



Gyrodata Incorporated  
10504 WCR 72  
Midland, TX 79707

Main: 432-561-8458  
Fax: 432-563-7982

August 21, 2017

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

Attn: Ms. Pamela Johns

**RE:  
QEP ENERGY COMPANY  
UNIVERSITY 7-2730 S 12SC  
Permit No. 820411  
UL /Abstract/A-U27  
SPRABERRY (TREND AREA)  
Martin County, Texas  
API No. 42-317-40608**

Ms. Johns:

Enclosed, please find the original and one copy of the survey performed on the referenced well by Gyrodata, Inc (P-5 No. 339711). Other information required by your office is as follows:

Name & Title	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Javier Estrada Surveyor	Original Hole	0' – 8968'	08/05/17-8/06/17	Gyroscopic Multishot

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 the 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.

Sincerely,

Cindy Watson  
Operations Assistant

Enclosure

A Gyrodata Directional Survey

## FINAL DEFINITIVE COPY

for

## QEP ENERGY COMPANY

Lease: UNIVERSITY 7-2730 Well: S 12SC,  
Location: UNIT DRILLING RIG #103, MARTIN COUNTY, TEXAS

Job Number: MD0817GDM573

Run Date: 06 Aug 2017

Report Generated: 21 Aug 2017 02:33

Surveyor: Javier Estrada

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Well Plan/Plot

Survey Latitude: 32.391717 deg. N

Longitude: 102.184889 deg. W

Azimuth Correction:

Gyro: 2.56000 deg to Grid North

Proposed Well Direction: 167.130 deg

Depth Reference: Rotary Table

Air Gap (RKB to Ground / RKB to MSL): 25.00

Ground Elevation (Ground to MSL / MSL to Mudline): 2926.00

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

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Location: UNIT DRILLING RIG #103, MARTIN COUNTY, TEXAS

Job Number: MD0817GDM573

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.0	0.00	0.00	0.0 0.0	0.00 N 0.00 E
0 TO 8968 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 5 INCH DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO UNIT DRILLING RIG #103 R.K.B. HEIGHT OF 25 FT. ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO UNIT DRILLING RIG #103 R.K.B. HEIGHT OF 25 FT.							
121.27	0.27	122.11	0.2	0.22	121.27	0.3 122.1	0.15 S 0.24 E
213.63	0.10	357.25	0.3	0.37	213.63	0.5 113.9	0.19 S 0.42 E
306.83	0.28	21.76	0.0	0.21	306.83	0.5 78.1	0.11 N 0.50 E
397.91	0.08	21.09	-0.2	0.22	397.91	0.7 58.6	0.37 N 0.61 E
489.12	0.11	330.27	-0.4	0.09	489.12	0.8 49.2	0.51 N 0.59 E
579.89	0.03	76.23	-0.5	0.13	579.89	0.8 44.0	0.59 N 0.57 E
672.08	0.08	83.09	-0.4	0.05	672.08	0.9 47.4	0.60 N 0.66 E
770.50	0.31	74.94	-0.4	0.23	770.50	1.2 55.3	0.68 N 0.98 E
865.42	1.09	92.11	-0.2	0.84	865.41	2.2 71.5	0.71 N 2.13 E
961.08	2.28	93.10	0.5	1.24	961.03	5.0 83.3	0.58 N 4.94 E
1055.79	3.04	94.36	1.8	0.80	1055.63	9.3 88.3	0.28 N 9.32 E
1151.23	3.30	95.30	3.4	0.28	1150.93	14.6 90.6	0.16 S 14.57 E
1245.71	3.21	100.10	5.3	0.30	1245.26	19.9 92.5	0.88 S 19.88 E
1340.08	3.13	99.50	7.3	0.09	1339.48	25.1 94.0	1.76 S 25.02 E
1435.07	3.07	98.80	9.2	0.07	1434.33	30.2 94.9	2.58 S 30.08 E
1529.72	2.91	103.51	11.2	0.31	1528.86	35.1 95.8	3.53 S 34.92 E

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Location: UNIT DRILLING RIG #103, MARTIN COUNTY, TEXAS

Job Number: MD0817GDM573

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1624.06	2.69	102.83	13.2	0.24	1623.08	39.7 96.6	4.58 S 39.40 E
1719.40	2.80	102.79	15.2	0.12	1718.31	44.2 97.3	5.59 S 43.86 E
1813.96	3.18	99.11	17.2	0.45	1812.74	49.1 97.6	6.52 S 48.70 E
1909.09	2.96	95.59	19.0	0.30	1907.74	54.2 97.6	7.17 S 53.74 E
2003.73	2.89	95.72	20.5	0.07	2002.25	59.0 97.4	7.65 S 58.55 E
2098.16	3.28	96.58	22.2	0.41	2096.55	64.1 97.3	8.20 S 63.60 E
2192.72	3.33	96.09	23.9	0.06	2190.95	69.6 97.3	8.80 S 69.01 E
2286.74	3.31	96.23	25.7	0.02	2284.81	75.0 97.2	9.38 S 74.42 E
2380.60	3.22	86.27	27.0	0.61	2378.52	80.3 96.8	9.50 S 79.73 E
2475.04	3.08	93.50	28.2	0.45	2472.82	85.4 96.4	9.49 S 84.91 E
2569.70	3.02	91.69	29.5	0.12	2567.35	90.5 96.2	9.71 S 89.93 E
2664.19	2.84	90.20	30.6	0.20	2661.71	95.3 95.9	9.79 S 94.76 E
2758.78	2.28	103.59	32.0	0.86	2756.21	99.5 95.9	10.25 S 98.93 E
2852.65	1.79	118.34	33.8	0.76	2850.02	102.7 96.4	11.38 S 102.03 E
2947.87	0.94	123.09	35.4	0.90	2945.21	104.7 96.9	12.51 S 104.00 E
3041.40	0.45	122.75	36.2	0.52	3038.74	105.8 97.1	13.13 S 104.95 E
3135.63	0.41	113.50	36.6	0.08	3132.96	106.4 97.3	13.46 S 105.57 E
3230.41	0.51	113.49	37.1	0.11	3227.74	107.2 97.4	13.77 S 106.27 E
3324.39	0.60	106.82	37.6	0.12	3321.72	108.0 97.5	14.08 S 107.12 E
3418.74	0.51	96.29	38.0	0.14	3416.06	108.9 97.5	14.27 S 108.01 E
3513.62	0.22	191.33	38.3	0.60	3510.94	109.4 97.6	14.49 S 108.40 E
3608.36	0.78	240.80	38.6	0.70	3605.68	108.8 97.9	14.98 S 107.80 E



