



Railroad Commission of Texas  
Oil and Gas Division  
P.O. Box 12967  
Capitol Station  
Austin, TX 78711

December 17, 2014

Attn: Pam Johns

RE: Devon Energy Production CO, L.P.  
University 43-15 #11H (ST01)  
Reagan County, Texas  
API #: 42-383-39225

Enclosed, please find the original and one copy of the survey performed on the referenced well by LEAM Drilling Systems LLC. (P-5 No. 491647). Other information required by your office is as follows:

<u>Name &amp; Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Randy W. Rakowitz	ST01	6,160' – 15,296'	12/05/14 – 12/10/14	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

  
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Nora Tucker  
Well Planner

Enclosures

# LEAM Drilling Systema LLC

## Survey Report

<b>Company:</b> Devon Energy	<b>Local Co-ordinate Reference:</b> Well #11H	
<b>Project:</b> Reagan County, TX (NAD-83)	<b>TVD Reference:</b> H&P 265: 2652' GL + 25' RKB @ 2677.00usft	
<b>Site:</b> University 43-15	<b>MD Reference:</b> H&P 265: 2652' GL + 25' RKB @ 2677.00usft	
<b>Well:</b> #11H	<b>North Reference:</b> Grid	
<b>Wellbore:</b> ST	<b>Survey Calculation Method:</b> Minimum Curvature	
<b>Design:</b> ST	<b>Database:</b> EDM 5000.1 MULTI User DB	

<b>Project</b> Reagan County, TX (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> Texas Central Zone		

<b>Site</b> University 43-15		
<b>Site Position:</b>	<b>Northing:</b> 10,367,878.51 usft	<b>Latitude:</b> 31° 6' 27.560 N
<b>From:</b> Map	<b>Easting:</b> 1,996,322.04 usft	<b>Longitude:</b> 101° 17' 34.139 W
<b>Position Uncertainty:</b> 0.00 usft	<b>Slot Radius:</b> 13-3/16 "	<b>Grid Convergence:</b> -0.49 °

<b>Well</b> #11H, Wolfcamp		
<b>Well Position</b> +N/-S 0.00 usft	<b>Northing:</b> 10,367,938.05 usft	<b>Latitude:</b> 31° 6' 28.154 N
+E/-W 0.00 usft	<b>Easting:</b> 1,996,375.46 usft	<b>Longitude:</b> 101° 17' 33.531 W
<b>Position Uncertainty</b> 0.00 usft	<b>Wellhead Elevation:</b> 2,677.00 usft	<b>Ground Level:</b> 2,652.00 usft

<b>Wellbore</b> ST					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	12/01/14	6.03	59.39	47,796

<b>Design</b> ST					
<b>Audit Notes:</b>					
<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL	<b>Tie On Depth:</b> 6,116.00			
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	360.00	

<b>Survey Program</b>		<b>Date</b> 12/17/14		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
86.00	945.00	Survey #1 (OH)	MWD-ISCWSA	MWD - Standard
1,047.00	6,116.00	Survey #2 (OH)	LEAM MWD+HDGM	MWD+HDGM
6,160.00	15,229.00	Survey #1 (ST)	LEAM MWD+HDGM	MWD+HDGM
15,296.00	15,296.00	Survey #2 (ST)	Project	Projection

<b>Survey</b>										
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	0.00
86.00	0.37	329.36	86.00	0.24	-0.14	0.24	0.43	0.43	0.00	
145.00	0.44	10.28	145.00	0.63	-0.20	0.63	0.49	0.12	69.36	
239.00	0.35	25.30	239.00	1.24	-0.01	1.24	0.15	-0.10	15.98	
332.00	0.64	343.92	331.99	2.00	-0.03	2.00	0.48	0.31	-44.49	
438.00	0.48	333.52	437.99	2.96	-0.40	2.96	0.18	-0.15	-9.81	
566.00	0.51	19.50	565.98	3.98	-0.44	3.98	0.30	0.02	35.92	
693.00	0.28	16.88	692.98	4.81	-0.17	4.81	0.18	-0.18	-2.06	

