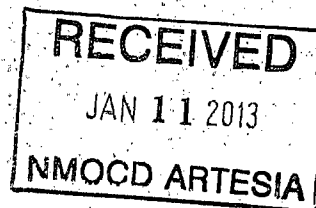




A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612



May 30, 2012

Devon Energy Production Co., L. P.
20 North Broadway
Oklahoma City, OK 73102-8260

15-40098

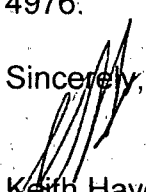
Attn: Mark Cooper

Re: **Regulus 26 Federal No. 001H**

Please find enclosed a copy of the survey from 0' to 8600' ran on the above referenced well.

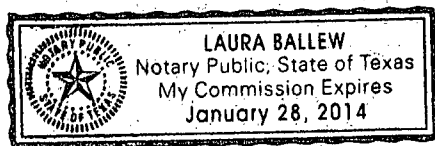
If I can be of any further service please do not hesitate to call me at 800-606-4976.

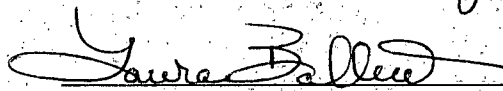
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 1st day of June, A.D., 2012, by Keith Havelka.





Laura Ballew
Notary Public, State of Texas



Company: DEVON ENERGY PRODUCTION CO. LP

Lease/Well: REGULUS 26 FEDERAL /No. 001H

Rig Name: H&P #300

State/County: NEW MEXICO/EDDY

Latitude: 32.64

GRID North is 0.27 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB = 25

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: eline.ut

Minimum Curvature Method

Report Date/Time: 5/30/2012 / 13:56

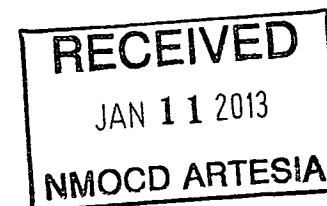
VAUGHN ENERGY SERVICES

CONWAY, ARKANSAS

501-730-0602

SURVEYOR: SLAYTON THOMAS

REGULUS 26 FEDERAL NO. 001H / API 30-015-40098



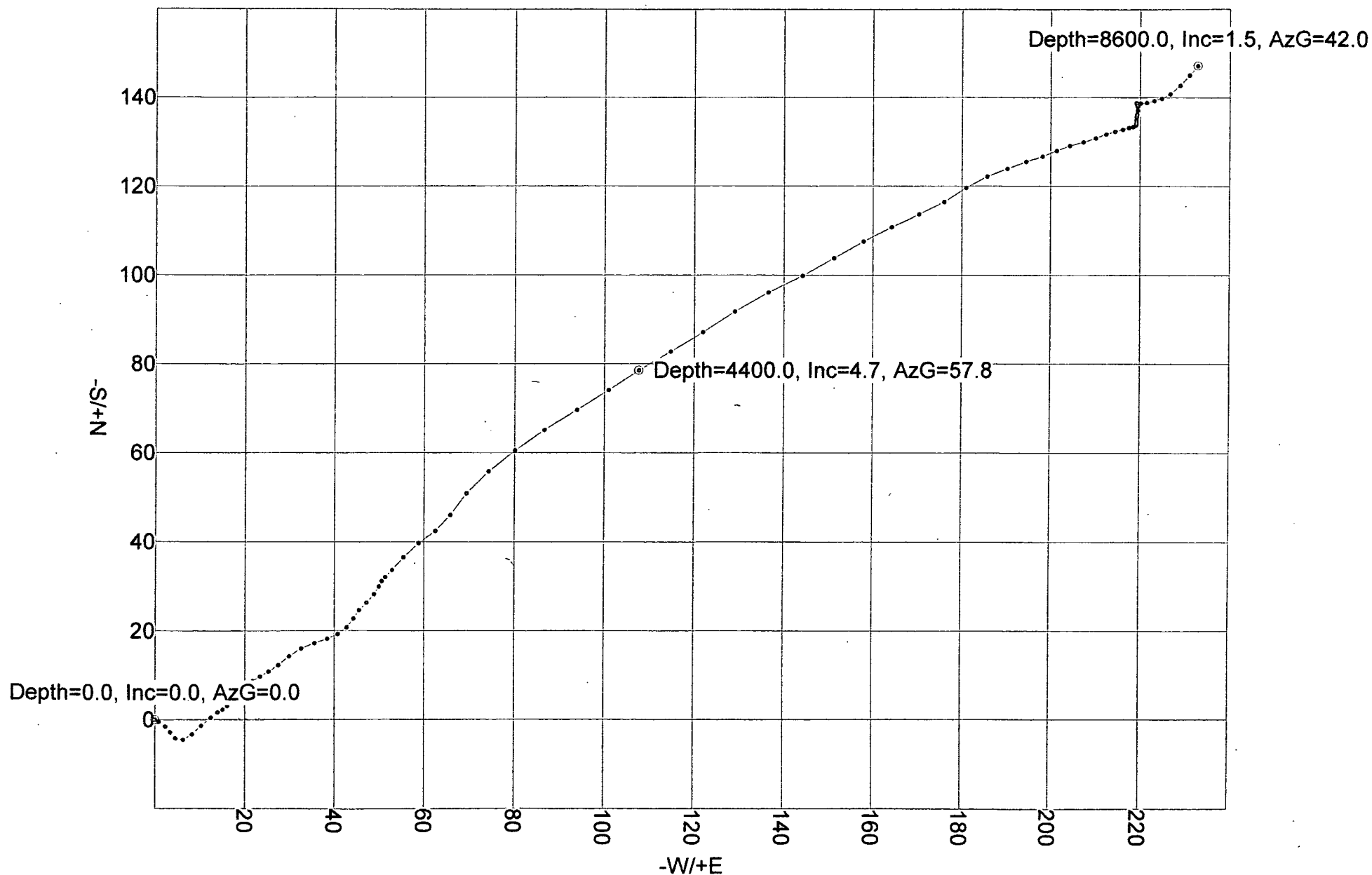
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	1.07	116.80	99.99	-0.42	0.84	-0.42	0.94	116.80	1.07
200.00	1.02	136.91	199.98	-1.50	2.28	-1.50	2.73	123.26	0.37
300.00	0.94	144.75	299.96	-2.82	3.37	-2.82	4.39	129.95	0.16
400.00	1.08	135.13	399.95	-4.16	4.50	-4.16	6.13	132.70	0.22
500.00	1.27	73.06	499.93	-4.50	6.22	-4.50	7.68	125.86	1.22
600.00	1.49	45.50	599.90	-3.26	8.21	-3.26	8.84	111.66	0.69
700.00	1.74	47.26	699.86	-1.32	10.25	-1.32	10.34	97.33	0.25
800.00	1.45	52.63	799.82	0.48	12.37	0.48	12.38	87.80	0.33
900.00	0.75	46.78	899.80	1.69	13.85	1.69	13.95	83.05	0.71
1000.00	0.76	72.72	999.80	2.33	14.96	2.33	15.14	81.14	0.34
1100.00	0.85	34.70	1099.79	3.14	16.02	3.14	16.32	78.91	0.53
1200.00	0.99	41.62	1199.77	4.39	17.01	4.39	17.57	75.52	0.18
1300.00	0.91	57.81	1299.76	5.46	18.26	5.46	19.06	73.35	0.28
1400.00	0.75	44.79	1399.75	6.35	19.39	6.35	20.41	71.86	0.24
1500.00	1.03	45.05	1499.74	7.46	20.50	7.46	21.81	70.01	0.28
1600.00	1.02	50.94	1599.72	8.65	21.82	8.65	23.48	68.37	0.11
1700.00	1.19	61.31	1699.70	9.71	23.43	9.71	25.36	67.48	0.26
1800.00	1.35	60.08	1799.68	10.80	25.36	10.80	27.56	66.93	0.16

