

Pathfinder

3329 W. Pinhook Rd.
Lafayette, LA 70508-3506, USA
Tel. 337-233-3982
Fax 337-234-2988

PATHFINDER
A Schlumberger Company

DIRECTIONAL SURVEY REPORT

30-015-41525

DEVON ENERGY PRODUCTION CO., L.P.

SHAULA 30 FED COM 4H

EDDY COUNTY, NEW MEXICO

PREPARED BY: MARK TRAHAN

PathFinder

3329 W. Pinhook Rd.
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A Schlumberger Company

December 2, 2013

DEVON ENERGY PRODUCTION CO.
333 West Sheridan
Oklahoma City, OK 73102

RE: DEVON ENERGY PRODUCTION CO., L.P.
SHAULA 30 FED COM 4H
EDDY COUNTY, NM
RIG: H&P 300
API NO.: 30-015-41525
PES FILE NO.: 13LAF0294

Dear Sir or Madame:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA
3 – Original Directional Survey Reports

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (337) 233-3982.

Sincerely,



Mark Trahan
M/LWD Service Coordinator
PathFinder, a Schlumberger company

MT:tb

PathFinder

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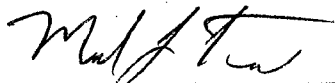
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DIRECTIONAL SURVEY COMPANY REPORT:

1. SURVEYING COMPANY: PATHFINDER, A SCHLUMBERGER COMPANY
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) AARON HARGRAVE
B) KEVIN BLANCHARD
3. POSITION OF SAID PERSON(S): (A-B) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11/06/13 TO 11/15/13
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

DEVON ENERGY PRODUCTION CO., L.P.
SHAULA 30 FED COM 4H
EDDY COUNTY, NM
RIG: H&P 300
API NO.: 30-015-41525
9. SURVEY CERTIFIED FROM: 8,124 TO 13,726 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4,941.77 FEET ON A BEARING OF 266.76 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A MEASURED DEPTH OF 13,726 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



MARK TRAHAN
M/LWD SERVICE COORDINATOR

PathFinder

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**STATE OF LOUISIANA
PARISH OF LAFAYETTE**

I, **Aaron Hargrave**, certify that; I am employed by PathFinder, a Schlumberger company; that I did on the day(s) of **11/06/13** through **11/15/13** conduct or supervise the taking of a **Measurement While Drilling** survey from a depth of **8,124 feet** to a depth of **13,726 feet**; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder, a Schlumberger company; that I am authorized and qualified to make this report; that this survey was conducted at the request of **DEVON ENERGY PRODUCTION CO., L.P.** for the **Shaula 30 Fed Com 4H Well API No. 30-015-41525** in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by PathFinder, a Schlumberger company.



PathFinder Field Engineer

PathFinder – a Schlumberger company

BHL Report

Page 01/01
Tie-in Date: 11/06/2013
Date Completed: 11/15/2013

DEVON ENERGY PRODUCTION COMPANY, L.P.

SHAULA "30" FEDERAL 4H

EDDY COUNTY, NM

API#: 30-015-41525 Rig: H&P 300

PathFinder Office Supervisor: ERIC JENSEN

PathFinder Field Engineers: AARON HARGRAVE
KEVIN BLANCHARD

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.42.46.6100 N LON:103.53.59.0112 W

GRID Reference:NAD83 new mexico east Transverse Mercator

Ref GRID Coord: X: 674700.8700 Y: 623374.3400

North Aligned To:GRID NORTH

Total Magnetic Correction: 7.25° EAST TO GRID

Vertical Section Plane: 268.76

Survey Vert. Reference: 26.00' Rotary Table To Ground

Altitude:3576.00' Ground To MSL

Measured Depth	13726.00	(feet)
Inclination	92.42	(deg)
Azimuth	267.65	(deg)
True Vertical Depth	8754.63	(feet)
Vertical Section	4938.76	(feet)
Survey X cord	669767.00	(feet)
Survey Y cord	623095.09	(feet)
Survey Lat	32.71223412 N	(deg)
Survey Lon	103.91577016 W	(deg)
Rectangular Corr. N/S	279.25 S	(feet)
Rectangular Corr. E/W	4933.87 W	(feet)
Closure Distance	4941.77	(feet)
Direction of Closure	266.76	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder -- a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
AP#: 30-015-41525 RIG: H&P 300
PathFinder Office Supervisor: ERIC JENSEN
PathFinder Field Engineers: AARON HARGRAVE
KEVIN BLANCHARD

