

Oilfield Services, Central U.S. Area

**Reservoir Development**

Drilling & Measurements (Anadrill)
 4301 SW 44th St
 Oklahoma City, Oklahoma 73119 USA
 Phone: (405) 682-2284
 Fax: (405) 682-3937

November 6, 2015

DEVON ENERGY PRODUCTION COMPANY, LP
 333 W Sheridan Ave
 Oklahoma City, OK 73102

NM OIL CONSERVATION
 ARTESIA DISTRICT

OCT 11 2016

Re:

Sec 15, T25S, R31E Eddy NM
 N 32.12314 W 103.76272

RECEIVED

CLIENT: DEVON ENERGY PRODUCTION COMPANY, LP
 WELL: SHIRE 22 FED 1H
 FIELD: PADUCA; BONE SPRING
 RIG: PRECISION 608
 COUNTY: EDDY
 API NO: 30-015-43222
 JOB NO: 15MLD2657

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>
MAGSUD ALIYEV FE2	SHIRE 22 FED 1H Original Hole	986.00 Ft to 14878.00 Ft	October 26, 2015 to November 6, 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

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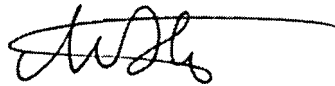
Well Reference:

Sec 15, T25S, R31E Eddy NM

N 32.12314 W 103.76272

I, MAGSUD ALIYEV certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of October 26, 2015 through November 06, 2015, conduct or supervise the taking of the HDS-1L surveys from a depth of 986.00 feet to a depth of 14878.00 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 SHIRE 22 FED 1H Well (Original Hole) API No. 30-015-43222 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
MAGSUD ALIYEV
FE2



11/09/2015

Subscribed and Sworn to before me this 9th day of November (month) 2015 (yr)

My Commission expires:

5-28-2019

Neata Matturro

Notary Public

Socorro, NM

(County State)

(signature)



OFFICIAL SEAL
NEATA MATTURRO
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 5-28-2019

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
SHIRE 22 FED 1H
EDDY COUNTY, NM
API#: 30-015-43222 Rig: PRECISION 608
PathFinder Office Supervisor: QUN XU
PathFinder Field Engineers: MAGSUD ALIYEV
BEN FULTON