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	1.66	52.06	1899.64	12.28	27.52	12.28	30.14	65.95	0.38
2000.00	1.94	49.60	1999.59	14.27	29.96	14.27	33.19	64.53	0.29
2100.00	1.75	65.55	2099.54	16.00	32.64	16.00	36.35	63.88	0.55
2200.00	1.89	70.14	2199.49	17.19	35.58	17.19	39.51	64.21	0.20
2300.00	1.55	71.27	2299.45	18.19	38.40	18.19	42.49	64.66	0.34
2400.00	1.40	60.78	2399.42	19.22	40.75	19.22	45.05	64.75	0.31
2500.00	1.48	43.55	2499.38	20.75	42.70	20.75	47.48	64.09	0.44
2600.00	1.46	30.17	2599.35	22.79	44.23	22.79	49.76	62.75	0.34
2700.00	1.12	39.56	2699.33	24.64	45.49	24.64	51.74	61.56	0.40
2800.00	1.63	47.19	2799.30	26.36	47.16	26.36	54.02	60.80	0.55
2900.00	1.31	34.99	2899.26	28.26	48.86	28.26	56.44	59.95	0.45
3000.00	1.03	26.37	2999.24	30.00	49.91	30.00	58.23	58.99	0.33
3100.00	0.58	29.39	3099.23	31.24	50.56	31.24	59.43	58.29	0.45
3200.00	0.80	50.55	3199.23	32.12	51.34	32.12	60.56	57.97	0.34
3300.00	1.77	40.64	3299.20	33.74	52.89	33.74	62.73	57.46	0.99
3400.00	2.61	42.21	3399.13	36.60	55.42	36.60	66.42	56.56	0.84
3500.00	2.72	49.89	3499.02	39.81	58.76	39.81	70.98	55.88	0.37
3600.00	2.51	56.88	3598.91	42.53	62.41	42.53	75.53	55.73	0.38
3700.00	3.19	31.50	3698.79	46.11	65.71	46.11	80.27	54.94	1.42
3800.00	3.77	39.81	3798.61	51.01	69.27	51.01	86.02	53.63	0.77
3900.00	4.15	49.50	3898.37	55.88	74.13	55.88	92.83	52.99	0.77
4000.00	4.54	53.57	3998.08	60.59	80.07	60.59	100.41	52.88	0.50
4100.00	4.69	56.27	4097.76	65.21	86.65	65.21	108.45	53.04	0.26
4200.00	5.06	59.77	4197.40	69.70	93.85	69.70	116.90	53.40	0.47
4300.00	4.59	55.51	4297.04	74.18	100.96	74.18	125.28	53.69	0.59
4400.00	4.71	57.76	4396.72	78.63	107.73	78.63	133.37	53.87	0.22
4500.00	4.71	60.52	4496.38	82.85	114.78	82.85	141.55	54.18	0.23
4600.00	4.90	57.68	4596.03	87.15	121.96	87.15	149.89	54.45	0.31
4700.00	4.93	56.18	4695.66	91.82	129.13	91.82	158.45	54.58	0.13
4800.00	4.98	63.70	4795.29	96.14	136.60	96.14	167.03	54.86	0.65
4900.00	4.67	63.64	4894.93	99.87	144.14	99.87	175.35	55.28	0.31
5000.00	4.65	57.32	4994.60	103.86	151.20	103.86	183.43	55.51	0.51
5100.00	4.18	64.94	5094.31	107.60	157.91	107.60	191.09	55.73	0.75
5200.00	3.95	61.12	5194.05	110.81	164.24	110.81	198.12	55.99	0.36
5300.00	3.79	67.44	5293.83	113.74	170.30	113.74	204.79	56.26	0.46
5400.00	3.55	60.76	5393.62	116.52	176.05	116.52	211.11	56.50	0.49
5500.00	3.20	53.13	5493.45	119.70	180.98	119.70	216.98	56.52	0.57
5600.00	2.99	71.04	5593.31	122.22	185.68	122.22	222.29	56.65	0.98
5700.00	2.63	66.40	5693.19	123.99	190.25	123.99	227.09	56.91	0.43