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<b>Well:</b>	#11H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	ST	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	ST	<b>Database:</b>	EDM 5000.1 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)	
821.00	0.08	1.39	820.98	5.20	-0.07	5.20	0.16	-0.16	-12.10	
945.00	0.32	314.66	944.98	5.53	-0.32	5.53	0.22	0.19	-37.69	
1,047.00	0.21	260.86	1,046.98	5.70	-0.70	5.70	0.25	-0.11	-52.75	
1,142.00	0.73	257.13	1,141.97	5.54	-1.47	5.54	0.55	0.55	-3.93	
1,237.00	0.81	96.45	1,236.97	5.33	-1.39	5.33	1.60	0.08	-169.14	
1,331.00	2.41	86.84	1,330.93	5.36	1.25	5.36	1.72	1.70	-10.22	
1,426.00	4.44	85.86	1,425.76	5.74	6.91	5.74	2.14	2.14	-1.03	
1,520.00	6.82	82.21	1,519.30	6.75	16.07	6.75	2.56	2.53	-3.88	
1,615.00	8.86	82.20	1,613.40	8.51	28.91	8.51	2.15	2.15	-0.01	
1,709.00	10.15	87.82	1,706.11	9.81	44.36	9.81	1.69	1.37	5.98	
1,804.00	10.39	88.41	1,799.59	10.37	61.28	10.37	0.28	0.25	0.62	
1,898.00	10.11	86.09	1,892.09	11.16	77.99	11.16	0.53	-0.30	-2.47	
1,993.00	9.62	86.22	1,985.69	12.26	94.23	12.26	0.52	-0.52	0.14	
2,087.00	9.39	85.03	2,078.40	13.44	109.70	13.44	0.32	-0.24	-1.27	
2,182.00	10.17	91.88	2,172.02	13.83	125.81	13.83	1.47	0.82	7.21	
2,276.00	10.30	94.42	2,264.52	12.91	142.48	12.91	0.50	0.14	2.70	
2,371.00	10.29	93.59	2,357.99	11.73	159.42	11.73	0.16	-0.01	-0.87	
2,465.00	10.28	93.64	2,450.48	10.67	176.17	10.67	0.01	-0.01	0.05	
2,560.00	10.44	92.97	2,543.93	9.69	193.22	9.69	0.21	0.17	-0.71	
2,654.00	10.47	92.65	2,636.37	8.85	210.26	8.85	0.07	0.03	-0.34	
2,749.00	10.46	93.09	2,729.79	7.99	227.49	7.99	0.08	-0.01	0.46	
2,844.00	10.46	93.45	2,823.21	7.00	244.71	7.00	0.07	0.00	0.38	
2,938.00	10.24	93.54	2,915.68	5.97	261.57	5.97	0.23	-0.23	0.10	
3,033.00	10.08	92.69	3,009.20	5.06	278.30	5.06	0.23	-0.17	-0.89	
3,127.00	9.16	93.13	3,101.87	4.27	293.99	4.27	0.98	-0.98	0.47	
3,221.00	7.65	91.84	3,194.86	3.66	307.71	3.66	1.62	-1.61	-1.37	
3,316.00	7.36	88.23	3,289.05	3.64	320.12	3.64	0.58	-0.31	-3.80	
3,410.00	8.08	81.14	3,382.20	4.85	332.66	4.85	1.27	0.77	-7.54	
3,505.00	8.86	81.24	3,476.16	6.99	346.49	6.99	0.82	0.82	0.11	
3,599.00	9.64	85.40	3,568.94	8.72	361.49	8.72	1.09	0.83	4.43	
3,694.00	9.80	91.38	3,662.58	9.17	377.50	9.17	1.08	0.17	6.29	
3,788.00	10.10	89.35	3,755.16	9.07	393.74	9.07	0.49	0.32	-2.16	
3,883.00	10.54	87.56	3,848.63	9.53	410.75	9.53	0.57	0.46	-1.88	
3,977.00	9.39	83.69	3,941.21	10.74	426.96	10.74	1.42	-1.22	-4.12	
4,072.00	9.63	82.79	4,034.90	12.59	442.55	12.59	0.30	0.25	-0.95	
4,166.00	10.35	85.59	4,127.48	14.22	458.77	14.22	0.92	0.77	2.98	
4,261.00	10.34	92.58	4,220.94	14.50	475.80	14.50	1.32	-0.01	7.36	
4,355.00	9.05	95.27	4,313.59	13.44	491.59	13.44	1.45	-1.37	2.86	
4,450.00	8.82	91.87	4,407.44	12.51	506.30	12.51	0.61	-0.24	-3.58	
4,544.00	10.13	89.00	4,500.16	12.42	521.77	12.42	1.48	1.39	-3.05	
4,639.00	10.58	85.90	4,593.61	13.19	538.83	13.19	0.75	0.47	-3.26	
4,733.00	10.07	88.47	4,686.09	14.03	555.65	14.03	0.73	-0.54	2.73	
4,828.00	8.36	86.92	4,779.86	14.62	570.85	14.62	1.82	-1.80	-1.63	