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MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
3703.09	0.81	244.74	38.9	0.07	3700.40	107.8 98.3	15.58 S 106.63 E
3797.91	0.62	258.34	39.1	0.27	3795.21	106.7 98.6	15.97 S 105.52 E
3892.98	0.54	268.77	39.0	0.14	3890.27	105.8 98.7	16.09 S 104.57 E
3988.35	0.41	21.11	38.6	0.83	3985.64	105.4 98.6	15.78 S 104.24 E
4083.02	0.49	26.08	38.0	0.09	4080.31	105.6 98.2	15.10 S 104.54 E
4177.57	0.48	27.68	37.4	0.02	4174.86	105.9 97.8	14.39 S 104.90 E
4271.65	0.49	9.08	36.7	0.17	4268.93	106.0 97.4	13.64 S 105.15 E
4366.53	0.50	2.08	35.9	0.06	4363.81	106.0 96.9	12.82 S 105.23 E
4461.22	0.57	3.51	35.1	0.08	4458.50	105.9 96.5	11.94 S 105.27 E
4555.93	0.61	5.73	34.2	0.05	4553.20	105.9 95.9	10.97 S 105.35 E
4651.37	0.69	359.56	33.1	0.11	4648.63	105.9 95.4	9.89 S 105.40 E
4746.31	0.67	0.07	32.0	0.02	4743.57	105.8 94.8	8.76 S 105.39 E
4841.19	0.54	351.45	31.0	0.17	4838.44	105.6 94.2	7.77 S 105.33 E
4935.67	0.48	348.22	30.2	0.07	4932.92	105.4 93.8	6.94 S 105.18 E
5030.32	0.47	354.41	29.4	0.06	5027.57	105.2 93.4	6.16 S 105.06 E
5124.90	0.44	0.77	28.7	0.06	5122.14	105.2 93.0	5.41 S 105.03 E
5218.93	0.38	26.21	28.1	0.20	5216.17	105.3 92.6	4.77 S 105.17 E
5312.65	0.25	163.16	28.0	0.63	5309.89	105.5 92.5	4.69 S 105.37 E
5406.94	0.75	193.50	28.8	0.58	5404.18	105.4 93.0	5.49 S 105.28 E
5502.04	0.68	221.62	29.7	0.37	5499.27	105.0 93.6	6.51 S 104.76 E
5596.61	0.64	240.88	30.2	0.24	5593.83	104.2 94.0	7.19 S 103.93 E

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Location: UNIT DRILLING RIG #103, MARTIN COUNTY, TEXAS

Job Number: MD0817GDM573

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
5690.40	0.64	245.51	30.4	0.06	5687.62	103.3 94.3	7.66 S 103.00 E
5785.56	0.60	233.74	30.7	0.14	5782.77	102.4 94.6	8.18 S 102.11 E
5879.85	0.48	246.29	31.0	0.18	5877.06	101.7 94.9	8.63 S 101.35 E
5974.64	0.48	253.92	31.1	0.07	5971.84	101.0 95.1	8.90 S 100.61 E
6069.30	0.54	247.58	31.2	0.09	6066.50	100.2 95.3	9.18 S 99.81 E
6164.35	0.43	236.55	31.4	0.15	6161.55	99.6 95.5	9.55 S 99.10 E
6259.10	0.39	240.96	31.6	0.05	6256.29	99.0 95.7	9.90 S 98.52 E
6353.72	0.37	236.53	31.8	0.04	6350.91	98.5 96.0	10.22 S 97.99 E
6448.63	0.34	234.49	32.0	0.03	6445.82	98.1 96.2	10.56 S 97.50 E
6543.56	0.38	216.59	32.3	0.13	6540.75	97.7 96.4	10.97 S 97.08 E
6638.59	0.33	226.47	32.7	0.08	6635.78	97.4 96.7	11.41 S 96.70 E
6732.73	0.42	229.01	33.0	0.10	6729.91	97.0 97.0	11.83 S 96.24 E
6827.20	0.49	213.11	33.4	0.15	6824.38	96.6 97.4	12.39 S 95.76 E
6921.87	0.54	207.74	34.0	0.07	6919.05	96.2 97.8	13.13 S 95.33 E
7015.94	0.69	217.36	34.7	0.19	7013.11	95.8 98.4	13.97 S 94.78 E
7110.58	0.76	203.39	35.6	0.20	7107.74	95.4 99.0	15.00 S 94.19 E
7205.43	0.81	208.89	36.6	0.10	7202.59	95.0 99.8	16.16 S 93.61 E
7300.67	0.75	216.93	37.5	0.13	7297.82	94.5 100.5	17.25 S 92.91 E
7394.08	0.70	221.13	38.2	0.08	7391.22	93.9 101.2	18.17 S 92.17 E
7490.75	0.72	226.91	38.9	0.08	7487.88	93.3 101.8	19.03 S 91.34 E
7586.22	0.66	236.40	39.4	0.13	7583.34	92.6 102.3	19.74 S 90.44 E
7681.18	0.64	246.10	39.7	0.12	7678.30	91.8 102.8	20.26 S 89.50 E