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	2.48	72.39	5793.09	125.56	194.41	125.56	231.44	57.14	0.31
5900.00	2.00	72.11	5893.01	126.75	198.13	126.75	235.21	57.39	0.48
6000.00	1.96	63.87	5992.95	128.04	201.32	128.04	238.59	57.54	0.29
6100.00	1.78	77.01	6092.90	129.14	204.37	129.14	241.75	57.71	0.46
6200.00	1.85	73.58	6192.85	129.94	207.43	129.94	244.77	57.94	0.13
6300.00	1.50	70.38	6292.80	130.84	210.22	130.84	247.61	58.10	0.36
6400.00	1.32	67.54	6392.77	131.72	212.51	131.72	250.02	58.21	0.20
6500.00	1.04	81.04	6492.75	132.30	214.48	132.30	252.00	58.33	0.39
6600.00	1.01	69.11	6592.74	132.76	216.20	132.76	253.70	58.45	0.22
6700.00	0.54	83.39	6692.73	133.12	217.49	133.12	254.99	58.53	0.51
6800.00	0.60	69.09	6792.72	133.36	218.44	133.36	255.93	58.59	0.15
6900.00	0.37	29.61	6892.72	133.83	219.09	133.83	256.73	58.58	0.39
7000.00	0.18	332.71	6992.72	134.25	219.17	134.25	257.02	58.51	0.31
7100.00	0.53	8.10	7092.72	134.85	219.17	134.85	257.33	58.40	0.40
7200.00	0.35	357.95	7192.71	135.61	219.22	135.61	257.78	58.26	0.20
7300.00	0.34	18.04	7292.71	136.19	219.30	136.19	258.15	58.16	0.12
7400.00	0.68	5.69	7392.71	137.06	219.45	137.06	258.74	58.01	0.36
7500.00	0.45	351.39	7492.70	138.04	219.45	138.04	259.26	57.83	0.26
7600.00	0.25	311.92	7592.70	138.58	219.23	138.58	259.35	57.70	0.31
7700.00	0.06	90.64	7692.70	138.72	219.12	138.72	259.34	57.66	0.30
7800.00	0.18	102.99	7792.70	138.69	219.32	138.69	259.49	57.69	0.13
7900.00	0.70	86.93	7892.70	138.68	220.09	138.68	260.14	57.78	0.53
8000.00	0.89	81.06	7992.69	138.84	221.46	138.84	261.38	57.92	0.21
8100.00	1.06	71.41	8092.67	139.25	223.10	139.25	262.99	58.03	0.23
8200.00	0.93	72.86	8192.66	139.78	224.75	139.78	264.67	58.12	0.13
8300.00	1.57	55.49	8292.63	140.79	226.65	140.79	266.82	58.15	0.74
8400.00	1.86	42.99	8392.59	142.76	228.88	142.76	269.75	58.05	0.47
8500.00	1.73	40.56	8492.54	145.09	230.97	145.09	272.76	57.86	0.15
8600.00	1.46	41.98	8592.50	147.18	232.80	147.18	275.43	57.70	0.27



VAUGHN ENERGY SERVICES
CONWAY, ARKANSAS
501-730-0602
SURVEYOR: SLAYTON THOMAS
REGULUS 26 FEDERAL NO. 001H / API 30-015-40098



VES SURVEY DATE: 05/21/2012

Pathfinder

6213 WCR. 112
Midland, Texas. 79706
Tel. (432)687-1647
Fax (432)687-1544



June 4, 2012

Devon Energy
20 N. Broadway
Oklahoma City, OK

RE: Devon Energy
Regulus 26 Federal #1H
API: 30-015-40098
Eddy County, NM
RIG: H&P 300
FIELD: Lusk; Bone Spring (West)
PES FILE NO.: 12MLD0161

To whom it may concern:

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
1 – Original survey report
2 – Survey report copies

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 (432) 687-1647

Sincerely,

JUAN ALCOCER
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh



A Schlumberger Company

DIRECTIONAL SURVEY REPORT

DEVON ENERGY

REGULUS 26 FEDERAL #1H

EDDY COUNTY, NEW MEXICO

RECEIVED

JAN 11 2013

NMOCD ARTESIA

PREPARED BY: JUAN ALCOCER

Pathfinder

6213 WCR, 112
Midland, Texas, 79706
Tel. (432)687-1647
Fax (432)687-1544

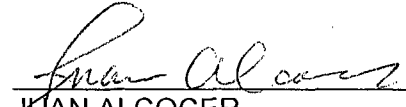


DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) ALEX CASTILLO
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 23-MAY-12 TO 31-MAY-12
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: GAMMA-RAY
8. COMPLETE IDENTIFICATION OF WELL:

DEVON ENERGY
REGULUS 26 FEDERAL #1H
EDDY COUNTY, NM
RIG: H&P 300
9. SURVEY CERTIFIED FROM: 8,735 TO 13,778 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 4,613.02 FEET ON A BEARING OF 269.46 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 13,855 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



JUAN ALCOCER
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 05/23/2012
Date Completed: 05/31/2012

DEVON ENERGY CORP.
REGULUS 26 FEDERAL #1H/ 30-015-40098
EDDY COUNTY, NM
Rig:H&P 300
PathFinder Office Supervisor: JUAN ALCOCER
PathFinder Field Engineers:A.CASTILLO
T.RODDIN

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.38.15.6596 N LON:103.49.56.7280 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 695529.8300 Y: 596083.5600
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.35° EAST TO GRID
Vertical Section Plane: 269.40
Survey Vert. Reference: 26.00' Rotary Table To Ground
Altitude:3498.30' Ground To MSL

Measured Depth	13855.00	(feet)
Inclination	90.04	(deg)
Azimuth	269.44	(deg)
True Vertical Depth	9156.06	(feet)
Vertical Section	4613.02	(feet)
Survey X cord	690917.01	(feet)
Survey Y cord	593040.01	(feet)
Survey Lat	32.62937654 N	(deg)
Survey Lon	103.84745439 W	(deg)
Rectangular Corr. N/S	43.55 S	(feet)
Rectangular Corr. E/W	4612.82 W	(feet)
Closure Distance	4613.02	(feet)
Direction of Closure	269.46	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORP.
REGULUS 26 FEDERAL #1H/ 30-015-40098

