Gyrodata Incorporated
10504 WCR 72
Midland, TX 79707

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

May 18, 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 N #10SC
Permit No. 820027
UL / Abstract/A-U30
SPRABERRY (TREND AREA)
MARTIN COUNTY, TEXAS
API No. 42-317-40600

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 Of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Gary Fowler Surveyor	Original Hole	0' –8962'	04/26/17-04/26/17	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,

Heather Weidemann
Operations Assistant

Enclosure

A Gyrodata Directional Survey

FINAL DEFINITIVE COPY

for

QEP ENERGY COMPANY

Lease: UNIVERSITY 7-2730 N Well: 10SC,
Location: Unit #103, Martin County, Texas

Job Number: MD0417GDM329

Run Date: 26 Apr 2017
Report Generated: 18 May 2017 08:03

Surveyor: Gary Fowler

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Company Man
Survey Latitude: 32.372168 deg. N
Longitude: 102.174282 deg. W

Azimuth Correction:

Gyro: 2.55000 deg to Grid North

Proposed Well Direction: 344.610 deg

Depth Reference: Rotary Table

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

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

A Gyrodata Directional Survey

QEP Energy Company
Lease: UNIVERSITY 7-2730 N Well: 10SC
Location: Unit #103, Martin County, Texas
Job Number: MD0417GDM329

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	CLOSURE AZIMUTH 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 8962.85 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 5 INCH DRILLPIPE
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO DRILLING RIG #103 WITH R.K.B. HEIGHT OF 25 FT.

52.27	0.19	236.12	-0.0	0.36	52.27	0.1	236.1	0.05 S 0.07 W
112.66	0.19	153.99	-0.2	0.41	112.66	0.2	209.8	0.19 S 0.11 W
203.80	0.45	201.12	-0.6	0.38	203.80	0.7	194.7	0.66 S 0.17 W
294.94	0.32	229.05	-1.0	0.25	294.94	1.3	203.0	1.16 S 0.50 W
386.08	0.17	171.83	-1.2	0.30	386.08	1.6	204.5	1.47 S 0.67 W
477.74	0.02	74.22	-1.4	0.19	477.74	1.7	201.7	1.60 S 0.63 W
575.73	0.11	6.07	-1.3	0.11	575.73	1.6	202.1	1.50 S 0.61 W
670.21	0.30	253.76	-1.2	0.38	670.20	1.7	209.5	1.48 S 0.83 W
765.10	0.82	248.10	-1.3	0.55	765.09	2.5	223.4	1.80 S 1.70 W
860.24	1.78	246.40	-1.6	1.01	860.20	4.5	234.4	2.64 S 3.69 W
955.75	2.65	243.81	-2.2	0.92	955.64	8.2	239.1	4.21 S 7.03 W
1050.84	3.12	239.27	-3.3	0.55	1050.61	13.0	239.9	6.50 S 11.22 W
1145.51	3.75	235.53	-5.0	0.71	1145.11	18.6	239.1	9.57 S 15.99 W
1240.24	3.85	222.67	-7.7	0.90	1239.64	24.8	236.6	13.66 S 20.69 W
1334.83	3.67	220.65	-11.0	0.24	1334.02	30.8	233.6	18.28 S 24.81 W
1429.99	3.61	222.80	-14.3	0.16	1428.99	36.7	231.7	22.79 S 28.83 W
1525.48	3.87	223.78	-17.6	0.28	1524.28	42.9	230.5	27.32 S 33.10 W

A Gyrodata Directional Survey

QEP Energy Company
Lease: UNIVERSITY 7-2730 N Well: 10SC
Location: Unit #103, Martin County, Texas
Job Number: MD0417GDM329

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	CLOSURE AZIMUTH deg.	HORIZONTAL COORDINATES feet	
1620.50	4.65	227.52	-20.9	0.87	1619.04	49.9	229.8	32.23 S	38.15 W
1715.80	5.47	233.09	-24.4	1.00	1713.96	58.3	229.9	37.56 S	44.62 W
1811.76	5.51	233.36	-27.7	0.05	1809.48	67.5	230.4	43.05 S	51.97 W
1906.44	5.31	235.00	-30.8	0.27	1903.74	76.4	230.8	48.27 S	59.20 W
2001.22	5.50	232.89	-34.0	0.29	1998.10	85.3	231.1	53.52 S	66.41 W
2095.83	5.83	232.46	-37.5	0.35	2092.25	94.6	231.3	59.18 S	73.83 W
2191.47	6.32	225.16	-41.9	0.95	2187.36	104.7	231.0	65.85 S	81.41 W
2286.79	6.69	206.18	-48.6	2.28	2282.07	115.0	229.6	74.52 S	87.57 W
2381.97	7.13	214.02	-56.6	1.09	2376.57	125.8	227.9	84.39 S	93.32 W
2476.97	7.47	220.94	-63.9	0.99	2470.80	137.7	227.0	93.93 S	100.66 W
2572.02	7.79	222.79	-70.7	0.42	2565.01	150.2	226.6	103.32 S	109.08 W
2666.90	7.87	221.27	-77.6	0.23	2659.01	163.1	226.2	112.92 S	117.73 W
2761.38	7.20	218.18	-84.7	0.83	2752.67	175.4	225.7	122.43 S	125.65 W
2856.89	6.38	215.86	-91.6	0.91	2847.51	186.6	225.2	131.43 S	132.45 W
2951.90	5.83	212.57	-98.1	0.69	2941.98	196.5	224.7	139.76 S	138.14 W
3046.95	5.26	210.42	-104.4	0.64	3036.59	205.5	224.1	147.58 S	142.94 W
3141.36	5.05	219.66	-109.8	0.91	3130.62	213.8	223.7	154.51 S	147.78 W
3236.48	5.17	220.79	-114.5	0.16	3225.36	222.2	223.6	160.97 S	153.24 W
3331.73	5.23	223.66	-119.2	0.28	3320.22	230.9	223.5	167.35 S	159.04 W
3427.24	5.29	214.74	-124.2	0.86	3415.33	239.6	223.4	174.11 S	164.55 W
3522.18	5.46	223.59	-129.3	0.89	3509.86	248.4	223.2	180.98 S	170.15 W
3616.74	5.62	223.72	-134.0	0.17	3603.97	257.5	223.2	187.57 S	176.45 W

A Gyrodata Directional Survey

QEP Energy Company
Lease: UNIVERSITY 7-2730 N Well: 10SC
Location: Unit #103, Martin County, Texas
Job Number: MD0417GDM329