ERNESTO GALLEGOS
Survey Calculations by RX5 V7.01A using Minimum Curvature

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.7.23.2948 N LON:103.45.45.7845 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 717985.9400 Y: 409001.1800
North Aligned To:GRID NORTH
Total Magnetic Correction: 6.73°EAST TO GRID
Vertical Section Plane: 183.33
Survey Vert. Reference: 25.00' Rotary Table To Ground
Altitude:3362.50' 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.									
273.00	0.62	310.91	272.99	0.00	-0.90	0.97 N	1.12 W	1.48@ 310.94	0.00
367.00	0.88	329.50	366.98	94.00	-1.81	1.93 N	1.87 W	2.68@ 315.85	0.38
462.00	1.19	340.84	461.97	95.00	-3.33	3.49 N	2.56 W	4.33@ 323.67	0.39
556.00	1.32	347.21	555.95	94.00	-5.27	5.46 N	3.12 W	6.29@ 330.24	0.20
650.00	1.58	342.91	649.92	94.00	-7.53	7.76 N	3.74 W	8.61@ 334.24	0.30
745.00	1.80	343.21	744.87	95.00	-10.16	10.44 N	4.56 W	11.39@ 336.40	0.23
** TIED INTO EXTREME ENGINEERING MWD SURVEY AT 777'MD.									
777.00	1.71	349.81	776.86	32.00	-11.09	11.39 N	4.79 W	12.36@ 337.19	0.69
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.									
986.00	0.26	320.70	985.82	209.00	-14.47	14.83 N	5.64 W	15.86@ 339.17	0.71
1080.00	0.26	316.91	1079.82	94.00	-14.78	15.15 N	5.92 W	16.26@ 338.64	0.02
1175.00	0.70	305.73	1174.82	95.00	-15.24	15.64 N	6.54 W	16.96@ 337.31	0.47
1264.00	0.53	330.64	1263.81	89.00	-15.87	16.32 N	7.18 W	17.83@ 336.24	0.35
1353.00	0.44	272.98	1352.81	89.00	-16.22	16.70 N	7.73 W	18.40@ 335.16	0.53
1442.00	0.44	277.24	1441.81	89.00	-16.24	16.76 N	8.41 W	18.75@ 333.36	0.04
1532.00	0.44	346.21	1531.81	90.00	-16.59	17.14 N	8.83 W	19.28@ 332.73	0.55
1621.00	0.53	300.60	1620.80	89.00	-17.11	17.68 N	9.27 W	19.96@ 332.33	0.43
1711.00	0.44	287.19	1710.80	90.00	-17.38	17.99 N	9.96 W	20.56@ 331.04	0.16
1800.00	0.44	326.19	1799.80	89.00	-17.74	18.38 N	10.47 W	21.15@ 330.32	0.33
1889.00	0.09	295.79	1888.80	89.00	-18.04	18.69 N	10.73 W	21.55@ 330.15	0.41
1979.00	0.53	285.21	1978.80	90.00	-18.15	18.83 N	11.19 W	21.91@ 329.27	0.49
2068.00	0.53	267.56	2067.79	89.00	-18.19	18.92 N	12.00 W	22.41@ 327.62	0.18
2157.00	0.35	235.49	2156.79	89.00	-17.98	18.75 N	12.64 W	22.61@ 326.02	0.34
2246.00	0.44	318.12	2245.79	89.00	-18.06	18.85 N	13.09 W	22.95@ 325.23	0.59
2336.00	0.44	222.40	2335.79	90.00	-18.03	18.85 N	13.55 W	23.22@ 324.29	0.72