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.42466100 N LON: 103.53590112 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 674700.8700 Y: 623374.3400
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.25° EAST TO GRID
Vertical Section Plane: 268.76
Survey Vert. Reference: 26.00' Rotary Table To Ground
Altitude: 3576.00' Ground To MSL

Survey Calculations by RX5 V6.05 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL (ft)	Survey Latitude (deg)	Survey Longitude (deg)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
THE FOLLOWING ARE VAUGHN ENERGY GYRO SURVEYS.											
100.00	0.42	331.81	100.00	0.00	0.12	0.36 N	0.13 W	32.71294821 N	103.89972577 W	0.38@ 339.65	0.00
200.00	0.47	319.83	199.99	100.00	0.55	0.99 N	0.57 W	32.71294996 N	103.89972718 W	1.15@ 330.15	0.10
300.00	0.51	307.85	299.99	100.00	1.15	1.58 N	1.19 W	32.71295158 N	103.89972918 W	1.98@ 323.11	0.11
400.00	0.65	314.01	399.99	100.00	1.90	2.25 N	1.95 W	32.71295342 N	103.89973164 W	2.97@ 319.12	0.15
500.00	0.78	320.17	499.98	100.00	2.72	3.16 N	2.79 W	32.71295595 N	103.89973437 W	4.22@ 318.60	0.15
600.00	0.77	333.19	599.97	100.00	3.44	4.29 N	3.53 W	32.71295904 N	103.89973675 W	5.55@ 320.54	0.18
700.00	0.75	346.21	699.96	100.00	3.87	5.52 N	3.99 W	32.71296245 N	103.89973823 W	6.81@ 324.17	0.17
800.00	0.85	0.84	799.95	100.00	3.98	6.90 N	4.13 W	32.71296623 N	103.89973888 W	8.04@ 329.08	0.23
900.00	0.94	15.46	899.94	100.00	3.72	8.43 N	3.90 W	32.71297044 N	103.89973792 W	9.29@ 335.16	0.24
1000.00	1.06	21.35	999.92	100.00	3.13	10.08 N	3.35 W	32.71297498 N	103.89973609 W	10.63@ 341.63	0.16
1100.00	1.19	27.23	1099.90	100.00	2.28	11.87 N	2.54 W	32.71297987 N	103.89973343 W	12.14@ 347.94	0.17
1200.00	1.28	30.11	1199.88	100.00	1.20	13.76 N	1.50 W	32.71298505 N	103.89973004 W	13.84@ 353.77	0.11
1300.00	1.37	32.99	1299.85	100.00	-0.05	15.73 N	0.29 W	32.71299045 N	103.89972607 W	15.73@ 358.95	0.11
1400.00	1.47	35.67	1399.82	100.00	-1.49	17.77 N	1.11 E	32.71299606 N	103.89972150 W	17.81@ 357	0.12
1500.00	1.58	38.34	1499.79	100.00	-3.14	19.90 N	2.71 E	32.71300188 N	103.89971626 W	20.08@ 7.76	0.13
1600.00	2.00	43.72	1599.74	100.00	-5.25	22.24 N	4.77 E	32.71300829 N	103.89970952 W	22.74@ 12.12	0.45
1700.00	2.42	49.09	1699.66	100.00	-8.11	24.88 N	7.58 E	32.71301553 N	103.89970038 W	26.01@ 16.93	0.47
1800.00	2.93	51.73	1799.55	100.00	-11.78	27.85 N	11.18 E	32.71302364 N	103.89968863 W	30.01@ 21.87	0.52
1900.00	3.44	54.38	1899.40	100.00	-16.29	31.18 N	15.62 E	32.71303274 N	103.89967413 W	34.87@ 26.62	0.53
2000.00	2.94	54.81	1999.24	100.00	-20.90	34.40 N	20.16 E	32.71304155 N	103.89965934 W	39.87@ 30.37	0.50
2100.00	2.44	55.24	2099.13	100.00	-24.80	37.09 N	24.00 E	32.71304891 N	103.89964681 W	44.18@ 32.91	0.50
2200.00	2.22	46.66	2199.05	100.00	-28.01	39.64 N	27.16 E	32.71305586 N	103.89963651 W	48.05@ 34.42	0.41
2300.00	2.01	38.08	2298.98	100.00	-30.56	42.35 N	29.65 E	32.71306328 N	103.89962838 W	51.69@ 35.00	0.38
2400.00	1.95	38.20	2398.92	100.00	-32.75	45.06 N	31.78 E	32.71307073 N	103.89962140 W	55.14@ 35.20	0.06
2500.00	1.89	38.32	2498.87	100.00	-34.88	47.69 N	33.86 E	32.71307794 N	103.89961462 W	58.49@ 35.37	0.06