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	CLOSURE AZIMUTH deg.	HORIZONTAL COORDINATES feet	
3711.99	5.70	225.61	-138.7	0.21	3698.76	266.9	223.3	194.25 S	183.04 W
3807.43	5.80	225.68	-143.3	0.11	3793.72	276.4	223.4	200.93 S	189.87 W
3901.37	5.86	226.20	-147.9	0.09	3887.18	286.0	223.5	207.56 S	196.73 W
3996.08	5.81	227.20	-152.4	0.12	3981.40	295.6	223.6	214.15 S	203.73 W
4090.38	5.69	227.48	-156.7	0.13	4075.22	305.0	223.7	220.55 S	210.67 W
4184.97	5.69	227.41	-161.0	0.01	4169.35	314.3	223.8	226.89 S	217.57 W
4280.58	5.63	228.84	-165.2	0.16	4264.49	323.7	223.9	233.18 S	224.58 W
4374.75	5.65	229.84	-169.2	0.11	4358.21	332.9	224.1	239.20 S	231.60 W
4469.31	5.35	225.79	-173.2	0.52	4452.33	342.0	224.2	245.27 S	238.31 W
4564.22	5.01	222.27	-177.6	0.49	4546.86	350.5	224.2	251.42 S	244.26 W
4659.35	4.65	219.70	-182.0	0.44	4641.65	358.5	224.1	257.45 S	249.52 W
4753.57	4.26	225.81	-185.9	0.65	4735.59	365.8	224.1	262.82 S	254.46 W
4848.34	4.27	226.02	-189.3	0.02	4830.09	372.9	224.1	267.72 S	259.52 W
4943.09	4.30	227.26	-192.6	0.10	4924.58	379.9	224.2	272.58 S	264.66 W
5037.94	4.64	228.69	-195.9	0.38	5019.14	387.3	224.2	277.52 S	270.15 W
5132.62	5.40	226.58	-199.6	0.83	5113.46	395.6	224.3	283.10 S	276.25 W
5227.16	6.54	227.95	-204.1	1.22	5207.49	405.4	224.4	289.76 S	283.48 W
5322.55	6.94	224.53	-209.5	0.59	5302.22	416.5	224.4	297.50 S	291.55 W
5416.29	6.36	228.92	-214.6	0.82	5395.33	427.4	224.5	304.95 S	299.43 W
5511.49	5.41	222.90	-219.2	1.19	5490.03	437.1	224.5	311.69 S	306.45 W
5605.47	4.63	221.14	-223.6	0.85	5583.65	445.3	224.5	317.79 S	311.96 W

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Location: Unit #103, Martin County, Texas
Job Number: MD0417GDM329

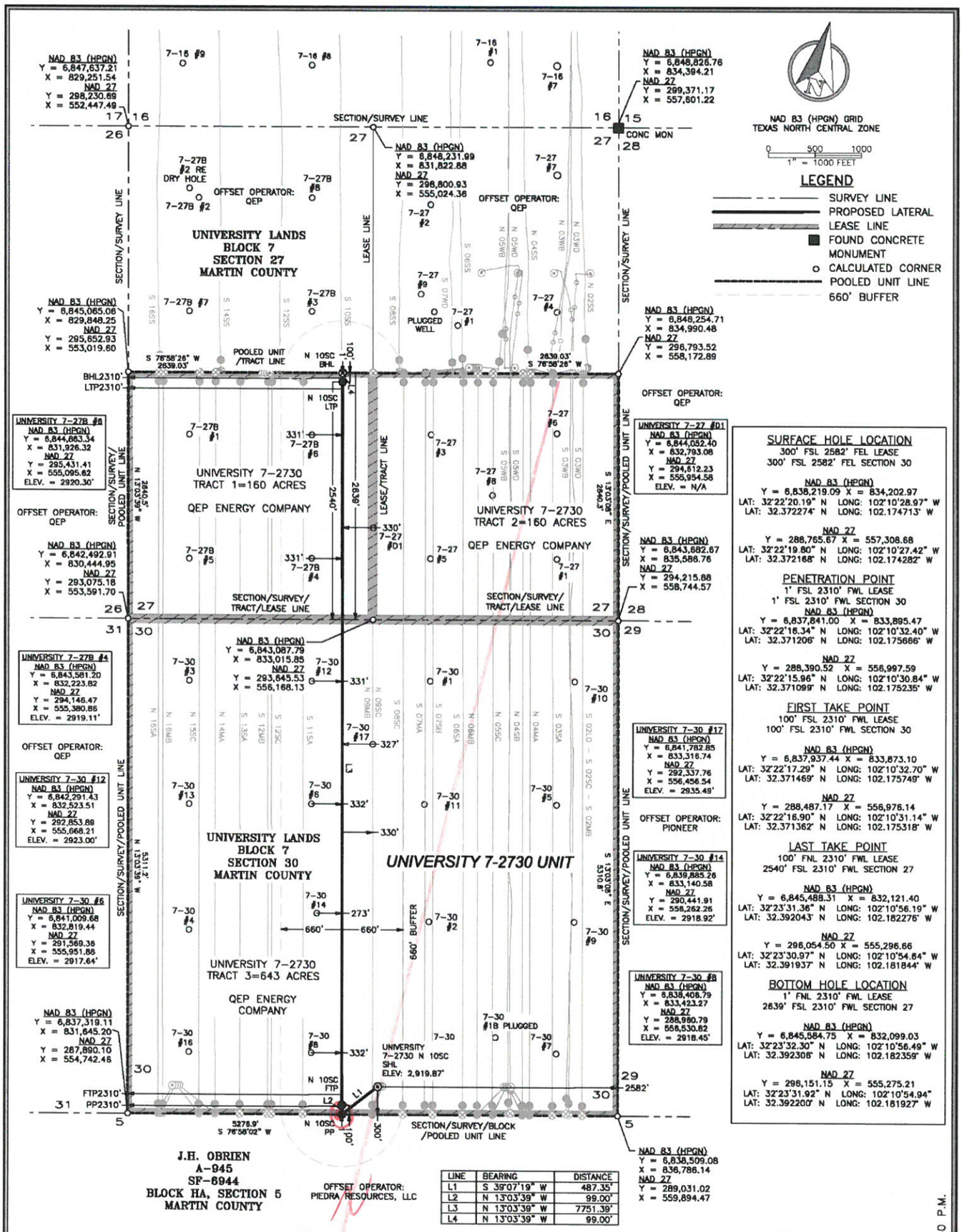
MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	CLOSURE AZIMUTH deg.	HORIZONTAL COORDINATES feet	
5699.44	4.18	220.37	-227.6	0.48	5677.34	452.5	224.4	323.25 S	316.66 W
5794.16	3.58	219.96	-231.2	0.63	5771.84	458.9	224.4	328.14 S	320.80 W
5888.64	2.98	217.69	-234.4	0.65	5866.17	464.3	224.3	332.34 S	324.19 W
5982.55	2.57	217.87	-237.1	0.44	5959.97	468.8	224.2	335.94 S	326.97 W
6077.47	1.56	230.57	-238.9	1.16	6054.82	472.2	224.2	338.44 S	329.28 W
6172.53	0.60	255.09	-239.4	1.10	6149.87	473.9	224.3	339.39 S	330.76 W
6267.24	0.65	11.15	-238.9	1.12	6244.57	473.9	224.3	338.99 S	331.13 W
6362.69	0.68	18.16	-238.0	0.09	6340.02	472.9	224.4	337.92 S	330.85 W
6458.08	0.75	16.17	-237.0	0.08	6435.40	471.9	224.5	336.78 S	330.50 W
6553.15	0.81	19.88	-235.9	0.08	6530.46	470.7	224.5	335.55 S	330.10 W
6647.76	0.65	23.75	-234.9	0.18	6625.06	469.6	224.6	334.43 S	329.66 W
6740.44	0.33	27.20	-234.3	0.35	6717.74	468.8	224.6	333.71 S	329.32 W
6835.43	0.29	24.36	-234.0	0.05	6812.73	468.4	224.6	333.25 S	329.10 W
6930.60	0.29	33.41	-233.6	0.05	6907.90	467.9	224.7	332.83 S	328.87 W
7025.54	0.26	77.73	-233.5	0.22	7002.84	467.5	224.6	332.59 S	328.53 W
7120.31	0.29	120.44	-233.7	0.21	7097.60	467.2	224.6	332.66 S	328.11 W
7214.95	0.19	131.52	-234.0	0.12	7192.24	467.2	224.6	332.89 S	327.78 W
7309.34	0.14	128.86	-234.2	0.05	7286.63	467.2	224.5	333.06 S	327.58 W
7404.37	0.12	103.05	-234.3	0.06	7381.66	467.1	224.5	333.16 S	327.39 W
7499.57	0.26	132.99	-234.6	0.18	7476.86	467.0	224.5	333.33 S	327.13 W
7594.79	0.51	136.27	-235.1	0.26	7572.08	467.0	224.4	333.78 S	326.68 W
7690.29	0.65	141.77	-236.0	0.16	7667.58	467.1	224.3	334.51 S	326.05 W