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MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
7775.93	0.30	245.24	39.8	0.36	7773.05	91.1 103.0	20.58 S 88.79 E
7870.82	0.11	248.10	39.9	0.20	7867.93	90.9 103.2	20.72 S 88.48 E
7965.77	0.19	33.28	39.8	0.30	7962.88	90.9 103.1	20.62 S 88.48 E
8061.05	0.62	75.71	39.7	0.52	8058.16	91.4 102.9	20.36 S 89.07 E
8156.03	0.58	51.29	39.5	0.27	8153.14	92.1 102.5	19.93 S 89.94 E
8250.43	0.47	29.72	39.0	0.24	8247.53	92.5 102.0	19.30 S 90.51 E
8345.34	0.73	347.10	38.1	0.53	8342.44	92.4 101.5	18.37 S 90.57 E
8440.23	0.14	128.36	37.6	0.89	8437.33	92.3 101.2	17.85 S 90.52 E
8535.22	1.56	139.11	38.8	1.50	8532.30	93.4 101.7	18.90 S 91.46 E
8629.70	1.34	146.47	41.0	0.30	8626.75	95.2 102.6	20.79 S 92.91 E
8724.75	0.81	149.81	42.6	0.56	8721.79	96.5 103.4	22.30 S 93.86 E
8820.15	0.62	155.29	43.8	0.21	8817.18	97.3 103.9	23.35 S 94.42 E
8914.34	0.48	167.37	44.7	0.19	8911.36	97.8 104.3	24.20 S 94.72 E
8968.00	0.63	167.02	45.2	0.28	8965.02	98.0 104.6	24.71 S 94.83 E

Final Station Closure: Distance: 98.00 ft Az: 104.60 deg.









Gyrodata Incorporated  
10504 WCR 72  
Midland, TX 79707

Main: 432-561-8458  
Fax: 432-563-7982

State of Texas  
County of Harris

I, Kevin Willard, certify that; I am employed by Gyrodata Inc.; that I am authorized and qualified to review the Gyroscopic Multishot survey from a depth of 0 feet to a depth of 8968 feet conducted on the day(s) of 08/05/2017; that this survey was conducted at the request QEP ENERGY COMPANY for the UNIVERSITY 7-2730 Well S12SC API No. 42-317-40608 in Martin County, Texas; that the data is true, correct, complete, and within the limitations of the tool as set forth by Gyrodata Inc.; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Gyrodata Inc.

A handwritten signature in black ink, appearing to read "Kevin Willard", written over a horizontal line.

Kevin Willard  
Operations Coordinator

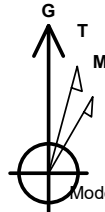
# QEP ENERGY



Project: Martin County, TX (NAD27)  
 Site: University 7-2730 S  
 Well: University 7-2730 S 12SC  
 Wellbore: Lateral  
 Design: Lateral

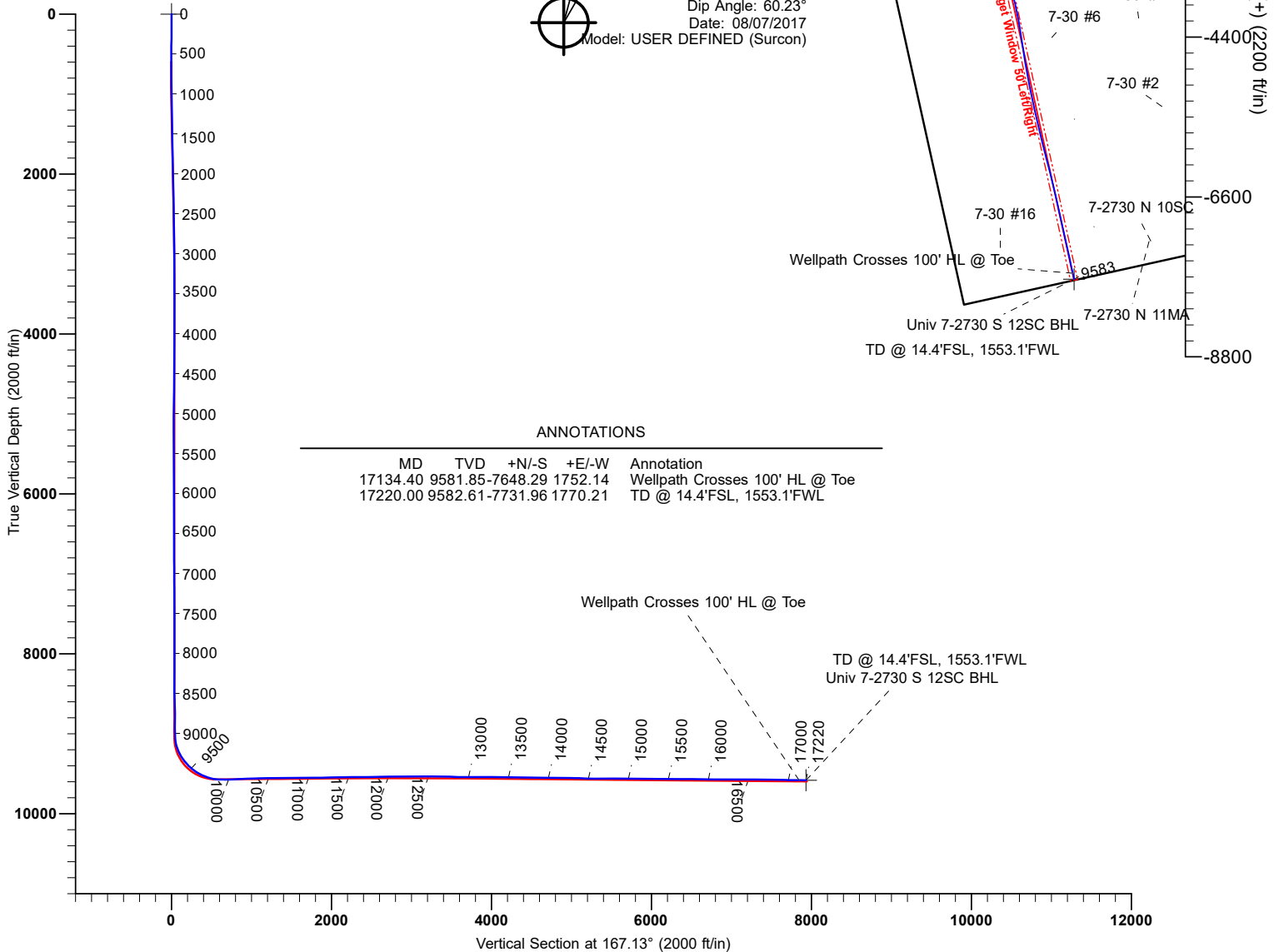
2926+25 @ 2951.00ft (Unit103)  
 NAD 1927 (NADCON CONUS)

