDI 331)



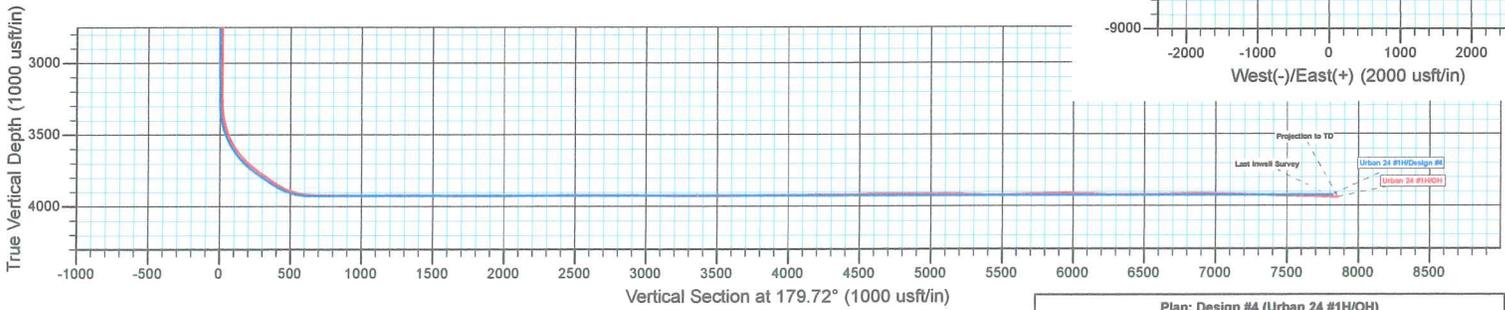
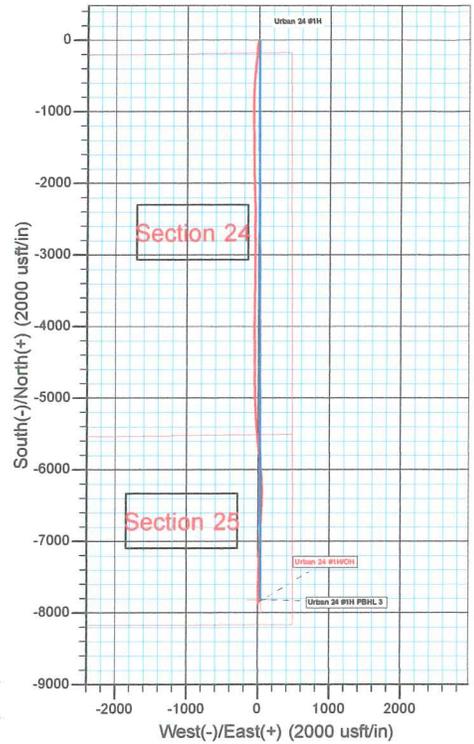
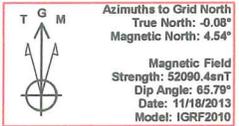
SECTION DETAILS								
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3288.49	0.00	0.00	3288.49	0.00	0.00	0.00	0.00	0.00
3848.49	56.00	179.72	3763.49	-252.56	1.23	10.00	179.72	252.56
3989.55	56.00	179.72	3842.37	-369.50	1.81	0.00	0.00	369.51
4272.88	90.00	179.72	3924.00	-636.50	3.11	12.00	0.00	636.50
11451.97	90.00	179.72	3924.00	-7815.50	38.00	0.00	0.00	7815.59

WELL DETAILS: Urban 24 #1H						
+N-S	+E-W	Northing	Ground Level: Easting	1716.00 Latitude	Longitude	Slot
0.00	0.00	1750088.00	1351603.00	37° 52' 7.706 N	98° 21' 50.248 W	

PROJECT DETAILS: Reno County, Kansas [NAD 83]  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Kansas Southern Zone  
 System Datum: Mean Sea Level

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape Point
Urban 24 #1H PBHL 3	3924.00	-7815.50	38.00	37° 50' 50.441 N	98° 21' 49.916 W	Point
Urban 24 #1H PBHL 2	3929.00	-7815.50	38.00	37° 50' 50.441 N	98° 21' 49.916 W	Point

