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September 6, 2019

The Railroad Commission of Texas  
Oil & Gas Division  
PO Box 12967  
Austin, TX 78711-2967

WPX Energy Permian, LLC  
University 32, 411H (Permit No: 852429)  
Survey: UL / Abstract: U28  
Field: Phantom (Wolfcamp)  
Winkler County, TX

API Number: 42-495-34354

Please find the attached survey performed on the above referenced well by MS Directional LLC;  
**Operator Number 592486.** Other information required by your office is as follows:

Name of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Daniel White	Original Wellbore	166' – 16,836'	06/11/19 – 07/25/19	MWD

If any other information is required, please contact the undersigned at the letterhead address and telephone number.

Sincerely,

Amber Greer  
Regulatory Administrator

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V09.04.02

Company:		WPX Energy Permian, LLC									
Well Name:		University 32 411H									
Location:		Winkler County, TX									
Rig:		H&P #314				Magnetic Declination:		8.42		REFERENCED TO GRID NORTH	
Job Number:		MSMO-66602									
API #:		42-495-34354									
Vertical Section Azimuth:				343.71		Proposed Direction:		343.71			
Survey Calculation Method:				Minimum Curvature							
PTB:	MD		INC		AZM	TVD	N/S	E/W	VS		
	16,890		89.2		343	11884.48	4467.45	-2130.46	4885.69		
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
TIE IN	0	0.00	0.00	0.00	0.00	0.00			0.00		
1	166	0.40	284.60	166.00	0.15	-0.56	0.30	0.58	284.60	0.24	0.24
2	258	0.50	7.80	258.00	0.62	-0.82	0.83	1.03	307.40	0.65	0.11
3	350	0.50	310.10	349.99	1.28	-1.07	1.53	1.67	320.14	0.52	0.00
4	443	0.40	297.50	442.99	1.69	-1.67	2.09	2.38	315.41	0.15	-0.11
5	611	0.40	346.00	610.99	2.53	-2.33	3.08	3.44	317.38	0.20	0.00
6	704	0.50	19.10	703.98	3.23	-2.28	3.74	3.95	324.84	0.29	0.11