To convert a Magnetic Direction to a Grid Direction, Add 8.91°



Azimuths to Grid North  
 True North: 2.56°  
 Magnetic North: 8.92°

Magnetic Field  
 Strength: 47951.0snT  
 Dip Angle: 60.23°  
 Date: 08/07/2017  
 Model: USER DEFINED (Surcon)



## ANNOTATIONS

MD	TVD	+N/-S	+E/-W	Annotation
17134.40	9581.85	-7648.29	1752.14	Wellpath Crosses 100' HL @ Toe
17220.00	9582.61	-7731.96	1770.21	TD @ 14.4°FSL, 1553.1°FWL

Wellpath Crosses 100' HL @ Toe

TD @ 14.4°FSL, 1553.1°FWL  
 Univ 7-2730 S 12SC BHL

## TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Univ 7-2730 S 12SC SL	0.00	0.00	0.00	295971.85	554485.31	Point
Univ 7-2730 S 12SC BHL	9582.61	-7731.96	1770.21	288239.89	556255.52	Point

<b>Company:</b>	QEP ENERGY	<b>Local Co-ordinate Reference:</b>	Well University 7-2730 S 12SC - Slot S 12SC
<b>Project:</b>	Martin County, TX (NAD27)	<b>TVD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Site:</b>	University 7-2730 S	<b>MD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Well:</b>	University 7-2730 S 12SC	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Lateral	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Lateral	<b>Database:</b>	VON_EDM

<b>Project</b>	Martin County, TX (NAD27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Texas North Central 4202		

<b>Site</b>	University 7-2730 S, centered on 06SA		
<b>Site Position:</b>		<b>Northing:</b>	296,518.75 ft
<b>From:</b>	Map	<b>Easting:</b>	556,667.48 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.20 in
		<b>Latitude:</b>	32° 23' 36.162 N
		<b>Longitude:</b>	102° 10' 38.920 W
		<b>Grid Convergence:</b>	-2.55 °

<b>Well</b>	University 7-2730 S 12SC - Slot S 12SC		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b> 295,971.85 ft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 554,485.31 ft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	32° 23' 29.793 N
		<b>Longitude:</b>	102° 11' 4.061 W
		<b>Ground Level:</b>	2,926.00 ft

<b>Wellbore</b>	Lateral				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	User Defined	08/07/17	6.36	60.23	47,951

<b>Design</b>	Lateral				
<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	167.13	

<b>Survey Program</b>	<b>Date</b>	08/14/17			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
121.27	8,968.00	Survey #3 (Lateral)	Gyrodata New 2-16-16	Gyrodata Stationary Tool drop on BHA	
9,038.00	17,155.00	Survey #4 (Lateral)	MWD+IFR1+MS_WY	Fixed:v2:Rockies, crustal dec + 3-axis correction	
17,220.00	17,220.00	Survey #5 (Lateral)	Projection	projection	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
121.27	0.27	122.11	121.27	-0.15	0.24	0.20	0.22	0.22	0.00	
213.63	0.10	357.25	213.63	-0.19	0.42	0.28	0.37	-0.18	-135.19	
306.83	0.28	21.76	306.83	0.11	0.50	0.01	0.21	0.19	26.30	
397.91	0.08	21.09	397.91	0.37	0.61	-0.23	0.22	-0.22	-0.74	
489.12	0.11	330.27	489.12	0.51	0.59	-0.36	0.09	0.03	-55.72	
579.89	0.03	76.23	579.89	0.59	0.57	-0.45	0.13	-0.09	116.73	
672.08	0.08	83.09	672.08	0.60	0.66	-0.44	0.05	0.05	7.44	
770.50	0.31	74.94	770.50	0.68	0.98	-0.44	0.23	0.23	-8.28	



