

25-43415

Weatherford

Evaluation, Drilling & Intervention

10000 West County Rd. 116

P.O. Box 61028

Midland, TX USA 79711

Tel. (432) 561-8892 Fax (432) 561-8895

HOBBS OCD

Date: 12-5-2017

XTO Energy
200 N Loraine, Ste 800
Midland, TX 79701

JUL 05 2018

RECEIVED

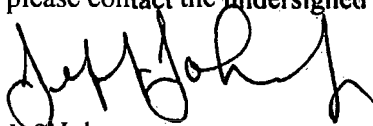
Attention: Colin Gilmore

Re: XTO Energy
Well: Severus 31 Federal Com 1H
Lea County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Mike McDonough MWD Supervisor	1H	30 MD 19103 MD	10/13/2017 11/27/2017	Measurement While Drilling

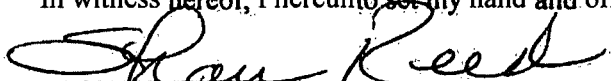
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

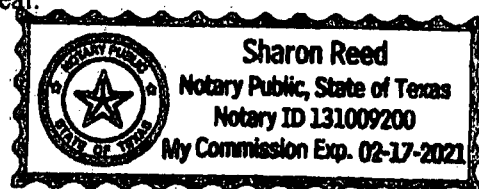


Jeff Johnson
MWD Ops Coordinator

On this, the 5th day of December, 2017, before me a notary public, the undersigned officer, personally appeared Jeff Johnson, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public




Weatherford


Severus 31 Federal Com 1H

Field Name:	Map Units: US ft		Company Name: XTO Energy	
XTO Lea Co, NM (NAD 27 NME)	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD27 / New Mexico East			
	Comment:			
Site: Severus 31 Federal Com 1H Well Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.40	
	Position:	Northing: 559895.40 US ft	Latitude: 32° 32' 13.56"	
		Easting: 726703.50 US ft	Longitude: -103° 35' 51.75"	
	Elevation above MSL: 3699.00 US ft			
Comment:				
Slot: Severus 31 Federal Com 1H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft	Northing: 559895.40 US ft	Latitude: 32° 32' 13.56"	
	+E/-W: 0.00 US ft	Easting: 726703.50 US ft	Longitude: -103° 35' 51.75"	
	Elevation above MSL: 3699.00 US ft			
Comment:				
Well: Severus 31 Federal Com 1H	Type: Main well	UWI:		
	File Number:	Comment:		
	Closure Distance: 7965.34 US ft	Closure Azimuth: 169.31°		
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: -0.00 US ft	+E/-W: -0.00 US ft	Az: 179.59°	

Drill floor: Survey Name: Definitive Survey
Rig Height (Well TVD Reference): 30.00 US ft
Elevation above MSL: 3729.00 US ft
Inclination: 0.00°
Azimuth: 0.00°

Survey Name: Definitive Survey			
Date: 03/Aug/2017	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:

Magnetic Model:				
Model Name: bggm2017	Date: 25/Sep/2017	Field Strength: 48180.0 nT	Declination: 7.01°	Dip: 60.34°

Tie Point:					
MD: 0.00 US ft	Inclination: 0.00°	Azimuth: 0.00°	TVD: 0.00 US ft	North Offset: -0.00 US ft	East Offset: -0.00 US ft

Survey Tool Ranges:			
Name	Start MD(USft)	End MD(USft)	Source Survey
MWD	0.00	1532.00	WFT MWD SVY_1
MWD	1532.00	5122.00	WFT MWD SVY_2
MWD	5122.00	5399.00	WFT MWD SVY_3