EDDY COUNTY, NM

Rig:H&P 300

PathFinder Office Supervisor: JUAN ALCOCER

PathFinder Field Engineers: A.CASTILLO

T.RODDIN

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.38.15.6596 N LON:103.49.56.7280 W

GRID Reference:NAD83 new mexico east Transverse Mercator

Ref GRID Coord: X: 695529.8300 Y: 596083.5600

North Aligned To:GRID NORTH

Total Magnetic Correction: 7.35° EAST TO GRID

Vertical Section Plane: 269.40

Survey Vert. Reference: 26.00' Rotary Table To Ground

Altitude:3498.30' Ground To MSL

Survey Calculations by RX5 V6.04A using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
THE FOLLOWING ARE VAUGHN ENERGY SERVICE GYRO SURVEYS.										
100.00	1.07	116.80	99.99	100.00	-0.83	0.42 S	0.84 E	0.94@	116.67	1.07
200.00	1.02	136.91	199.98	100.00	-2.26	1.49 S	2.28 E	2.72@	123.21	0.37
300.00	0.94	144.75	299.96	100.00	-3.33	2.81 S	3.36 E	4.38@	129.92	0.16
400.00	1.08	135.13	399.95	100.00	-4.45	4.15 S	4.50 E	6.12@	132.69	0.22
500.00	1.27	73.06	499.93	100.00	-6.18	4.49 S	6.22 E	7.68@	125.83	1.22
600.00	1.49	45.50	599.90	100.00	-8.18	3.26 S	8.21 E	8.83@	111.65	0.69
700.00	1.74	47.26	699.86	100.00	-10.24	1.32 S	10.25 E	10.34@	97.33	0.25
800.00	1.45	52.63	799.82	100.00	-12.38	0.48 N	12.37 E	12.38@	87.78	0.33
900.00	0.75	46.78	899.80	100.00	-13.87	1.70 N	13.86 E	13.96@	83.02	0.71
1000.00	0.76	72.72	999.80	100.00	-14.99	2.34 N	14.97 E	15.15@	81.11	0.34
1100.00	0.85	34.70	1099.79	100.00	-16.05	3.15 N	16.02 E	16.33@	78.88	0.53
1200.00	0.99	41.62	1199.77	100.00	-17.06	4.40 N	17.02 E	17.58@	75.49	0.18
1300.00	0.91	57.81	1299.76	100.00	-18.32	5.47 N	18.26 E	19.07@	73.32	0.28
1400.00	0.75	44.79	1399.75	100.00	-19.46	6.36 N	19.40 E	20.41@	71.85	0.25
1500.00	1.03	45.05	1499.74	100.00	-20.57	7.46 N	20.49 E	21.81@	70.00	0.28
1600.00	1.02	50.94	1599.72	100.00	-21.91	8.66 N	21.82 E	23.48@	68.36	0.11
1700.00	1.19	61.31	1699.70	100.00	-23.52	9.72 N	23.42 E	25.36@	67.47	0.26
1800.00	1.35	60.08	1799.68	100.00	-25.47	10.80 N	25.35 E	27.56@	66.93	0.16
1900.00	1.66	52.06	1899.64	100.00	-27.65	12.28 N	27.52 E	30.13@	65.95	0.37
2000.00	1.94	49.60	1999.59	100.00	-30.10	14.27 N	29.95 E	33.17@	64.53	0.29
2100.00	1.75	65.55	2099.54	100.00	-32.79	16.00 N	32.63 E	36.34@	63.88	0.54
2200.00	1.89	70.14	2199.49	100.00	-35.75	17.19 N	35.57 E	39.50@	64.21	0.20
2300.00	1.55	71.27	2299.45	100.00	-38.59	18.18 N	38.40 E	42.49@	64.66	0.34
2400.00	1.40	60.78	2399.41	100.00	-40.95	19.21 N	40.75 E	45.05@	64.76	0.31
2500.00	1.48	43.55	2499.38	100.00	-42.92	20.75 N	42.70 E	47.48@	64.09	0.44

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORP.
 REGULUS 26 FEDERAL #1H/ 30-015-40098
 EDDY COUNTY, NM
 RIG:H&P 300