<b>Company:</b>	QEP ENERGY	<b>Local Co-ordinate Reference:</b>	Well University 7-2730 S 12SC - Slot S 12SC
<b>Project:</b>	Martin County, TX (NAD27)	<b>TVD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Site:</b>	University 7-2730 S	<b>MD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Well:</b>	University 7-2730 S 12SC	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Lateral	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Lateral	<b>Database:</b>	VON_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
865.42	1.09	92.11	865.41	0.71	2.13	-0.22	0.84	0.82	18.09
961.08	2.28	93.10	961.03	0.58	4.94	0.54	1.24	1.24	1.03
1,055.79	3.04	94.36	1,055.63	0.28	9.33	1.80	0.80	0.80	1.33
1,151.23	3.30	95.30	1,150.93	-0.16	14.58	3.41	0.28	0.27	0.98
1,245.71	3.21	100.10	1,245.26	-0.88	19.90	5.29	0.30	-0.10	5.08
1,340.08	3.13	99.50	1,339.48	-1.77	25.04	7.30	0.09	-0.08	-0.64
1,435.07	3.07	98.80	1,434.33	-2.58	30.11	9.22	0.07	-0.06	-0.74
1,529.72	2.91	103.51	1,528.85	-3.53	34.95	11.23	0.31	-0.17	4.98
1,624.06	2.69	102.83	1,623.08	-4.58	39.44	13.25	0.24	-0.23	-0.72
1,719.40	2.80	102.79	1,718.31	-5.60	43.89	15.23	0.12	0.12	-0.04
1,813.96	3.18	99.11	1,812.74	-6.52	48.73	17.21	0.45	0.40	-3.89
1,909.09	2.96	95.59	1,907.74	-7.18	53.78	18.98	0.30	-0.23	-3.70
2,003.73	2.89	95.72	2,002.25	-7.66	58.59	20.51	0.07	-0.07	0.14
2,098.16	3.28	96.58	2,096.55	-8.20	63.64	22.17	0.42	0.41	0.91
2,192.72	3.33	96.09	2,190.95	-8.80	69.06	23.96	0.06	0.05	-0.52
2,286.74	3.31	96.23	2,284.81	-9.39	74.47	25.74	0.02	-0.02	0.15
2,380.60	3.22	86.27	2,378.52	-9.51	79.80	27.04	0.61	-0.10	-10.61
2,475.04	3.08	93.50	2,472.82	-9.49	84.97	28.18	0.45	-0.15	7.66
2,569.70	3.02	91.69	2,567.34	-9.72	90.01	29.52	0.12	-0.06	-1.91
2,664.19	2.84	90.20	2,661.71	-9.80	94.83	30.68	0.21	-0.19	-1.58
2,758.78	2.28	103.59	2,756.21	-10.25	99.01	32.05	0.86	-0.59	14.16
2,852.65	1.79	118.34	2,850.02	-11.39	102.11	33.85	0.76	-0.52	15.71
2,947.87	0.94	123.09	2,945.21	-12.52	104.08	35.39	0.90	-0.89	4.99
3,041.40	0.45	122.75	3,038.73	-13.14	105.03	36.20	0.52	-0.52	-0.36
3,135.63	0.41	113.50	3,132.96	-13.47	105.65	36.67	0.08	-0.04	-9.82
3,230.41	0.51	113.49	3,227.74	-13.78	106.35	37.12	0.11	0.11	-0.01
3,324.39	0.60	106.82	3,321.71	-14.08	107.20	37.61	0.12	0.10	-7.10
3,418.74	0.51	96.29	3,416.06	-14.27	108.09	37.99	0.14	-0.10	-11.16
3,513.62	0.22	191.33	3,510.94	-14.50	108.47	38.30	0.60	-0.31	100.17
3,608.36	0.78	240.80	3,605.67	-14.99	107.88	38.64	0.70	0.59	52.22
3,703.09	0.81	244.74	3,700.39	-15.59	106.71	38.97	0.07	0.03	4.16
3,797.91	0.62	258.34	3,795.21	-15.98	105.60	39.10	0.27	-0.20	14.34
3,892.98	0.54	268.77	3,890.27	-16.10	104.65	39.00	0.14	-0.08	10.97
3,988.35	0.41	21.11	3,985.64	-15.79	104.32	38.63	0.83	-0.14	117.79
4,083.02	0.49	26.08	4,080.31	-15.11	104.62	38.03	0.09	0.08	5.25
4,177.57	0.48	27.68	4,174.85	-14.39	104.98	37.42	0.02	-0.01	1.69
4,271.65	0.49	9.08	4,268.93	-13.65	105.23	36.74	0.17	0.01	-19.77
4,366.53	0.50	2.08	4,363.81	-12.83	105.31	35.97	0.06	0.01	-7.38
4,461.22	0.57	3.51	4,458.49	-11.95	105.35	35.12	0.08	0.07	1.51
4,555.93	0.61	5.73	4,553.20	-10.98	105.43	34.19	0.05	0.04	2.34
4,651.37	0.69	359.56	4,648.63	-9.90	105.48	33.14	0.11	0.08	-6.46
4,746.31	0.67	0.07	4,743.56	-8.77	105.47	32.04	0.02	-0.02	0.54
4,841.19	0.54	351.45	4,838.44	-7.77	105.41	31.06	0.17	-0.14	-9.09