7	796	0.60	15.00	795.98	4.08	-2.02	4.48	4.55	333.64	0.12	0.11
8	889	0.40	4.90	888.98	4.87	-1.87	5.20	5.21	339.03	0.23	-0.22
9	981	0.60	356.30	980.97	5.67	-1.87	5.97	5.97	341.75	0.23	0.22
10	1,074	0.60	10.80	1073.97	6.63	-1.81	6.88	6.88	344.74	0.16	0.00
11	1,197	0.20	192.70	1196.97	7.06	-1.74	7.26	7.27	346.18	0.65	-0.33
12	1,292	1.30	199.90	1291.96	5.88	-2.14	6.25	6.26	340.01	1.16	1.16
13	1,387	1.60	193.00	1386.93	3.58	-2.80	4.22	4.54	321.89	0.36	0.32
14	1,481	1.50	197.00	1480.89	1.12	-3.46	2.05	3.64	287.95	0.16	-0.11
15	1,576	1.20	192.60	1575.87	-1.04	-4.04	0.14	4.17	255.58	0.33	-0.32
16	1,671	1.30	188.20	1670.84	-3.08	-4.41	-1.72	5.38	235.11	0.15	0.11
17	1,766	1.10	175.60	1765.82	-5.05	-4.49	-3.59	6.76	221.66	0.35	-0.21
18	1,861	0.80	166.10	1860.81	-6.61	-4.27	-5.14	7.86	212.85	0.36	-0.32
19	1,955	0.60	163.80	1954.80	-7.71	-3.97	-6.29	8.68	207.23	0.21	-0.21
20	2,050	0.50	147.60	2049.80	-8.54	-3.61	-7.19	9.27	202.91	0.19	-0.11
21	2,144	0.60	125.00	2143.79	-9.17	-2.99	-7.97	9.65	198.04	0.25	0.11
22	2,239	0.50	109.30	2238.79	-9.59	-2.19	-8.59	9.84	192.85	0.19	-0.11
23	2,334	0.80	205.60	2333.78	-10.33	-2.08	-9.33	10.54	191.40	1.04	0.32
24	2,429	2.80	229.10	2428.73	-12.45	-4.12	-10.79	13.11	198.33	2.20	2.11
25	2,524	4.90	228.80	2523.51	-16.64	-8.93	-13.47	18.88	208.23	2.21	2.21
26	2,619	6.50	223.40	2618.04	-23.22	-15.68	-17.89	28.02	214.03	1.77	1.68
27	2,714	8.10	224.80	2712.27	-31.87	-24.09	-23.84	39.95	217.08	1.69	1.68
28	2,809	8.20	225.00	2806.31	-41.41	-33.60	-30.33	53.33	219.05	0.11	0.11
29	2,904	7.60	224.90	2900.41	-50.65	-42.82	-36.61	66.33	220.21	0.63	-0.63
30	2,999	7.00	224.50	2994.64	-59.23	-51.31	-42.46	78.37	220.90	0.63	-0.63
31	3,094	7.30	228.10	3088.90	-67.39	-59.86	-47.90	90.14	221.61	0.57	0.32
32	3,189	7.40	230.80	3183.12	-75.29	-69.10	-52.89	102.19	222.54	0.38	0.11