Page 02/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
2600.00	1.46	30.17	2599.35	100.00	-44.47	22.78 N	44.23 E	49.76@	62.75	0.34
2700.00	1.12	39.56	2699.33	100.00	-45.75	24.64 N	45.50 E	51.74@	61.56	0.40
2800.00	1.63	47.19	2799.30	100.00	-47.44	26.36 N	47.16 E	54.03@	60.80	0.54
2900.00	1.31	34.99	2899.26	100.00	-49.15	28.26 N	48.86 E	56.45@	59.96	0.45
3000.00	1.03	26.37	2999.24	100.00	-50.23	30.00 N	49.92 E	58.24@	58.99	0.33
3100.00	0.58	29.39	3099.23	100.00	-50.89	31.25 N	50.56 E	59.44@	58.28	0.45
3200.00	0.80	50.55	3199.23	100.00	-51.69	32.13 N	51.35 E	60.58@	57.96	0.33
3300.00	1.77	40.64	3299.20	100.00	-53.25	33.75 N	52.90 E	62.75@	57.46	0.99
3400.00	2.61	42.21	3399.12	100.00	-55.81	36.61 N	55.43 E	66.43@	56.56	0.84
3500.00	2.72	49.89	3499.02	100.00	-59.19	39.82 N	58.78 E	71.00@	55.88	0.37
3600.00	2.51	56.88	3598.91	100.00	-62.87	42.55 N	62.43 E	75.55@	55.72	0.38
3700.00	3.19	31.50	3698.79	100.00	-66.19	46.12 N	65.71 E	80.28@	54.94	1.42
3800.00	3.77	39.81	3798.61	100.00	-69.80	51.01 N	69.27 E	86.03@	53.63	0.77
3900.00	4.15	49.50	3898.37	100.00	-74.71	55.89 N	74.13 E	92.84@	52.99	0.77
4000.00	4.54	53.57	3998.08	100.00	-80.69	60.59 N	80.06 E	100.41@	52.88	0.50
4100.00	4.69	56.27	4097.76	100.00	-87.33	65.21 N	86.65 E	108.45@	53.04	0.26
4200.00	5.06	59.77	4197.40	100.00	-94.58	69.70 N	93.86 E	116.91@	53.40	0.48
4300.00	4.59	55.51	4297.04	100.00	-101.74	74.19 N	100.97 E	125.29@	53.69	0.59
4400.00	4.71	57.76	4396.71	100.00	-108.56	78.64 N	107.74 E	133.39@	53.87	0.22
4500.00	4.71	60.52	4496.38	100.00	-115.65	82.85 N	114.78 E	141.56@	54.18	0.23
4600.00	4.90	57.68	4596.03	100.00	-122.87	87.16 N	121.97 E	149.91@	54.45	0.30
4700.00	4.93	56.18	4695.66	100.00	-130.10	91.83 N	129.15 E	158.47@	54.58	0.13
4800.00	4.98	63.70	4795.29	100.00	-137.61	96.15 N	136.61 E	167.05@	54.86	0.65
4900.00	4.67	63.64	4894.93	100.00	-145.18	99.88 N	144.15 E	175.37@	55.28	0.31
5000.00	4.65	57.32	4994.60	100.00	-152.29	103.87 N	151.21 E	183.45@	55.51	0.51
5100.00	4.18	64.94	5094.30	100.00	-159.04	107.61 N	157.92 E	191.10@	55.73	0.75
5200.00	3.95	61.12	5194.05	100.00	-165.39	110.81 N	164.24 E	198.12@	55.99	0.35
5300.00	3.79	67.44	5293.83	100.00	-171.49	113.75 N	170.30 E	204.80@	56.26	0.46

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORP.
 REGULUS 26 FEDERAL #1H/ 30-015-40098
 EDDY COUNTY, NM
 RIG:H&P 300

Page 03/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
5400.00	3.55	60.76	5393.62	100.00	-177.27	116.53 N	176.06 E	211.13@	56.50	0.49
5500.00	3.20	53.13	5493.45	100.00	-182.24	119.71 N	180.99 E	217.00@	56.52	0.57
5600.00	2.99	71.04	5593.30	100.00	-186.96	122.23 N	185.69 E	222.31@	56.64	0.98
5700.00	2.63	66.40	5693.18	100.00	-191.55	124.00 N	190.26 E	227.10@	56.91	0.43
5800.00	2.48	72.39	5793.08	100.00	-195.73	125.57 N	194.43 E	231.45@	57.14	0.31
5900.00	2.00	72.11	5893.01	100.00	-199.46	126.76 N	198.15 E	235.23@	57.39	0.48
6000.00	1.96	63.87	5992.95	100.00	-202.67	128.05 N	201.34 E	238.62@	57.54	0.29
6100.00	1.78	77.01	6092.90	100.00	-205.73	129.16 N	204.39 E	241.78@	57.71	0.46
6200.00	1.85	73.58	6192.85	100.00	-208.80	129.96 N	207.45 E	244.80@	57.93	0.13
6300.00	1.50	70.38	6292.80	100.00	-211.59	130.86 N	210.24 E	247.63@	58.10	0.36
6400.00	1.32	67.54	6392.77	100.00	-213.90	131.74 N	212.53 E	250.05@	58.21	0.19
6500.00	1.04	81.04	6492.75	100.00	-215.87	132.32 N	214.49 E	252.02@	58.33	0.39
6600.00	1.01	69.11	6592.74	100.00	-217.59	132.77 N	216.21 E	253.73@	58.45	0.21
6700.00	0.54	83.39	6692.73	100.00	-218.89	133.14 N	217.51 E	255.02@	58.53	0.50
6800.00	0.60	69.09	6792.72	100.00	-219.85	133.38 N	218.46 E	255.96@	58.59	0.15
6900.00	0.37	29.61	6892.72	100.00	-220.50	133.85 N	219.11 E	256.76@	58.58	0.39
7000.00	0.18	332.71	6992.72	100.00	-220.59	134.27 N	219.20 E	257.05@	58.51	0.31
7100.00	0.53	8.10	7092.71	100.00	-220.59	134.87 N	219.19 E	257.36@	58.40	0.40
7200.00	0.35	357.95	7192.71	100.00	-220.65	135.63 N	219.25 E	257.81@	58.26	0.20
7300.00	0.34	18.04	7292.71	100.00	-220.74	136.22 N	219.33 E	258.19@	58.16	0.12
7400.00	0.68	5.69	7392.71	100.00	-220.90	137.09 N	219.48 E	258.78@	58.01	0.35
7500.00	0.45	351.39	7492.70	100.00	-220.91	138.07 N	219.48 E	259.29@	57.83	0.27
7600.00	0.25	311.92	7592.70	100.00	-220.70	138.60 N	219.26 E	259.39@	57.70	0.30
7700.00	0.06	90.64	7692.70	100.00	-220.59	138.75 N	219.15 E	259.38@	57.66	0.30
7800.00	0.18	102.99	7792.70	100.00	-220.79	138.71 N	219.35 E	259.53@	57.69	0.12
7900.00	0.70	86.93	7892.69	100.00	-221.56	138.71 N	220.12 E	260.18@	57.78	0.53
8000.00	0.89	81.06	7992.69	100.00	-222.93	138.86 N	221.49 E	261.42@	57.91	0.21
8100.00	1.06	71.41	8092.67	100.00	-224.58	139.28 N	223.14 E	263.04@	58.03	0.24

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORP.
 REGULUS 26 FEDERAL #1H/ 30-015-40098
 EDDY COUNTY, NM
 RIG:H&P 300