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Incl (°)	As (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS ("/100US ft)	Comment
3715.00	3.10	82.40	3714.10	-7.33	7.59	36.04	559902.99	726739.54	1.43	
3808.00	4.20	80.40	3806.91	-8.19	8.49	41.89	559903.89	726745.39	1.19	
3902.00	5.81	79.54	3900.55	-9.57	9.92	49.96	559905.32	726753.46	1.71	
3996.00	7.65	85.59	3993.90	-10.83	11.27	60.88	559906.67	726764.38	2.10	
4089.00	8.17	88.01	4086.02	-11.45	11.98	73.66	559907.38	726777.16	0.66	
4183.00	8.35	85.71	4179.04	-12.09	12.72	87.14	559908.12	726790.64	0.40	
4277.00	9.40	86.27	4271.91	-13.00	13.73	101.61	559909.13	726805.11	1.12	
4371.00	9.67	87.08	4364.62	-13.79	14.63	117.15	559910.03	726820.65	0.32	
4465.00	10.33	85.23	4457.19	-14.78	15.73	133.43	559911.13	726836.93	0.78	
4559.00	10.50	85.05	4549.64	-16.10	17.17	150.36	559912.57	726853.86	0.18	
4652.00	10.16	83.08	4641.13	-17.70	18.89	166.95	559914.29	726870.45	0.53	
4746.00	10.02	83.22	4733.68	-19.54	20.86	183.30	559916.26	726886.80	0.15	
4840.00	10.26	87.05	4826.21	-20.82	22.25	199.78	559917.65	726903.28	0.76	
4934.00	10.19	86.97	4918.72	-21.57	23.12	216.45	559918.52	726919.95	0.08	
5028.00	10.04	87.85	5011.26	-22.20	23.87	232.94	559919.27	726936.44	0.23	
5122.00	10.66	84.65	5103.73	-23.20	24.99	249.78	559920.39	726953.28	0.90	
5216.00	10.66	83.64	5196.11	-24.85	26.76	267.08	559922.16	726970.58	0.20	
5310.00	10.34	83.69	5288.53	-26.62	28.65	284.10	559924.05	726987.60	0.34	
5399.00	9.99	84.74	5376.13	-28.09	30.24	299.73	559925.64	727003.23	0.44	
5467.00	11.45	85.94	5442.95	-29.02	31.26	312.34	559926.66	727015.84	2.17	9 5/8 in
5493.00	12.01	86.32	5468.40	-29.34	31.61	317.61	559927.01	727021.11	2.17	
5586.00	12.78	87.89	5559.23	-30.20	32.61	337.55	559928.01	727041.05	0.90	
5680.00	11.54	88.50	5651.12	-30.68	33.24	357.34	559928.64	727060.84	1.33	
5774.00	9.73	87.41	5743.51	-31.16	33.85	374.67	559929.25	727078.17	1.94	
5868.00	9.01	82.83	5836.25	-32.33	35.12	389.91	559930.52	727093.41	1.10	
5961.00	9.32	80.48	5928.06	-34.38	37.28	404.56	559932.68	727108.06	0.52	
6055.00	8.94	85.06	6020.87	-36.16	39.17	419.35	559934.57	727122.85	0.87	
6149.00	9.22	88.63	6113.70	-36.87	39.98	434.15	559935.38	727137.65	0.67	
6243.00	9.69	87.24	6206.42	-37.32	40.54	449.58	559935.94	727153.08	0.56	
6337.00	10.94	87.82	6298.90	-37.92	41.26	466.40	559936.66	727169.90	1.33	
6431.00	12.06	84.17	6391.01	-39.12	42.59	485.08	559937.99	727188.58	1.42	
6525.00	12.18	83.39	6482.92	-41.12	44.73	504.70	559940.13	727208.20	0.22	
6619.00	11.12	84.65	6574.98	-42.97	46.72	523.58	559942.12	727227.08	1.16	
6713.00	10.76	86.24	6667.27	-44.26	48.14	541.36	559943.54	727244.86	0.50	
6806.00	10.43	85.70	6758.69	-45.34	49.34	558.41	559944.74	727261.91	0.37	
6900.00	10.77	86.74	6851.08	-46.36	50.48	575.67	559945.88	727279.17	0.42	
6994.00	10.52	82.99	6943.46	-47.78	52.02	592.95	559947.42	727296.45	0.78	
7088.00	10.13	83.43	7035.94	-49.65	54.02	609.68	559949.42	727313.18	0.42	
7182.00	9.69	85.29	7128.54	-51.13	55.61	625.78	559951.01	727329.28	0.58	
7275.00	9.48	84.05	7220.24	-52.46	57.05	641.20	559952.45	727344.70	0.32	
7369.00	10.38	80.82	7312.83	-54.50	59.20	657.26	559954.60	727360.76	1.13	