<b>Company:</b>	QEP ENERGY	<b>Local Co-ordinate Reference:</b>	Well University 7-2730 S 12SC - Slot S 12SC
<b>Project:</b>	Martin County, TX (NAD27)	<b>TVD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Site:</b>	University 7-2730 S	<b>MD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Well:</b>	University 7-2730 S 12SC	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Lateral	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Lateral	<b>Database:</b>	VON_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,935.67	0.48	348.22	4,932.91	-6.95	105.26	30.22	0.07	-0.06	-3.42
5,030.32	0.47	354.41	5,027.56	-6.17	105.14	29.44	0.06	-0.01	6.54
5,124.90	0.44	0.77	5,122.14	-5.42	105.11	28.70	0.06	-0.03	6.72
5,218.93	0.38	26.21	5,216.17	-4.78	105.25	28.11	0.20	-0.06	27.06
5,312.65	0.25	163.16	5,309.89	-4.70	105.45	28.07	0.63	-0.14	146.13
5,406.94	0.75	193.50	5,404.17	-5.50	105.36	28.83	0.58	0.53	32.18
5,502.04	0.68	221.62	5,499.26	-6.52	104.84	29.71	0.37	-0.07	29.57
5,596.61	0.64	240.88	5,593.83	-7.20	104.01	30.19	0.24	-0.04	20.37
5,690.40	0.64	245.51	5,687.61	-7.67	103.07	30.44	0.06	0.00	4.94
5,785.56	0.60	233.74	5,782.77	-8.19	102.19	30.74	0.14	-0.04	-12.37
5,879.85	0.48	246.29	5,877.05	-8.64	101.43	31.01	0.18	-0.13	13.31
5,974.64	0.48	253.92	5,971.84	-8.91	100.68	31.11	0.07	0.00	8.05
6,069.30	0.54	247.58	6,066.50	-9.19	99.89	31.21	0.09	0.06	-6.70
6,164.35	0.43	236.55	6,161.54	-9.55	99.18	31.41	0.15	-0.12	-11.60
6,259.10	0.39	240.96	6,256.29	-9.91	98.60	31.62	0.05	-0.04	4.65
6,353.72	0.37	236.53	6,350.91	-10.23	98.06	31.82	0.04	-0.02	-4.68
6,448.63	0.34	234.49	6,445.82	-10.56	97.58	32.03	0.03	-0.03	-2.15
6,543.56	0.38	216.59	6,540.74	-10.98	97.16	32.35	0.13	0.04	-18.86
6,638.59	0.33	226.47	6,635.77	-11.42	96.78	32.69	0.08	-0.05	10.40
6,732.73	0.42	229.01	6,729.91	-11.83	96.32	32.99	0.10	0.10	2.70
6,827.20	0.49	213.11	6,824.38	-12.40	95.84	33.44	0.15	0.07	-16.83
6,921.87	0.54	207.74	6,919.04	-13.13	95.41	34.06	0.07	0.05	-5.67
7,015.94	0.69	217.36	7,013.11	-13.98	94.86	34.75	0.19	0.16	10.23
7,110.58	0.76	203.39	7,107.74	-15.01	94.26	35.63	0.20	0.07	-14.76
7,205.43	0.81	208.89	7,202.58	-16.17	93.69	36.63	0.10	0.05	5.80
7,300.67	0.75	216.93	7,297.81	-17.26	92.99	37.54	0.13	-0.06	8.44
7,394.08	0.70	221.13	7,391.22	-18.18	92.25	38.27	0.08	-0.05	4.50
7,490.75	0.72	226.91	7,487.88	-19.04	91.42	38.92	0.08	0.02	5.98
7,586.22	0.66	236.40	7,583.34	-19.75	90.52	39.42	0.13	-0.06	9.94
7,681.18	0.64	246.10	7,678.29	-20.27	89.58	39.71	0.12	-0.02	10.21
7,775.93	0.30	245.24	7,773.04	-20.59	88.87	39.86	0.36	-0.36	-0.91
7,870.82	0.11	248.10	7,867.93	-20.72	88.56	39.93	0.20	-0.20	3.01
7,965.77	0.19	33.28	7,962.88	-20.63	88.56	39.83	0.30	0.08	152.90
8,061.05	0.62	75.71	8,058.16	-20.37	89.15	39.71	0.52	0.45	44.53
8,156.03	0.58	51.29	8,153.13	-19.94	90.02	39.49	0.27	-0.04	-25.71
8,250.43	0.47	29.72	8,247.53	-19.30	90.59	39.00	0.24	-0.12	-22.85
8,345.34	0.73	347.10	8,342.43	-18.38	90.64	38.11	0.53	0.27	-44.91
8,440.23	0.14	128.36	8,437.32	-17.86	90.60	37.59	0.89	-0.62	148.87
8,535.22	1.56	139.11	8,532.30	-18.91	91.54	38.82	1.50	1.49	11.32
8,629.70	1.34	146.47	8,626.75	-20.80	92.99	40.99	0.30	-0.23	7.79
8,724.75	0.81	149.81	8,721.78	-22.31	93.94	42.67	0.56	-0.56	3.51
8,820.15	0.62	155.29	8,817.17	-23.36	94.50	43.82	0.21	-0.20	5.74
8,914.34	0.48	167.37	8,911.36	-24.21	94.80	44.72	0.19	-0.15	12.83

<b>Company:</b>	QEP ENERGY	<b>Local Co-ordinate Reference:</b>	Well University 7-2730 S 12SC - Slot S 12SC
<b>Project:</b>	Martin County, TX (NAD27)	<b>TVD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Site:</b>	University 7-2730 S	<b>MD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Well:</b>	University 7-2730 S 12SC	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Lateral	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Lateral	<b>Database:</b>	VON_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,968.00	0.63	167.02	8,965.02	-24.72	94.91	45.24	0.28	0.28	-0.65
9,038.00	1.06	170.12	9,035.01	-25.73	95.11	46.27	0.62	0.61	4.43
9,070.00	4.96	160.07	9,066.96	-27.32	95.63	47.94	12.25	12.19	-31.41
9,102.00	8.89	160.87	9,098.72	-30.96	96.91	51.77	12.28	12.28	2.50
9,133.00	12.92	162.22	9,129.15	-36.53	98.76	57.60	13.03	13.00	4.35
9,164.00	16.82	166.19	9,159.11	-44.18	100.89	65.55	13.00	12.58	12.81
9,196.00	20.18	167.66	9,189.45	-54.07	103.17	75.70	10.60	10.50	4.59
9,227.00	23.49	168.28	9,218.23	-65.35	105.57	87.22	10.70	10.68	2.00
9,259.00	27.13	168.97	9,247.15	-78.76	108.26	100.90	11.41	11.38	2.16
9,291.00	30.11	169.31	9,275.24	-93.81	111.15	116.21	9.33	9.31	1.06
9,323.00	33.60	168.67	9,302.41	-110.39	114.38	133.09	10.96	10.91	-2.00
9,355.00	36.16	166.83	9,328.66	-128.27	118.27	151.39	8.65	8.00	-5.75
9,387.00	39.93	165.79	9,353.86	-147.42	122.94	171.10	11.95	11.78	-3.25
9,418.00	42.83	166.53	9,377.12	-167.32	127.84	191.59	9.49	9.35	2.39
9,450.00	43.89	167.76	9,400.38	-188.74	132.73	213.56	4.24	3.31	3.84
9,482.00	47.09	168.22	9,422.81	-211.05	137.47	236.37	10.05	10.00	1.44
9,514.00	50.61	168.21	9,443.87	-234.64	142.39	260.46	11.00	11.00	-0.03
9,546.00	55.33	168.00	9,463.13	-259.63	147.66	285.99	14.76	14.75	-0.66
9,578.00	58.79	168.79	9,480.53	-285.93	153.06	312.84	11.01	10.81	2.47
9,609.00	60.10	170.46	9,496.29	-312.19	157.86	339.51	6.28	4.23	5.39
9,641.00	63.26	172.11	9,511.47	-340.03	162.12	367.60	10.87	9.88	5.16
9,673.00	67.04	172.98	9,524.92	-368.82	165.89	396.50	12.07	11.81	2.72
9,704.00	68.86	171.85	9,536.55	-397.29	169.68	425.11	6.77	5.87	-3.65
9,736.00	70.02	171.14	9,547.79	-426.93	174.11	454.98	4.18	3.63	-2.22
9,768.00	73.81	171.46	9,557.72	-456.99	178.71	485.32	11.88	11.84	1.00
9,799.00	79.05	170.33	9,564.99	-486.73	183.48	515.37	17.27	16.90	-3.65
9,831.00	84.82	169.20	9,569.48	-517.90	189.11	547.01	18.37	18.03	-3.53
9,834.00	84.96	169.41	9,569.75	-520.83	189.66	550.00	8.39	4.67	7.00
9,897.00	89.15	168.26	9,572.98	-582.55	201.85	612.87	6.90	6.65	-1.83
9,929.00	88.71	168.75	9,573.58	-613.90	208.22	644.86	2.06	-1.38	1.53
9,991.00	89.90	167.30	9,574.33	-674.54	221.08	706.84	3.03	1.92	-2.34
10,023.00	92.36	167.64	9,573.70	-705.77	228.03	738.83	7.76	7.69	1.06
10,117.00	92.98	166.56	9,569.32	-797.30	248.99	832.73	1.32	0.66	-1.15
10,212.00	92.95	167.83	9,564.41	-889.81	270.01	927.60	1.34	-0.03	1.34
10,307.00	91.41	168.16	9,560.80	-982.66	289.76	1,022.52	1.66	-1.62	0.35
10,402.00	91.59	167.43	9,558.31	-1,075.48	309.84	1,117.48	0.79	0.19	-0.77
10,496.00	90.54	167.10	9,556.56	-1,167.15	330.55	1,211.46	1.17	-1.12	-0.35
10,592.00	90.82	167.25	9,555.42	-1,260.75	351.86	1,307.45	0.33	0.29	0.16
10,687.00	89.80	167.65	9,554.91	-1,353.48	372.50	1,402.45	1.15	-1.07	0.42
10,783.00	90.88	167.49	9,554.34	-1,447.22	393.17	1,498.44	1.14	1.13	-0.17
10,878.00	91.24	168.91	9,552.58	-1,540.20	412.59	1,593.41	1.54	0.38	1.49
10,973.00	89.99	169.50	9,551.56	-1,633.51	430.38	1,688.33	1.45	-1.32	0.62
11,068.00	90.07	169.24	9,551.51	-1,726.88	447.91	1,783.26	0.29	0.08	-0.27
11,163.00	90.51	169.01	9,551.03	-1,820.17	465.83	1,878.20	0.52	0.46	-0.24