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
API#: 30-015-41525 Rig: H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL Rectangular Offsets (ft)	Survey Latitude (deg)	Survey Longitude (deg)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
2600.00	1.88	36.69	2598.81	100.00	-36.94	50.30 N	35.86 E	32.71308508 N	103.89960808 W	61.78@ 35.48	0.05
2700.00	1.86	35.07	2698.76	100.00	-38.91	52.95 N	37.77 E	32.71309233 N	103.89960182 W	65.04@ 35.50	0.06
2800.00	1.88	47.08	2798.71	100.00	-41.10	55.39 N	39.91 E	32.71309903 N	103.89959485 W	68.27@ 35.77	0.39
2900.00	1.90	59.08	2898.65	100.00	-43.76	57.36 N	42.53 E	32.71310441 N	103.89958630 W	71.41@ 36.55	0.39
3000.00	1.81	61.27	2998.60	100.00	-46.60	58.97 N	45.34 E	32.71310880 N	103.89957715 W	74.39@ 37.55	0.12
3100.00	1.72	63.45	3098.55	100.00	-49.36	60.40 N	48.06 E	32.71311270 N	103.89956827 W	77.19@ 38.51	0.11
3200.00	1.37	49.99	3198.52	100.00	-51.65	61.84 N	50.32 E	32.71311664 N	103.89956090 W	79.73@ 39.14	0.50
3300.00	1.02	36.53	3298.50	100.00	-53.13	63.33 N	51.77 E	32.71312070 N	103.89955619 W	81.79@ 39.27	0.45
3400.00	0.95	35.90	3398.48	100.00	-54.17	64.71 N	52.78 E	32.71312450 N	103.89955286 W	83.51@ 39.20	0.07
3500.00	0.87	35.28	3498.47	100.00	-55.12	66.00 N	53.71 E	32.71312804 N	103.89954984 W	85.09@ 39.14	0.08
3600.00	0.84	22.51	3598.46	100.00	-55.87	67.30 N	54.43 E	32.71313159 N	103.89954749 W	86.55@ 38.96	0.19
3700.00	0.81	9.74	3698.45	100.00	-56.30	68.67 N	54.83 E	32.71313536 N	103.89954617 W	87.88@ 38.60	0.19
3800.00	0.71	3.97	3798.44	100.00	-56.49	69.99 N	54.99 E	32.71313898 N	103.89954562 W	89.01@ 38.16	0.13
3900.00	0.61	358.20	3898.43	100.00	-56.54	71.14 N	55.02 E	32.71314214 N	103.89954552 W	89.93@ 37.72	0.12
4000.00	0.65	357.59	3998.43	100.00	-56.53	72.24 N	54.98 E	32.71314516 N	103.89954564 W	90.78@ 37.27	0.04
4100.00	0.69	356.98	4098.42	100.00	-56.50	73.41 N	54.92 E	32.71314837 N	103.89954580 W	91.68@ 36.80	0.04
4200.00	0.72	356.48	4198.41	100.00	-56.45	74.63 N	54.85 E	32.71315175 N	103.89954601 W	92.62@ 36.31	0.03
4300.00	0.75	355.99	4298.40	100.00	-56.40	75.91 N	54.77 E	32.71315527 N	103.89954627 W	93.61@ 35.81	0.03
4400.00	0.70	359.55	4398.40	100.00	-56.37	77.18 N	54.72 E	32.71315874 N	103.89954642 W	94.61@ 35.33	0.07
4500.00	0.65	3.12	4498.39	100.00	-56.42	78.36 N	54.74 E	32.71316198 N	103.89954632 W	95.58@ 34.94	0.06
4600.00	0.77	352.01	4598.38	100.00	-56.39	79.59 N	54.68 E	32.71316536 N	103.89954651 W	96.56@ 34.49	0.18
4700.00	0.76	0.03	4698.37	100.00	-56.32	80.92 N	54.59 E	32.71316901 N	103.89954679 W	97.61@ 34.00	0.11
4800.00	0.84	19.53	4798.36	100.00	-56.60	82.27 N	54.83 E	32.71317273 N	103.89954597 W	98.87@ 33.68	0.28
4900.00	1.12	56.65	4898.35	100.00	-57.69	83.50 N	55.89 E	32.71317610 N	103.89954251 W	100.48@ 33.80	0.68
5000.00	1.52	62.39	4998.32	100.00	-59.70	84.65 N	57.88 E	32.71317924 N	103.89953602 W	102.55@ 34.36	0.42
5100.00	1.71	63.50	5098.28	100.00	-62.24	85.93 N	60.39 E	32.71318273 N	103.89952784 W	105.03@ 35.10	0.19
5200.00	1.66	69.43	5198.24	100.00	-64.96	87.11 N	63.09 E	32.71318593 N	103.89951907 W	107.55@ 35.91	0.18
5300.00	1.96	70.88	5298.19	100.00	-67.95	88.17 N	66.06 E	32.71318884 N	103.89950940 W	110.17@ 36.84	0.30

