



Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

September 25, 2015

DEVON ENERGY PRODUCTION COMPANY, LP

333 W Sheridan Ave

Oklahoma City, OK 73102

NM OIL CONSERVATION

ARTESIA DISTRICT

SEP 19 2016

RECEIVED

Re:

CLIENT: DEVON ENERGY PRODUCTION COMPANY, LP

WELL: COTTON DRAW UNIT 238H

FIELD: PADUCA; BONE SPRING

RIG: PRECISION 608

COUNTY: LEA

API NO: 30-015-43269

JOB NO: 15MLD2608

Sec 13, T25S, R31E Eddy NM
N 32.00368 W 103.73814

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.

Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Tim Cramer FEI	COTTON DRAW UNIT 238H Original Hole	867.00 Ft to 15076.00 Ft	September 7, 2015 to September 23, 2015	HDS-1L

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Qun Xu
Field Service Manager

Reservoir Development

Drilling & Measurements (Anadrill)

4301 SW 44th St

Oklahoma City, Oklahoma 73119 USA

Phone: (405) 682-2284

Fax: (405) 682-3937

Well Reference:

Sec 13, T25S, R31E Eddy NM

N 32.00368 W 103.73814

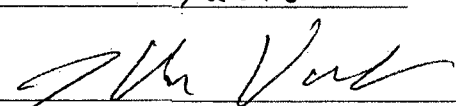
I, Tim Cramer certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of September 07, 2015 through September 23, 2015, conduct or supervise the taking of the HDS-1L surveys from a depth of 867.00 feet to a depth of 15076.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of DEVON ENERGY PRODUCTION COMPANY, LP for the COTTON DRAW UNIT 238H Well (Original Hole) API No. 30-015-43269 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By 
Tim Cramer
FEI

Subscribed and Sworn to before me this 25 day of September (month) 2015 (yr)

My Commission expires:

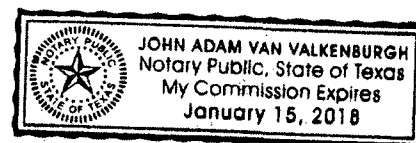
Jan 15, 2018



Notary Public

(signature)

Bell County Texas
(County State)



PathFinder Energy Services, Inc. Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
COTTON DRAW UNIT 238H
EDDY COUNTY, NM
Rig: PD 608

PathFinder Office Supervisor: QUN XU
PathFinder Field Engineers: MAGSUD ALIYEV
VERONICA CHAU
TIMOTHY CRAMER

ZAIRE WILLIAMS

Survey Calculations by RX5 V7.01A using Minimum Curvature

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.813, 2276 N LON: 103.44.17, 2927 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 725567.8700 Y: 414088.1200
North Aligned To: GRID NORTH
Total Magnetic Correction: 6.73° EAST TO GRID
Vertical Section Plane: 179.16
Survey Vert. Reference: 25.00' Rotary Table To Ground
Altitude: 3404.70' Ground To MSL