Page 04/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
8200.00	0.93	72.86	8192.66	100.00	-226.24	139.81 N	224.79 E	264.72@	58.12	0.13
8300.00	1.57	55.49	8292.63	100.00	-228.16	140.83 N	226.69 E	266.88@	58.15	0.74
8400.00	1.86	42.99	8392.59	100.00	-230.41	142.79 N	228.93 E	269.81@	58.05	0.47
8500.00	1.73	40.56	8492.54	100.00	-232.52	145.13 N	231.02 E	272.82@	57.86	0.15
** TIED INTO VAUGHN ENERGY SERVICE GYRO SURVEY @ 8600.00'MD.										
8600.00	1.46	41.98	8592.50	100.00	-234.38	147.22 N	232.85 E	275.49@	57.70	0.27
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8735.00	12.84	261.07	8726.46	135.00	-220.63	146.16 N	219.11 E	263.39@	56.29	10.37
8766.00	14.95	262.42	8756.55	31.00	-213.25	145.10 N	211.75 E	256.69@	55.58	6.89
8798.00	16.62	253.71	8787.35	32.00	-204.75	143.27 N	203.26 E	248.68@	54.82	9.04
8829.00	19.26	253.59	8816.84	31.00	-195.56	140.59 N	194.10 E	239.66@	54.08	8.52
8861.00	21.72	253.67	8846.81	32.00	-184.78	137.43 N	183.35 E	229.14@	53.15	7.69
8892.00	24.18	253.93	8875.35	31.00	-173.14	134.06 N	171.74 E	217.87@	52.03	7.94
8924.00	25.85	254.43	8904.35	32.00	-160.08	130.37 N	158.73 E	205.40@	50.60	5.26
8955.00	28.05	255.07	8931.98	31.00	-146.49	126.68 N	145.17 E	192.67@	48.89	7.16
8987.00	31.04	254.24	8959.82	32.00	-131.23	122.50 N	129.96 E	178.59@	46.69	9.43
9018.00	34.47	254.50	8985.88	31.00	-115.04	117.98 N	113.81 E	163.93@	43.97	11.07
9050.00	36.67	254.85	9011.91	32.00	-97.03	113.06 N	95.86 E	148.23@	40.29	6.91
9082.00	38.69	255.29	9037.24	32.00	-78.08	108.03 N	76.96 E	132.64@	35.47	6.37
9113.00	40.80	255.47	9061.07	31.00	-58.85	103.03 N	57.78 E	118.12@	29.28	6.82
9145.00	43.70	254.94	9084.76	32.00	-38.00	97.53 N	36.98 E	104.30@	20.76	9.13
9176.00	46.96	255.82	9106.55	31.00	-16.61	91.97 N	15.65 E	93.29@	9.66	10.71
9208.00	50.56	256.87	9127.64	32.00	6.83	86.30 N	7.73 W	86.64@	354.88	11.52
9239.00	53.20	257.66	9146.77	31.00	30.67	80.92 N	31.52 W	86.84@	338.72	8.75
9271.00	56.72	257.75	9165.14	32.00	56.32	75.35 N	57.11 W	94.54@	322.84	11.00
9302.00	60.23	257.40	9181.35	31.00	82.18	69.66 N	82.91 W	108.29@	310.04	11.36
9334.00	64.19	258.01	9196.27	32.00	109.90	63.63 N	110.57 W	127.57@	299.92	12.49
9367.00	67.71	258.19	9209.71	33.00	139.44	57.42 N	140.05 W	151.37@	292.29	10.68

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORP.
REGULUS 26 FEDERAL #1H/ 30-015-40098
EDDY COUNTY, NM
RIG:H&P 300

Page 05/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
9399.00	71.40	259.16	9220.89	32.00	168.90	51.54 N	169.45 W	177.11@	286.92	11.88
9430.00	74.57	259.68	9229.96	31.00	198.09	46.10 N	198.58 W	203.86@	283.07	10.35
9462.00	78.52	259.77	9237.40	32.00	228.76	40.55 N	229.20 W	232.76@	280.03	12.35
9493.00	82.22	259.24	9242.59	31.00	258.86	34.98 N	259.25 W	261.59@	277.68	12.05
9524.00	86.09	258.45	9245.75	31.00	289.18	29.02 N	289.50 W	290.95@	275.72	12.74
9556.00	89.60	258.37	9246.95	32.00	320.56	22.59 N	320.82 W	321.61@	274.03	10.97
9618.00	89.43	259.07	9247.47	62.00	381.49	10.46 N	381.62 W	381.76@	271.57	1.16
9713.00	89.08	260.30	9248.71	95.00	475.11	6.54 S	475.07 W	475.12@	269.21	1.35
9807.00	89.60	262.06	9249.79	94.00	568.14	20.96 S	567.95 W	568.34@	267.89	1.95
9902.00	90.84	263.82	9249.43	95.00	662.53	32.63 S	662.22 W	663.03@	267.18	2.27
9996.00	92.33	266.54	9246.83	94.00	756.23	40.53 S	755.84 W	756.93@	266.93	3.30
10091.00	92.33	267.95	9242.96	95.00	851.08	45.09 S	850.65 W	851.85@	266.97	1.48
10185.00	91.45	269.26	9239.86	94.00	945.01	47.38 S	944.57 W	945.76@	267.13	1.68
10280.00	91.45	270.32	9237.46	95.00	1039.98	47.72 S	1039.54 W	1040.63@	267.37	1.12
10375.00	91.28	270.23	9235.20	95.00	1134.94	47.27 S	1134.51 W	1135.49@	267.61	0.20
10469.00	92.33	270.32	9232.23	94.00	1228.88	46.82 S	1228.46 W	1229.35@	267.82	1.12
10564.00	91.54	271.02	9229.03	95.00	1323.80	45.71 S	1323.40 W	1324.19@	268.02	1.11
10658.00	90.48	270.58	9227.37	94.00	1417.76	44.39 S	1417.37 W	1418.07@	268.21	1.22
10753.00	91.54	270.93	9225.70	95.00	1512.72	43.14 S	1512.35 W	1512.96@	268.37	1.18
10847.00	91.63	271.29	9223.10	94.00	1606.64	41.32 S	1606.29 W	1606.83@	268.53	0.39
10942.00	91.36	271.81	9220.62	95.00	1701.54	38.75 S	1701.23 W	1701.67@	268.70	0.62
11036.00	91.71	270.14	9218.10	94.00	1795.47	37.15 S	1795.18 W	1795.56@	268.81	1.81
11131.00	91.89	269.62	9215.12	95.00	1890.42	37.35 S	1890.13 W	1890.50@	268.87	0.58
11225.00	92.33	270.23	9211.65	94.00	1984.35	37.48 S	1984.06 W	1984.42@	268.92	0.80
11320.00	91.98	270.14	9208.08	95.00	2079.27	37.17 S	2079.00 W	2079.33@	268.98	0.38
11415.00	91.80	270.49	9204.95	95.00	2174.21	36.65 S	2173.94 W	2174.25@	269.03	0.41
11509.00	91.89	270.67	9201.92	94.00	2268.14	35.70 S	2267.89 W	2268.17@	269.10	0.21
11604.00	91.28	268.82	9199.29	95.00	2363.10	36.12 S	2362.85 W	2363.12@	269.12	2.05