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<b>Design:</b>	ST	<b>Database:</b>	EDM 5000.1 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)	
4,922.00	8.03	85.04	4,872.90	15.56	584.21	15.56	0.45	-0.35	-2.00	
5,017.00	8.41	95.40	4,966.93	15.48	597.74	15.48	1.61	0.40	10.91	
5,111.00	9.14	99.89	5,059.83	13.55	611.94	13.55	1.06	0.78	4.78	
5,206.00	8.98	93.48	5,153.64	11.80	626.77	11.80	1.08	-0.17	-6.75	
5,300.00	9.92	90.41	5,246.37	11.30	642.19	11.30	1.13	1.00	-3.27	
5,395.00	9.45	89.22	5,340.01	11.35	658.17	11.35	0.54	-0.49	-1.25	
5,490.00	8.56	88.65	5,433.84	11.62	673.04	11.62	0.94	-0.94	-0.60	
5,584.00	7.71	88.81	5,526.89	11.91	686.34	11.91	0.90	-0.90	0.17	
5,678.00	7.69	87.94	5,620.05	12.27	698.93	12.27	0.13	-0.02	-0.93	
5,773.00	9.08	89.23	5,714.03	12.60	712.78	12.60	1.48	1.46	1.36	
5,867.00	9.86	91.60	5,806.75	12.48	728.24	12.48	0.93	0.83	2.52	
5,962.00	8.94	92.05	5,900.47	11.98	743.75	11.98	0.97	-0.97	0.47	
6,057.00	7.54	92.85	5,994.49	11.41	757.35	11.41	1.48	-1.47	0.84	
6,116.00	6.37	93.65	6,053.05	11.01	764.48	11.01	1.99	-1.98	1.36	
6,160.00	11.65	77.90	6,096.50	11.79	771.27	11.79	13.14	12.00	-35.80	
6,186.00	13.10	72.36	6,121.90	13.23	776.64	13.23	7.20	5.58	-21.31	
6,217.00	14.77	61.81	6,151.99	16.16	783.47	16.16	9.79	5.39	-34.03	
6,249.00	16.48	51.18	6,182.81	20.93	790.61	20.93	10.40	5.34	-33.22	
6,280.00	18.15	40.72	6,212.41	27.35	797.19	27.35	11.37	5.39	-33.74	
6,312.00	20.04	31.23	6,242.66	35.82	803.28	35.82	11.34	5.91	-29.66	
6,344.00	22.41	24.02	6,272.49	46.08	808.61	46.08	11.01	7.41	-22.53	
6,375.00	24.83	17.78	6,300.90	57.68	813.00	57.68	11.21	7.81	-20.13	
6,406.00	27.47	12.33	6,328.72	70.87	816.52	70.87	11.51	8.52	-17.58	
6,438.00	30.50	9.25	6,356.71	86.10	819.40	86.10	10.55	9.47	-9.63	
6,470.00	31.73	7.94	6,384.11	102.45	821.87	102.45	4.39	3.84	-4.09	
6,501.00	33.09	8.11	6,410.28	118.90	824.19	118.90	4.40	4.39	0.55	
6,533.00	34.28	7.58	6,436.91	136.48	826.61	136.48	3.83	3.72	-1.66	
6,564.00	36.04	7.76	6,462.25	154.17	828.99	154.17	5.69	5.68	0.58	
6,596.00	37.92	6.88	6,487.81	173.27	831.44	173.27	6.10	5.88	-2.75	
6,627.00	39.07	6.09	6,512.08	192.44	833.62	192.44	4.03	3.71	-2.55	
6,659.00	40.52	5.04	6,536.66	212.82	835.60	212.82	4.99	4.53	-3.28	
6,690.00	42.28	3.98	6,559.91	233.26	837.21	233.26	6.11	5.68	-3.42	
6,722.00	44.12	3.54	6,583.24	255.12	838.65	255.12	5.83	5.75	-1.38	
6,753.00	46.10	3.28	6,605.12	277.04	839.95	277.04	6.41	6.39	-0.84	
6,785.00	48.95	3.72	6,626.72	300.59	841.40	300.59	8.96	8.91	1.38	
6,817.00	51.94	4.86	6,647.10	325.19	843.25	325.19	9.74	9.34	3.56	
6,848.00	55.63	5.39	6,665.41	350.10	845.48	350.10	11.98	11.90	1.71	
6,880.00	58.32	4.42	6,682.85	376.83	847.77	376.83	8.78	8.41	-3.03	
6,911.00	61.61	2.40	6,698.37	403.61	849.36	403.61	12.02	10.61	-6.52	
6,943.00	63.98	0.64	6,713.00	432.06	850.11	432.06	8.88	7.41	-5.50	
6,974.00	66.40	359.50	6,726.00	460.20	850.14	460.20	8.49	7.81	-3.68	
7,006.00	68.64	358.62	6,738.24	489.76	849.66	489.76	7.45	7.00	-2.75	
7,038.00	70.49	358.18	6,749.41	519.73	848.82	519.73	5.92	5.78	-1.38	
7,069.00	72.64	359.94	6,759.21	549.13	848.34	549.13	8.78	6.94	5.68	