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
SHIRE 22 FED 1H
EDDY COUNTY, NM
API#: 30-015-43222 Rlg: PRECISION 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)
2425.00	0.62	228.39	2424.78	89.00	-17.43	18.28 N 14.14 W	23.11@ 322.27	0.21
2514.00	0.70	218.98	2513.78	89.00	-16.65	17.54 N 14.84 W	22.98@ 319.76	0.15
2604.00	0.70	232.33	2603.77	90.00	-15.84	16.77 N 15.63 W	22.92@ 317.03	0.18
2693.00	0.62	291.90	2692.77	89.00	-15.64	16.62 N 16.50 W	23.42@ 315.21	0.74
2782.00	0.53	299.69	2781.76	89.00	-15.97	17.01 N 17.31 W	24.26@ 314.50	0.13
2872.00	0.53	285.02	2871.76	90.00	-16.24	17.32 N 18.07 W	25.03@ 313.78	0.15
2961.00	0.18	245.84	2960.76	89.00	-16.26	17.37 N 18.60 W	25.45@ 313.05	0.46
3051.00	0.18	272.68	3050.75	90.00	-16.19	17.32 N 18.87 W	25.61@ 312.55	0.09
3140.00	0.44	31.03	3139.75	89.00	-16.49	17.62 N 18.83 W	25.79@ 313.10	0.62
3229.00	0.44	26.77	3228.75	89.00	-17.11	18.21 N 18.50 W	25.96@ 314.56	0.04
3319.00	0.62	41.79	3318.75	90.00	-17.81	18.89 N 18.02 W	26.10@ 316.35	0.25
3408.00	0.35	21.45	3407.74	89.00	-18.44	19.50 N 17.60 W	26.27@ 317.93	0.35
3497.00	0.44	30.31	3496.74	89.00	-19.01	20.05 N 17.33 W	26.50@ 319.16	0.12
3586.00	0.44	72.73	3585.74	89.00	-19.43	20.44 N 16.83 W	26.48@ 320.54	0.36
3675.00	0.88	92.46	3674.73	89.00	-19.56	20.52 N 15.82 W	25.91@ 322.36	0.55
3765.00	1.67	84.79	3764.71	90.00	-19.77	20.60 N 13.82 W	24.81@ 326.14	0.90
3854.00	1.41	93.94	3853.68	89.00	-19.95	20.65 N 11.44 W	23.60@ 331.01	0.40
3943.00	1.93	107.17	3942.64	89.00	-19.58	20.13 N 8.91 W	22.01@ 336.11	0.72
4033.00	2.11	115.70	4032.59	90.00	-18.58	18.96 N 5.97 W	19.88@ 342.52	0.39
4122.00	1.85	124.99	4121.53	89.00	-17.21	17.43 N 3.32 W	17.74@ 349.22	0.46
4212.00	1.23	132.99	4211.50	90.00	-15.83	15.94 N 1.42 W	16.00@ 354.90	0.73
4256.00	1.06	133.66	4255.49	44.00	-15.26	15.33 N 0.78 W	15.35@ 357.08	0.39
4376.00	0.62	127.97	4375.48	120.00	-14.18	14.17 N 0.53 E	14.18@ 2.15	0.37
4465.00	0.53	115.10	4464.47	89.00	-13.75	13.70 N 1.28 E	13.76@ 5.36	0.18
4554.00	0.44	205.70	4553.47	89.00	-13.28	13.22 N 1.51 E	13.30@ 6.51	0.78
4644.00	0.79	226.29	4643.47	90.00	-12.51	12.48 N 0.91 E	12.51@ 4.17	0.45
4733.00	1.85	238.28	4732.44	89.00	-11.23	11.30 N 0.76 W	11.32@ 356.17	1.22
4823.00	2.81	234.93	4822.37	90.00	-9.03	9.26 N 3.80 W	10.01@ 337.72	1.08
4912.00	3.69	239.00	4911.22	89.00	-6.06	8.04 W 10.36@	309.12	1.02
5001.00	4.57	243.00	4999.99	89.00	-2.65	13.65 W 14.08@	284.19	1.04