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY CORP.
REGULUS 26 FEDERAL #1H/ 30-015-40098
EDDY COUNTY, NM
RIG:H&P 300

Page 06/06

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
11698.00	90.75	268.65	9197.63	94.00	2457.07	38.19 S	2456.81 W	2457.11@	269.11	0.59
11793.00	89.78	268.65	9197.19	95.00	2552.06	40.43 S	2551.78 W	2552.10@	269.09	1.02
11887.00	90.40	268.30	9197.04	94.00	2646.05	42.93 S	2645.75 W	2646.10@	269.07	0.76
11982.00	91.98	268.74	9195.07	95.00	2741.02	45.39 S	2740.69 W	2741.07@	269.05	1.73
12077.00	92.51	268.91	9191.35	95.00	2835.94	47.33 S	2835.60 W	2835.99@	269.04	0.59
12171.00	92.07	269.26	9187.59	94.00	2929.86	48.83 S	2929.51 W	2929.92@	269.04	0.60
12266.00	91.89	269.97	9184.31	95.00	3024.80	49.47 S	3024.45 W	3024.86@	269.06	0.77
12360.00	91.45	270.32	9181.57	94.00	3118.76	49.23 S	3118.41 W	3118.80@	269.10	0.60
12455.00	90.31	270.49	9180.11	95.00	3213.73	48.56 S	3213.40 W	3213.76@	269.13	1.21
12549.00	89.43	270.76	9180.32	94.00	3307.71	47.54 S	3307.39 W	3307.73@	269.18	0.98
12644.00	90.48	269.88	9180.40	95.00	3402.69	47.01 S	3402.39 W	3402.71@	269.21	1.44
12738.00	91.63	269.88	9178.67	94.00	3496.67	47.20 S	3496.37 W	3496.69@	269.23	1.22
12833.00	91.45	269.62	9176.12	95.00	3591.63	47.62 S	3591.33 W	3591.65@	269.24	0.33
12927.00	92.51	269.97	9172.87	94.00	3685.57	47.95 S	3685.27 W	3685.59@	269.25	1.19
13022.00	92.51	270.76	9168.71	95.00	3780.47	47.35 S	3780.18 W	3780.48@	269.28	0.83
13116.00	92.15	271.37	9164.89	94.00	3874.35	45.60 S	3874.09 W	3874.35@	269.33	0.75
13211.00	92.24	271.64	9161.25	95.00	3969.22	43.11 S	3968.98 W	3969.22@	269.38	0.30
13305.00	91.54	271.90	9158.15	94.00	4063.08	40.21 S	4062.89 W	4063.09@	269.43	0.79
13400.00	90.13	270.14	9156.76	95.00	4158.03	38.52 S	4157.86 W	4158.03@	269.47	2.37
13494.00	89.52	269.09	9157.05	94.00	4252.03	39.15 S	4251.85 W	4252.03@	269.47	1.29
13589.00	90.22	269.18	9157.26	95.00	4347.03	40.58 S	4346.84 W	4347.03@	269.47	0.74
13683.00	90.57	269.35	9156.62	94.00	4441.02	41.79 S	4440.83 W	4441.03@	269.46	0.41
13778.00	90.04	269.44	9156.11	95.00	4536.02	42.79 S	4535.82 W	4536.02@	269.46	0.57
STRAIGHT LINE PROJECTION TO BIT @ 13855.00'MD.										
13855.00	90.04	269.44	9156.06	77.00	4613.02	43.55 S	4612.82 W	4613.02@	269.46	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.



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	DEVON ENERGY CORP.		
LEASE / WELL No.:	REGULUS 26 FEDERAL	1H	
WELL LOCATION:	EDDY COUNTY, NEW MEXICO		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	H&P 300		
API WELL No:	30-015-40098		
JOB No:	12MLD0161		
P.O. / AFE No.	202417		
DIRECTIONAL COMPANY:	PATHFINDER		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):					
On Wall Plat:	7.4	LWD Calculated:	7.35317	Agreed Upon:	7.35
X =	695529.830000	Feet	Y =	596083.560000	Feet
SITE LATITUDE:	32.637683 N	SITE LONGITUDE:	103.832424 W		
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒	ZONE:	New Mexico East		
PROPOSED DRIFT DIRECTION:	269.40				
KELLY BUSHING ELEVATION:	26 Feet				
ALTITUDE:	3498.3	Feet	RIG HEIGHT:	26	Feet

TIE-IN SURVEY

MEASURED DEPTH:	8600		
DRIFT ANGLE:	1.46		
DRIFT DIRECTION:	41.98		
TRUE VERTICAL DEPTH:	8592.5		
VERTICAL SECTION:	147.18		
RECTANGULAR COORDINATE (N / S) :	147.18		
RECTANGULAR COORDINATE (E / W) :	232.8		
CLOSURE DISTANCE / DIRECTION:	275.43	57.7	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	Vaughn Energy Service		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	8562	TOTAL DEPTH:	13501.3
KICKOFF ANGLE:	0	MAX ANGLE:	90.28

PES Engineers: ALEX CASTILLO
TOM RODDIN

**Signature of both field engineers required if applicable

Directional Driller: JORDAN WILLIAMS

DATE: 20-May-2012



Company: DEVON
 Rig: H&P #300
 Latitude: 32.638
 Longitude: -103.833
 API # 30-015-40098
 Date: 5/21/12

Well: REGULUS 26 FED 1H
 Location:
 North Reference: GC = -.27
 Depth Reference: RKB = 25'
 Surveyor: SLAYTON THOMAS
 VS: 0.000

Field copy only not definitive.