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7,101.00	74.66	0.47	6,768.22	579.84	848.45	579.84	6.51	6.31	1.66
7,132.00	77.34	0.29	6,775.72	609.91	848.65	609.91	8.66	8.65	-0.58
7,164.00	79.23	359.24	6,782.22	641.24	848.52	641.24	6.72	5.91	-3.28
7,195.00	81.74	358.62	6,787.34	671.81	847.95	671.81	8.33	8.10	-2.00
7,227.00	83.67	359.06	6,791.41	703.54	847.30	703.54	6.18	6.03	1.38
7,258.00	85.65	359.06	6,794.29	734.40	846.80	734.40	6.39	6.39	0.00
7,290.00	87.32	359.50	6,796.25	766.34	846.40	766.34	5.40	5.22	1.38
7,322.00	88.46	358.80	6,797.43	798.31	845.92	798.31	4.18	3.56	-2.19
7,353.00	88.64	359.32	6,798.21	829.30	845.41	829.30	1.77	0.58	1.68
7,448.00	88.64	358.88	6,800.47	924.26	843.92	924.26	0.46	0.00	-0.46
7,542.00	88.81	359.32	6,802.56	1,018.22	842.45	1,018.22	0.50	0.18	0.47
7,637.00	89.25	358.09	6,804.17	1,113.18	840.30	1,113.18	1.37	0.46	-1.29
7,731.00	89.47	357.04	6,805.22	1,207.09	836.31	1,207.09	1.14	0.23	-1.12
7,826.00	89.96	356.60	6,805.69	1,301.94	831.04	1,301.94	0.69	0.52	-0.46
7,920.00	90.40	357.30	6,805.40	1,395.81	826.04	1,395.81	0.88	0.47	0.74
8,015.00	89.47	358.80	6,805.50	1,490.75	822.80	1,490.75	1.86	-0.98	1.58
8,109.00	90.13	359.15	6,805.83	1,584.73	821.12	1,584.73	0.79	0.70	0.37
8,204.00	89.38	358.27	6,806.24	1,679.71	818.98	1,679.71	1.22	-0.79	-0.93
8,299.00	89.52	357.65	6,807.15	1,774.64	815.60	1,774.64	0.67	0.15	-0.65
8,394.00	89.25	357.70	6,808.17	1,869.56	811.75	1,869.56	0.29	-0.28	0.05
8,488.00	89.25	357.57	6,809.40	1,963.47	807.87	1,963.47	0.14	0.00	-0.14
8,583.00	89.17	357.48	6,810.71	2,058.37	803.77	2,058.37	0.13	-0.08	-0.09
8,677.00	90.00	356.42	6,811.39	2,152.24	798.77	2,152.24	1.43	0.88	-1.13
8,772.00	90.79	356.86	6,810.74	2,247.07	793.20	2,247.07	0.95	0.83	0.46
8,866.00	91.27	359.59	6,809.05	2,341.00	790.29	2,341.00	2.95	0.51	2.90
8,961.00	90.22	358.71	6,807.81	2,435.98	788.88	2,435.98	1.44	-1.11	-0.93
9,055.00	90.75	0.55	6,807.02	2,529.97	788.27	2,529.97	2.04	0.56	1.96
9,150.00	89.52	0.11	6,806.79	2,624.97	788.82	2,624.97	1.38	-1.29	-0.46
9,244.00	88.20	359.32	6,808.66	2,718.94	788.35	2,718.94	1.64	-1.40	-0.84
9,339.00	88.77	359.59	6,811.17	2,813.90	787.45	2,813.90	0.66	0.60	0.28
9,433.00	89.52	358.27	6,812.58	2,907.88	785.69	2,907.88	1.61	0.80	-1.40
9,528.00	89.96	358.80	6,813.01	3,002.84	783.26	3,002.84	0.73	0.46	0.56
9,623.00	88.99	358.62	6,813.88	3,097.81	781.12	3,097.81	1.04	-1.02	-0.19
9,717.00	89.12	359.06	6,815.43	3,191.78	779.22	3,191.78	0.49	0.14	0.47
9,811.00	88.24	357.04	6,817.59	3,285.70	776.02	3,285.70	2.34	-0.94	-2.15
9,906.00	87.28	358.36	6,821.31	3,380.54	772.21	3,380.54	1.72	-1.01	1.39
10,000.00	87.14	358.27	6,825.88	3,474.39	769.45	3,474.39	0.18	-0.15	-0.10
10,095.00	88.02	0.64	6,829.89	3,569.29	768.55	3,569.29	2.66	0.93	2.49
10,189.00	89.03	1.87	6,832.31	3,663.24	770.61	3,663.24	1.69	1.07	1.31
10,284.00	91.01	1.52	6,832.28	3,758.19	773.42	3,758.19	2.12	2.08	-0.37
10,379.00	89.78	0.29	6,831.63	3,853.17	774.92	3,853.17	1.83	-1.29	-1.29
10,473.00	89.78	0.20	6,831.99	3,947.17	775.32	3,947.17	0.10	0.00	-0.10
10,568.00	90.53	0.64	6,831.73	4,042.17	776.02	4,042.17	0.92	0.79	0.46