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
SHIRE 22 FED 1H
EDDY COUNTY, NM
API#: 30-015-43222 Rlg: PRECISION 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)
5090.00	4.48	242.79	5088.71	89.00	0.90	0.25 N 19.90 W	19.90@ 270.73	0.10
5180.00	4.31	242.97	5178.45	90.00	4.40	2.89 S 26.04 W	26.20@ 263.66	0.19
5269.00	4.48	237.03	5267.19	89.00	8.15	6.30 S 31.94 W	32.55@ 258.83	0.54
5358.00	4.75	244.51	5355.90	89.00	11.98	9.78 S 38.18 W	39.41@ 255.63	0.74
5448.00	4.92	246.05	5445.58	90.00	15.55	12.95 S 45.07 W	46.89@ 253.97	0.24
5537.00	4.75	246.89	5534.26	89.00	18.94	15.95 S 51.95 W	54.34@ 252.93	0.21
5626.00	5.45	251.13	5622.91	89.00	22.18	18.76 S 59.33 W	62.23@ 252.45	0.89
5716.00	5.54	251.91	5712.50	90.00	25.38	21.49 S 67.51 W	70.85@ 252.34	0.13
5805.00	5.63	252.98	5801.07	89.00	28.46	24.10 S 75.77 W	79.51@ 252.35	0.16
5894.00	5.28	255.09	5889.67	89.00	31.26	26.43 S 83.90 W	87.96@ 252.51	0.45
5984.00	5.28	258.32	5979.29	90.00	33.63	28.34 S 91.96 W	96.22@ 252.87	0.33
6073.00	5.28	243.85	6067.91	89.00	36.71	30.97 S 99.64 W	104.34@ 252.73	1.49
6162.00	5.72	239.80	6156.51	89.00	41.17	35.01 S 107.15 W	112.72@ 251.91	0.66
6252.00	5.45	237.57	6246.08	90.00	46.15	39.56 S 114.63 W	121.27@ 250.96	0.38
6341.00	5.19	237.51	6334.69	89.00	50.97	43.99 S 121.60 W	129.31@ 250.11	0.29
6430.00	5.10	237.49	6423.34	89.00	55.65	48.27 S 128.33 W	137.11@ 249.39	0.10
6520.00	4.75	236.55	6513.00	90.00	60.22	52.48 S 134.81 W	144.66@ 248.73	0.40
6609.00	5.19	238.61	6601.67	89.00	64.72	56.61 S 141.32 W	152.24@ 248.17	0.53
6698.00	4.31	235.49	6690.36	89.00	69.06	60.60 S 147.51 W	159.48@ 247.67	1.03
6787.00	4.31	235.85	6779.11	89.00	73.15	64.37 S 153.04 W	166.02@ 247.19	0.03
6877.00	5.80	235.90	6868.76	90.00	77.97	68.82 S 159.60 W	173.81@ 246.68	1.66
6966.00	5.36	236.10	6957.34	89.00	83.22	73.66 S 166.78 W	182.32@ 246.17	0.49
7056.00	5.89	235.63	7046.90	90.00	88.59	78.61 S 174.08 W	191.00@ 245.70	0.59
7145.00	5.63	235.20	7135.45	89.00	94.08	83.68 S 181.43 W	199.80@ 245.24	0.30
7235.00	4.92	233.71	7225.07	90.00	99.26	88.48 S 188.17 W	207.93@ 244.82	0.80
7324.00	5.54	233.96	7313.70	89.00	104.42	93.27 S 194.72 W	215.90@ 244.41	0.70
7414.00	5.28	235.80	7403.30	90.00	109.70	98.15 S 201.66 W	224.27@ 244.05	0.35
7503.00	5.01	234.53	7491.94	89.00	114.63	102.71 S 208.21 W	232.16@ 243.74	0.33
7592.00	5.63	236.90	7580.56	89.00	119.66	107.35 S 215.03 W	240.34@ 243.47	0.74
7682.00	5.36	237.39	7670.14	90.00	124.75	112.02 S 222.27 W	248.90@ 243.25	0.30