A Gyrodata Directional Survey

QEP Energy Company
Lease: UNIVERSITY 7-2730 N Well: 10SC
Location: Unit #103, Martin County, Texas
Job Number: MD0417GDM329

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. feet	CLOSURE AZIMUTH deg.	HORIZONTAL COORDINATES feet	
7784.99	0.97	146.57	-237.3	0.35	7762.27	467.4	224.1	335.60 S	325.28 W
7879.22	1.13	154.68	-238.9	0.23	7856.48	467.9	223.9	337.11 S	324.44 W
7973.82	1.11	168.34	-240.8	0.28	7951.06	468.7	223.7	338.85 S	323.86 W
8068.44	1.03	183.12	-242.5	0.30	8045.67	469.9	223.5	340.60 S	323.72 W
8162.74	0.83	173.69	-243.9	0.27	8139.95	471.0	223.4	342.12 S	323.69 W
8257.64	0.81	163.03	-245.3	0.16	8234.84	471.8	223.3	343.45 S	323.42 W
8351.95	0.45	151.55	-246.3	0.40	8329.15	472.2	223.2	344.41 S	323.05 W
8445.65	0.52	182.82	-247.1	0.29	8422.85	472.6	223.1	345.16 S	322.90 W
8540.70	0.63	180.41	-248.0	0.12	8517.89	473.4	223.0	346.11 S	322.92 W
8635.35	0.34	183.50	-248.8	0.31	8612.54	474.0	223.0	346.91 S	322.94 W
8730.26	0.28	150.80	-249.3	0.19	8707.45	474.3	222.9	347.40 S	322.85 W
8824.96	0.52	46.98	-249.3	0.68	8802.14	473.9	222.9	347.31 S	322.42 W
8919.96	0.62	24.11	-248.7	0.26	8897.14	473.0	222.9	346.54 S	321.89 W
8962.85	0.74	21.81	-248.3	0.29	8940.03	472.5	222.9	346.07 S	321.70 W

Final Station Closure: Distance: 472.50 ft Az: 222.91 deg.



LINE	BEARING	DISTANCE
L1	S 39°07'19" W	487.35'
L2	N 13°03'39" W	99.00'
L3	N 13°03'39" W	7751.39'
L4	N 13°03'39" W	99.00'

GENERAL NOTES

1. COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 83 (HPGN) "TEXAS NORTH CENTRAL ZONE", AND BASED ON "GLASS" NGS MONUMENT (Y = 6,817,164.36, X = 834,131.39)
2. VERTICAL DATUM IS NAVD 88
3. LATITUDE AND LONGITUDE ARE NAD 83 (HPGN) AS SHOWN
4. AREA, DISTANCES, AND COORDINATES ARE "GRID"
5. UNITS ARE UNITED STATES SURVEY FOOT
6. ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT SURFACE LOCATION AS STAKED ON THE GROUND.

JOHN E. KOWALIK
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS NO. 6408

STATE OF TEXAS REGISTERED JOHN E. KOWALIK 6408 PROFESSIONAL LAND SURVEYOR

PLAT OF:
A PROPOSED WELL LOCATION FOR:
QEP ENERGY COMPANY
UNIVERSITY 7-2730 UNIT
UNIVERSITY 7-2730 N 10SC
SITUATED IN THE UNIVERSITY LANDS, BLOCK 7, SECTIONS 27 AND 30, AND BEING APPROXIMATELY 21.6 MILES NORTHEAST OF ANDREWS IN MARTIN COUNTY, TEXAS.

PLOT DATE: 11/07/16 1:30 P.M.