Company:		WPX Energy Permian, LLC				<div><div>Magnetic Declination:</div><div>8.42</div><div>REFERENCED TO GRID NORTH</div><div></div></div>					
Well Name:		University 32 411H									
Location:		Winkler County, TX									
Rig:		H&P #314									
Job Number:		MSMO-66602									
API #:		42-495-34354									
Vertical Section Azimuth:				343.71		Proposed Direction:		343.71			
Survey Calculation Method:				Minimum Curvature							
PTB:	MD		INC		AZM	TVD	N/S	E/W		VS	
	16,890		89.2		343	11884.48	4467.45	-2130.46		4885.69	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance      Azm		DLS/ 100	BUR/ 100'
33	3,283	6.50	229.80	3276.43	-82.55	-77.85	-57.40	113.47	223.32	0.97	-0.96
34	3,378	6.80	224.50	3370.79	-90.03	-85.90	-62.32	124.44	223.65	0.72	0.32
35	3,473	9.30	226.20	3464.85	-99.36	-95.38	-68.61	137.73	223.83	2.64	2.63
36	3,568	8.90	227.00	3558.65	-109.68	-106.30	-75.46	152.74	224.10	0.44	-0.42
37	3,662	8.40	227.20	3651.58	-119.31	-116.66	-81.80	166.86	224.36	0.53	-0.53
38	3,757	7.60	226.20	3745.65	-128.37	-126.28	-87.80	180.07	224.53	0.85	-0.84
39	3,852	8.00	226.00	3839.78	-137.31	-135.57	-93.77	192.96	224.63	0.42	0.42
40	3,947	7.80	225.40	3933.87	-146.43	-144.92	-99.90	206.02	224.70	0.23	-0.21
41	4,042	7.00	221.60	4028.08	-155.29	-153.35	-106.04	218.24	224.64	0.99	-0.84
42	4,137	8.10	225.40	4122.26	-164.31	-161.96	-112.29	230.72	224.59	1.27	1.16
43	4,233	7.10	223.80	4217.41	-173.35	-170.88	-118.45	243.41	224.59	1.06	-1.04
44	4,327	7.50	227.70	4310.65	-181.67	-179.44	-124.04	255.35	224.65	0.68	0.43
45	4,423	7.50	231.20	4405.83	-189.81	-188.96	-129.19	267.83	224.87	0.48	0.00
46	4,518	6.60	232.10	4500.11	-197.05	-198.10	-133.57	279.41	225.15	0.95	-0.95
47	4,613	7.30	225.70	4594.41	-204.62	-206.72	-138.42	290.87	225.29	1.10	0.74
48	4,707	7.20	221.40	4687.66	-213.21	-214.89	-144.37	302.72	225.23	0.59	-0.11
49	4,802	8.10	225.90	4781.82	-222.33	-223.64	-150.67	315.35	225.17	1.14	0.95
50	4,897	7.50	222.10	4875.94	-231.59	-232.60	-157.05	328.23	225.12	0.83	-0.63
51	4,991	8.50	223.80	4969.02	-241.15	-241.52	-163.73	341.30	225.04	1.09	1.06
52	5,086	8.60	225.00	5062.97	-251.24	-251.40	-170.64	355.43	225.02	0.22	0.11
53	5,172	7.60	227.40	5148.11	-259.64	-260.14	-176.25	367.54	225.05	1.23	-1.16
54	5,242	7.50	227.00	5217.50	-265.89	-266.89	-180.35	376.73	225.11	0.16	-0.14
55	5,337	7.60	228.70	5311.68	-274.26	-276.14	-185.80	389.20	225.20	0.26	0.11
56	5,432	7.70	228.80	5405.83	-282.60	-285.65	-191.13	401.82	225.31	0.11	0.11
57	5,527	7.50	229.60	5500.00	-290.81	-295.16	-196.35	414.36	225.42	0.24	-0.21
58	5,622	7.20	230.30	5594.22	-298.63	-304.46	-201.25	426.47	225.55	0.33	-0.32
59	5,716	7.70	227.90	5687.42	-306.62	-313.67	-206.33	438.64	225.65	0.63	0.53
60	5,811	7.70	227.90	5781.57	-315.15	-323.11	-211.87	451.35	225.71	0.00	0.00
61	5,906	7.50	228.00	5875.73	-323.57	-332.44	-217.33	463.91	225.77	0.21	-0.21
62	6,001	6.90	227.50	5969.98	-331.57	-341.25	-222.54	475.81	225.82	0.64	-0.63
63	6,096	7.70	226.10	6064.21	-339.84	-350.05	-228.01	487.88	225.85	0.86	0.84
64	6,191	8.10	225.90	6158.31	-348.91	-359.44	-234.08	500.94	225.85	0.42	0.42
65	6,285	8.00	226.50	6251.39	-358.02	-368.94	-240.16	514.10	225.86	0.14	-0.11