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
THE FOLLOWING ARE EXTREME ENGINEERING MWD SURVEYS.									
140.00	0.31	265.96	140.00	0.00	0.02	0.03 S	0.38 W	0.38@ 265.61	0.00
231.00	0.40	285.30	231.00	91.00	-0.05	0.04 N	0.93 W	0.93@ 272.28	0.16
366.00	1.01	244.38	365.99	135.00	0.32	0.35 S	2.46 W	2.49@ 261.84	0.56
466.00	1.18	235.77	465.97	100.00	1.25	1.31 S	4.11 W	4.31@ 252.27	0.24
553.00	1.80	232.48	552.94	87.00	2.56	2.65 S	5.93 W	6.50@ 245.93	0.72
648.00	2.11	227.60	647.88	95.00	4.61	4.74 S	8.41 W	9.65@ 240.60	0.37
** TIED INTO EXTREME ENGINEERING MWD SURVEY AT 695' MD.									
695.00	2.11	224.30	694.85	47.00	5.80	5.94 S	9.65 W	11.33@ 238.39	0.26
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.									
867.00	1.49	254.00	866.77	172.00	8.62	8.82 S	14.01 W	16.56@ 237.80	0.64
962.00	1.32	256.29	961.74	95.00	9.18	9.42 S	16.26 W	18.79@ 239.91	0.19
1057.00	1.58	290.75	1056.71	95.00	8.94	9.22 S	18.55 W	20.71@ 243.58	0.94
1245.00	1.67	287.95	1244.63	188.00	7.11	7.46 S	23.58 W	24.73@ 252.45	0.06
1334.00	1.67	283.11	1333.60	89.00	6.38	6.76 S	26.08 W	26.94@ 255.46	0.16
1424.00	1.85	283.36	1423.55	90.00	5.71	6.13 S	28.77 W	29.41@ 257.97	0.20
1513.00	1.85	282.09	1512.51	89.00	5.03	5.50 S	31.57 W	32.04@ 260.13	0.05
1603.00	1.67	278.84	1602.47	90.00	4.49	4.99 S	34.29 W	34.65@ 261.72	0.23
1692.00	1.85	282.49	1691.42	89.00	3.94	4.48 S	36.97 W	37.24@ 263.09	0.24
1782.00	1.76	310.63	1781.38	90.00	2.69	3.27 S	39.44 W	39.57@ 265.27	0.98
1871.00	1.93	280.98	1870.34	89.00	1.47	2.09 S	41.95 W	42.00@ 267.15	1.08
1960.00	2.02	307.46	1959.29	89.00	0.20	0.85 S	44.66 W	44.67@ 268.91	1.02
2049.00	2.73	327.12	2048.21	89.00	-2.57	1.88 N	47.06 W	47.10@ 272.29	1.20
2139.00	2.81	328.43	2138.11	90.00	-6.29	5.56 N	49.38 W	49.69@ 276.43	0.11
2228.00	2.73	327.61	2227.00	89.00	-9.97	9.21 N	51.65 W	52.47@ 280.11	0.10
2318.00	2.64	325.90	2316.90	90.00	-13.53	12.74 N	53.96 W	55.45@ 283.28	0.13
2407.00	2.81	328.44	2405.80	89.00	-17.12	16.29 N	56.25 W	58.57@ 286.15	0.23

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
COTTON DRAW UNIT 238H
EDDY COUNTY, NM
RIG:PD 608