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
API#: 30-015-41525 Rig: H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Survey Latitude (deg)	Survey Longitude (deg)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
5400.00	2.13	71.04	5398.13	100.00	-71.35	89.34 N 69.43 E	32.71319200 N	103.89949841 W	113.15@ 37.85	0.17
5500.00	2.20	69.62	5498.05	100.00	-74.93	90.61 N 72.99 E	32.71319545 N	103.89948683 W	116.35@ 38.85	0.09
5600.00	1.90	68.00	5597.99	100.00	-78.30	91.90 N 76.32 E	32.71319896 N	103.89947597 W	119.46@ 39.71	0.31
5700.00	1.91	64.39	5697.93	100.00	-81.36	93.24 N 79.36 E	32.71320261 N	103.89946607 W	122.44@ 40.40	0.12
5800.00	2.04	58.38	5797.88	100.00	-84.42	94.89 N 82.38 E	32.71320712 N	103.89945623 W	125.67@ 40.96	0.24
5900.00	2.95	63.31	5897.78	100.00	-88.28	96.98 N 86.20 E	32.71321282 N	103.89944380 W	129.75@ 41.63	0.93
6000.00	3.33	57.41	5997.63	100.00	-93.08	99.70 N 90.94 E	32.71322025 N	103.89942833 W	134.95@ 42.37	0.50
6100.00	2.65	68.26	6097.49	100.00	-97.73	102.12 N 95.54 E	32.71322685 N	103.89941336 W	139.85@ 43.09	0.88
6200.00	1.92	64.99	6197.41	100.00	-101.42	103.69 N 99.20 E	32.71323111 N	103.89940142 W	143.50@ 43.73	0.74
6300.00	1.72	52.25	6297.36	100.00	-104.16	105.32 N 101.91 E	32.71323555 N	103.89939261 W	146.55@ 44.06	0.45
6400.00	1.62	5.20	6397.33	100.00	-105.53	107.64 N 103.22 E	32.71324193 N	103.89938830 W	149.14@ 43.80	1.34
6500.00	1.76	4.44	6497.28	100.00	-105.84	110.58 N 103.47 E	32.71325000 N	103.89938746 W	151.44@ 43.10	0.14
6600.00	1.94	350.05	6597.23	100.00	-105.73	113.78 N 103.30 E	32.71325880 N	103.89938798 W	153.67@ 42.24	0.50
6700.00	2.04	351.86	6697.17	100.00	-105.26	117.21 N 102.75 E	32.71326823 N	103.89938971 W	155.87@ 41.24	0.12
6800.00	1.91	348.70	6797.11	100.00	-104.76	120.60 N 102.17 E	32.71327757 N	103.89939154 W	158.07@ 40.27	0.17
6900.00	2.16	333.23	6897.05	100.00	-103.66	123.92 N 101.00 E	32.71328670 N	103.89939532 W	159.87@ 39.18	0.60
7000.00	1.79	349.59	6996.99	100.00	-102.59	127.14 N 99.87 E	32.71329556 N	103.89939896 W	161.67@ 38.15	0.67
7100.00	0.99	4.12	7096.96	100.00	-102.43	129.54 N 99.65 E	32.71330215 N	103.89939964 W	163.43@ 37.57	0.87
7200.00	0.58	319.21	7196.95	100.00	-102.19	130.78 N 99.38 E	32.71330558 N	103.89940050 W	164.26@ 37.23	0.71
7300.00	0.57	334.63	7296.95	100.00	-101.66	131.62 N 98.83 E	32.71330787 N	103.89940225 W	164.59@ 36.90	0.16
7400.00	0.85	18.97	7396.94	100.00	-101.71	132.77 N 98.86 E	32.71331103 N	103.89940215 W	165.53@ 36.67	0.60
7500.00	0.64	16.28	7496.93	100.00	-102.14	134.00 N 99.26 E	32.71331443 N	103.89940084 W	166.76@ 36.53	0.21
7600.00	0.95	44.11	7596.92	100.00	-102.89	135.14 N 99.99 E	32.71331753 N	103.89939844 W	168.11@ 36.50	0.49
7700.00	1.87	44.07	7696.89	100.00	-104.64	136.90 N 101.71 E	32.71332237 N	103.89939285 W	170.55@ 36.61	0.92
7800.00	1.63	44.93	7796.84	100.00	-106.83	139.08 N 103.84 E	32.71332834 N	103.89938586 W	173.57@ 36.75	0.24
7900.00	1.70	48.37	7896.80	100.00	-108.99	141.07 N 105.96 E	32.71333379 N	103.89937897 W	176.43@ 36.91	0.12
8000.00	1.57	38.02	7996.76	100.00	-110.98	143.14 N 107.91 E	32.71333944 N	103.89937259 W	179.26@ 37.01	0.32
8100.00	1.87	28.90	8096.72	100.00	-112.67	145.65 N 109.54 E	32.71334632 N	103.89936725 W	182.24@ 36.95	0.41