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Job Number:		MSMO-66602									
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Vertical Section Azimuth:			343.71			Proposed Direction:		343.71			
Survey Calculation Method:			Minimum Curvature								
PTB:	MD		INC		AZM	TVD	N/S	E/W		VS	
	16,890		89.2		343	11884.48	4467.45	-2130.46		4885.69	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'
66	6,380	8.80	229.60	6345.37	-367.28	-379.27	-246.15	527.96	225.92	0.97	0.84
67	6,475	9.20	231.10	6439.20	-376.76	-390.71	-252.04	542.78	226.04	0.49	0.42
68	6,570	9.30	231.50	6532.96	-386.31	-402.63	-257.86	557.98	226.19	0.13	0.11
69	6,665	9.30	231.00	6626.71	-395.92	-414.60	-263.73	573.28	226.32	0.09	0.00
70	6,759	9.20	231.60	6719.49	-405.37	-426.40	-269.49	588.33	226.45	0.15	-0.11
71	6,854	9.10	231.50	6813.28	-414.76	-438.23	-275.19	603.38	226.58	0.11	-0.11
72	6,949	8.50	231.50	6907.16	-423.81	-449.60	-280.68	617.86	226.69	0.63	-0.63
73	7,044	8.20	231.70	7001.15	-432.38	-460.41	-285.87	631.61	226.80	0.32	-0.32
74	7,139	8.10	232.90	7095.20	-440.61	-471.07	-290.79	645.02	226.91	0.21	-0.11
75	7,234	7.60	232.10	7189.31	-448.51	-481.36	-295.48	657.93	227.02	0.54	-0.53
76	7,328	7.20	223.60	7282.52	-456.59	-490.33	-300.73	670.00	227.04	1.24	-0.43
77	7,423	7.30	223.50	7376.77	-465.28	-498.59	-306.75	681.97	226.98	0.11	0.11
78	7,518	6.10	220.30	7471.12	-473.51	-506.01	-312.57	693.01	226.90	1.32	-1.26
79	7,613	6.80	218.60	7565.51	-481.76	-512.78	-318.58	703.59	226.79	0.76	0.74
80	7,707	6.60	220.20	7658.87	-490.23	-519.74	-324.76	714.46	226.67	0.29	-0.21
81	7,802	6.60	225.30	7753.24	-498.24	-527.15	-330.38	725.35	226.61	0.62	0.00
82	7,897	6.10	235.40	7847.66	-504.95	-535.18	-334.56	735.79	226.66	1.29	-0.53
83	7,992	6.80	225.50	7942.06	-511.76	-543.35	-338.80	746.41	226.72	1.38	0.74
84	8,086	6.70	222.30	8035.41	-519.71	-551.01	-344.29	757.44	226.67	0.41	-0.11
85	8,181	8.10	227.10	8129.62	-528.37	-559.64	-350.18	769.66	226.65	1.61	1.47
86	8,276	8.20	228.00	8223.66	-537.46	-569.58	-356.12	783.12	226.66	0.17	0.11
87	8,371	7.50	229.40	8317.77	-546.03	-579.32	-361.61	796.09	226.69	0.76	-0.74
88	8,466	7.10	230.20	8412.00	-553.82	-588.54	-366.50	808.14	226.74	0.43	-0.42
89	8,560	6.40	228.10	8505.35	-561.04	-596.90	-371.08	819.18	226.77	0.79	-0.74
90	8,655	5.60	225.50	8599.83	-567.82	-604.15	-375.56	829.11	226.78	0.89	-0.84
91	8,750	4.90	223.20	8694.43	-574.03	-610.23	-379.81	837.79	226.75	0.77	-0.74
92	8,845	4.00	221.30	8789.14	-579.48	-615.20	-383.65	845.14	226.71	0.96	-0.95
93	8,939	3.10	220.80	8882.96	-583.86	-619.02	-386.79	850.93	226.67	0.96	-0.96
94	9,034	2.90	225.00	8977.83	-587.51	-622.40	-389.34	855.89	226.65	0.31	-0.21
95	9,129	1.30	242.10	9072.76	-589.71	-625.05	-390.71	859.33	226.67	1.79	-1.68
96	9,224	1.00	249.50	9167.74	-590.50	-626.78	-390.99	861.13	226.71	0.35	-0.32
97	9,318	1.00	258.40	9261.73	-590.96	-628.35	-390.98	862.59	226.76	0.17	0.00