**NOTE: All Lease lines and Hard lines are estimates only and are subject to the customers' approval.**



Plan: Design #4 (Urban 24 #1H/OH)  
 Created By: Derek Stephens Date: 10:33, December 27 2013



<b>Company:</b>	Unit Petroleum	<b>Local Co-ordinate Reference:</b>	Well Urban 24 #1H
<b>Project:</b>	Reno County, Kansas [NAD 83]	<b>TVD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Site:</b>	Section 24 T25S-R10W	<b>MD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Well:</b>	Urban 24 #1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	Reno County, Kansas [NAD 83]		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Kansas Southern Zone		Using geodetic scale factor

<b>Site</b>	Section 24 T25S-R10W				
<b>Site Position:</b>		<b>Northing:</b>	1,750,088.00 usft	<b>Latitude:</b>	37° 52' 7.706 N
<b>From:</b>	Map	<b>Easting:</b>	1,351,603.00 usft	<b>Longitude:</b>	98° 21' 50.248 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.08 °

<b>Well</b>	Urban 24 #1H					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,750,088.00 usft	<b>Latitude:</b>	37° 52' 7.706 N
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	1,351,603.00 usft	<b>Longitude:</b>	98° 21' 50.248 W
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	1,716.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/18/2013	4.62	65.79	52,090

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	179.72	

<b>Survey Program</b>	Date 12/27/2013				
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
74.89	3,170.62	Gyro (OH)	CB-GYRO-MS	Camera based gyro multishot	
3,221.00	11,475.00	MWD (OH)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
74.89	0.67	183.43	74.89	-0.44	-0.03	0.44	0.89	0.89	0.00	
168.70	1.09	219.46	168.69	-1.67	-0.63	1.67	0.72	0.45	38.41	
262.51	1.10	226.42	262.48	-2.98	-1.85	2.97	0.14	0.01	7.42	
356.32	0.72	226.94	356.28	-4.01	-2.93	3.99	0.41	-0.41	0.55	
450.13	0.62	200.78	450.08	-4.88	-3.54	4.87	0.34	-0.11	-27.89	
543.94	0.46	231.96	543.89	-5.59	-4.02	5.57	0.35	-0.17	33.24	
637.75	0.80	189.35	637.69	-6.47	-4.42	6.45	0.59	0.36	-45.42	
731.56	0.73	151.48	731.50	-7.64	-4.24	7.62	0.53	-0.07	-40.37	
825.37	0.93	167.48	825.30	-8.91	-3.79	8.89	0.32	0.21	17.06	

