


Weatherford
HOBBS OCD
MAY 08 2018
XTO
ENERGY
Perla Negra Federal Com 6H

Field Name: XTO Lea Co, NM (NAD 27 NME)	Map Units: US ft		Company Name: XTO Energy	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD27 / New Mexico East			
Site: Perla Negra Federal Com 6H	Units: US ft		North Reference: Grid	
	Position:		Convergence Angle: 0.44	
	Northing: 597390.20 US ft		Latitude: 32° 38' 22.79"	
	Easting: 751804.80 US ft		Longitude: -103° 30' 55.18"	
Elevation above MSL: 3788.00 US ft		Comment:		
Slot: Perla Negra Federal Com 6H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft		Northing: 597390.20 US ft	
	+E/-W: 0.00 US ft		Easting: 751804.80 US ft	
	Elevation above MSL: 3788.00 US ft		Latitude: 32° 38' 22.79"	
Comment:		Longitude: -103° 30' 55.18"		
Well: Perla Negra Federal Com 6H	Type: Main well		UWI:	
	File Number:		Comment:	
	Closure Distance: 4654.74 US ft		Closure Azimuth: 357.82°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
+N/-S: 0.00 US ft		+E/-W: -0.00 US ft		Az: 358.01°

Drill floor: Survey Name: Definitive Survey

Rig Height (Well TVD Reference): 26.50 US ft

Elevation above MSL: 3814.50 US ft

Inclination: 0.00°

Azimuth: 0.00°

Survey Name: Definitive Survey

Date: 23/Sep/2017

Survey Tool: See Survey Tool Ranges below.

Comment:
Company:
Magnetic Model:
Model Name: bggm2017

Date: 23/Sep/2017

Field Strength: 48257.9 nT

Declination: 6.97°

Dip: 60.46°

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	1827.00	WFT MWD SVY_1
MWD	1827.00	3987.00	WFT MWD SVY_2
MWD	3987.00	8991.00	WFT MWD SVY_3

5D Survey Report

Survey Tool Ranges:			
Name	Start MD(USft)	End MD(USft)	Source Survey
MWD	8991.00	9216.00	WFT MWD SVY_4
MWD	9216.00	9751.00	WFT MWD SVY_5
MWD	9751.00	14055.00	WFT MWD SVY_6

Casing Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
1895.00	0.47	128.98	1894.91	6.18	1.58	597396.38	751806.38	13 3/8 in