FSC INC SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net
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QEP ENERGY™

DATE:	10-26-2016
DRAWN BY:	CG
CHECKED BY:	JK
FIELD CREW:	RE
PROJECT NO:	2016090813
SCALE:	1" = 1000'
SHEET:	1 OF 1
REVISION:	2

Gyrodata Incorporated
10504 WCR 72
Midland, TX 79707

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

State of Texas
County of Harris

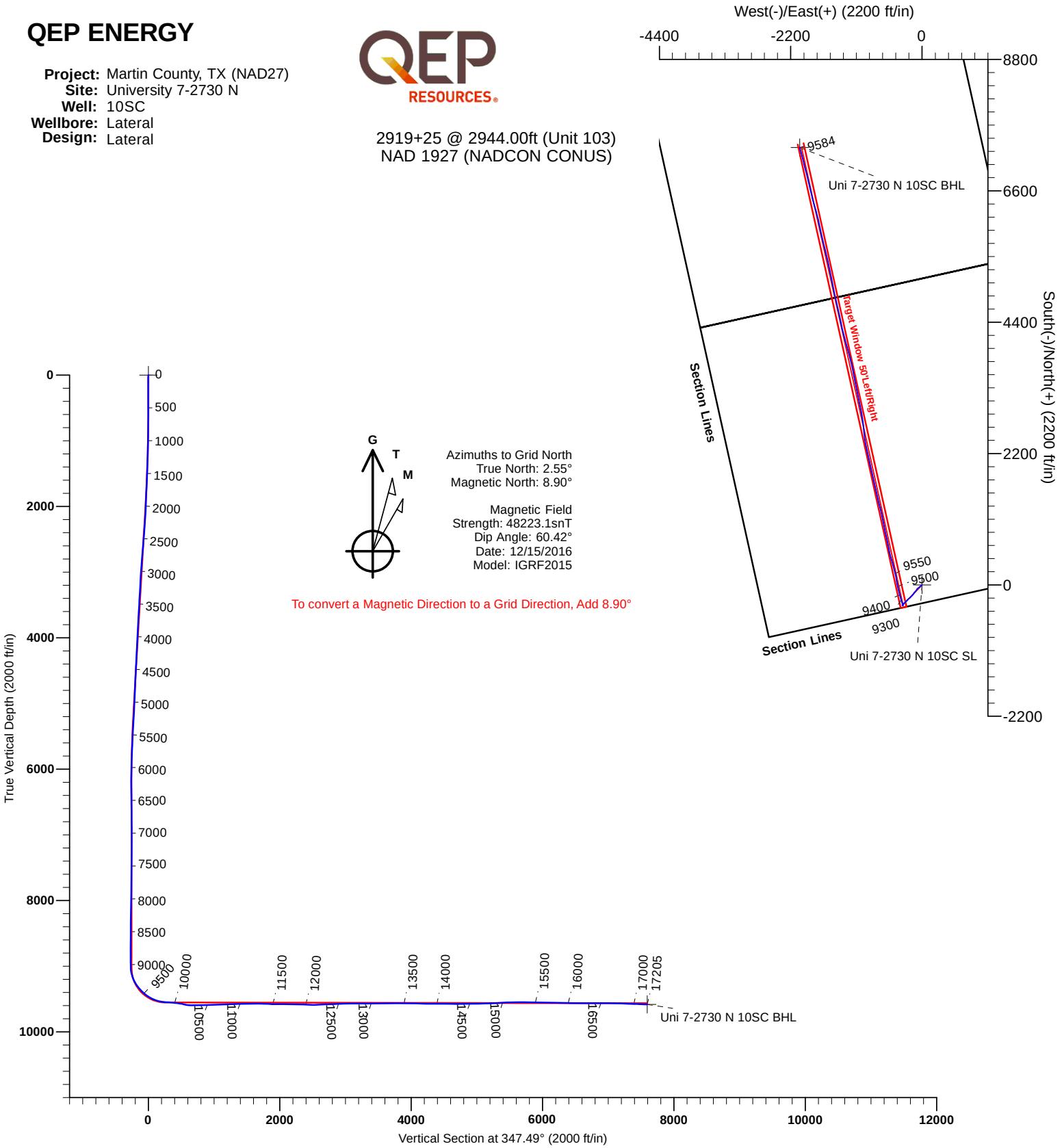
I, Kevin Willard, certify that; I am employed by Gyrodata Inc.; that I am authorized and qualified to review the Gyroscopic Multishot survey from a depth of 0 feet to a depth of 8962 feet conducted on the day(s) of 04/26/17 through 04/26/17; that this survey was conducted at the request QEP Energy Company for the University 7-2730N #10SC Well API No. 42-317-40600 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.

Kevin Willard
Operations Coordinator

QEP ENERGY

Project: Martin County, TX (NAD27)
Site: University 7-2730 N
Well: 10SC
Wellbore: Lateral
Design: Lateral

2919+25 @ 2944.00ft (Unit 103)
NAD 1927 (NADCON CONUS)



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Uni 7-2730 N 10SC SL	0.00	0.00	0.00	288765.67	557308.68	Point
Uni 7-2730 N 10SC BHL	9583.91	7325.94	-2048.87	296091.61	555259.81	Point

Design: Lateral (10SC/Lateral)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
7:57, May 05 2017

VON DIRECTIONAL
12074 FM 3083 Conroe, Texas 77301
936-756-2400

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

Project Martin County, TX (NAD27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Texas North Central 4202		

Site University 7-2730 N, centered on 11MA

Site Position:		**Northing:**	288,760.24 ft	**Latitude:**	32° 22' 19.733 N
From:	Map	**Easting:**	557,284.25 ft	**Longitude:**	102° 10' 27.709 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.20 in	**Grid Convergence:**	-2.55 °

Well 10SC - Slot 10SC

Well Position	**+N/-S**	0.00 ft	**Northing:**	288,765.67 ft	**Latitude:**	32° 22' 19.797 N
	+E/-W	0.00 ft	**Easting:**	557,308.68 ft	**Longitude:**	102° 10' 27.428 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	0.00 ft	**Ground Level:**	2,919.00 ft

Wellbore Lateral

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/15/16	6.35	60.42	48,223

Design Lateral

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	347.49

Survey Program **Date** 05/05/17

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
52.27	8,962.85	Survey #2 (Lateral)	Gyrodata New 2-16-16	Gyrodata Stationary Tool drop on BHA
9,017.00	17,138.00	Survey #3 (Lateral)	MWD+IFR1+MS_WY	Fixed:v2:Rockies, crustal dec + 3-axis correction
17,205.00	17,205.00	Survey #4 (Lateral)	Projection	projection