<b>Company:</b>	Unit Petroleum	<b>Local Co-ordinate Reference:</b>	Well Urban 24 #1H
<b>Project:</b>	Reno County, Kansas [NAD 83]	<b>TVD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Site:</b>	Section 24 T25S-R10W	<b>MD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Well:</b>	Urban 24 #1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single 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)
919.18	1.19	175.64	919.09	-10.62	-3.55	10.60	0.32	0.28	8.70
1,012.99	0.97	218.19	1,012.88	-12.22	-3.97	12.20	0.86	-0.23	45.36
1,106.80	0.96	205.01	1,106.68	-13.55	-4.79	13.53	0.24	-0.01	-14.05
1,200.61	0.83	244.76	1,200.48	-14.56	-5.74	14.53	0.66	-0.14	42.37
1,294.42	0.75	245.47	1,294.28	-15.10	-6.91	15.07	0.09	-0.09	0.76
1,388.23	0.90	282.09	1,388.08	-15.20	-8.19	15.16	0.57	0.16	39.04
1,482.04	0.63	213.65	1,481.89	-15.48	-9.20	15.43	0.95	-0.29	-72.96
1,575.85	0.51	284.30	1,575.69	-15.80	-9.89	15.75	0.71	-0.13	75.31
1,669.66	0.64	209.26	1,669.50	-16.16	-10.55	16.10	0.75	0.14	-79.99
1,763.47	0.33	196.14	1,763.30	-16.87	-10.88	16.82	0.35	-0.33	-13.99
1,857.28	0.25	108.25	1,857.11	-17.20	-10.76	17.14	0.43	-0.09	-93.69
1,951.09	0.29	200.55	1,950.92	-17.48	-10.65	17.43	0.42	0.04	98.39
2,044.90	0.40	338.34	2,044.73	-17.40	-10.85	17.35	0.69	0.12	146.88
2,138.71	0.44	342.00	2,138.54	-16.75	-11.08	16.70	0.05	0.04	3.90
2,232.52	0.33	78.92	2,232.35	-16.36	-10.93	16.31	0.62	-0.12	103.32
2,326.33	0.34	128.19	2,326.16	-16.48	-10.45	16.43	0.30	0.01	52.52
2,420.14	0.32	191.00	2,419.97	-16.91	-10.28	16.86	0.37	-0.02	66.95
2,513.95	0.28	182.96	2,513.77	-17.39	-10.34	17.34	0.06	-0.04	-8.57
2,607.76	0.25	201.23	2,607.58	-17.81	-10.43	17.76	0.10	-0.03	19.48
2,701.57	0.24	17.90	2,701.39	-17.82	-10.44	17.77	0.52	-0.01	188.33
2,795.38	0.22	71.75	2,795.20	-17.57	-10.21	17.52	0.22	-0.02	57.40
2,889.19	0.38	36.23	2,889.01	-17.27	-9.85	17.22	0.25	0.17	-37.86
2,983.00	0.29	45.86	2,982.82	-16.85	-9.50	16.80	0.11	-0.10	10.27
3,076.81	0.10	99.94	3,076.63	-16.70	-9.25	16.65	0.26	-0.20	57.65
3,170.62	0.47	312.00	3,170.44	-16.46	-9.45	16.41	0.59	0.39	-157.70
3,221.00	0.50	27.60	3,220.82	-16.12	-9.50	16.08	1.18	0.06	150.06
3,253.00	0.30	30.40	3,252.82	-15.93	-9.40	15.88	0.63	-0.63	8.75
3,284.00	1.30	189.70	3,283.81	-16.20	-9.42	16.16	5.11	3.23	513.87
3,316.00	4.30	192.40	3,315.77	-17.73	-9.73	17.69	9.38	9.38	8.44
3,347.00	7.40	193.40	3,346.61	-20.81	-10.45	20.76	10.01	10.00	3.23
3,378.00	10.20	193.20	3,377.24	-25.43	-11.54	25.37	9.03	9.03	-0.65
3,410.00	13.00	192.40	3,408.58	-31.70	-12.96	31.64	8.76	8.75	-2.50
3,441.00	15.90	190.90	3,438.60	-39.28	-14.51	39.21	9.43	9.35	-4.84
3,473.00	18.90	188.60	3,469.13	-48.71	-16.11	48.63	9.62	9.38	-7.19
3,505.00	22.20	187.30	3,499.09	-59.83	-17.66	59.75	10.41	10.31	-4.06
3,537.00	25.50	187.40	3,528.35	-72.66	-19.31	72.57	10.31	10.31	0.31
3,567.00	29.10	186.40	3,555.01	-86.32	-20.96	86.22	12.10	12.00	-3.33
3,597.00	32.40	184.80	3,580.79	-101.59	-22.44	101.48	11.33	11.00	-5.33
3,629.00	35.70	183.70	3,607.30	-119.45	-23.76	119.33	10.49	10.31	-3.44
3,661.00	38.70	184.40	3,632.78	-138.75	-25.13	138.62	9.47	9.38	2.19
3,692.00	42.20	185.20	3,656.37	-158.79	-26.82	158.65	11.41	11.29	2.58
3,724.00	45.10	185.30	3,679.52	-180.78	-28.84	180.64	9.07	9.06	0.31
3,756.00	47.70	186.00	3,701.59	-203.84	-31.13	203.68	8.28	8.13	2.19