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	597390.20	751804.80	0.00	
26.50	0.00	0.00	26.50	0.00	0.00	-0.00	597390.20	751804.80	0.00	
174.00	0.93	320.30	173.99	0.95	0.92	-0.76	597391.12	751804.04	0.63	
258.00	1.02	325.73	257.98	2.12	2.06	-1.62	597392.26	751803.18	0.15	
348.00	0.76	338.47	347.97	3.36	3.28	-2.29	597393.48	751802.51	0.36	
440.00	0.98	335.63	439.96	4.66	4.56	-2.84	597394.76	751801.96	0.24	
532.00	0.95	331.19	531.95	6.07	5.95	-3.53	597396.15	751801.27	0.09	
626.00	0.91	347.50	625.93	7.50	7.36	-4.07	597397.56	751800.73	0.28	
808.00	0.38	113.67	807.93	8.66	8.53	-3.83	597398.73	751800.97	0.65	
904.00	0.31	84.32	903.93	8.54	8.43	-3.28	597398.63	751801.52	0.20	
999.00	0.36	118.75	998.92	8.40	8.31	-2.76	597398.51	751802.04	0.21	
1094.00	0.07	83.17	1093.92	8.25	8.17	-2.44	597398.37	751802.36	0.32	
1187.00	0.42	93.44	1186.92	8.23	8.16	-2.05	597398.36	751802.75	0.38	
1282.00	0.16	124.86	1281.92	8.11	8.06	-1.59	597398.26	751803.21	0.31	
1377.00	0.21	78.88	1376.92	8.06	8.02	-1.31	597398.22	751803.49	0.16	
1471.00	0.35	89.13	1470.92	8.08	8.06	-0.85	597398.26	751803.95	0.16	
1566.00	0.25	133.60	1565.92	7.93	7.92	-0.41	597398.12	751804.39	0.26	
1660.00	0.45	135.32	1659.92	7.51	7.52	-0.01	597397.72	751804.79	0.21	
1754.00	0.49	130.93	1753.91	6.97	6.99	0.56	597397.19	751805.36	0.06	
1827.00	0.58	127.23	1826.91	6.52	6.56	1.09	597396.76	751805.89	0.13	
1895.00	0.47	128.98	1894.91	6.12	6.18	1.58	597396.38	751806.38	0.16	13 3/8 in
2001.00	0.30	134.28	2000.91	5.63	5.71	2.12	597395.91	751806.92	0.16	
2095.00	0.45	116.23	2094.90	5.28	5.38	2.62	597395.58	751807.42	0.20	
2188.00	0.31	137.22	2187.90	4.92	5.03	3.12	597395.23	751807.92	0.21	
2283.00	0.45	101.94	2282.90	4.63	4.76	3.66	597394.96	751808.46	0.28	
2378.00	0.22	167.42	2377.90	4.37	4.51	4.07	597394.71	751808.87	0.43	
2472.00	0.71	235.55	2471.89	3.88	4.00	3.62	597394.20	751808.42	0.70	
2567.00	0.69	248.23	2566.89	3.37	3.46	2.61	597393.66	751807.41	0.16	
2661.00	0.84	255.67	2660.88	3.03	3.08	1.41	597393.28	751806.21	0.19	
2755.00	0.77	254.92	2754.87	2.74	2.74	0.14	597392.94	751804.94	0.08	
2849.00	0.63	244.27	2848.86	2.39	2.35	-0.94	597392.55	751803.86	0.20	
2943.00	0.38	296.35	2942.86	2.33	2.27	-1.68	597392.47	751803.12	0.53	
3037.00	0.07	290.35	3036.86	2.50	2.43	-2.02	597392.63	751802.78	0.33	
3131.00	0.10	313.28	3130.86	2.58	2.50	-2.13	597392.70	751802.67	0.05	
3226.00	0.35	58.90	3225.86	2.78	2.71	-1.94	597392.91	751802.86	0.41	
3320.00	0.35	29.96	3319.86	3.16	3.11	-1.55	597393.31	751803.25	0.19	
3414.00	0.44	53.10	3413.85	3.61	3.57	-1.12	597393.77	751803.68	0.19	
3509.00	0.40	166.62	3508.85	3.49	3.47	-0.75	597393.67	751804.05	0.74	
3603.00	0.53	180.59	3602.85	2.74	2.71	-0.68	597392.91	751804.12	0.18	
3697.00	0.49	189.28	3696.85	1.91	1.88	-0.75	597392.08	751804.05	0.09	
3792.00	0.40	197.35	3791.84	1.20	1.17	-0.91	597391.37	751803.89	0.12	
3886.00	0.43	162.99	3885.84	0.55	0.52	-0.91	597390.72	751803.89	0.26	
3987.00	0.35	182.72	3986.84	-0.13	-0.16	-0.81	597390.04	751803.99	0.15	
4096.00	0.21	180.87	4095.84	-0.66	-0.69	-0.83	597389.51	751803.97	0.13	
4190.00	0.29	337.33	4189.84	-0.61	-0.64	-0.93	597389.56	751803.87	0.52	
4284.00	0.31	333.35	4283.84	-0.15	-0.19	-1.13	597390.01	751803.67	0.03	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										Comment
MD (US ft)	inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (%/100US ft)	
4379.00	0.16	296.07	4378.83	0.14	0.09	-1.37	597390.29	751803.43	0.22	
4473.00	0.35	321.42	4472.83	0.43	0.38	-1.66	597390.58	751803.14	0.23	
4568.00	0.16	319.00	4567.83	0.77	0.70	-1.93	597390.90	751802.87	0.20	
4663.00	0.16	264.83	4662.83	0.87	0.79	-2.15	597390.99	751802.65	0.15	
4757.00	0.14	289.47	4756.83	0.90	0.82	-2.39	597391.02	751802.41	0.07	
4852.00	0.10	203.41	4851.83	0.87	0.78	-2.53	597390.98	751802.27	0.18	