# LEAM Drilling Systema LLC

## Survey Report

<b>Company:</b>	Devon Energy	<b>Local Co-ordinate Reference:</b>	Well #11H
<b>Project:</b>	Reagan County, TX (NAD-83)	<b>TVD Reference:</b>	H&P 265: 2652' GL + 25' RKB @ 2677.00usft
<b>Site:</b>	University 43-15	<b>MD Reference:</b>	H&P 265: 2652' GL + 25' RKB @ 2677.00usft
<b>Well:</b>	#11H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	ST	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	ST	<b>Database:</b>	EDM 5000.1 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)	
10,662.00	89.25	2.05	6,831.91	4,136.14	778.22	4,136.14	2.03	-1.36	1.50	
10,757.00	89.96	3.37	6,832.57	4,231.03	782.72	4,231.03	1.58	0.75	1.39	
10,851.00	88.86	2.40	6,833.53	4,324.90	787.45	4,324.90	1.56	-1.17	-1.03	
10,946.00	90.40	4.51	6,834.15	4,419.72	793.17	4,419.72	2.75	1.62	2.22	
11,040.00	89.60	2.31	6,834.15	4,513.54	798.76	4,513.54	2.49	-0.85	-2.34	
11,135.00	89.30	0.99	6,835.06	4,608.50	801.50	4,608.50	1.42	-0.32	-1.39	
11,229.00	90.62	2.66	6,835.12	4,702.45	804.49	4,702.45	2.26	1.40	1.78	
11,324.00	89.74	0.29	6,834.83	4,797.41	806.94	4,797.41	2.66	-0.93	-2.49	
11,418.00	88.20	359.85	6,836.52	4,891.39	807.05	4,891.39	1.70	-1.64	-0.47	
11,513.00	87.98	359.85	6,839.68	4,986.33	806.80	4,986.33	0.23	-0.23	0.00	
11,607.00	89.47	0.03	6,841.77	5,080.31	806.70	5,080.31	1.60	1.59	0.19	
11,702.00	89.78	359.15	6,842.40	5,175.30	806.02	5,175.30	0.98	0.33	-0.93	
11,796.00	90.22	359.32	6,842.40	5,269.29	804.77	5,269.29	0.50	0.47	0.18	
11,891.00	88.68	0.55	6,843.31	5,364.28	804.66	5,364.28	2.07	-1.62	1.29	
11,985.00	89.17	0.73	6,845.07	5,458.26	805.71	5,458.26	0.56	0.52	0.19	
12,080.00	89.12	0.55	6,846.49	5,553.25	806.77	5,553.25	0.20	-0.05	-0.19	
12,176.00	89.96	0.20	6,847.26	5,649.24	807.40	5,649.24	0.95	0.88	-0.36	
12,269.00	89.21	0.64	6,847.93	5,742.23	808.08	5,742.23	0.93	-0.81	0.47	
12,364.00	89.74	1.96	6,848.80	5,837.20	810.24	5,837.20	1.50	0.56	1.39	
12,458.00	90.31	2.40	6,848.76	5,931.13	813.81	5,931.13	0.77	0.61	0.47	
12,553.00	90.40	0.29	6,848.17	6,026.10	816.04	6,026.10	2.22	0.09	-2.22	
12,647.00	89.82	1.34	6,847.99	6,120.09	817.38	6,120.09	1.28	-0.62	1.12	
12,742.00	90.66	0.11	6,847.60	6,215.08	818.58	6,215.08	1.57	0.88	-1.29	
12,836.00	90.18	1.96	6,846.91	6,309.06	820.28	6,309.06	2.03	-0.51	1.97	
12,931.00	90.62	1.52	6,846.24	6,404.01	823.16	6,404.01	0.65	0.46	-0.46	
13,026.00	90.31	1.52	6,845.47	6,498.97	825.68	6,498.97	0.33	-0.33	0.00	
13,120.00	89.60	2.75	6,845.55	6,592.90	829.19	6,592.90	1.51	-0.76	1.31	
13,215.00	87.54	3.28	6,847.92	6,687.74	834.18	6,687.74	2.24	-2.17	0.56	
13,310.00	87.98	1.17	6,851.63	6,782.59	837.87	6,782.59	2.27	0.46	-2.22	
13,404.00	88.20	0.90	6,854.76	6,876.52	839.56	6,876.52	0.37	0.23	-0.29	
13,499.00	88.51	2.05	6,857.49	6,971.45	842.01	6,971.45	1.25	0.33	1.21	
13,593.00	89.25	2.22	6,859.33	7,065.36	845.51	7,065.36	0.81	0.79	0.18	
13,688.00	87.76	1.61	6,861.81	7,160.28	848.68	7,160.28	1.69	-1.57	-0.64	
13,782.00	88.07	1.43	6,865.23	7,254.18	851.17	7,254.18	0.38	0.33	-0.19	
13,877.00	88.68	2.31	6,867.92	7,349.09	854.27	7,349.09	1.13	0.64	0.93	
13,971.00	88.11	359.94	6,870.55	7,443.03	856.12	7,443.03	2.59	-0.61	-2.52	
14,066.00	88.20	359.32	6,873.61	7,537.98	855.50	7,537.98	0.66	0.09	-0.65	
14,160.00	87.06	0.03	6,877.50	7,631.89	854.97	7,631.89	1.43	-1.21	0.76	
14,255.00	88.07	0.90	6,881.53	7,726.80	855.74	7,726.80	1.40	1.06	0.92	
14,349.00	88.68	1.17	6,884.20	7,820.75	857.44	7,820.75	0.71	0.65	0.29	
14,444.00	89.03	0.64	6,886.10	7,915.72	858.94	7,915.72	0.67	0.37	-0.56	
14,538.00	88.95	1.43	6,887.76	8,009.69	860.64	8,009.69	0.84	-0.09	0.84	
14,633.00	89.56	0.73	6,888.99	8,104.66	862.43	8,104.66	0.98	0.64	-0.74	