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
2497.00	2.73	326.43	2495.70	90.00	-20.82	19.96 N 58.59 W	61.90@ 288.81	0.14
2586.00	2.64	328.12	2584.60	89.00	-24.36	23.47 N 60.85 W	65.22@ 291.09	0.13
2676.00	2.64	326.71	2674.50	90.00	-27.88	26.96 N 63.08 W	68.60@ 293.14	0.07
2765.00	2.73	321.76	2763.41	89.00	-31.29	30.34 N 65.52 W	72.20@ 294.85	0.28
2854.00	2.73	320.70	2852.30	89.00	-34.64	33.64 N 68.17 W	76.02@ 296.27	0.06
2943.00	2.90	322.39	2941.20	89.00	-38.10	37.07 N 70.89 W	79.99@ 297.60	0.21
3032.00	2.81	322.91	3030.09	89.00	-41.66	40.59 N 73.58 W	84.03@ 298.88	0.10
3122.00	2.81	350.67	3119.98	90.00	-45.62	44.53 N 75.27 W	87.45@ 300.61	1.50
3211.00	3.08	359.63	3208.87	89.00	-50.17	49.07 N 75.64 W	90.16@ 302.97	0.60
3300.00	3.17	10.59	3297.73	89.00	-54.98	53.88 N 75.20 W	92.51@ 305.62	0.68
3390.00	3.08	10.70	3387.60	90.00	-59.78	58.70 N 74.29 W	94.69@ 308.31	0.10
3479.00	3.17	11.63	3476.47	89.00	-64.53	63.46 N 73.35 W	96.99@ 310.86	0.12
3568.00	3.08	9.22	3565.34	89.00	-69.29	68.23 N 72.47 W	99.54@ 313.27	0.18
3658.00	3.08	12.07	3655.21	90.00	-74.02	72.98 N 71.58 W	102.23@ 315.56	0.17
3747.00	2.81	21.12	3744.09	89.00	-78.38	77.36 N 70.29 W	104.52@ 317.74	0.60
3836.00	2.81	28.60	3832.98	89.00	-82.30	81.31 N 68.46 W	106.29@ 319.90	0.41
3925.00	2.81	32.26	3921.87	89.00	-86.03	85.07 N 66.26 W	107.82@ 322.09	0.20
4014.00	2.37	20.31	4010.78	89.00	-89.57	88.64 N 64.45 W	109.59@ 323.98	0.78
4103.00	2.55	13.44	4099.70	89.00	-93.21	92.29 N 63.35 W	111.94@ 325.53	0.39
4281.00	2.55	23.61	4277.53	178.00	-100.65	99.77 N 60.85 W	116.86@ 328.62	0.25
4381.00	2.73	24.20	4377.42	100.00	-104.83	103.98 N 58.98 W	119.54@ 330.44	0.18
4470.00	2.46	23.26	4466.33	89.00	-108.50	107.67 N 57.36 W	121.99@ 331.95	0.31
4560.00	2.73	28.85	4556.24	90.00	-112.12	111.32 N 55.56 W	124.41@ 333.48	0.41
4649.00	2.64	29.58	4645.14	89.00	-115.73	114.96 N 53.53 W	126.81@ 335.03	0.11
4738.00	2.55	28.72	4734.05	89.00	-119.22	118.48 N 51.56 W	129.21@ 336.48	0.11
4828.00	2.55	24.55	4823.96	90.00	-122.77	122.05 N 49.77 W	131.81@ 337.82	0.21
4917.00	2.81	349.75	4912.87	89.00	-126.71	126.00 N 49.33 W	135.31@ 338.62	1.82
5006.00	3.08	340.99	5001.75	89.00	-131.13	130.41 N 50.50 W	139.85@ 338.83	0.59

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
COTTON DRAW UNIT 238H
EDDY COUNTY, NM
RIG:PD 608