<b>Company:</b>	Unit Petroleum	<b>Local Co-ordinate Reference:</b>	Well Urban 24 #1H
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<b>Site:</b>	Section 24 T25S-R10W	<b>MD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Well:</b>	Urban 24 #1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single 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)
3,787.00	50.50	186.20	3,721.88	-227.13	-33.62	226.97	9.05	9.03	0.65
3,819.00	53.80	185.90	3,741.52	-252.26	-36.28	252.08	10.34	10.31	-0.94
3,851.00	55.80	185.60	3,759.96	-278.27	-38.90	278.08	6.30	6.25	-0.94
3,883.00	55.90	185.30	3,777.92	-304.64	-41.41	304.43	0.84	0.31	-0.94
3,915.00	56.00	185.20	3,795.84	-331.04	-43.84	330.82	0.41	0.31	-0.31
3,946.00	55.90	185.20	3,813.20	-356.62	-46.17	356.39	0.32	-0.32	0.00
3,978.00	56.30	185.20	3,831.05	-383.07	-48.57	382.83	1.25	1.25	0.00
4,010.00	59.00	184.90	3,848.17	-409.99	-50.95	409.74	8.47	8.44	-0.94
4,041.00	62.80	184.60	3,863.24	-436.98	-53.19	436.72	12.29	12.26	-0.97
4,073.00	66.30	185.20	3,876.99	-465.77	-55.66	465.49	11.07	10.94	1.88
4,104.00	69.70	185.90	3,888.60	-494.37	-58.45	494.08	11.17	10.97	2.26
4,136.00	73.30	185.90	3,898.75	-524.55	-61.56	524.24	11.25	11.25	0.00
4,167.00	77.10	185.20	3,906.67	-554.38	-64.46	554.06	12.45	12.26	-2.26
4,199.00	81.20	183.90	3,912.69	-585.70	-66.95	585.36	13.42	12.81	-4.06
4,214.00	82.90	183.30	3,914.77	-600.52	-67.88	600.19	12.01	11.33	-4.00
4,284.00	88.30	182.50	3,920.14	-670.20	-71.41	669.85	7.80	7.71	-1.14
4,345.00	89.10	181.80	3,921.52	-731.14	-73.70	730.77	1.74	1.31	-1.15
4,407.00	89.70	181.10	3,922.17	-793.12	-75.27	792.74	1.49	0.97	-1.13
4,469.00	90.30	180.40	3,922.17	-855.11	-76.08	854.73	1.49	0.97	-1.13
4,531.00	89.00	180.20	3,922.55	-917.11	-76.40	916.73	2.12	-2.10	-0.32
4,593.00	89.40	180.00	3,923.42	-979.10	-76.51	978.72	0.72	0.65	-0.32
4,654.00	90.50	180.10	3,923.47	-1,040.10	-76.57	1,039.72	1.81	1.80	0.16
4,716.00	90.00	179.30	3,923.20	-1,102.10	-76.24	1,101.71	1.52	-0.81	-1.29
4,778.00	90.90	178.80	3,922.71	-1,164.09	-75.21	1,163.71	1.66	1.45	-0.81
4,840.00	89.70	178.90	3,922.39	-1,226.07	-73.97	1,225.70	1.94	-1.94	0.16
4,902.00	90.60	178.40	3,922.22	-1,288.06	-72.51	1,287.69	1.66	1.45	-0.81
4,963.00	89.40	178.90	3,922.22	-1,349.04	-71.07	1,348.67	2.13	-1.97	0.82
5,025.00	90.50	178.70	3,922.28	-1,411.02	-69.77	1,410.67	1.80	1.77	-0.32
5,087.00	89.20	179.30	3,922.44	-1,473.01	-68.69	1,472.66	2.31	-2.10	0.97
5,149.00	88.10	179.90	3,923.90	-1,534.99	-68.26	1,534.64	2.02	-1.77	0.97
5,212.00	88.60	180.10	3,925.72	-1,597.97	-68.26	1,597.61	0.85	0.79	0.32
5,273.00	89.10	179.80	3,926.94	-1,658.95	-68.20	1,658.60	0.96	0.82	-0.49
5,335.00	89.50	179.80	3,927.70	-1,720.95	-67.99	1,720.60	0.65	0.65	0.00
5,397.00	90.40	180.10	3,927.75	-1,782.95	-67.93	1,782.59	1.53	1.45	0.48
5,458.00	91.20	178.90	3,926.90	-1,843.94	-67.40	1,843.59	2.36	1.31	-1.97
5,520.00	89.70	178.00	3,926.41	-1,905.91	-65.73	1,905.57	2.82	-2.42	-1.45
5,581.00	89.90	177.40	3,926.63	-1,966.86	-63.28	1,966.53	1.04	0.33	-0.98
5,643.00	90.30	177.10	3,926.52	-2,028.79	-60.30	2,028.47	0.81	0.65	-0.48
5,704.00	91.30	177.60	3,925.67	-2,089.72	-57.48	2,089.41	1.83	1.64	0.82
5,766.00	90.30	178.40	3,924.80	-2,151.67	-55.32	2,151.38	2.07	-1.61	1.29
5,827.00	91.00	178.20	3,924.11	-2,212.64	-53.51	2,212.35	1.19	1.15	-0.33
5,888.00	91.70	178.90	3,922.67	-2,273.60	-51.97	2,273.32	1.62	1.15	1.15
5,949.00	90.30	179.00	3,921.61	-2,334.58	-50.85	2,334.31	2.30	-2.30	0.16