# LEAM Drilling Systema LLC

## Survey Report

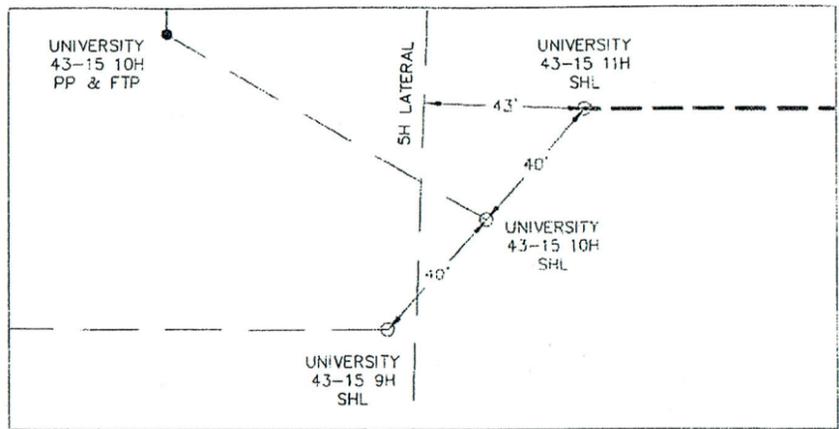
<b>Company:</b> Devon Energy	<b>Local Co-ordinate Reference:</b> Well #11H	
<b>Project:</b> Reagan County, TX (NAD-83)	<b>TVD Reference:</b> H&P 265: 2652' GL + 25' RKB @ 2677.00usft	
<b>Site:</b> University 43-15	<b>MD Reference:</b> H&P 265: 2652' GL + 25' RKB @ 2677.00usft	
<b>Well:</b> #11H	<b>North Reference:</b> Grid	
<b>Wellbore:</b> ST	<b>Survey Calculation Method:</b> Minimum Curvature	
<b>Design:</b> ST	<b>Database:</b> EDM 5000.1 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)	
14,728.00	89.47	359.76	6,889.80	8,199.65	862.83	8,199.65	1.03	-0.09	-1.02	
14,822.00	88.20	0.11	6,891.71	8,293.63	862.73	8,293.63	1.40	-1.35	0.37	
14,917.00	88.02	2.40	6,894.84	8,388.55	864.81	8,388.55	2.42	-0.19	2.41	
15,011.00	88.64	1.61	6,897.58	8,482.45	868.09	8,482.45	1.07	0.66	-0.84	
15,106.00	88.95	2.05	6,899.58	8,577.38	871.13	8,577.38	0.57	0.33	0.46	
15,200.00	89.03	1.17	6,901.23	8,671.33	873.77	8,671.33	0.94	0.09	-0.94	
15,229.00	89.34	1.17	6,901.65	8,700.32	874.36	8,700.32	1.07	1.07	0.00	
15,296.00	89.34	1.17	6,902.42	8,767.30	875.73	8,767.30	0.00	0.00	0.00	
<b>Projection</b>										