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PTB:	MD		INC		AZM	TVD	N/S		E/W		VS
	16,890		89.2		343	11884.48	4467.45		-2130.46		4885.69
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'
98	9,413	1.00	280.40	9356.71	-590.97	-629.98	-390.54	863.79	226.83	0.40	0.00
99	9,508	0.20	19.50	9451.71	-590.67	-630.74	-390.03	864.13	226.88	1.11	-0.84
100	9,603	0.40	72.10	9546.71	-590.41	-630.37	-389.89	863.68	226.87	0.34	0.21
101	9,698	0.70	167.90	9641.71	-590.88	-629.93	-390.46	863.68	226.83	0.88	0.32
102	9,792	0.40	170.50	9735.70	-591.76	-629.76	-391.36	864.16	226.78	0.32	-0.32
103	9,887	1.30	190.40	9830.69	-593.15	-629.90	-392.65	865.21	226.72	0.98	0.95
104	9,982	1.90	186.20	9925.65	-595.77	-630.26	-395.07	867.28	226.61	0.64	0.63
105	10,077	1.20	161.10	10020.62	-598.28	-630.11	-397.52	868.89	226.48	1.01	-0.74
106	10,171	0.50	182.50	10114.61	-599.62	-629.81	-398.89	869.60	226.41	0.81	-0.74
107	10,266	0.40	210.50	10209.60	-600.32	-630.00	-399.51	870.22	226.38	0.25	-0.11
108	10,361	0.30	302.20	10304.60	-600.47	-630.37	-399.55	870.60	226.39	0.53	-0.11
109	10,455	0.60	348.70	10398.60	-599.86	-630.68	-398.87	870.40	226.43	0.48	0.32
110	10,550	1.20	330.90	10493.59	-598.50	-631.26	-397.41	869.88	226.53	0.69	0.63
111	10,645	1.90	315.30	10588.55	-596.51	-632.85	-395.05	869.67	226.69	0.85	0.74
112	10,739	1.80	298.50	10682.51	-594.70	-635.25	-392.64	870.18	226.89	0.58	-0.11
113	10,834	1.90	291.50	10777.46	-593.41	-638.02	-390.63	871.33	227.07	0.26	0.11
114	10,929	0.30	161.90	10872.44	-593.07	-639.41	-389.91	872.11	227.15	2.21	-1.68
115	11,023	1.40	144.40	10966.43	-594.24	-638.67	-391.24	872.36	227.06	1.19	1.17
116	11,118	1.60	179.50	11061.40	-596.51	-637.98	-393.61	873.41	226.92	0.97	0.21
117	11,213	1.80	186.10	11156.36	-599.32	-638.12	-396.27	875.44	226.80	0.29	0.21
118	11,311	3.40	336.50	11254.31	-598.18	-639.45	-394.81	875.62	226.91	5.15	1.63
119	11,406	14.80	343.00	11347.96	-583.95	-644.13	-379.83	869.43	227.81	12.03	12.00
120	11,501	25.60	340.90	11436.99	-552.86	-654.43	-347.10	856.70	229.81	11.39	11.37
121	11,596	35.30	337.80	11518.79	-507.94	-671.56	-299.18	842.02	232.90	10.34	10.21
122	11,691	41.00	344.10	11593.50	-452.49	-690.49	-240.64	825.54	236.76	7.26	6.00
123	11,784	47.60	345.00	11660.02	-389.91	-707.75	-175.74	808.05	241.15	7.13	7.10
124	11,878	56.90	345.90	11717.50	-318.04	-726.37	-101.53	792.95	246.35	9.92	9.89
125	11,972	68.10	345.80	11760.84	-237.32	-746.72	-18.34	783.53	252.37	11.92	11.91
126	12,050	73.60	347.20	11786.42	-165.70	-763.90	55.22	781.67	257.76	7.25	7.05
127	12,145	77.80	345.40	11809.88	-76.29	-785.71	147.16	789.41	264.45	4.79	4.42
128	12,240	87.70	342.90	11821.86	14.24	-811.44	241.27	811.56	271.01	10.74	10.42
129	12,335	88.90	343.70	11824.67	105.19	-838.72	336.23	845.30	277.15	1.52	1.26