7463.00	10.28	80.99	7405.31	-57.04	61.87	673.90	559957.27	727377.40	0.11	
7557.00	10.42	84.59	7497.78	-59.04	63.98	690.65	559959.38	727394.15	0.70	
7651.00	9.94	85.41	7590.30	-60.37	65.43	707.20	559960.83	727410.70	0.53	
7744.00	10.63	84.94	7681.81	-61.65	66.83	723.74	559962.23	727427.24	0.75	
7838.00	11.43	87.00	7774.07	-62.78	68.08	741.68	559963.48	727445.18	0.95	
7932.00	11.54	89.32	7866.19	-63.24	68.68	760.38	559964.08	727463.88	0.51	
8025.00	11.42	91.99	7957.33	-62.90	68.47	778.89	559963.87	727482.39	0.59	
8119.00	10.12	87.41	8049.67	-62.82	68.52	796.44	559963.92	727499.94	1.65	
8213.00	10.50	87.87	8142.15	-63.39	69.22	813.25	559964.62	727516.75	0.41	
8307.00	10.67	82.74	8234.56	-64.69	70.63	830.44	559966.03	727533.94	1.02	
8401.00	10.06	78.91	8327.02	-67.25	73.31	847.13	559968.71	727550.63	0.98	
8494.00	10.90	84.24	8418.47	-69.57	75.76	863.85	559971.16	727567.35	1.38	
8588.00	11.04	84.99	8510.76	-71.12	77.44	881.66	559972.84	727585.16	0.21	
8682.00	9.99	81.75	8603.18	-72.96	79.39	898.69	559974.79	727602.19	1.28	
8776.00	8.11	80.75	8696.00	-75.09	81.63	913.31	559977.03	727616.81	2.01	
8870.00	7.09	82.00	8789.17	-76.88	83.50	925.60	559978.90	727629.10	1.10	
8964.00	6.54	80.08	8882.51	-78.53	85.23	936.61	559980.63	727640.11	0.63	
9058.00	7.78	81.12	8975.78	-80.35	87.13	948.17	559982.53	727651.67	1.33	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)											Comment
HT (US ft)	HT (m)	AT (°)	TVD (US ft)	V2 (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS %/100US ft)		
12705.00	90.91	180.23	11310.37	1372.98	-1362.85	1420.12	558532.55	728123.62	0.59		
12799.00	88.95	179.73	11310.49	1466.97	-1456.85	1420.15	558438.55	728123.65	2.15		
12893.00	91.05	178.59	11310.49	1560.96	-1550.83	1421.53	558344.57	728125.03	2.54		
12987.00	92.88	177.82	11307.26	1654.88	-1644.73	1424.47	558250.67	728127.97	2.11		
13081.00	92.10	178.87	11303.18	1748.76	-1738.60	1427.19	558156.80	728130.69	1.39		
13175.00	90.70	180.22	11300.88	1842.73	-1832.56	1427.93	558062.84	728131.43	2.07		
13268.00	89.09	181.02	11301.05	1935.71	-1925.55	1426.93	557969.85	728130.43	1.93		
13362.00	87.97	179.90	11303.47	2029.67	-2019.51	1426.17	557875.89	728129.67	1.68		
13455.00	88.95	180.32	11305.96	2122.63	-2112.48	1425.99	557782.92	728129.49	1.15		
13550.00	90.63	179.88	11306.31	2217.62	-2207.47	1425.83	557687.93	728129.33	1.83		
13643.00	89.58	179.77	11306.14	2310.62	-2300.47	1426.11	557594.93	728129.61	1.14		
13737.00	88.39	180.68	11307.81	2404.60	-2394.45	1425.74	557500.95	728129.24	1.59		
13831.00	87.97	180.19	11310.79	2498.54	-2488.40	1425.03	557407.00	728128.53	0.69		
13925.00	86.44	180.46	11315.38	2592.41	-2582.29	1424.50	557313.11	728128.00	1.65		
14019.00	87.34	180.13	11320.48	2686.27	-2676.15	1424.01	557219.25	728127.51	1.02		
14112.00	86.85	180.03	11325.19	2779.15	-2769.03	1423.88	557126.37	728127.38	0.54		
14206.00	86.28	178.97	11330.82	2872.97	-2862.85	1424.70	557032.55	728128.20	1.28		
14300.00	87.83	177.95	11335.65	2966.83	-2956.69	1427.22	556938.71	728130.72	1.97		
14394.00	88.60	177.14	11338.58	3060.72	-3050.56	1431.25	556844.84	728134.75	1.19		
14514.00	90.07	175.25	11339.97	3180.49	-3170.28	1439.21	556725.12	728142.71	2.00		
14610.00	92.24	177.22	11338.04	3276.30	-3266.04	1445.51	556629.36	728149.01	3.05		