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
SHIRE 22 FED 1H
EDDY COUNTY, NM
API#: 30-015-43222 Rig: PRECISION 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)
7771.00	5.01	237.63	7758.78	89.00	129.45	116.35 S 229.05 W	256.91@ 243.07	0.39
7860.00	4.57	235.57	7847.47	89.00	133.89	120.43 S 235.26 W	264.29@ 242.89	0.53
7950.00	4.31	231.38	7937.20	90.00	138.35	124.57 S 240.86 W	271.16@ 242.65	0.46
8039.00	4.04	229.26	8025.96	89.00	142.76	128.70 S 245.85 W	277.50@ 242.37	0.35
8128.00	3.78	230.54	8114.75	89.00	146.94	132.61 S 250.49 W	283.43@ 242.10	0.31
8218.00	3.61	228.17	8204.57	90.00	150.96	136.39 S 254.89 W	289.09@ 241.85	0.25
8307.00	3.17	231.46	8293.41	89.00	154.59	139.79 S 258.90 W	294.23@ 241.63	0.54
8397.00	2.99	232.38	8383.28	90.00	157.79	142.77 S 262.71 W	299.00@ 241.48	0.21
8486.00	2.29	234.32	8472.19	89.00	160.43	145.23 S 265.99 W	303.05@ 241.37	0.79
8576.00	1.67	236.84	8562.13	90.00	162.34	146.99 S 268.55 W	306.15@ 241.31	0.70
8665.00	1.49	259.73	8651.10	89.00	163.39	147.91 S 270.77 W	308.54@ 241.35	0.73
8754.00	2.02	246.10	8740.06	89.00	164.38	148.75 S 273.35 W	311.20@ 241.45	0.75
8844.00	1.23	256.27	8830.02	90.00	165.39	149.62 S 275.73 W	313.71@ 241.51	0.93
8933.00	1.23	260.59	8919.00	89.00	165.88	150.01 S 277.60 W	315.54@ 241.62	0.10
9022.00	1.58	271.22	9007.97	89.00	166.13	150.14 S 279.77 W	317.51@ 241.78	0.49
9111.00	1.58	296.27	9096.94	89.00	165.70	149.57 S 282.10 W	319.30@ 242.07	0.77
9201.00	1.32	300.82	9186.91	90.00	164.74	148.49 S 284.10 W	320.57@ 242.41	0.32
9290.00	0.70	212.39	9275.90	89.00	164.74	148.42 S 285.28 W	321.57@ 242.51	1.66
9379.00	1.14	197.15	9364.89	89.00	166.07	149.72 S 285.83 W	322.67@ 242.35	0.56
9469.00	1.32	209.51	9454.87	90.00	167.87	151.48 S 286.60 W	324.17@ 242.14	0.35
9558.00	1.23	206.48	9543.85	89.00	169.67	153.23 S 287.53 W	325.81@ 241.95	0.13
9647.00	1.14	222.27	9632.83	89.00	171.24	154.74 S 288.55 W	327.43@ 241.80	0.38
9726.00	2.99	208.99	9711.78	79.00	173.71	157.12 S 290.08 W	329.90@ 241.56	2.40
9770.00	8.35	188.85	9755.55	44.00	177.93	161.29 S 291.13 W	332.82@ 241.01	12.81
9815.00	12.66	182.00	9799.78	45.00	186.11	169.45 S 291.81 W	337.44@ 239.86	9.95
9860.00	13.72	179.25	9843.60	45.00	196.37	179.71 S 291.91 W	342.79@ 238.38	2.74
9904.00	17.06	176.34	9886.01	44.00	207.98	191.38 S 291.43 W	348.65@ 236.71	7.79
9949.00	21.81	177.35	9928.44	45.00	222.85	206.32 S 290.62 W	356.41@ 234.63	10.58
9993.00	24.71	179.19	9968.86	44.00	240.16	223.69 S 290.11 W	366.33@ 232.37	6.79
10038.00	28.49	181.30	10009.09	45.00	260.27	243.83 S 290.22 W	379.05@ 229.96	8.66