Company:		WPX Energy Permian, LLC				<div><div>Magnetic Declination:</div><div>8.42</div><div>REFERENCED TO GRID NORTH</div><div></div></div>					
Well Name:		University 32 411H									
Location:		Winkler County, TX									
Rig:		H&P #314									
Job Number:		MSMO-66602									
API #:		42-495-34354									
Vertical Section Azimuth:				343.71		Proposed Direction:		343.71			
Survey Calculation Method:				Minimum Curvature							
PTB:	MD		INC		AZM	TVD	N/S	E/W		VS	
	16,890		89.2		343	11884.48	4467.45	-2130.46		4885.69	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance      Azm		DLS/ 100	BUR/ 100'
130	12,430	89.90	344.30	11825.67	196.50	-864.91	431.22	886.95	282.80	1.23	1.05
131	12,524	85.90	340.90	11829.11	286.11	-892.99	525.11	937.70	287.77	5.58	-4.26
132	12,619	89.70	342.90	11832.76	376.32	-922.47	619.97	996.28	292.19	4.52	4.00
133	12,714	89.00	343.20	11833.84	467.19	-950.16	714.95	1058.81	296.18	0.80	-0.74
134	12,809	89.30	343.30	11835.25	558.15	-977.54	809.94	1125.66	299.73	0.33	0.32
135	12,903	89.90	342.80	11835.90	648.06	-1004.94	903.93	1195.78	302.82	0.83	0.64
136	12,998	88.90	340.80	11836.90	738.30	-1034.61	998.87	1271.03	305.51	2.35	-1.05
137	13,093	90.20	342.60	11837.64	828.49	-1064.44	1093.80	1348.86	307.89	2.34	1.37
138	13,188	89.60	342.90	11837.81	919.21	-1092.61	1188.79	1427.85	310.07	0.71	-0.63
139	13,282	88.30	340.30	11839.53	1008.38	-1122.27	1282.70	1508.75	311.94	3.09	-1.38
140	13,377	91.20	347.30	11839.95	1099.54	-1148.76	1377.63	1590.17	313.75	7.97	3.05
141	13,472	89.90	345.90	11839.04	1191.95	-1170.77	1472.50	1670.76	315.51	2.01	-1.37
142	13,568	89.10	344.50	11839.87	1284.76	-1195.29	1568.46	1754.80	317.07	1.68	-0.83
143	13,663	90.70	346.10	11840.04	1376.64	-1219.40	1663.41	1839.04	318.47	2.38	1.68
144	13,758	90.00	347.10	11839.46	1469.05	-1241.41	1758.29	1923.33	319.80	1.28	-0.74
145	13,853	89.80	346.20	11839.63	1561.48	-1263.35	1853.16	2008.55	321.02	0.97	-0.21
146	13,948	88.30	344.20	11841.20	1653.31	-1287.61	1948.11	2095.56	322.09	2.63	-1.58
147	14,043	90.10	342.10	11842.53	1744.21	-1315.14	2043.09	2184.46	322.98	2.91	1.89
148	14,138	89.90	338.80	11842.53	1833.73	-1346.93	2137.92	2275.25	323.70	3.48	-0.21
149	14,233	88.70	337.10	11843.69	1921.77	-1382.59	2232.43	2367.43	324.27	2.19	-1.26
150	14,329	90.00	338.80	11844.78	2010.73	-1418.62	2327.93	2460.80	324.80	2.23	1.35
151	14,424	87.90	339.00	11846.52	2099.34	-1452.81	2422.58	2553.02	325.32	2.22	-2.21
152	14,519	88.70	339.20	11849.34	2188.05	-1486.69	2517.23	2645.34	325.81	0.87	0.84
153	14,613	90.10	345.70	11850.32	2277.62	-1515.01	2611.15	2735.48	326.37	7.07	1.49
154	14,708	86.40	349.00	11853.22	2370.24	-1535.80	2705.88	2824.31	327.06	5.22	-3.89
155	14,803	85.50	348.90	11859.93	2463.25	-1553.97	2800.25	2912.46	327.75	0.95	-0.95
156	14,898	87.70	347.40	11865.57	2556.05	-1573.44	2894.79	3001.52	328.38	2.80	2.32
157	14,992	87.70	344.40	11869.34	2647.14	-1596.32	2988.63	3091.21	328.91	3.19	0.00
158	15,087	89.70	342.20	11871.50	2738.10	-1623.61	3083.59	3183.28	329.33	3.13	2.11
159	15,182	89.80	341.70	11871.91	2828.42	-1653.04	3178.55	3276.05	329.70	0.54	0.11
160	15,277	89.90	341.80	11872.16	2918.64	-1682.80	3273.49	3369.01	330.03	0.15	0.11
161	15,372	89.00	341.60	11873.07	3008.83	-1712.62	3368.43	3462.10	330.35	0.97	-0.95