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
API#: 30-015-41525 Rtg: H&P 300

Page 04/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	SURVEY LATITUDE (deg)	SURVEY LONGITUDE (deg)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
** TIED INTO VAUGHN ENERGY GYRO SURVEYS AT 8124' MD.										
8124.00	2.05	24.48	8120.70	24.00	-113.05	146.38 N	32.71334833 N	103.89936605 W	183.05@ 36.90	0.98
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8172.00	2.11	33.97	8168.67	48.00	-113.93	147.89 N	32.71335248 N	103.89936326 W	184.77@ 36.83	0.73
8196.00	2.37	28.31	8192.65	24.00	-114.43	148.70 N	32.71335468 N	103.89936169 W	185.70@ 36.80	1.42
8227.00	2.02	20.82	8223.63	31.00	-114.95	149.77 N	32.71335763 N	103.89936005 W	186.86@ 36.73	1.46
8259.00	0.97	354.39	8255.62	32.00	-115.15	150.57 N	32.71335982 N	103.89935948 W	187.61@ 36.62	3.84
8290.00	2.81	248.34	8286.60	31.00	-114.41	150.55 N	32.71335978 N	103.89936186 W	187.15@ 36.45	10.38
8322.00	5.80	242.56	8318.51	32.00	-112.23	149.52 N	32.71335695 N	103.89936891 W	185.04@ 36.10	9.43
8353.00	8.35	244.67	8349.27	31.00	-108.77	147.83 N	32.71335236 N	103.89938007 W	181.67@ 35.54	8.27
8385.00	11.17	245.21	8380.81	32.00	-103.80	145.54 N	32.71334611 N	103.89939608 W	176.96@ 34.67	8.82
8416.00	13.98	247.36	8411.06	31.00	-97.56	142.83 N	32.71333876 N	103.89941622 W	171.26@ 33.49	9.19
8448.00	16.53	246.90	8441.93	32.00	-89.74	139.56 N	32.71332984 N	103.89944148 W	164.32@ 31.86	7.98
8479.00	18.64	245.10	8471.48	31.00	-81.11	135.74 N	32.71331945 N	103.89946933 W	156.65@ 29.94	7.03
8511.00	20.75	244.44	8501.61	32.00	-71.26	131.14 N	32.71330692 N	103.89950110 W	147.93@ 27.56	6.63
8542.00	23.39	244.19	8530.33	31.00	-60.65	126.10 N	32.71329316 N	103.89953529 W	138.77@ 24.68	8.52
8574.00	26.64	245.87	8559.33	32.00	-48.26	120.40 N	32.71327763 N	103.89957526 W	128.77@ 20.77	10.39
8605.00	29.90	246.17	8586.63	31.00	-34.72	114.43 N	32.71326138 N	103.89961895 W	118.89@ 15.74	10.53
8637.00	32.54	246.22	8613.99	32.00	-19.41	107.74 N	32.71324316 N	103.89966837 W	109.08@ 9.01	8.25
8668.00	35.61	246.22	8639.66	31.00	-3.37	100.73 N	32.71322409 N	103.89972014 W	100.74@ 0.68	9.90
8700.00	38.87	246.33	8665.13	32.00	14.52	92.94 N	32.71320288 N	103.89977787 W	94.40@ 349.91	10.19
8731.00	41.06	246.48	8688.89	31.00	32.94	84.98 N	32.71318118 N	103.89983730 W	91.82@ 337.74	7.07
8763.00	42.91	246.91	8712.68	32.00	52.77	76.51 N	32.71315813 N	103.89990133 W	93.90@ 324.56	5.85
8794.00	45.73	246.67	8734.86	31.00	72.86	67.97 N	32.71313489 N	103.89996615 W	100.74@ 312.44	9.11
8826.00	49.95	245.84	8756.33	32.00	94.76	58.42 N	32.71310887 N	103.90003685 W	112.42@ 301.31	13.33
8857.00	56.01	245.16	8774.99	31.00	117.49	48.15 N	32.71308091 N	103.90011017 W	127.97@ 292.10	19.63
8889.00	61.38	244.87	8791.61	32.00	142.51	36.61 N	32.71304945 N	103.90019087 W	147.93@ 284.33	16.80
8920.00	66.48	245.58	8805.23	31.00	168.03	24.95 N	32.71301768 N	103.90027320 W	170.44@ 278.42	16.58