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
5096.00	3.08	339.91	5091.62	90.00	-135.71	134.97 N 52.12 W	144.68@ 338.89	0.06
5185.00	3.17	341.28	5180.49	89.00	-140.31	139.54 N 53.73 W	149.53@ 338.94	0.13
5275.00	3.43	338.97	5270.34	90.00	-145.21	144.41 N 55.49 W	154.71@ 338.98	0.32
5453.00	2.02	304.20	5448.14	178.00	-152.01	151.15 N 60.00 W	162.62@ 338.35	1.19
5632.00	1.85	306.96	5627.04	179.00	-155.59	154.66 N 64.92 W	167.73@ 337.23	0.11
5811.00	1.67	317.49	5805.96	179.00	-159.31	158.32 N 68.99 W	172.69@ 336.45	0.21
5989.00	1.76	304.88	5983.88	178.00	-162.84	161.79 N 72.99 W	177.49@ 335.72	0.22
6168.00	1.93	299.95	6162.79	179.00	-165.99	164.87 N 77.85 W	182.32@ 334.72	0.13
6347.00	1.58	296.60	6341.70	179.00	-168.67	167.48 N 82.67 W	186.77@ 333.73	0.20
6526.00	1.67	298.62	6520.63	179.00	-171.09	169.83 N 87.17 W	190.89@ 332.83	0.06
6704.00	1.41	234.55	6698.58	178.00	-171.12	169.80 N 91.23 W	192.76@ 331.75	0.93
6883.00	1.14	245.09	6877.53	179.00	-169.15	167.78 N 94.64 W	192.63@ 330.57	0.20
7061.00	0.44	256.03	7055.52	178.00	-168.27	166.87 N 96.91 W	192.96@ 329.85	0.40
7150.00	0.26	257.23	7144.51	89.00	-168.15	166.74 N 97.43 W	193.12@ 329.70	0.20
7329.00	0.53	347.62	7323.51	179.00	-168.88	167.46 N 98.01 W	194.03@ 329.66	0.33
7508.00	0.79	57.40	7502.50	179.00	-170.34	168.93 N 97.15 W	194.87@ 330.10	0.44
7687.00	1.06	44.37	7681.48	179.00	-172.15	170.78 N 94.95 W	195.40@ 330.93	0.19
7865.00	0.79	44.47	7859.45	178.00	-174.18	172.83 N 92.94 W	196.24@ 331.73	0.15
8044.00	0.97	114.09	8038.44	179.00	-174.41	173.09 N 90.69 W	195.41@ 332.35	0.57
8223.00	0.88	112.05	8217.41	179.00	-173.23	171.96 N 88.03 W	193.18@ 332.89	0.05
8401.00	1.14	74.35	8395.39	178.00	-173.15	171.92 N 85.06 W	191.82@ 333.68	0.39
8579.00	0.35	77.16	8573.37	178.00	-173.72	172.52 N 82.83 W	191.37@ 334.36	0.44
8758.00	0.70	330.16	8752.37	179.00	-174.79	173.59 N 82.84 W	192.34@ 334.49	0.49
8937.00	2.20	317.09	8931.31	179.00	-178.30	177.06 N 85.72 W	196.72@ 334.17	0.85
9115.00	1.49	296.57	9109.21	178.00	-181.90	180.60 N 90.12 W	201.83@ 333.48	0.54
9294.00	2.02	248.74	9288.14	179.00	-181.87	180.49 N 95.14 W	204.03@ 332.21	0.84
9472.00	2.11	242.72	9466.02	178.00	-179.31	177.85 N 100.97 W	204.52@ 330.41	0.13
9651.00	0.97	273.34	9644.96	179.00	-177.96	176.43 N 105.41 W	205.52@ 329.14	0.76

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
COTTON DRAW UNIT 238H
EDDY COUNTY, NM
RIG:PD 608