4947.00	0.35	235.57	4946.83	0.64	0.54	-2.80	597390.74	751802.00	0.28	
5041.00	0.29	240.81	5040.83	0.37	0.26	-3.25	597390.46	751801.55	0.07	
5135.00	0.38	231.21	5134.83	0.08	-0.05	-3.70	597390.15	751801.10	0.11	
5230.00	0.56	215.48	5229.83	-0.48	-0.62	-4.21	597389.58	751800.59	0.23	
5324.00	0.49	86.80	5323.82	-0.83	-0.98	-4.08	597389.22	751800.72	1.01	
5419.00	1.09	76.37	5418.81	-0.64	-0.74	-2.80	597389.46	751800.20	0.65	
5512.00	1.20	74.64	5511.80	-0.24	-0.27	-1.00	597389.93	751803.80	0.12	
5607.00	1.22	83.64	5606.77	0.07	0.10	0.97	597390.30	751805.77	0.20	
5702.00	0.45	99.81	5701.76	0.07	0.15	2.34	597390.35	751807.14	0.84	
5797.00	0.14	302.08	5796.76	0.06	0.15	2.61	597390.35	751807.41	0.61	
5891.00	0.51	325.12	5890.76	0.47	0.55	2.27	597390.75	751807.07	0.41	
5986.00	0.50	336.21	5985.76	1.21	1.28	1.86	597391.48	751806.66	0.10	
6079.00	0.85	283.35	6078.75	1.77	1.81	1.03	597392.01	751805.83	0.73	
6173.00	1.44	283.60	6172.73	2.27	2.25	-0.80	597392.45	751804.00	0.63	
6267.00	1.56	271.31	6266.70	2.66	2.55	-3.22	597392.75	751801.58	0.36	
6361.00	1.58	247.80	6360.67	2.29	2.09	-5.70	597392.29	751799.10	0.68	
6456.00	1.00	203.37	6455.64	1.09	0.84	-7.24	597391.04	751797.56	1.17	
6550.00	0.91	187.73	6549.63	-0.39	-0.65	-7.67	597389.55	751797.13	0.29	
6645.00	1.19	180.23	6644.61	-2.12	-2.39	-7.78	597387.81	751797.02	0.33	
6738.00	0.22	133.14	6737.61	-3.21	-3.48	-7.65	597386.72	751797.15	1.13	
6832.00	0.22	25.27	6831.61	-3.18	-3.44	-7.44	597386.76	751797.36	0.38	
6927.00	0.63	23.01	6926.60	-2.54	-2.79	-7.16	597387.41	751797.64	0.43	
7022.00	0.84	29.46	7021.60	-1.47	-1.70	-6.61	597388.50	751798.19	0.24	
7117.00	1.07	32.99	7116.58	-0.15	-0.35	-5.79	597389.85	751799.01	0.25	
7211.00	0.16	170.74	7210.58	0.44	0.25	-5.29	597390.45	751799.51	1.27	
7305.00	1.21	246.52	7304.57	-0.06	-0.27	-6.18	597389.93	751798.62	1.26	
7400.00	1.59	250.69	7399.54	-0.82	-1.11	-8.34	597389.09	751796.46	0.41	
7493.00	1.16	270.85	7492.52	-1.15	-1.52	-10.50	597388.68	751794.30	0.69	
7588.00	1.12	266.42	7587.50	-1.13	-1.56	-12.39	597388.64	751792.41	0.10	
7681.00	1.15	258.51	7680.48	-1.31	-1.81	-14.21	597388.39	751790.59	0.17	
7776.00	1.29	255.69	7775.46	-1.70	-2.26	-16.18	597387.94	751788.62	0.16	
7870.00	0.90	259.09	7869.44	-2.04	-2.66	-17.93	597387.54	751786.87	0.42	
7965.00	0.82	248.40	7964.43	-2.38	-3.05	-19.30	597387.15	751785.50	0.19	
8059.00	1.69	280.17	8058.41	-2.32	-3.06	-21.28	597387.14	751783.52	1.15	
8153.00	1.78	302.06	8152.36	-1.21	-2.04	-23.89	597388.16	751780.91	0.71	
8248.00	0.43	345.77	8247.35	-0.03	-0.91	-25.22	597389.29	751779.58	1.58	
8342.00	0.14	189.47	8341.35	0.20	-0.68	-25.33	597389.52	751779.47	0.60	
8436.00	0.87	111.01	8435.34	-0.19	-1.05	-24.68	597389.15	751780.12	0.91	
8530.00	0.63	143.95	8529.33	-0.90	-1.72	-23.71	597388.48	751781.09	0.51	
8624.00	0.98	278.85	8623.33	-1.17	-2.02	-24.20	597388.18	751780.60	1.59	
8719.00	0.70	287.30	8718.32	-0.83	-1.72	-25.56	597388.48	751779.24	0.32	
8813.00	1.02	312.58	8812.31	-0.05	-0.98	-26.72	597389.22	751778.08	0.52	
8907.00	0.25	59.34	8906.30	0.63	-0.31	-27.16	597389.89	751777.64	1.19	
8991.00	1.65	104.97	8990.29	0.37	-0.53	-25.84	597389.67	751778.96	1.77	
9026.00	1.97	119.22	9025.27	-0.09	-0.95	-24.83	597389.25	751779.97	1.57	
9058.00	1.00	235.53	9057.27	-0.53	-1.38	-24.58	597388.82	751780.22	8.04	
9089.00	4.13	321.18	9088.24	0.22	-0.66	-25.50	597389.54	751779.30	13.47	
9121.00	8.22	331.72	9120.05	3.20	2.25	-27.31	597392.45	751777.49	13.21	
9152.00	12.11	335.51	9150.55	8.19	7.16	-29.70	597397.36	751775.10	12.73	
9184.00	13.77	340.83	9181.74	14.93	13.82	-32.35	597404.02	751772.45	6.38	
9216.00	15.03	342.88	9212.74	22.57	21.38	-34.82	597411.58	751769.98	4.25	
9248.00	17.47	343.38	9243.45	31.23	29.95	-37.41	597420.15	751767.39	7.64	
9279.00	21.23	343.61	9272.70	41.17	39.79	-40.33	597429.99	751764.47	12.13	