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
API#: 30-015-41525 Rlg: H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Survey Latitude (deg)	Survey Longitude (deg)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
8952.00	72.37	245.98	8816.47	32.00	195.60	12.66 N 195.92 W	32.71298423 N	103.90036216 W	196.33@ 273.70	18.44
8983.00	77.38	244.94	8824.55	31.00	223.08	0.23 N 223.13 W	32.71295037 N	103.90045080 W	223.13@ 270.06	16.48
9015.00	82.39	244.49	8830.17	32.00	251.83	13.22 S 251.61 W	32.71291372 N	103.90054355 W	251.95@ 266.99	15.72
9033.00	85.21	244.45	8832.11	18.00	268.14	20.93 S 267.75 W	32.71289270 N	103.90059615 W	268.57@ 265.53	15.67
9064.00	88.99	244.90	8833.68	31.00	296.40	34.17 S 295.73 W	32.71285662 N	103.90068730 W	297.70@ 263.41	12.28
9127.00	90.13	247.59	8834.17	63.00	354.59	59.54 S 353.39 W	32.71278752 N	103.90087508 W	358.37@ 260.44	4.64
9222.00	93.39	250.81	8831.25	95.00	444.04	93.26 S 442.13 W	32.71269586 N	103.90116405 W	451.86@ 258.09	4.82
9316.00	93.03	255.18	8825.98	94.00	534.34	120.70 S 531.86 W	32.71262144 N	103.90145614 W	545.38@ 257.21	4.66
9411.00	89.78	258.54	8823.65	95.00	627.25	142.28 S 624.32 W	32.71256315 N	103.90175703 W	640.32@ 257.16	4.92
9505.00	89.52	261.98	8824.23	94.00	720.20	158.18 S 716.95 W	32.71252049 N	103.90205840 W	734.19@ 257.56	3.67
9600.00	90.04	263.77	8824.59	95.00	814.70	169.96 S 811.21 W	32.71248915 N	103.90236502 W	828.82@ 258.17	1.96
9694.00	90.22	264.62	8824.38	94.00	908.40	179.47 S 904.72 W	32.71246407 N	103.90266919 W	922.35@ 258.78	0.92
9789.00	90.40	266.64	8823.86	95.00	1003.25	186.71 S 999.44 W	32.71244523 N	103.90297724 W	1016.73@ 259.42	2.13
9883.00	89.52	268.64	8823.93	94.00	1097.22	190.58 S 1093.36 W	32.71243564 N	103.90328263 W	1109.84@ 260.11	2.32
9978.00	90.22	268.78	8824.15	95.00	1192.22	192.72 S 1188.33 W	32.71243082 N	103.90359144 W	1203.86@ 260.79	0.75
10072.00	90.04	268.40	8823.93	94.00	1286.22	195.03 S 1282.30 W	32.71242551 N	103.90389699 W	1297.05@ 261.35	0.45
10166.00	90.84	268.49	8823.21	94.00	1380.22	197.58 S 1376.26 W	32.71241954 N	103.90420252 W	1390.37@ 261.83	0.86
10261.00	91.89	267.11	8820.95	95.00	1475.17	201.23 S 1471.16 W	32.71241058 N	103.90451110 W	1484.86@ 262.21	1.82
10356.00	91.54	266.39	8818.10	95.00	1570.07	206.61 S 1565.97 W	32.71239683 N	103.90481941 W	1579.54@ 262.48	0.84
10450.00	91.98	267.19	8815.22	94.00	1663.97	211.87 S 1659.77 W	32.71238341 N	103.90512446 W	1673.24@ 262.73	0.97
10545.00	91.89	267.81	8812.01	95.00	1758.89	216.01 S 1754.63 W	32.71237308 N	103.90543291 W	1767.88@ 262.98	0.66
10639.00	90.92	267.41	8809.70	94.00	1852.84	219.93 S 1848.52 W	32.71236335 N	103.90573822 W	1861.56@ 263.22	1.12
10733.00	89.96	266.90	8808.98	94.00	1946.80	224.60 S 1942.40 W	32.71235157 N	103.90604350 W	1955.34@ 263.40	1.16
10828.00	89.87	267.89	8809.12	95.00	2041.78	228.91 S 2037.30 W	32.71234075 N	103.90635210 W	2050.12@ 263.59	1.05
10922.00	90.31	268.91	8808.98	94.00	2135.77	231.54 S 2131.26 W	32.71233458 N	103.90665763 W	2143.80@ 263.80	1.18
11017.00	90.57	269.21	8808.25	95.00	2230.77	233.10 S 2226.25 W	32.71233135 N	103.90696647 W	2238.42@ 264.02	0.42
11112.00	90.48	269.80	8807.38	95.00	2325.76	233.92 S 2321.24 W	32.71233014 N	103.90727532 W	2332.99@ 264.25	0.63
11206.00	91.01	268.83	8806.15	94.00	2419.74	235.04 S 2415.22 W	32.71232809 N	103.90758090 W	2426.63@ 264.44	1.18