**NOTE:**  
 COMBINED SCALE FACTOR: 0.999760376  
 SHL IS APPROXIMATELY 11.55 MILES S 58°54'49" E OF THE  
 COURTHOUSE IN BIG LAKE, REAGAN COUNTY, TEXAS.



INSERT  
 SCALE 1" = 50'



PERMIT PLAT OF  
 DEVON ENERGY PRODUCTION COMPANY, L.P.

**UNIVERSITY 43-15 11H**

LIN (WOLFCAMP) FIELD  
 (1344.30 ACRES)  
 UNIVERSITY LEASE

**SURVEY LINES**

SHL: 1760' FSL & 2667' FEL  
 PP & FTP: 1760' FSL & 1800' FEL  
 SECTION 15, BLOCK 43  
 UNIVERSITY LAND SURVEY  
 LTP & BHL: 100' FNL & 1800' FEL  
 SECTION 6, BLOCK 43  
 UNIVERSITY LAND SURVEY

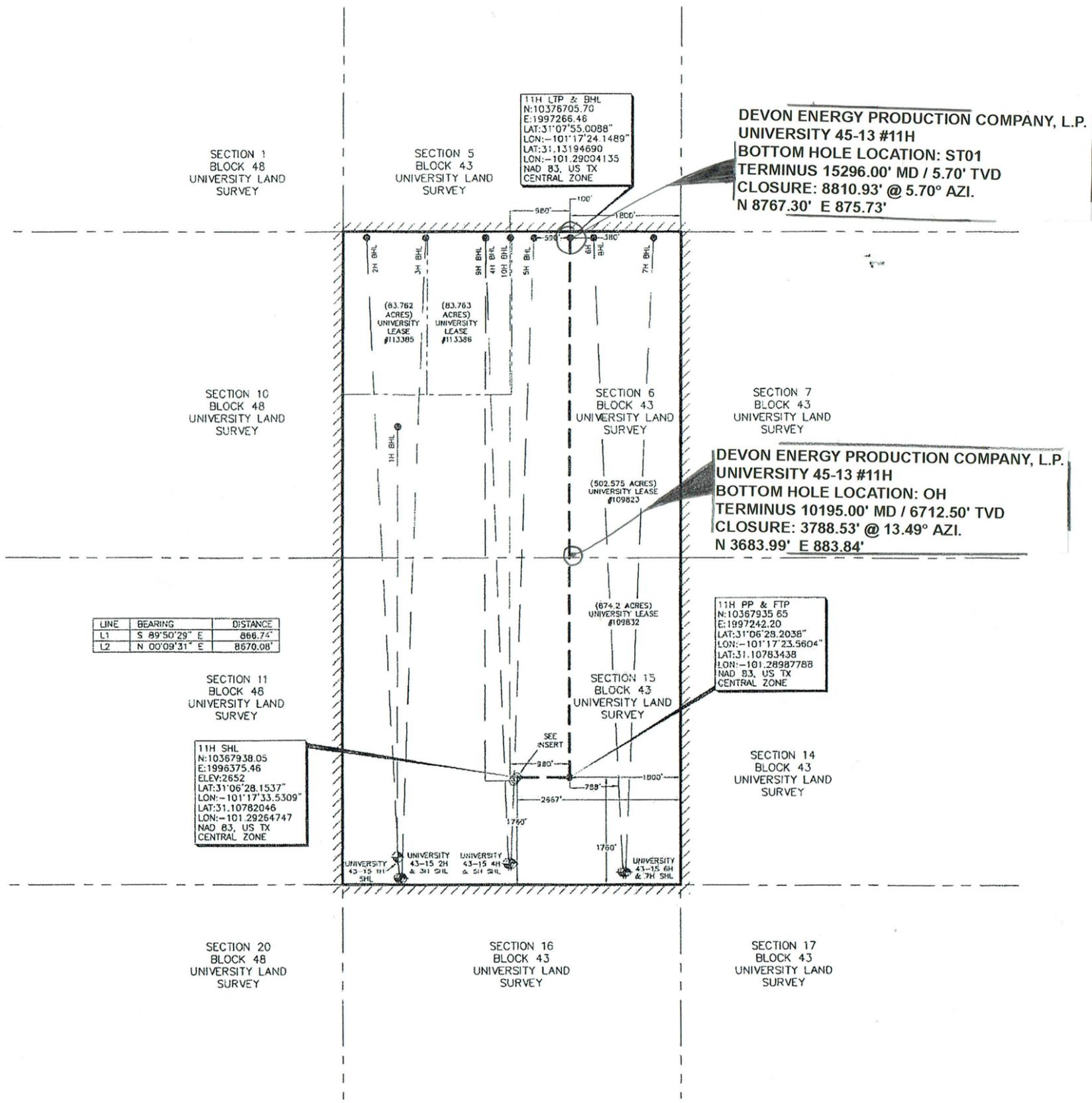
**LEASE LINES**

SHL: 1760' FSL & 2667' FEL  
 PP & FTP: 1760' FSL & 1800' FEL  
 LTP & BHL: 100' FNL & 1800' FEL  
 REAGAN COUNTY, TEXAS

**DRILLABLE**

**09/30/14**

**TB**



LINE	BEARING	DISTANCE
L1	S 89°50'29" E	866.74'
L2	N 00°09'31" E	8670.08'

11H SHL  
 N:10367938.05  
 E:1998375.46  
 ELEV:2652  
 LAT:31°06'28.1537"  
 LON:-101°17'33.5309"  
 LAT:31.10782046  
 LON:-101.29264747  
 NAD 83, US TX  
 CENTRAL ZONE

11H LTP & BHL  
 N:10376705.70  
 E:1997266.46  
 LAT:31°07'55.0088"  
 LON:-101°17'24.1489"  
 LAT:31.13194690  
 LON:-101.29004135  
 NAD 83, US TX  
 CENTRAL ZONE

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 UNIVERSITY 45-13 #11H  
 BOTTOM HOLE LOCATION: ST01  
 TERMINUS 15296.00' MD / 5.70' TVD  
 CLOSURE: 8810.93' @ 5.70° AZI.  
 N 8767.30' E 875.73'

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 UNIVERSITY 45-13 #11H  