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<b>Project:</b>	Reno County, Kansas [NAD 83]	<b>TVD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Site:</b>	Section 24 T25S-R10W	<b>MD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Well:</b>	Urban 24 #1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single 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)	
6,010.00	91.50	179.50	3,920.65	-2,395.57	-50.05	2,395.29	2.13	1.97	0.82	
6,072.00	91.10	179.40	3,919.24	-2,457.55	-49.46	2,457.28	0.67	-0.65	-0.16	
6,134.00	90.10	179.50	3,918.59	-2,519.54	-48.86	2,519.27	1.62	-1.61	0.16	
6,195.00	88.90	180.20	3,919.12	-2,580.54	-48.70	2,580.27	2.28	-1.97	1.15	
6,258.00	89.20	180.00	3,920.17	-2,643.53	-48.81	2,643.26	0.57	0.48	-0.32	
6,319.00	89.90	180.00	3,920.65	-2,704.53	-48.81	2,704.26	1.15	1.15	0.00	
6,381.00	89.00	179.70	3,921.24	-2,766.52	-48.65	2,766.25	1.53	-1.45	-0.48	
6,442.00	89.40	179.50	3,922.09	-2,827.52	-48.22	2,827.25	0.73	0.66	-0.33	
6,504.00	90.10	179.70	3,922.37	-2,889.51	-47.79	2,889.25	1.17	1.13	0.32	
6,566.00	88.90	180.10	3,922.91	-2,951.51	-47.68	2,951.24	2.04	-1.94	0.65	
6,627.00	89.40	179.70	3,923.81	-3,012.50	-47.57	3,012.23	1.05	0.82	-0.66	
6,689.00	90.50	179.40	3,923.87	-3,074.50	-47.09	3,074.23	1.84	1.77	-0.48	
6,750.00	89.00	180.40	3,924.13	-3,135.50	-46.98	3,135.23	2.96	-2.46	1.64	
6,812.00	90.40	180.20	3,924.46	-3,197.49	-47.31	3,197.22	2.28	2.26	-0.32	
6,874.00	88.40	180.50	3,925.11	-3,259.49	-47.68	3,259.21	3.26	-3.23	0.48	
6,935.00	89.20	180.90	3,926.38	-3,320.47	-48.43	3,320.19	1.47	1.31	0.66	
6,997.00	90.60	180.60	3,926.49	-3,382.46	-49.24	3,382.18	2.31	2.26	-0.48	
7,058.00	89.50	180.90	3,926.44	-3,443.45	-50.04	3,443.17	1.87	-1.80	0.49	
7,120.00	90.10	180.90	3,926.65	-3,505.45	-51.01	3,505.15	0.97	0.97	0.00	