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
API#: 30-015-41525 Rig: H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Survey Latitude (deg)	Survey Longitude (deg)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
11301.00	92.24	267.62	8803.46	95.00	2514.70	237.98 S 2510.13 W	32.71232105 N	103.90788951 W	2521.39@ 264.58	1.82
11395.00	92.07	268.21	8799.92	94.00	2608.62	241.40 S 2604.00 W	32.71231269 N	103.90819476 W	2615.17@ 264.70	0.65
11489.00	91.01	268.47	8797.40	94.00	2702.58	244.12 S 2697.93 W	32.71230625 N	103.90850016 W	2708.95@ 264.83	1.16
11584.00	90.92	268.51	8795.80	95.00	2797.57	246.62 S 2792.88 W	32.71230041 N	103.90880891 W	2803.75@ 264.95	0.10
11678.00	90.92	268.13	8794.29	94.00	2891.55	249.38 S 2886.83 W	32.71229387 N	103.90911439 W	2897.58@ 265.06	0.40
11773.00	90.66	268.94	8792.98	95.00	2986.54	251.81 S 2981.79 W	32.71228824 N	103.90942316 W	2992.40@ 265.17	0.90
11868.00	90.84	269.35	8791.74	95.00	3081.53	253.23 S 3076.77 W	32.71228539 N	103.90973198 W	3087.17@ 265.30	0.47
11962.00	89.96	269.29	8791.08	94.00	3175.52	254.34 S 3170.76 W	32.71228336 N	103.91003758 W	3180.95@ 265.41	0.94
12057.00	90.48	269.68	8790.72	95.00	3270.51	255.20 S 3265.76 W	32.71228205 N	103.91034644 W	3275.71@ 265.53	0.68
12151.00	91.10	270.24	8789.42	94.00	3364.48	255.26 S 3359.75 W	32.71228290 N	103.91065202 W	3369.43@ 265.66	0.89
12246.00	91.63	269.68	8787.16	95.00	3459.44	255.33 S 3454.72 W	32.71228376 N	103.91096080 W	3464.14@ 265.77	0.81
12340.00	91.45	269.28	8784.63	94.00	3553.39	256.18 S 3548.68 W	32.71228244 N	103.91126630 W	3557.92@ 265.87	0.47
12434.00	90.92	269.31	8782.69	94.00	3647.37	257.34 S 3642.65 W	32.71228029 N	103.91157184 W	3651.73@ 265.96	0.56
12529.00	90.31	268.69	8781.67	95.00	3742.36	258.99 S 3737.63 W	32.71227677 N	103.91188066 W	3746.59@ 266.04	0.92