<b>Company:</b>	QEP ENERGY	<b>Local Co-ordinate Reference:</b>	Well University 7-2730 S 12SC - Slot S 12SC
<b>Project:</b>	Martin County, TX (NAD27)	<b>TVD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Site:</b>	University 7-2730 S	<b>MD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Well:</b>	University 7-2730 S 12SC	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Lateral	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Lateral	<b>Database:</b>	VON_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,257.00	90.79	168.14	9,549.97	-1,912.30	484.45	1,972.17	0.97	0.30	-0.93
11,352.00	91.64	167.77	9,547.95	-2,005.19	504.27	2,067.13	0.98	0.89	-0.39
11,447.00	90.88	168.12	9,545.86	-2,098.07	524.10	2,162.10	0.88	-0.80	0.37
11,542.00	91.80	168.48	9,543.64	-2,191.07	543.36	2,257.05	1.04	0.97	0.38
11,637.00	90.01	167.79	9,542.14	-2,284.02	562.89	2,352.02	2.02	-1.88	-0.73
11,733.00	90.12	167.26	9,542.03	-2,377.76	583.63	2,448.02	0.56	0.11	-0.55
11,827.00	90.70	166.75	9,541.36	-2,469.35	604.77	2,542.02	0.82	0.62	-0.54
11,922.00	91.56	166.99	9,539.49	-2,561.84	626.34	2,637.00	0.94	0.91	0.25
12,017.00	90.17	167.65	9,538.05	-2,654.51	647.19	2,731.98	1.62	-1.46	0.69
12,112.00	90.94	167.63	9,537.13	-2,747.31	667.53	2,826.97	0.81	0.81	-0.02
12,207.00	89.37	167.21	9,536.87	-2,840.02	688.22	2,921.97	1.71	-1.65	-0.44
12,302.00	90.45	167.21	9,537.02	-2,932.66	709.25	3,016.97	1.14	1.14	0.00
12,396.00	90.81	167.11	9,535.99	-3,024.31	730.13	3,110.96	0.40	0.38	-0.11
12,491.00	90.31	166.80	9,535.06	-3,116.85	751.58	3,205.96	0.62	-0.53	-0.33
12,585.00	88.46	166.41	9,536.07	-3,208.28	773.35	3,299.94	2.01	-1.97	-0.41
12,680.00	89.58	166.38	9,537.69	-3,300.60	795.69	3,394.92	1.18	1.18	-0.03
12,775.00	88.06	166.29	9,539.65	-3,392.89	818.13	3,489.89	1.60	-1.60	-0.09
12,869.00	88.92	166.25	9,542.13	-3,484.17	840.43	3,583.84	0.92	0.91	-0.04
12,964.00	89.54	165.90	9,543.40	-3,576.37	863.29	3,678.82	0.75	0.65	-0.37
13,058.00	89.40	164.07	9,544.27	-3,667.16	887.64	3,772.74	1.95	-0.15	-1.95
13,153.00	89.20	164.89	9,545.44	-3,758.68	913.06	3,867.63	0.89	-0.21	0.86
13,247.00	91.00	166.20	9,545.27	-3,849.70	936.52	3,961.59	2.37	1.91	1.39
13,342.00	90.71	167.30	9,543.85	-3,942.16	958.30	4,056.58	1.20	-0.31	1.16
13,437.00	89.32	167.64	9,543.83	-4,034.90	978.91	4,151.57	1.51	-1.46	0.36
13,531.00	89.14	169.70	9,545.09	-4,127.05	997.37	4,245.53	2.20	-0.19	2.19
13,626.00	89.14	169.79	9,546.52	-4,220.52	1,014.28	4,340.42	0.09	0.00	0.09
13,720.00	89.79	171.49	9,547.40	-4,313.26	1,029.57	4,434.23	1.94	0.69	1.81
13,815.00	88.93	171.41	9,548.46	-4,407.20	1,043.69	4,528.96	0.91	-0.91	-0.08
13,910.00	88.03	170.76	9,550.98	-4,501.02	1,058.41	4,623.69	1.17	-0.95	-0.68
14,004.00	88.46	170.94	9,553.86	-4,593.78	1,073.35	4,717.45	0.50	0.46	0.19
14,098.00	90.63	171.59	9,554.60	-4,686.68	1,087.62	4,811.20	2.41	2.31	0.69
14,193.00	89.16	170.36	9,554.78	-4,780.50	1,102.52	4,905.98	2.02	-1.55	-1.29
14,288.00	89.41	170.03	9,555.96	-4,874.10	1,118.70	5,000.84	0.44	0.26	-0.35
14,383.00	88.39	168.92	9,557.79	-4,967.49	1,136.05	5,095.74	1.59	-1.07	-1.17
14,478.00	88.62	168.76	9,560.26	-5,060.66	1,154.43	5,190.66	0.29	0.24	-0.17
14,573.00	89.21	167.79	9,562.06	-5,153.66	1,173.73	5,285.62	1.19	0.62	-1.02
14,668.00	89.74	167.63	9,562.93	-5,246.48	1,193.95	5,380.61	0.58	0.56	-0.17
14,762.00	91.55	167.83	9,561.88	-5,338.32	1,213.93	5,474.60	1.94	1.93	0.21
14,857.00	89.78	166.91	9,560.77	-5,431.01	1,234.70	5,569.59	2.10	-1.86	-0.97
14,951.00	88.59	167.14	9,562.11	-5,522.60	1,255.80	5,663.58	1.29	-1.27	0.24
15,046.00	89.13	167.59	9,564.00	-5,615.28	1,276.58	5,758.56	0.74	0.57	0.47
15,140.00	89.11	166.72	9,565.44	-5,706.92	1,297.47	5,852.54	0.93	-0.02	-0.93
15,234.00	90.41	166.40	9,565.84	-5,798.34	1,319.32	5,946.54	1.42	1.38	-0.34