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EDDY COUNTY, NM
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10083.00	33.41	182.77	10047.67	45.00	283.40	266.95 S 291.06 W	394.94@ 227.47	11.06
10127.00	37.20	183.15	10083.57	44.00	308.83	292.34 S 292.38 W	413.46@ 225.00	8.63
10172.00	39.83	182.20	10118.78	45.00	336.84	320.33 S 293.68 W	434.58@ 222.52	5.99
10217.00	42.38	182.78	10152.68	45.00	366.42	349.88 S 294.97 W	457.63@ 220.13	5.73
10261.00	44.05	181.09	10184.75	44.00	396.54	379.99 S 295.98 W	481.66@ 217.92	4.62
10306.00	46.52	180.10	10216.41	45.00	428.48	411.96 S 296.31 W	507.45@ 215.73	5.71
10351.00	49.24	180.68	10246.59	45.00	461.81	445.34 S 296.54 W	535.03@ 213.66	6.12
10395.00	52.50	180.55	10274.35	44.00	495.90	479.46 S 296.90 W	563.95@ 211.77	7.41
10440.00	57.07	180.32	10300.29	45.00	532.61	516.21 S 297.18 W	595.65@ 209.93	10.16
10485.00	63.40	181.07	10322.62	45.00	571.61	555.25 S 297.66 W	630.01@ 208.20	14.14
10529.00	68.94	180.38	10340.39	44.00	611.80	595.48 S 298.17 W	665.96@ 206.60	12.67
10574.00	72.28	181.05	10355.33	45.00	654.19	637.92 S 298.70 W	704.39@ 205.09	7.55
10618.00	76.68	181.98	10367.10	44.00	696.56	680.29 S 299.82 W	743.43@ 203.78	10.21
10663.00	79.84	182.71	10376.26	45.00	740.60	724.31 S 301.63 W	784.60@ 202.61	7.20
10708.00	83.71	183.36	10382.69	45.00	785.13	768.77 S 303.99 W	826.69@ 201.57	8.72
10767.00	88.99	183.38	10386.45	59.00	843.99	827.53 S 307.45 W	882.80@ 200.38	8.95
10856.00	90.31	182.53	10386.99	89.00	932.99	916.41 S 312.03 W	968.07@ 198.80	1.76
10946.00	89.25	181.99	10387.34	90.00	1022.97	1006.34 S 315.58 W	1054.66@ 197.41	1.32
11035.00	88.20	181.07	10389.32	89.00	1111.90	1095.28 S 317.96 W	1140.50@ 196.19	1.57
11124.00	87.76	179.75	10392.45	89.00	1200.73	1184.22 S 318.60 W	1226.33@ 195.06	1.56
11213.00	87.85	179.54	10395.86	89.00	1289.48	1273.15 S 318.04 W	1312.28@ 194.03	0.26
11303.00	88.20	179.00	10398.96	90.00	1379.20	1363.09 S 316.90 W	1399.44@ 193.09	0.71
11392.00	88.64	179.74	10401.42	89.00	1467.95	1452.05 S 315.92 W	1486.02@ 192.27	0.97
11482.00	89.25	180.77	10403.08	90.00	1557.80	1542.03 S 316.32 W	1574.14@ 191.59	1.33
11571.00	88.20	180.51	10405.06	89.00	1646.68	1631.01 S 317.31 W	1661.59@ 191.01	1.22
11661.00	87.93	181.11	10408.09	90.00	1736.54	1720.94 S 318.59 W	1750.18@ 190.49	0.73
11750.00	88.37	181.55	10410.97	89.00	1825.44	1809.87 S 320.65 W	1838.06@ 190.05	0.70
11840.00	89.08	182.17	10412.97	90.00	1915.39	1899.80 S 323.57 W	1927.16@ 189.67	1.05
11929.00	89.52	182.79	10414.06	89.00	2004.37	1988.71 S 327.42 W	2015.49@ 189.35	0.85
12019.00	89.87	183.16	10414.54	90.00	2094.37	2078.59 S 332.09 W	2104.95@ 189.08	0.57