Page 04/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
9741.00	1.23	297.55	9734.94	90.00	-178.47	176.92 N 107.03 W	206.78@ 328.83	0.59
9857.00	1.67	170.52	9850.92	116.00	-177.39	175.83 N 107.86 W	206.28@ 328.47	2.24
9901.00	6.60	164.82	9894.80	44.00	-174.31	172.76 N 107.09 W	203.26@ 328.21	11.23
9946.00	11.08	162.87	9939.25	45.00	-167.65	166.12 N 105.14 W	196.60@ 327.67	9.98
9991.00	16.71	165.56	9982.92	45.00	-157.20	155.72 N 102.25 W	186.29@ 326.71	12.59
10035.00	20.93	166.31	10024.55	44.00	-143.38	141.95 N 98.81 W	172.95@ 325.16	9.61
10080.00	24.80	167.29	10066.01	45.00	-126.31	124.93 N 94.83 W	156.84@ 322.80	8.64
10125.00	28.93	166.67	10106.15	45.00	-106.43	105.12 N 90.24 W	138.54@ 319.36	9.20
10170.00	33.24	166.62	10144.67	45.00	-83.76	82.52 N 84.88 W	118.38@ 314.19	9.58
10214.00	36.67	167.79	10180.73	44.00	-59.10	57.94 N 79.30 W	98.22@ 306.15	7.94
10259.00	38.34	173.04	10216.44	45.00	-32.04	30.95 N 74.77 W	80.92@ 292.48	8.01
10304.00	41.33	177.18	10251.00	45.00	-3.30	2.24 N 72.35 W	72.38@ 271.77	8.88
10349.00	46.52	181.58	10283.40	45.00	27.89	28.95 S 72.07 W	77.66@ 248.11	13.38
10393.00	52.32	182.69	10312.01	44.00	61.25	62.33 S 73.32 W	96.24@ 229.63	13.32
10438.00	57.68	182.52	10337.82	45.00	98.03	99.14 S 75.00 W	124.31@ 217.11	11.92
10482.00	62.78	181.31	10359.66	44.00	136.17	137.30 S 76.26 W	157.06@ 209.05	11.83
10527.00	67.09	179.63	10378.72	45.00	176.91	178.05 S 76.59 W	193.82@ 203.27	10.16
10572.00	72.28	179.21	10394.33	45.00	219.09	220.23 S 76.16 W	233.03@ 199.08	11.57
10616.00	74.92	179.09	10406.76	44.00	261.30	262.43 S 75.53 W	273.09@ 196.06	6.01
10661.00	75.80	178.63	10418.13	45.00	304.84	305.96 S 74.66 W	314.94@ 193.71	2.19
10706.00	78.88	178.52	10427.99	45.00	348.73	349.85 S 73.57 W	357.50@ 191.88	6.85
10750.00	84.94	178.81	10434.18	44.00	392.27	393.38 S 72.56 W	400.02@ 190.45	13.79
10836.00	90.04	179.18	10437.95	86.00	478.16	479.26 S 71.05 W	484.50@ 188.43	5.95
10925.00	88.46	178.78	10439.11	89.00	567.15	568.23 S 69.47 W	572.46@ 186.97	1.83
11015.00	88.37	178.84	10441.60	90.00	657.12	658.18 S 67.60 W	661.64@ 185.86	0.12
11104.00	89.08	179.38	10443.58	89.00	746.09	747.14 S 66.22 W	750.07@ 185.06	1.00
11194.00	90.04	179.99	10444.27	90.00	836.09	837.14 S 65.72 W	839.72@ 184.49	1.26
11283.00	88.37	179.95	10445.51	89.00	925.07	926.13 S 65.68 W	928.45@ 184.06	1.88

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11372.00	88.64	180.27	10447.83	89.00	1014.02	1015.10 S	1017.23@ 183.71	0.47
11462.00	88.46	178.93	10450.10	90.00	1103.99	1105.06 S	1106.99@ 183.38	1.50
11551.00	89.60	179.51	10451.61	89.00	1192.97	1194.04 S	1195.76@ 183.07	1.44
11640.00	87.67	179.47	10453.73	89.00	1281.94	1283.01 S	1284.56@ 182.82	2.17
11730.00	87.76	179.50	10457.32	90.00	1371.87	1372.93 S	1374.35@ 182.60	0.10
11819.00	87.76	179.51	10460.80	89.00	1460.80	1461.86 S	1463.16@ 182.41	0.01
11908.00	86.97	179.29	10464.89	89.00	1549.70	1550.76 S	1551.95@ 182.24	0.92
11997.00	87.76	179.91	10468.98	89.00	1638.61	1639.66 S	1640.76@ 182.10	1.13
12086.00	88.11	180.15	10472.19	89.00	1727.54	1728.61 S	1729.65@ 181.99	0.48
12176.00	88.29	180.27	10475.02	90.00	1817.48	1818.56 S	1819.57@ 181.90	0.24
12265.00	88.46	181.09	10477.54	89.00	1906.41	1907.52 S	1908.51@ 181.85	0.94
12355.00	85.82	178.04	10482.03	90.00	1996.28	1997.38 S	1998.31@ 181.74	4.48
12444.00	85.47	177.69	10488.79	89.00	2085.00	2086.07 S	2086.86@ 181.58	0.56
12533.00	85.74	177.68	10495.61	89.00	2173.71	2174.73 S	2175.40@ 181.42	0.30
12623.00	86.09	176.38	10502.02	90.00	2263.41	2264.38 S	2264.92@ 181.25	1.49
12712.00	90.66	177.86	10504.54	89.00	2352.30	2353.21 S	2353.63@ 181.09	5.40
12801.00	90.31	177.89	10503.79	89.00	2441.27	2442.14 S	2442.50@ 180.97	0.39
12891.00	87.85	178.50	10505.24	90.00	2531.24	2532.08 S	2532.37@ 180.88	2.82
12980.00	87.67	179.83	10508.71	89.00	2620.17	2621.00 S	2621.27@ 180.82	1.51
13070.00	88.46	179.86	10511.75	90.00	2710.11	2710.95 S	2711.20@ 180.79	0.88
13159.00	89.69	178.92	10513.19	89.00	2799.10	2799.93 S	2800.16@ 180.74	1.74
13248.00	89.96	179.96	10513.46	89.00	2888.09	2888.92 S	2889.14@ 180.70	1.21
13337.00	89.69	178.68	10513.73	89.00	2977.09	2977.91 S	2978.11@ 180.66	1.47
13427.00	89.43	177.04	10514.43	90.00	3067.06	3067.84 S	3068.00@ 180.58	1.84
13516.00	89.08	174.69	10515.58	89.00	3155.90	3156.60 S	3156.69@ 180.44	2.67
13605.00	88.20	174.19	10517.70	89.00	3244.57	3245.15 S	3245.19@ 180.28	1.14
13694.00	88.90	174.41	10519.95	89.00	3333.22	3333.68 S	3333.69@ 180.12	0.82
13783.00	89.52	174.65	10521.17	89.00	3421.92	3422.27 S	3422.27@ 179.98	0.75