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uni 7-2730 N 10SC SL									
52.27	0.19	236.12	52.27	-0.05	-0.07	-0.03	0.36	0.36	0.00
112.66	0.19	153.99	112.66	-0.19	-0.11	-0.17	0.41	0.00	-136.00
203.80	0.45	201.12	203.80	-0.66	-0.17	-0.61	0.38	0.29	51.71
294.94	0.32	229.05	294.94	-1.16	-0.50	-1.03	0.25	-0.14	30.65
386.08	0.17	171.83	386.08	-1.47	-0.67	-1.29	0.30	-0.16	-62.78
477.74	0.02	74.22	477.74	-1.60	-0.63	-1.42	0.19	-0.16	-106.49
575.73	0.11	6.07	575.73	-1.50	-0.61	-1.33	0.11	0.09	-69.55

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

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)
670.21	0.30	253.76	670.20	-1.48	-0.83	-1.26	0.38	0.20	-118.87
765.10	0.82	248.10	765.09	-1.80	-1.70	-1.39	0.55	0.55	-5.96
860.24	1.78	246.40	860.20	-2.64	-3.69	-1.78	1.01	1.01	-1.79
955.75	2.65	243.81	955.64	-4.21	-7.03	-2.59	0.92	0.91	-2.71
1,050.84	3.12	239.27	1,050.61	-6.50	-11.22	-3.92	0.55	0.49	-4.77
1,145.51	3.75	235.53	1,145.11	-9.57	-15.99	-5.88	0.71	0.66	-3.95
1,240.24	3.85	222.67	1,239.64	-13.66	-20.69	-8.85	0.90	0.11	-13.58
1,334.83	3.67	220.65	1,334.02	-18.28	-24.81	-12.48	0.24	-0.19	-2.14
1,429.99	3.61	222.80	1,428.99	-22.79	-28.83	-16.00	0.16	-0.06	2.26
1,525.48	3.87	223.78	1,524.28	-27.32	-33.10	-19.50	0.28	0.27	1.03
1,620.50	4.65	227.52	1,619.04	-32.23	-38.15	-23.20	0.87	0.82	3.94
1,715.80	5.47	233.09	1,713.96	-37.56	-44.62	-27.00	1.00	0.86	5.84
1,811.76	5.51	233.36	1,809.48	-43.05	-51.97	-30.77	0.05	0.04	0.28
1,906.44	5.31	235.00	1,903.74	-48.27	-59.20	-34.30	0.27	-0.21	1.73
2,001.22	5.50	232.89	1,998.10	-53.52	-66.41	-37.87	0.29	0.20	-2.23
2,095.83	5.83	232.46	2,092.25	-59.18	-73.83	-41.78	0.35	0.35	-0.45
2,191.47	6.32	225.16	2,187.36	-65.85	-81.41	-46.65	0.95	0.51	-7.63
2,286.79	6.69	206.18	2,282.07	-74.52	-87.57	-53.79	2.28	0.39	-19.91
2,381.97	7.13	214.02	2,376.57	-84.39	-93.32	-62.17	1.09	0.46	8.24
2,476.97	7.47	220.94	2,470.80	-93.93	-100.66	-69.90	0.99	0.36	7.28
2,572.02	7.79	222.79	2,565.01	-103.32	-109.08	-77.24	0.42	0.34	1.95
2,666.90	7.87	221.27	2,659.01	-112.92	-117.73	-84.74	0.23	0.08	-1.60
2,761.38	7.20	218.18	2,752.67	-122.43	-125.65	-92.30	0.83	-0.71	-3.27
2,856.89	6.38	215.86	2,847.51	-131.43	-132.45	-99.62	0.91	-0.86	-2.43
2,951.90	5.83	212.57	2,941.98	-139.77	-138.14	-106.53	0.69	-0.58	-3.46
3,046.95	5.26	210.42	3,036.59	-147.58	-142.94	-113.12	0.64	-0.60	-2.26
3,141.36	5.05	219.66	3,130.62	-154.51	-147.78	-118.83	0.91	-0.22	9.79
3,236.48	5.17	220.79	3,225.36	-160.97	-153.24	-123.95	0.16	0.13	1.19
3,331.73	5.23	223.66	3,320.22	-167.35	-159.04	-128.93	0.28	0.06	3.01
3,427.24	5.29	214.74	3,415.33	-174.11	-164.55	-134.34	0.86	0.06	-9.34
3,522.18	5.46	223.59	3,509.86	-180.98	-170.15	-139.82	0.89	0.18	9.32
3,616.74	5.62	223.72	3,603.97	-187.57	-176.45	-144.90	0.17	0.17	0.14
3,711.99	5.70	225.61	3,698.76	-194.25	-183.04	-149.99	0.21	0.08	1.98
3,807.43	5.80	225.68	3,793.72	-200.93	-189.87	-155.03	0.11	0.10	0.07
3,901.37	5.86	226.20	3,887.18	-207.56	-196.73	-160.02	0.09	0.06	0.55
3,996.08	5.81	227.20	3,981.40	-214.15	-203.73	-164.94	0.12	-0.05	1.06
4,090.38	5.69	227.48	4,075.22	-220.55	-210.67	-169.68	0.13	-0.13	0.30
4,184.97	5.69	227.41	4,169.35	-226.89	-217.57	-174.37	0.01	0.00	-0.07
4,280.58	5.63	228.84	4,264.49	-233.18	-224.58	-178.99	0.16	-0.06	1.50
4,374.75	5.65	229.84	4,358.21	-239.20	-231.60	-183.36	0.11	0.02	1.06
4,469.31	5.35	225.79	4,452.33	-245.27	-238.31	-187.83	0.52	-0.32	-4.28
4,564.22	5.01	222.27	4,546.86	-251.42	-244.26	-192.54	0.49	-0.36	-3.71
4,659.35	4.65	219.70	4,641.65	-257.45	-249.52	-197.29	0.44	-0.38	-2.70