<b>Company:</b>	QEP ENERGY	<b>Local Co-ordinate Reference:</b>	Well University 7-2730 S 12SC - Slot S 12SC
<b>Project:</b>	Martin County, TX (NAD27)	<b>TVD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Site:</b>	University 7-2730 S	<b>MD Reference:</b>	2926+25 @ 2951.00ft (Unit103)
<b>Well:</b>	University 7-2730 S 12SC	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Lateral	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Lateral	<b>Database:</b>	VON_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,329.00	89.39	165.41	9,566.00	-5,890.48	1,342.45	6,041.51	1.50	-1.07	-1.04
15,424.00	89.86	165.51	9,566.62	-5,982.43	1,366.30	6,136.47	0.51	0.49	0.11
15,518.00	88.31	165.06	9,568.13	-6,073.33	1,390.18	6,230.41	1.72	-1.65	-0.48
15,612.00	89.90	165.10	9,569.59	-6,164.15	1,414.37	6,324.33	1.69	1.69	0.04
15,706.00	90.23	166.16	9,569.49	-6,255.21	1,437.70	6,418.30	1.18	0.35	1.13
15,802.00	89.32	166.54	9,569.86	-6,348.49	1,460.36	6,514.29	1.03	-0.95	0.40
15,897.00	89.94	166.74	9,570.48	-6,440.92	1,482.31	6,609.28	0.69	0.65	0.21
15,991.00	88.89	166.88	9,571.44	-6,532.43	1,503.76	6,703.27	1.13	-1.12	0.15
16,085.00	91.10	167.44	9,571.45	-6,624.08	1,524.64	6,797.27	2.43	2.35	0.60
16,180.00	89.71	167.28	9,570.77	-6,716.77	1,545.43	6,892.26	1.47	-1.46	-0.17
16,275.00	88.57	167.55	9,572.20	-6,809.48	1,566.13	6,987.25	1.23	-1.20	0.28
16,370.00	88.70	167.14	9,574.46	-6,902.14	1,586.93	7,082.22	0.45	0.14	-0.43
16,464.00	88.92	166.54	9,576.42	-6,993.65	1,608.33	7,176.20	0.68	0.23	-0.64
16,559.00	91.82	167.14	9,575.80	-7,086.15	1,629.96	7,271.18	3.12	3.05	0.63
16,654.00	90.92	167.65	9,573.53	-7,178.83	1,650.68	7,366.15	1.09	-0.95	0.54
16,749.00	88.32	167.99	9,574.16	-7,271.68	1,670.72	7,461.14	2.76	-2.74	0.36
16,844.00	88.45	168.05	9,576.84	-7,364.57	1,690.44	7,556.09	0.15	0.14	0.06
16,939.00	88.75	167.46	9,579.16	-7,457.38	1,710.58	7,651.05	0.70	0.32	-0.62
17,033.00	89.04	167.80	9,580.97	-7,549.19	1,730.71	7,745.03	0.48	0.31	0.36
17,126.00	89.91	167.80	9,581.82	-7,640.08	1,750.36	7,838.02	0.94	0.94	0.00
17,155.00	89.45	167.81	9,581.99	-7,668.43	1,756.49	7,867.02	1.59	-1.59	0.03
17,220.00	89.45	167.81	9,582.61	-7,731.96	1,770.21	7,932.01	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Univ 7-2730 S 12SC BH	0.00	360.00	9,582.61	-7,731.96	1,770.21	288,239.89	556,255.52	32° 22' 14.136 N	102° 10' 39.423 W
- actual wellpath hits target center									
- Point									
Univ 7-2730 S 12SC PB	0.00	360.00	9,582.61	-7,731.96	1,770.21	288,239.89	556,255.52	32° 22' 14.136 N	102° 10' 39.423 W
- actual wellpath hits target center									
- Point									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
17,134.40	9,581.85	-7,648.29	1,752.14	Wellpath Crosses 100' HL @ Toe
17,220.00	9,582.61	-7,731.96	1,770.21	TD @ 14.4'FSL, 1553.1'FWL

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_