V09.04.02

<b>Company:</b>		WPX Energy Permian, LLC												
<b>Well Name:</b>		University 32 411H												
<b>Location:</b>		Winkler County, TX												
<b>Rig:</b>		H&P #314				<b>Magnetic Declination:</b>		8.42		REFERENCED TO GRID NORTH ▼				
<b>Job Number:</b>		MSMO-66602												
<b>API #:</b>		42-495-34354												
<b>Vertical Section Azimuth:</b>				343.71		<b>Proposed Direction:</b>		343.71						
<b>Survey Calculation Method:</b>				Minimum Curvature										
<b>PTB:</b>	<b>MD</b>		<b>INC</b>		<b>AZM</b>		<b>TVD</b>		<b>N/S</b>		<b>E/W</b>		<b>VS</b>	
	16,890		89.2		343		11884.48		4467.45		-2130.46		4885.69	
<b>#</b>	<b>Depth Feet</b>	<b>Inc Degrees</b>	<b>Azm Degrees</b>	<b>TVD Feet</b>	<b>N/S Feet</b>	<b>E/W Feet</b>	<b>Surface Vert Sec</b>	<b>Closure Distance</b>		<b>Azm</b>	<b>DLS/ 100</b>	<b>BUR/ 100'</b>		
162	15,466	91.00	341.90	11873.07	3098.10	-1742.06	3462.37	3554.29	330.65	2.15	2.13			
163	15,561	90.20	341.30	11872.08	3188.23	-1772.04	3557.30	3647.60	330.93	1.05	-0.84			
164	15,656	90.30	342.50	11871.66	3278.53	-1801.56	3652.25	3740.91	331.21	1.27	0.11			
165	15,751	90.70	344.70	11870.83	3369.66	-1828.38	3747.24	3833.74	331.52	2.35	0.42			
166	15,845	89.70	344.50	11870.50	3460.28	-1853.34	3841.22	3925.35	331.83	1.08	-1.06			
167	15,940	88.20	345.00	11872.24	3551.92	-1878.32	3936.19	4017.98	332.13	1.66	-1.58			
168	16,035	87.80	344.50	11875.56	3643.51	-1903.29	4031.12	4110.68	332.42	0.67	-0.42			
169	16,130	90.80	344.80	11876.72	3735.11	-1928.44	4126.08	4203.56	332.69	3.17	3.16			
170	16,225	91.30	345.50	11874.98	3826.92	-1952.78	4221.04	4296.35	332.97	0.91	0.53			
171	16,319	89.90	345.80	11874.00	3917.98	-1976.08	4314.98	4388.10	333.24	1.52	-1.49			
172	16,414	89.20	345.20	11874.74	4009.95	-1999.86	4409.93	4480.98	333.49	0.97	-0.74			
173	16,509	88.60	345.00	11876.57	4101.74	-2024.28	4504.88	4574.05	333.73	0.67	-0.63			
174	16,603	87.40	344.30	11879.85	4192.33	-2049.15	4598.81	4666.33	333.95	1.48	-1.28			
175	16,698	87.90	343.10	11883.74	4283.43	-2075.79	4693.73	4759.90	334.14	1.37	0.53			
176	16,792	91.70	344.20	11884.07	4373.61	-2102.25	4787.71	4852.62	334.33	4.21	4.04			
177	16,836	89.20	343.00	11883.72	4415.81	-2114.67	4831.70	4896.04	334.41	6.30	-5.68			
PTB:	16,890	89.20	343.00	11884.48	4467.45	-2130.46	4885.69	4949.44	334.50	0.00	0.00			



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### MS Directional Survey Data Certification

MS Directional Job Number: MSMO-66602  
Survey Type: MWD  
Operating Company: WX Energy Permian, LLC  
Well Name & Number: University 32 411H  
Location: Winkler County, TX  
API Number: 42-495-34354  
Tie In Depth: Surface  
Surveyed Depths: 166' – 16,836' MD  
Projected TD Survey: 16,890' MD  
Dates Performed: 06/11/2019 – 07/25/2019

I certify that the data is true, correct and complete and within the limitations of the tool set forth by MS Directional; that I am authorized and qualified to make this report and that I have reviewed this report and find it conforms to the principles and procedures as set forth by MS Directional.

Digitally signed by:

A handwritten signature in black ink that reads "Daniel White". The signature is written in a cursive, flowing style. Below the signature is a horizontal line.

MWD Surveyor Name: Daniel White

Date: 09-05-2019

Email: Daniel.White@msdir.com

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