14704.00	92.73	177.50	11333.96	3370.14	-3359.85	1449.84	556535.55	728153.34	0.60		
14798.00	92.45	179.30	11329.71	3464.02	-3453.71	1452.46	556441.69	728155.96	1.94		
14892.00	91.89	181.69	11326.15	3557.93	-3547.64	1451.65	556347.76	728155.15	2.61		
14986.00	90.28	181.32	11324.37	3651.86	-3641.58	1449.18	556253.82	728152.68	1.76		
15080.00	88.95	182.55	11325.01	3745.78	-3735.52	1446.01	556159.88	728149.51	1.93		
15173.00	87.97	181.98	11327.50	3838.64	-3828.42	1442.33	556066.98	728145.83	1.22		
15267.00	87.69	180.80	11331.06	3932.52	-3922.32	1440.06	555973.08	728143.56	1.29		
15361.00	87.84	180.23	11334.73	4026.44	-4016.24	1439.21	555879.16	728142.71	0.63		
15455.00	87.49	179.50	11338.56	4120.36	-4110.16	1439.43	555785.24	728142.93	0.86		
15549.00	89.44	178.78	11341.08	4214.32	-4204.11	1440.84	555691.29	728144.34	2.21		
15643.00	89.58	179.14	11341.88	4308.31	-4298.10	1442.55	555597.30	728146.05	0.41		
15737.00	89.65	179.42	11342.51	4402.30	-4392.09	1443.73	555503.31	728147.23	0.31		
15830.00	89.58	178.58	11343.14	4495.30	-4485.07	1445.35	555410.33	728148.85	0.91		
15924.00	89.72	177.23	11343.71	4589.25	-4579.00	1448.79	555316.40	728152.29	1.44		
16018.00	89.23	178.66	11344.57	4683.21	-4672.93	1452.16	555222.47	728155.66	1.61		
16112.00	89.23	178.05	11345.84	4777.18	-4766.89	1454.86	555128.51	728158.36	0.65		
16206.00	88.53	179.34	11347.67	4871.14	-4860.84	1457.00	555034.56	728160.50	1.56		
16299.00	88.39	178.51	11350.17	4964.10	-4953.79	1458.74	554941.61	728162.24	0.90		
16393.00	89.86	179.12	11351.61	5058.08	-5047.76	1460.69	554847.64	728164.19	1.69		
16486.00	90.21	180.88	11351.55	5151.07	-5140.75	1460.69	554754.65	728164.19	1.93		
16580.00	89.16	179.48	11352.07	5245.06	-5234.75	1460.39	554660.65	728163.89	1.86		
16674.00	88.81	178.79	11353.73	5339.05	-5328.72	1461.81	554566.68	728165.31	0.82		
16768.00	89.37	181.27	11355.23	5433.02	-5422.70	1461.76	554472.70	728165.26	2.70		
16862.00	89.30	180.38	11356.32	5526.99	-5516.69	1460.41	554378.71	728163.91	0.95		
16956.00	89.51	180.47	11357.29	5620.98	-5610.68	1459.71	554284.72	728163.21	0.24		
17050.00	88.60	179.66	11358.84	5714.96	-5704.66	1459.60	554190.74	728163.10	1.30		
17144.00	88.19	178.96	11361.48	5808.92	-5798.62	1460.73	554096.78	728164.23	0.86		
17238.00	88.15	177.51	11364.48	5902.85	-5892.52	1463.63	554002.88	728167.13	1.54		
17331.00	89.02	178.38	11366.78	5995.78	-5985.43	1466.96	553909.97	728170.46	1.32		
17425.00	89.44	179.21	11368.04	6089.76	-6079.40	1468.94	553816.00	728172.44	0.99		
17519.00	89.79	180.92	11368.67	6183.75	-6173.40	1468.83	553722.00	728172.33	1.86		
17613.00	89.37	180.76	11369.36	6277.72	-6267.38	1467.45	553628.02	728170.95	0.48		
17707.00	88.88	179.11	11370.80	6371.71	-6361.37	1467.56	553534.03	728171.06	1.83		
17800.00	88.67	178.55	11372.78	6464.68	-6454.33	1469.46	553441.07	728172.96	0.64		
17894.00	90.21	180.08	11373.70	6558.67	-6548.31	1470.58	553347.09	728174.08	2.31		
17988.00	90.63	180.55	11373.01	6652.66	-6642.31	1470.07	553253.09	728173.57	0.67		
18082.00	89.37	181.17	11373.01	6746.63	-6736.29	1468.65	553159.11	728172.15	1.49		
18176.00	89.37	181.05	11374.05	6840.59	-6830.27	1466.83	553065.13	728170.33	0.13		