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
SHIRE 22 FED 1H
EDDY COUNTY, NM
API#: 30-015-43222 Rlg: PRECISION 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)
12108.00	90.57	182.30	10414.20	89.00	2183.36	2167.49 S 336.33 W	2193.43@ 188.82	1.25
12198.00	91.10	180.36	10412.88	90.00	2273.29	2257.45 S 338.42 W	2282.67@ 188.53	2.23
12287.00	91.19	179.42	10411.10	89.00	2362.12	2346.43 S 338.25 W	2370.68@ 188.20	1.06
12377.00	91.01	179.11	10409.38	90.00	2451.87	2436.40 S 337.10 W	2459.61@ 187.88	0.40
12466.00	91.80	179.28	10407.20	89.00	2540.61	2525.37 S 335.85 W	2547.60@ 187.58	0.91
12555.00	90.22	178.16	10405.63	89.00	2629.31	2614.33 S 333.86 W	2635.56@ 187.28	2.18
12645.00	90.22	178.75	10405.28	90.00	2718.98	2704.29 S 331.43 W	2724.53@ 186.99	0.65
12734.00	90.57	179.10	10404.67	89.00	2807.71	2793.28 S 329.76 W	2812.67@ 186.73	0.56
12823.00	89.52	178.95	10404.60	89.00	2896.46	2882.26 S 328.25 W	2900.89@ 186.50	1.19
12913.00	89.96	178.29	10405.01	90.00	2986.16	2972.23 S 326.08 W	2990.07@ 186.26	0.88
13002.00	89.96	178.84	10405.07	89.00	3074.85	3061.21 S 323.85 W	3078.29@ 186.04	0.62
13091.00	90.22	177.95	10404.93	89.00	3163.52	3150.17 S 321.36 W	3166.52@ 185.82	1.04
13181.00	90.22	178.43	10404.58	90.00	3253.16	3240.12 S 318.51 W	3255.74@ 185.61	0.53
13270.00	90.48	178.68	10404.04	89.00	3341.84	3329.09 S 316.27 W	3344.08@ 185.43	0.41
13359.00	90.48	179.50	10403.29	89.00	3430.60	3418.08 S 314.86 W	3432.55@ 185.26	0.92
13449.00	90.66	180.10	10402.40	90.00	3520.42	3508.07 S 314.54 W	3522.15@ 185.12	0.70
13538.00	89.78	179.66	10402.06	89.00	3609.26	3597.07 S 314.36 W	3610.78@ 184.99	1.11
13628.00	90.22	180.43	10402.06	90.00	3699.11	3687.07 S 314.43 W	3700.45@ 184.87	0.98
13717.00	90.66	181.31	10401.37	89.00	3788.02	3776.06 S 315.78 W	3789.24@ 184.78	1.11
13807.00	90.04	181.31	10400.82	90.00	3877.97	3866.03 S 317.84 W	3879.07@ 184.70	0.69
13896.00	90.13	180.78	10400.69	89.00	3966.90	3955.02 S 319.46 W	3967.90@ 184.62	0.60
13985.00	89.60	180.22	10400.90	89.00	4055.79	4044.01 S 320.24 W	4056.67@ 184.53	0.87
14075.00	89.69	178.25	10401.46	90.00	4145.55	4134.00 S 319.03 W	4146.29@ 184.41	2.19
14164.00	89.08	176.12	10402.41	89.00	4234.03	4222.88 S 314.66 W	4234.59@ 184.26	2.49
14253.00	89.60	178.08	10403.44	89.00	4322.49	4311.76 S 310.16 W	4322.90@ 184.11	2.28
14342.00	90.04	179.01	10403.72	89.00	4411.18	4400.72 S 307.90 W	4411.48@ 184.00	1.16
14432.00	90.13	178.94	10403.58	90.00	4500.92	4490.71 S 306.29 W	4501.14@ 183.90	0.13
14521.00	90.57	178.86	10403.04	89.00	4589.65	4579.69 S 304.58 W	4589.81@ 183.80	0.50
14610.00	89.60	178.61	10402.91	89.00	4678.36	4668.67 S 302.62 W	4678.47@ 183.71	1.12
14699.00	88.90	179.22	10404.07	89.00	4767.09	4757.64 S 300.93 W	4767.15@ 183.62	1.04

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
SHIRE 22 FED 1H
EDDY COUNTY, NM
API#: 30-015-43222 Rlg: PRECISION 608

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
14789.00	89.16	180.05	10405.60	90.00	4856.89	4847.63 S 300.36 W	4856.92@ 183.55	0.97
14878.00	89.34	180.95	10406.76	89.00	4945.77	4936.62 S 301.14 W	4945.79@ 183.49	1.03
14947.00	89.34	180.95	10407.56	69.00	5014.71	5005.60 S 302.28 W	5014.72@ 183.46	0.00

STRAIGHT LINE PROJECTION TO BIT AT 14947'MD.

** 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 – a Schlumberger company and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.