12623.00	89.78	268.27	8781.59	94.00	3836.36	261.49 S 3831.60 W	32.71227095 N	103.91218620 W	3840.51@ 266.10	0.72
12717.00	91.36	268.81	8780.66	94.00	3930.35	263.88 S 3925.56 W	32.71226539 N	103.91249172 W	3934.42@ 266.15	1.78
12812.00	91.36	267.78	8778.40	95.00	4025.32	266.71 S 4020.49 W	32.71225866 N	103.91280040 W	4029.33@ 266.20	1.08
12906.00	91.19	269.45	8776.31	94.00	4119.29	268.98 S 4114.44 W	32.71225344 N	103.91310587 W	4123.22@ 266.26	1.78
13001.00	90.22	269.93	8775.14	95.00	4214.27	269.49 S 4209.43 W	32.71225306 N	103.91341471 W	4218.04@ 266.34	1.14
13095.00	91.54	270.64	8773.70	94.00	4308.22	269.03 S 4303.41 W	32.71225537 N	103.91372027 W	4311.81@ 266.42	1.59
13190.00	92.77	270.16	8770.13	95.00	4403.12	268.36 S 4398.34 W	32.71225822 N	103.91402890 W	4406.52@ 266.51	1.39
13284.00	91.45	270.00	8766.67	94.00	4497.03	268.23 S 4492.27 W	32.71225960 N	103.91433429 W	4500.27@ 266.58	1.41
13379.00	90.13	269.68	8765.36	95.00	4592.00	268.50 S 4587.26 W	32.71225991 N	103.91464313 W	4595.11@ 266.65	1.43
13473.00	91.10	268.80	8764.35	94.00	4685.99	269.74 S 4681.25 W	32.71225750 N	103.91494871 W	4689.01@ 266.70	1.39
13568.00	92.51	267.59	8761.35	95.00	4780.93	272.73 S 4776.15 W	32.71225031 N	103.91525729 W	4783.93@ 266.73	1.96
13640.00	92.42	267.65	8758.26	72.00	4852.85	275.72 S 4848.02 W	32.71224288 N	103.91549100 W	4855.85@ 266.74	0.15
STRAIGHT LINE PROJECTION TO BIT DEPTH AT 13726' MD.										
13726.00	92.42	267.65	8754.63	86.00	4938.76	279.25 S 4933.87 W	32.71223412 N	103.91577016 W	4941.77@ 266.76	0.00

PathFinder – a Schlumberger company

Survey Report

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DEVON ENERGY PRODUCTION COMPANY, L.P.
SHAULA "30" FEDERAL 4H
EDDY COUNTY, NM
API#: 30-015-41525 Rig: H&P 300

** 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.