SD Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (%/100US ft)	Comment
9310.00	24.20	344.13	9301.29	52.78	51.29	-43.65	597441.49	751761.15	9.60	
9341.00	26.99	345.90	9329.25	65.83	64.23	-47.10	597454.43	751757.70	9.33	
9373.00	29.67	348.10	9357.41	80.73	79.03	-50.51	597469.23	751754.29	8.99	
9405.00	32.80	349.60	9384.77	97.11	95.31	-53.71	597485.51	751751.09	10.08	
9436.00	36.22	351.66	9410.31	114.53	112.63	-56.55	597502.83	751748.25	11.66	
9467.00	39.74	354.31	9434.75	133.53	131.56	-58.86	597521.76	751745.94	12.51	
9499.00	43.52	355.75	9458.66	154.75	152.73	-60.69	597542.93	751744.11	12.18	
9530.00	46.59	355.41	9480.56	176.67	174.61	-62.39	597564.81	751742.41	9.93	
9562.00	49.23	356.65	9502.00	200.40	198.30	-64.03	597588.50	751740.77	8.74	
9593.00	51.50	358.24	9521.78	224.27	222.14	-65.08	597612.34	751739.72	8.32	
9624.00	53.73	358.76	9540.60	248.90	246.76	-65.73	597636.96	751739.07	7.32	
9656.00	57.16	358.99	9558.75	275.25	273.11	-66.24	597663.31	751738.56	10.74	
9688.00	61.51	359.65	9575.06	302.76	300.63	-66.57	597690.83	751738.23	13.71	
9719.00	65.33	0.16	9588.93	330.46	328.35	-66.61	597718.55	751738.19	12.41	
9751.00	68.59	0.46	9601.46	359.88	357.79	-66.45	597747.99	751738.35	10.22	
9776.00	70.50	0.91	9610.19	383.28	381.21	-66.17	597771.41	751738.63	7.82	
9807.00	72.99	359.98	9619.90	412.69	410.65	-65.94	597800.85	751738.86	8.52	
9839.00	74.79	0.47	9628.78	443.41	441.39	-65.82	597831.59	751738.98	5.81	
9871.00	76.82	0.25	9636.63	474.40	472.41	-65.63	597862.61	751739.17	6.38	
9902.00	78.65	359.87	9643.21	504.67	502.70	-65.60	597892.90	751739.20	6.02	
9933.00	80.32	359.75	9648.87	535.14	533.18	-65.70	597923.38	751739.10	5.40	
9964.00	82.29	359.23	9653.56	565.77	563.82	-65.97	597954.02	751738.83	6.57	
9995.00	83.84	359.33	9657.30	596.53	594.59	-66.36	597984.79	751738.44	5.01	
10027.00	85.67	359.17	9660.22	628.39	626.45	-66.77	598016.65	751738.03	5.74	
10059.00	86.78	358.59	9662.33	660.32	658.37	-67.40	598048.57	751737.40	3.91	
10090.00	88.10	358.37	9663.69	691.20	689.33	-68.22	598079.53	751736.58	4.57	
10152.00	90.56	358.19	9664.38	753.28	751.30	-70.08	598141.50	751734.72	3.85	
10246.00	91.68	358.20	9662.54	847.26	845.23	-73.04	598235.43	751731.76	1.19	
10341.00	92.80	358.02	9658.83	942.18	940.10	-76.17	598330.30	751728.63	1.19	
10436.00	92.17	356.98	9654.71	1037.09	1034.92	-80.31	598425.12	751724.49	1.28	
10530.00	89.65	358.21	9653.21	1131.06	1128.82	-84.25	598519.02	751720.55	2.98	
10624.00	89.93	358.65	9653.56	1225.06	1222.78	-86.83	598612.98	751717.97	0.55	
10718.00	91.33	358.09	9652.52	1319.05	1316.74	-89.50	598706.94	751715.30	1.60	
10813.00	90.56	359.16	9650.96	1414.03	1411.69	-91.78	598801.89	751713.02	1.39	
10907.00	91.19	358.53	9649.52	1508.01	1505.66	-93.68	598895.86	751711.12	0.95	
11001.00	90.91	359.59	9647.80	1601.97	1599.63	-95.22	598989.83	751709.58	1.17	