PathFinder Energy Services, Inc. Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
COTTON DRAW UNIT 238H
EDDY COUNTY, NM
RIG:PD 608

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Measured Depth (ft)	Incl. (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
13873.00	90.31	174.52	10521.31	90.00	3511.64	3511.87 S	9.93 E	3511.88@ 179.84	0.89
13962.00	89.69	174.45	10521.31	89.00	3600.34	3600.46 S	18.48 E	3600.50@ 179.71	0.70
14051.00	90.57	174.39	10521.11	89.00	3689.03	3689.03 S	27.13 E	3689.13@ 179.58	0.99
14141.00	90.66	174.55	10520.14	90.00	3778.73	3778.61 S	35.81 E	3778.78@ 179.46	0.20
14230.00	90.31	174.66	10519.39	89.00	3867.44	3867.21 S	44.17 E	3867.46@ 179.35	0.41
14319.00	90.22	174.76	10518.98	89.00	3956.17	3955.83 S	52.38 E	3956.18@ 179.24	0.15
14408.00	90.31	176.28	10518.56	89.00	4044.99	4044.56 S	59.33 E	4044.99@ 179.16	1.71
14497.00	89.69	176.25	10518.56	89.00	4133.88	4133.37 S	65.13 E	4133.88@ 179.10	0.70
14587.00	89.96	177.65	10518.84	90.00	4223.81	4223.24 S	69.92 E	4223.82@ 179.05	1.58
14677.00	90.04	178.40	10518.84	90.00	4313.79	4313.18 S	73.02 E	4313.80@ 179.03	0.84
14766.00	89.52	178.34	10519.18	89.00	4402.78	4402.15 S	75.16 E	4402.80@ 179.02	0.76
14855.00	88.90	179.22	10520.41	89.00	4491.78	4491.13 S	76.67 E	4491.79@ 179.02	0.82
14945.00	88.02	179.53	10522.83	90.00	4581.74	4581.09 S	77.65 E	4581.75@ 179.03	1.04
15034.00	87.41	179.19	10526.37	89.00	4670.67	4670.02 S	78.64 E	4670.68@ 179.04	0.78
15076.00	87.05	178.99	10528.40	42.00	4712.62	4711.96 S	79.31 E	4712.63@ 179.04	0.98
STRAIGHT LINE PROJECTON TO BIT AT 15133'MD.									
15133.00	87.05	178.99	10531.34	57.00	4769.54	4768.88 S	80.31 E	4769.56@ 179.04	0.00

** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.