 BOTTOM HOLE LOCATION: OH  
 TERMINUS 10195.00' MD / 6712.50' TVD  
 CLOSURE: 3788.53' @ 13.49° AZI.  
 N 3683.99' E 883.84'

11H PP & FTP  
 N:10367935.65  
 E:1997242.20  
 LAT:31°06'28.2038"  
 LON:-101°17'23.5804"  
 LAT:31.10783438  
 LON:-101.28987788  
 NAD 83, US TX  
 CENTRAL ZONE

- NOTE:**
- BEARINGS, DISTANCES & ACREAGE ARE GRID, NAD 83 US TX CENTRAL ZONE AND ARE OBTAINED BY NORMAL GPS TECHNIQUES.
  - ELEVATIONS ARE BASED ON NAVD 83.
  - THIS SURVEY IS FOR AN OIL & GAS SUB-SURFACE LEASE AND THEREFORE THIS IS NOT A BOUNDARY SURVEY.
  - LOCATION OF ADJOINING WELLS OUTSIDE LEASE BOUNDARY ARE APPROXIMATED FROM TEXAS RAILROAD COMMISSION DATA.
  - DOWNHOLE INFORMATION PROVIDED BY THE CLIENT.

ORIGINALLY STAKED: 09-24-2014  
 LATERAL UPDATE: 09-29-2014

REV: 1 JOB NO.: 14-01451 DRAWN BY: JTL

09-30-2014  
 DATE

SHEET 1 OF 1



111 Austin St., Mason, Texas 76856  
 (877) 347-6883  
 TX FIRM REG. #100248-00  
 www.crosstexaslandservices.com

**LEGEND**

- SHL SURFACE HOLE LOCATION
- PP PENETRATION POINT
- FTP FIRST TAKE POINT
- LTP LAST TAKE POINT
- BHL BOTTOM HOLE LOCATION
- RRC RAILROAD COMMISSION
- POINT
- PROPOSED WELL LOCATION SET
- EXISTING WELLHEAD
- SURFACE LOCATION OBTAINED FROM RRC
- SURVEY LINE
- SUBJECT PROPOSED LATERAL
- LEASE BOUNDARY
- PROPOSED LATERAL
- ABSORBED LATERAL
- UNLEASED AREA

FILE: S:\TX\EL DORADO AREA\UNIVERSITY BLK 43\UNIVERSITY 43-15\DRAWING\14-01451 UNIVERSITY 43-15 11H UPDATE 09-29-2014.dwg