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

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)
4,753.57	4.26	225.81	4,735.59	-262.82	-254.46	-201.47	0.65	-0.41	6.48
4,848.34	4.27	226.02	4,830.09	-267.72	-259.52	-205.15	0.02	0.01	0.22
4,943.09	4.30	227.26	4,924.58	-272.58	-264.66	-208.78	0.10	0.03	1.31
5,037.94	4.64	228.69	5,019.14	-277.52	-270.15	-212.41	0.38	0.36	1.51
5,132.62	5.40	226.58	5,113.46	-283.10	-276.25	-216.54	0.83	0.80	-2.23
5,227.16	6.54	227.95	5,207.49	-289.76	-283.48	-221.48	1.22	1.21	1.45
5,322.55	6.94	224.53	5,302.22	-297.50	-291.55	-227.29	0.59	0.42	-3.59
5,416.29	6.36	228.92	5,395.33	-304.95	-299.43	-232.85	0.82	-0.62	4.68
5,511.49	5.41	222.90	5,490.03	-311.69	-306.45	-237.91	1.19	-1.00	-6.32
5,605.47	4.63	221.14	5,583.65	-317.79	-311.96	-242.67	0.85	-0.83	-1.87
5,699.44	4.18	220.37	5,677.34	-323.25	-316.66	-246.98	0.48	-0.48	-0.82
5,794.16	3.58	219.96	5,771.84	-328.14	-320.80	-250.86	0.63	-0.63	-0.43
5,888.64	2.98	217.69	5,866.17	-332.34	-324.19	-254.23	0.65	-0.63	-2.40
5,982.55	2.57	217.87	5,959.97	-335.94	-326.97	-257.14	0.44	-0.44	0.19
6,077.47	1.56	230.57	6,054.82	-338.44	-329.28	-259.08	1.16	-1.06	13.38
6,172.53	0.60	255.09	6,149.87	-339.39	-330.76	-259.69	1.10	-1.01	25.79
6,267.24	0.65	11.15	6,244.57	-338.99	-331.13	-259.21	1.12	0.05	122.54
6,362.69	0.68	18.16	6,340.02	-337.92	-330.85	-258.23	0.09	0.03	7.34
6,458.08	0.75	16.17	6,435.40	-336.78	-330.50	-257.20	0.08	0.07	-2.09
6,553.15	0.81	19.88	6,530.46	-335.55	-330.10	-256.08	0.08	0.06	3.90
6,647.76	0.65	23.75	6,625.06	-334.43	-329.66	-255.09	0.18	-0.17	4.09
6,740.44	0.33	27.20	6,717.74	-333.71	-329.32	-254.46	0.35	-0.35	3.72
6,835.43	0.29	24.36	6,812.73	-333.25	-329.10	-254.05	0.05	-0.04	-2.99
6,930.60	0.29	33.41	6,907.90	-332.83	-328.87	-253.69	0.05	0.00	9.51
7,025.54	0.26	77.73	7,002.84	-332.59	-328.52	-253.53	0.22	-0.03	46.68
7,120.31	0.29	120.44	7,097.61	-332.66	-328.11	-253.69	0.21	0.03	45.07
7,214.95	0.19	131.52	7,192.24	-332.89	-327.78	-253.98	0.12	-0.11	11.71
7,309.34	0.14	128.86	7,286.63	-333.06	-327.58	-254.20	0.05	-0.05	-2.82
7,404.37	0.12	103.05	7,381.66	-333.16	-327.39	-254.33	0.06	-0.02	-27.16
7,499.57	0.26	132.99	7,476.86	-333.33	-327.13	-254.55	0.18	0.15	31.45
7,594.79	0.51	136.27	7,572.08	-333.78	-326.68	-255.09	0.26	0.26	3.44
7,690.29	0.65	141.77	7,667.58	-334.51	-326.05	-255.95	0.16	0.15	5.76
7,784.99	0.97	146.57	7,762.27	-335.60	-325.28	-257.18	0.35	0.34	5.07
7,879.22	1.13	154.68	7,856.48	-337.11	-324.44	-258.83	0.23	0.17	8.61
7,973.82	1.11	168.34	7,951.06	-338.85	-323.86	-260.65	0.28	-0.02	14.44
8,068.44	1.03	183.12	8,045.67	-340.60	-323.72	-262.39	0.30	-0.08	15.62
8,162.74	0.83	173.69	8,139.95	-342.12	-323.69	-263.89	0.27	-0.21	-10.00
8,257.64	0.81	163.03	8,234.84	-343.45	-323.42	-265.24	0.16	-0.02	-11.23
8,351.95	0.45	151.55	8,329.15	-344.41	-323.05	-266.26	0.40	-0.38	-12.17
8,445.65	0.52	182.82	8,422.85	-345.16	-322.90	-267.02	0.29	0.07	33.37
8,540.70	0.63	180.41	8,517.89	-346.11	-322.92	-267.95	0.12	0.12	-2.54
8,635.35	0.34	183.50	8,612.54	-346.91	-322.94	-268.72	0.31	-0.31	3.26
8,730.26	0.28	150.80	8,707.45	-347.40	-322.85	-269.22	0.19	-0.06	-34.45
8,824.96	0.52	46.98	8,802.14	-347.31	-322.42	-269.22	0.68	0.25	-109.63