11095.00	88.95	359.96	9647.91	1695.92	1693.63	-95.59	599083.83	751709.21	2.12	
11190.00	89.02	359.29	9649.60	1790.87	1788.61	-96.21	599178.81	751708.59	0.71	
11284.00	89.93	359.07	9650.46	1884.85	1882.59	-97.55	599272.79	751707.25	1.00	
11378.00	89.86	357.67	9650.63	1978.84	1976.55	-100.23	599366.75	751704.57	1.49	
11473.00	89.51	358.59	9651.15	2073.84	2071.50	-103.33	599461.70	751701.47	1.04	
11568.00	90.70	357.85	9650.98	2168.84	2166.45	-106.28	599556.65	751698.52	1.48	
11662.00	92.59	357.95	9648.28	2262.79	2260.35	-109.72	599650.55	751695.08	2.01	
11757.00	91.68	357.77	9644.74	2357.73	2355.21	-113.27	599745.41	751691.53	0.98	
11851.00	91.67	357.69	9641.99	2451.68	2449.10	-116.99	599839.30	751687.81	0.09	
11945.00	90.42	358.36	9640.28	2545.67	2543.03	-120.23	599933.23	751684.57	1.51	
12039.00	88.81	356.57	9640.91	2639.65	2636.92	-124.38	600027.12	751680.42	2.56	
12134.00	89.86	357.40	9642.01	2734.63	2731.78	-129.38	600121.98	751675.42	1.41	
12229.00	90.70	0.93	9641.55	2829.59	2826.76	-130.76	600216.96	751674.04	3.82	
12323.00	91.81	0.62	9639.49	2923.46	2920.72	-129.49	600310.92	751675.31	1.23	
12417.00	89.37	359.81	9638.52	3017.38	3014.71	-129.14	600404.91	751675.66	2.74	
12511.00	89.44	359.26	9639.50	3111.34	3108.70	-129.90	600498.90	751674.90	0.59	
12606.00	90.07	358.73	9639.90	3206.32	3203.69	-131.57	600593.89	751673.23	0.87	
12700.00	90.91	358.21	9639.10	3300.32	3297.65	-134.08	600687.85	751670.72	1.05	
12795.00	92.09	357.25	9636.61	3395.28	3392.54	-137.84	600782.74	751666.96	1.60	
12890.00	91.96	358.88	9633.26	3490.22	3487.42	-141.05	600877.62	751663.75	1.72	
12985.00	93.22	359.01	9628.96	3585.10	3582.31	-142.79	600972.51	751662.01	1.33	
13079.00	90.63	358.52	9625.81	3679.04	3676.22	-144.82	601066.42	751659.98	2.80	
13174.00	90.35	358.56	9624.99	3774.03	3771.19	-147.24	601161.39	751657.56	0.30	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										Comment
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (%/100US ft)	
13268.00	88.95	357.76	9625.57	3868.02	3865.14	-150.26	601255.34	751654.54	1.72	
13362.00	89.51	358.05	9626.83	3962.01	3959.06	-153.69	601349.26	751651.11	0.67	
13456.00	90.98	357.64	9626.43	4056.01	4052.99	-157.23	601443.19	751647.57	1.62	
13551.00	89.30	357.69	9626.20	4151.00	4147.91	-161.10	601538.11	751643.70	1.77	
13645.00	90.70	358.38	9626.20	4245.00	4241.85	-164.32	601632.05	751640.48	1.66	
13740.00	92.37	357.84	9623.65	4339.96	4336.76	-167.45	601726.96	751637.35	1.85	
13834.00	91.54	358.76	9620.45	4433.91	4430.67	-170.24	601820.87	751634.56	1.32	
13928.00	91.61	358.20	9617.86	4527.87	4524.60	-172.73	601914.80	751632.07	0.60	
13991.00	93.16	358.23	9615.24	4590.81	4587.51	-174.69	601977.71	751630.11	2.46	Last WFT SVY
14055.00	93.16	358.23	9611.71	4654.71	4651.38	-176.67	602041.58	751628.13	0.00	PTB