7,182.00	90.60	181.00	3,926.28	-3,567.44	-52.04	3,567.14	0.82	0.81	0.16	
7,243.00	91.70	181.00	3,925.05	-3,628.41	-53.11	3,628.11	1.80	1.80	0.00	
7,305.00	91.00	180.80	3,923.59	-3,690.39	-54.08	3,690.08	1.17	-1.13	-0.32	
7,367.00	91.70	180.50	3,922.13	-3,752.37	-54.78	3,752.05	1.23	1.13	-0.48	
7,428.00	90.70	180.80	3,920.85	-3,813.35	-55.47	3,813.03	1.71	-1.64	0.49	
7,490.00	90.10	180.20	3,920.42	-3,875.34	-56.02	3,875.02	1.37	-0.97	-0.97	
7,552.00	91.40	179.70	3,919.61	-3,937.34	-55.96	3,937.02	2.25	2.10	-0.81	
7,613.00	90.20	179.80	3,918.76	-3,998.33	-55.70	3,998.01	1.97	-1.97	0.16	
7,675.00	89.40	180.10	3,918.97	-4,060.33	-55.64	4,060.01	1.38	-1.29	0.48	
7,737.00	89.70	179.30	3,919.46	-4,122.32	-55.32	4,122.00	1.38	0.48	-1.29	
7,798.00	91.00	179.30	3,919.09	-4,183.32	-54.57	4,183.00	2.13	2.13	0.00	
7,860.00	89.30	179.40	3,918.92	-4,245.31	-53.87	4,245.00	2.75	-2.74	0.16	
7,922.00	89.80	179.50	3,919.41	-4,307.31	-53.27	4,306.99	0.82	0.81	0.16	
7,984.00	90.50	179.00	3,919.25	-4,369.30	-52.46	4,368.99	1.39	1.13	-0.81	
8,047.00	90.80	179.50	3,918.53	-4,432.29	-51.64	4,431.98	0.93	0.48	0.79	
8,107.00	90.70	179.80	3,917.75	-4,492.28	-51.27	4,491.98	0.53	-0.17	0.50	
8,168.00	90.90	179.80	3,916.90	-4,553.28	-51.06	4,552.97	0.33	0.33	0.00	
8,228.00	90.60	179.50	3,916.11	-4,613.27	-50.69	4,612.97	0.71	-0.50	-0.50	
8,290.00	90.40	179.50	3,915.57	-4,675.27	-50.15	4,674.97	0.32	-0.32	0.00	
8,351.00	90.40	180.20	3,915.15	-4,736.26	-49.99	4,735.96	1.15	0.00	1.15	
8,411.00	89.90	179.90	3,914.99	-4,796.26	-50.04	4,795.96	0.97	-0.83	-0.50	
8,472.00	90.10	179.10	3,914.99	-4,857.26	-49.51	4,856.96	1.35	0.33	-1.31	
8,534.00	90.40	179.00	3,914.72	-4,919.25	-48.48	4,918.96	0.51	0.48	-0.16	
8,595.00	90.20	178.70	3,914.40	-4,980.24	-47.26	4,979.95	0.59	-0.33	-0.49	
8,656.00	90.30	177.30	3,914.13	-5,041.20	-45.13	5,040.92	2.30	0.16	-2.30	