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

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)
8,919.96	0.62	24.11	8,897.14	-346.54	-321.89	-268.59	0.26	0.11	-24.07
8,962.85	0.74	21.81	8,940.03	-346.07	-321.70	-268.17	0.29	0.28	-5.36
9,017.00	0.56	35.50	8,994.17	-345.53	-321.41	-267.71	0.44	-0.33	25.28
9,049.00	2.00	341.21	9,026.16	-344.88	-321.50	-267.05	5.42	4.50	-169.66
9,080.00	6.30	333.81	9,057.08	-342.84	-322.43	-264.86	13.95	13.87	-23.87
9,112.00	10.68	336.48	9,088.72	-338.54	-324.39	-260.24	13.74	13.69	8.34
9,144.00	14.91	342.50	9,119.92	-331.89	-326.81	-253.22	13.84	13.22	18.81
9,175.00	17.56	345.76	9,149.68	-323.56	-329.16	-244.57	9.04	8.55	10.52
9,207.00	20.17	347.02	9,179.96	-313.50	-331.58	-234.23	8.25	8.16	3.94
9,239.00	24.23	344.77	9,209.58	-301.78	-334.55	-222.15	12.96	12.69	-7.03
9,270.00	28.46	342.84	9,237.36	-288.58	-338.40	-208.43	13.92	13.65	-6.23
9,302.00	31.38	342.69	9,265.09	-273.34	-343.13	-192.52	9.13	9.13	-0.47
9,334.00	34.05	342.57	9,292.01	-256.83	-348.30	-175.29	8.35	8.34	-0.38
9,365.00	37.55	342.98	9,317.15	-239.51	-353.66	-157.22	11.32	11.29	1.32
9,397.00	40.54	343.32	9,342.00	-220.22	-359.50	-137.12	9.37	9.34	1.06
9,428.00	42.94	344.19	9,365.13	-200.41	-365.27	-116.53	7.96	7.74	2.81
9,460.00	46.25	345.50	9,387.91	-178.73	-371.14	-94.09	10.74	10.34	4.09
9,491.00	48.18	345.82	9,408.97	-156.69	-376.77	-71.35	6.27	6.23	1.03
9,523.00	50.45	345.24	9,429.83	-133.19	-382.84	-47.10	7.23	7.09	-1.81
9,555.00	53.85	344.23	9,449.46	-108.82	-389.49	-21.87	10.91	10.63	-3.16
9,587.00	57.68	345.10	9,467.46	-83.31	-396.48	4.55	12.18	11.97	2.72
9,619.00	61.08	347.14	9,483.76	-56.58	-403.08	32.07	11.96	10.63	6.38
9,650.00	64.23	349.37	9,498.00	-29.63	-408.68	59.60	12.00	10.16	7.19
9,681.00	67.67	350.06	9,510.63	-1.78	-413.73	87.88	11.28	11.10	2.23
9,713.00	71.74	349.95	9,521.73	27.78	-418.93	117.86	12.72	12.72	-0.34
9,744.00	75.05	350.72	9,530.58	57.06	-423.92	147.53	10.94	10.68	2.48
9,776.00	78.49	349.92	9,537.91	87.76	-429.16	178.64	11.02	10.75	-2.50
9,808.00	81.21	349.02	9,543.54	118.72	-434.92	210.11	8.94	8.50	-2.81
9,841.00	84.98	347.65	9,547.51	150.80	-441.54	242.86	12.14	11.42	-4.15
9,863.48	86.47	347.06	9,549.19	172.67	-446.45	265.28	7.12	6.62	-2.63
Uni 7-2730 N 10SC LP									
9,873.00	87.10	346.81	9,549.72	181.93	-448.60	274.78	7.12	6.63	-2.62
9,936.00	86.45	345.28	9,553.27	242.98	-463.76	337.66	2.64	-1.03	-2.43
10,031.00	82.26	344.66	9,562.61	334.26	-488.27	432.09	4.46	-4.41	-0.65
10,087.00	81.19	344.34	9,570.67	387.66	-503.08	487.43	1.99	-1.91	-0.57
10,121.00	77.43	343.54	9,576.97	419.76	-512.32	520.77	11.30	-11.06	-2.35
10,152.00	76.05	343.15	9,584.08	448.67	-520.97	550.86	4.62	-4.45	-1.26
10,184.00	80.18	344.40	9,590.67	478.73	-529.71	582.10	13.46	12.91	3.91
10,216.00	84.45	345.79	9,594.95	509.37	-537.87	613.78	14.02	13.34	4.34
10,247.00	89.23	348.16	9,596.66	539.51	-544.84	644.72	17.20	15.42	7.65
10,279.00	91.02	349.67	9,596.59	570.91	-550.99	676.71	7.32	5.59	4.72
10,316.00	91.55	349.61	9,595.76	607.30	-557.64	713.67	1.44	1.43	-0.16
10,410.00	90.60	348.03	9,594.00	699.50	-575.87	807.63	1.96	-1.01	-1.68

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

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)
10,506.00	90.86	347.56	9,592.77	793.32	-596.16	903.62	0.56	0.27	-0.49
10,601.00	91.23	347.74	9,591.04	886.11	-616.47	998.60	0.43	0.39	0.19
10,695.00	93.37	348.82	9,587.27	978.06	-635.55	1,092.51	2.55	2.28	1.15
10,791.00	93.93	348.33	9,581.16	1,071.97	-654.53	1,188.30	0.77	0.58	-0.51
10,885.00	91.87	348.20	9,576.40	1,163.88	-673.62	1,282.16	2.20	-2.19	-0.14
10,980.00	91.02	346.03	9,574.01	1,256.45	-694.80	1,377.12	2.45	-0.89	-2.28
11,075.00	90.45	345.53	9,572.79	1,348.54	-718.13	1,472.07	0.80	-0.60	-0.53
11,169.00	90.41	346.64	9,572.08	1,439.77	-740.74	1,566.04	1.18	-0.04	1.18
11,264.00	89.61	346.85	9,572.07	1,532.24	-762.52	1,661.03	0.87	-0.84	0.22
11,359.00	88.76	348.38	9,573.42	1,625.02	-782.89	1,756.02	1.84	-0.89	1.61
11,455.00	87.25	347.03	9,576.76	1,718.75	-803.32	1,851.96	2.11	-1.57	-1.41
11,550.00	89.33	347.23	9,579.59	1,811.32	-824.47	1,946.91	2.20	2.19	0.21
11,645.00	90.37	347.83	9,579.84	1,904.08	-844.98	2,041.90	1.26	1.09	0.63
11,739.00	89.85	347.56	9,579.66	1,995.92	-865.02	2,135.90	0.62	-0.55	-0.29
11,833.00	89.69	347.90	9,580.04	2,087.77	-884.99	2,229.90	0.40	-0.17	0.36
11,927.00	87.46	346.32	9,582.38	2,179.36	-905.95	2,323.86	2.91	-2.37	-1.68
12,022.00	86.31	346.21	9,587.54	2,271.51	-928.48	2,418.70	1.22	-1.21	-0.12
12,117.00	90.71	349.90	9,590.01	2,364.38	-948.12	2,513.62	6.04	4.63	3.88
12,212.00	93.28	353.89	9,586.70	2,458.35	-961.50	2,608.26	4.99	2.71	4.20
12,307.00	92.56	352.83	9,581.86	2,552.59	-972.48	2,702.63	1.35	-0.76	-1.12
12,401.00	91.54	353.60	9,578.50	2,645.87	-983.57	2,796.10	1.36	-1.09	0.82
12,496.00	92.40	353.32	9,575.23	2,740.19	-994.39	2,890.53	0.95	0.91	-0.29
12,591.00	91.54	351.17	9,571.97	2,834.26	-1,007.20	2,985.14	2.44	-0.91	-2.26
12,686.00	91.00	349.36	9,569.86	2,927.87	-1,023.26	3,080.00	1.99	-0.57	-1.91
12,780.00	90.25	348.20	9,568.84	3,020.06	-1,041.55	3,173.97	1.47	-0.80	-1.23
12,875.00	87.72	347.02	9,570.52	3,112.83	-1,061.92	3,268.95	2.94	-2.66	-1.24
12,970.00	91.73	348.78	9,570.97	3,205.69	-1,081.83	3,363.92	4.61	4.22	1.85
13,066.00	91.56	347.79	9,568.22	3,299.65	-1,101.32	3,459.87	1.05	-0.18	-1.03
13,160.00	90.63	348.26	9,566.42	3,391.59	-1,120.82	3,553.85	1.11	-0.99	0.50
13,255.00	91.33	349.97	9,564.80	3,484.86	-1,138.75	3,648.79	1.94	0.74	1.80
13,350.00	89.70	348.25	9,563.94	3,578.14	-1,156.70	3,743.74	2.49	-1.72	-1.81
13,445.00	88.79	347.18	9,565.20	3,670.96	-1,176.91	3,838.73	1.48	-0.96	-1.13
13,540.00	89.11	347.23	9,566.94	3,763.58	-1,197.94	3,933.71	0.34	0.34	0.05
13,635.00	88.77	344.29	9,568.69	3,855.64	-1,221.31	4,028.64	3.11	-0.36	-3.09
13,730.00	88.54	344.78	9,570.92	3,947.17	-1,246.63	4,123.49	0.57	-0.24	0.52
13,825.00	89.35	343.94	9,572.67	4,038.64	-1,272.24	4,218.33	1.23	0.85	-0.88
13,920.00	90.45	345.63	9,572.84	4,130.30	-1,297.17	4,313.22	2.12	1.16	1.78
14,015.00	89.62	344.37	9,572.78	4,222.06	-1,321.76	4,408.13	1.59	-0.87	-1.33
14,111.00	90.10	348.17	9,573.02	4,315.30	-1,344.54	4,504.09	3.99	0.50	3.96
14,205.00	87.54	348.21	9,574.95	4,407.28	-1,363.77	4,598.05	2.72	-2.72	0.04
14,300.00	91.11	348.04	9,576.07	4,500.23	-1,383.31	4,693.02	3.76	3.76	-0.18
14,395.00	91.21	347.32	9,574.15	4,593.02	-1,403.58	4,788.00	0.77	0.11	-0.76
14,490.00	91.27	347.12	9,572.09	4,685.65	-1,424.59	4,882.98	0.22	0.06	-0.21