Formation Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										Comment
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Name		
N/A	0.39	188.80	9741.50	1.01	-0.95	597391.21	751803.85	First Bone Spring Middle		
1823.59	0.58	127.38	1823.50	6.58	1.06	597396.78	751805.86	Rustler		
1931.59	0.41	130.32	1931.50	6.00	1.80	597396.20	751806.60	Top Salt		
3281.64	0.34	41.71	3281.50	2.92	-1.69	597393.12	751803.11	Base Salt		
3490.65	0.30	151.52	3490.50	3.57	-0.79	597393.77	751804.01	Yates		
4079.66	0.23	181.29	4079.50	-0.62	-0.83	597389.58	751803.97	Seven Rivers		
4734.67	0.14	283.07	4734.50	0.80	-2.34	597391.00	751802.46	Queen		
4994.67	0.32	237.98	4994.50	0.39	-3.04	597390.59	751801.76	Penrose Sand		
5270.67	0.25	173.69	5270.50	-0.87	-4.32	597389.33	751800.48	Grayburg		
6360.83	1.58	247.84	6360.50	2.10	-5.70	597392.30	751799.10	Delaware		
6688.89	0.70	174.02	6688.50	-3.11	-7.75	597387.09	751797.05	Brushy Canyon		
8040.09	1.49	276.83	8039.50	-3.13	-20.77	597387.07	751784.03	Basal Brushy Canyon		
8218.15	0.80	316.84	8217.50	-1.17	-25.05	597389.03	751779.75	"BSGL" Marker		
8239.15	0.52	333.11	8238.50	-0.98	-25.20	597389.22	751779.60	Bone Spring		
8335.15	0.10	196.56	8334.50	-0.66	-25.33	597389.54	751779.47	Avalon Sand		
8431.16	0.83	111.50	8430.50	-1.02	-24.75	597389.18	751780.05	Upper Avalon Shale		
8851.20	0.58	322.16	8850.50	-0.60	-27.09	597389.60	751777.71	Lower Avalon Shale		
9657.38	57.35	359.02	9559.50	274.27	-66.26	597664.47	751738.54	First Bone Spring Sand		