<b>Company:</b>	Unit Petroleum	<b>Local Co-ordinate Reference:</b>	Well Urban 24 #1H
<b>Project:</b>	Reno County, Kansas [NAD 83]	<b>TVD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Site:</b>	Section 24 T25S-R10W	<b>MD Reference:</b>	RKB 14' @ 1730.00usft (UDI 331)
<b>Well:</b>	Urban 24 #1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 5000.1 Single 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)
8,718.00	90.00	176.70	3,913.97	-5,103.11	-41.88	5,102.85	1.08	-0.48	-0.97
8,780.00	89.40	177.10	3,914.29	-5,165.02	-38.53	5,164.77	1.16	-0.97	0.65
8,842.00	87.20	175.80	3,916.13	-5,226.87	-34.70	5,226.64	4.12	-3.55	-2.10
8,905.00	88.00	175.70	3,918.77	-5,289.64	-30.03	5,289.43	1.28	1.27	-0.16
8,967.00	88.70	176.10	3,920.56	-5,351.46	-25.60	5,351.27	1.30	1.13	0.65
9,030.00	89.70	174.80	3,921.44	-5,414.25	-20.60	5,414.08	2.60	1.59	-2.06
9,091.00	90.10	175.20	3,921.54	-5,475.02	-15.29	5,474.88	0.93	0.66	0.66
9,152.00	92.50	175.30	3,920.16	-5,535.79	-10.24	5,535.67	3.94	3.93	0.16
9,212.00	92.90	174.90	3,917.33	-5,595.50	-5.12	5,595.41	0.94	0.67	-0.67
9,274.00	91.70	175.10	3,914.84	-5,657.21	0.28	5,657.15	1.96	-1.94	0.32
9,336.00	91.00	175.00	3,913.38	-5,718.97	5.63	5,718.93	1.14	-1.13	-0.16
9,398.00	91.00	174.60	3,912.30	-5,780.70	11.25	5,780.69	0.65	0.00	-0.65
9,459.00	90.90	174.30	3,911.29	-5,841.41	17.15	5,841.42	0.52	-0.16	-0.49
9,520.00	90.60	174.00	3,910.49	-5,902.08	23.36	5,902.13	0.70	-0.49	-0.49
9,580.00	89.10	175.00	3,910.65	-5,961.81	29.12	5,961.88	3.00	-2.50	1.67
9,641.00	87.90	174.70	3,912.25	-6,022.54	34.59	6,022.63	2.03	-1.97	-0.49
9,703.00	87.80	174.00	3,914.57	-6,084.19	40.69	6,084.32	1.14	-0.16	-1.13
9,764.00	87.90	175.60	3,916.86	-6,144.90	46.21	6,145.05	2.63	0.16	2.62
9,826.00	88.10	177.70	3,919.02	-6,206.75	49.83	6,206.92	3.40	0.32	3.39
9,887.00	88.30	178.60	3,920.94	-6,267.69	51.80	6,267.86	1.51	0.33	1.48
9,948.00	89.10	180.20	3,922.32	-6,328.66	52.44	6,328.85	2.93	1.31	2.62
10,010.00	90.20	181.90	3,922.70	-6,390.65	51.30	6,390.82	3.27	1.77	2.74
10,072.00	90.60	182.10	3,922.27	-6,452.61	49.14	6,452.77	0.72	0.65	0.32
10,135.00	91.00	182.00	3,921.39	-6,515.56	46.89	6,515.72	0.65	0.63	-0.16
10,197.00	90.90	181.90	3,920.36	-6,577.52	44.78	6,577.66	0.23	-0.16	-0.16
10,259.00	91.50	181.90	3,919.06	-6,639.47	42.72	6,639.60	0.97	0.97	0.00
10,319.00	91.00	182.40	3,917.76	-6,699.41	40.47	6,699.53	1.18	-0.83	0.83
10,381.00	90.90	182.90	3,916.73	-6,761.34	37.61	6,761.44	0.82	-0.16	0.81
10,443.00	91.00	183.60	3,915.70	-6,823.23	34.09	6,823.32	1.14	0.16	1.13
10,505.00	89.70	183.50	3,915.32	-6,885.11	30.25	6,885.18	2.10	-2.10	-0.16
10,566.00	90.20	183.10	3,915.37	-6,946.01	26.74	6,946.06	1.05	0.82	-0.66
10,628.00	90.20	183.00	3,915.16	-7,007.92	23.44	7,007.95	0.16	0.00	-0.16
10,690.00	89.90	183.60	3,915.10	-7,069.82	19.87	7,069.83	1.08	-0.48	0.97
10,751.00	88.10	183.10	3,916.17	-7,130.70	16.31	7,130.70	3.06	-2.95	-0.82
10,813.00	88.30	182.50	3,918.12	-7,192.60	13.28	7,192.57	1.02	0.32	-0.97
10,874.00	88.20	182.40	3,919.98	-7,253.51	10.68	7,253.48	0.23	-0.16	-0.16
10,936.00	87.30	181.20	3,922.41	-7,315.43	8.73	7,315.39	2.42	-1.45	-1.94
10,998.00	87.50	180.60	3,925.23	-7,377.36	7.76	7,377.31	1.02	0.32	-0.97
11,059.00	88.20	180.40	3,927.51	-7,438.31	7.22	7,438.26	1.19	1.15	-0.33
11,121.00	88.00	180.40	3,929.57	-7,500.28	6.79	7,500.22	0.32	-0.32	0.00
11,183.00	88.10	180.70	3,931.68	-7,562.24	6.20	7,562.18	0.51	0.16	0.48
11,245.00	88.50	180.50	3,933.52	-7,624.21	5.55	7,624.14	0.72	0.65	-0.32
11,306.00	89.00	180.40	3,934.85	-7,685.19	5.07	7,685.13	0.84	0.82	-0.16