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

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)
14,584.00	91.12	347.67	9,570.13	4,777.36	-1,445.10	4,976.96	0.61	-0.16	0.59
14,679.00	89.00	347.46	9,570.03	4,870.13	-1,465.55	5,071.95	2.24	-2.23	-0.22
14,773.00	92.45	348.28	9,568.84	4,962.01	-1,485.30	5,165.93	3.77	3.67	0.87
14,869.00	93.46	349.08	9,563.89	5,056.01	-1,504.12	5,261.78	1.34	1.05	0.83
14,964.00	93.45	349.43	9,558.17	5,149.18	-1,521.80	5,356.56	0.37	-0.01	0.37
15,058.00	91.92	347.71	9,553.76	5,241.20	-1,540.41	5,450.44	2.45	-1.63	-1.83
15,153.00	91.41	347.33	9,551.00	5,333.92	-1,560.93	5,545.39	0.67	-0.54	-0.40
15,247.00	91.25	347.06	9,548.82	5,425.56	-1,581.76	5,639.37	0.33	-0.17	-0.29
15,342.00	88.00	346.68	9,549.44	5,518.06	-1,603.33	5,734.35	3.44	-3.42	-0.40
15,438.00	89.08	346.87	9,551.89	5,611.48	-1,625.29	5,830.31	1.14	1.13	0.20
15,533.00	88.04	345.69	9,554.28	5,703.74	-1,647.81	5,925.25	1.66	-1.09	-1.24
15,627.00	89.86	346.75	9,556.00	5,795.01	-1,670.20	6,019.21	2.24	1.94	1.13
15,720.00	88.97	347.19	9,556.95	5,885.61	-1,691.16	6,112.20	1.07	-0.96	0.47
15,816.00	89.95	348.74	9,557.85	5,979.49	-1,711.18	6,208.19	1.91	1.02	1.61
15,911.00	89.05	347.94	9,558.68	6,072.53	-1,730.38	6,303.17	1.27	-0.95	-0.84
16,005.00	87.01	346.02	9,561.91	6,164.05	-1,751.54	6,397.10	2.98	-2.17	-2.04
16,100.00	90.54	344.06	9,563.95	6,255.79	-1,776.05	6,491.98	4.25	3.72	-2.06
16,194.00	88.76	343.72	9,564.52	6,346.09	-1,802.13	6,585.78	1.93	-1.89	-0.36
16,289.00	89.94	344.50	9,565.60	6,437.45	-1,828.14	6,680.61	1.49	1.24	0.82
16,385.00	90.97	348.18	9,564.83	6,530.72	-1,850.81	6,776.57	3.98	1.07	3.83
16,479.00	90.45	347.05	9,563.67	6,622.52	-1,870.97	6,870.56	1.32	-0.55	-1.20
16,575.00	89.40	347.05	9,563.80	6,716.08	-1,892.48	6,966.56	1.09	-1.09	0.00
16,670.00	89.26	346.11	9,564.91	6,808.48	-1,914.53	7,061.54	1.00	-0.15	-0.99
16,765.00	88.19	344.56	9,567.02	6,900.35	-1,938.57	7,156.44	1.98	-1.13	-1.63
16,859.00	87.12	345.62	9,570.87	6,991.11	-1,962.74	7,250.28	1.60	-1.14	1.13
16,953.00	88.45	346.33	9,574.50	7,082.24	-1,985.50	7,344.17	1.60	1.41	0.76
17,008.00	88.37	345.85	9,576.03	7,135.60	-1,998.72	7,399.13	0.88	-0.15	-0.87
17,049.00	87.83	345.59	9,577.39	7,175.32	-2,008.82	7,440.09	1.46	-1.32	-0.63
17,138.00	87.51	344.92	9,581.00	7,261.31	-2,031.46	7,528.95	0.83	-0.36	-0.75
17,199.39	87.51	344.92	9,583.67	7,320.53	-2,047.41	7,590.22	0.00	0.00	0.00
Uni 7-2730 N 10SC PBHL									
17,205.00	87.51	344.92	9,583.91	7,325.94	-2,048.87	7,595.82	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Uni 7-2730 N 10SC SL - actual wellpath hits target center - Point	0.00	360.00	0.00	0.00	0.00	288,765.67	557,308.68	32° 22' 19.797 N	102° 10' 27.428 W
Uni 7-2730 N 10SC BHL - actual wellpath hits target center - Point	0.00	360.00	9,583.91	7,325.94	-2,048.87	296,091.61	555,259.81	32° 23' 31.319 N	102° 10' 55.100 W

Company:	QEP ENERGY	**Local Co-ordinate Reference:**	Well 10SC - Slot 10SC
Project:	Martin County, TX (NAD27)	**TVD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Site:	University 7-2730 N	**MD Reference:**	2919+25 @ 2944.00ft (Unit 103)
Well:	10SC	**North Reference:**	Grid
Wellbore:	Lateral	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral	**Database:**	VONEDM

Checked By: _____ Approved By: _____ Date: _____