Depth	Inc	AzG	N/S	E/W	TVD	DL	VS	CD	Cbrg
0	0	0	0	0	0	****	0	0	0
100	1.07	116.80	-0.42	0.84	99.99	1.07	-0.42	0.94	116.80
200	1.02	136.91	-1.50	2.28	199.98	0.37	-1.50	2.73	123.26
300	0.94	144.75	-2.82	3.37	299.96	0.16	-2.82	4.39	129.95
400	1.08	135.13	-4.16	4.50	399.95	0.22	-4.16	6.13	132.70
500	1.27	73.06	-4.50	6.22	499.93	1.22	-4.50	7.68	125.86
600	1.49	45.50	-3.26	8.21	599.90	0.69	-3.26	8.84	111.66
700	1.74	47.26	-1.32	10.25	699.86	0.25	-1.32	10.34	97.33
800	1.45	52.63	0.48	12.37	799.82	0.33	0.48	12.38	87.80
900	0.75	46.78	1.69	13.85	899.80	0.71	1.69	13.95	83.05
1000	0.76	72.72	2.33	14.96	999.80	0.34	2.33	15.14	81.14
1100	0.85	34.70	3.14	16.02	1099.79	0.53	3.14	16.32	78.91
1200	0.99	41.62	4.39	17.01	1199.77	0.18	4.39	17.57	75.52
1300	0.91	57.81	5.46	18.26	1299.76	0.28	5.46	19.06	73.35
1400	0.75	44.79	6.35	19.39	1399.75	0.24	6.35	20.41	71.86
1500	1.03	45.05	7.46	20.50	1499.74	0.28	7.46	21.81	70.01
1600	1.02	50.94	8.65	21.82	1599.72	0.11	8.65	23.48	68.37
1700	1.19	61.31	9.71	23.43	1699.70	0.26	9.71	25.36	67.48
1800	1.35	60.08	10.80	25.36	1799.68	0.16	10.80	27.56	66.93
1900	1.66	52.06	12.28	27.52	1899.64	0.38	12.28	30.14	65.95
2000	1.94	49.60	14.27	29.96	1999.59	0.29	14.27	33.19	64.53
2100	1.75	65.55	16.00	32.64	2099.54	0.55	16.00	36.35	63.88
2200	1.89	70.14	17.19	35.58	2199.49	0.20	17.19	39.51	64.21
2300	1.55	71.27	18.19	38.40	2299.45	0.34	18.19	42.49	64.66
2400	1.40	60.78	19.22	40.75	2399.42	0.31	19.22	45.05	64.75
2500	1.48	43.55	20.75	42.70	2499.38	0.44	20.75	47.48	64.09
2600	1.46	30.17	22.79	44.23	2599.35	0.34	22.79	49.76	62.75
2700	1.12	39.56	24.64	45.49	2699.33	0.40	24.64	51.74	61.56
2800	1.63	47.19	26.36	47.16	2799.30	0.55	26.36	54.02	60.80
2900	1.31	34.99	28.26	48.86	2899.26	0.45	28.26	56.44	59.95
3000	1.03	26.37	30.00	49.91	2999.24	0.33	30.00	58.23	58.99
3100	0.58	29.39	31.24	50.56	3099.23	0.45	31.24	59.43	58.29
3200	0.80	50.55	32.12	51.34	3199.23	0.34	32.12	60.56	57.97
3300	1.77	40.64	33.74	52.89	3299.20	0.99	33.74	62.73	57.46
3400	2.61	42.21	36.60	55.42	3399.13	0.84	36.60	66.42	56.56
3500	2.72	49.89	39.81	58.76	3499.02	0.37	39.81	70.98	55.88
3600	2.51	56.88	42.53	62.41	3598.91	0.38	42.53	75.53	55.73
3700	3.19	31.50	46.11	65.71	3698.79	1.42	46.11	80.27	54.94

3800	3.77	39.81	51.01	69.27	3798.61	0.77	51.01	86.02	53.63
3900	4.15	49.50	55.88	74.13	3898.37	0.77	55.88	92.83	52.99
4000	4.54	53.57	60.59	80.07	3998.08	0.50	60.59	100.41	52.88
4100	4.69	56.27	65.21	86.65	4097.76	0.26	65.21	108.45	53.04
4200	5.06	59.77	69.70	93.85	4197.40	0.47	69.70	116.90	53.40
4300	4.59	55.51	74.18	100.96	4297.04	0.59	74.18	125.28	53.69
4400	4.71	57.76	78.63	107.73	4396.72	0.22	78.63	133.37	53.87
4500	4.71	60.52	82.85	114.78	4496.38	0.23	82.85	141.55	54.18
4600	4.90	57.68	87.15	121.96	4596.03	0.31	87.15	149.89	54.45
4700	4.93	56.18	91.82	129.13	4695.66	0.13	91.82	158.45	54.58
4800	4.98	63.70	96.14	136.60	4795.29	0.65	96.14	167.03	54.86
4900	4.67	63.64	99.87	144.14	4894.93	0.31	99.87	175.35	55.28
5000	4.65	57.32	103.86	151.20	4994.60	0.51	103.86	183.43	55.51
5100	4.18	64.94	107.60	157.91	5094.31	0.75	107.60	191.09	55.73
5200	3.95	61.12	110.81	164.24	5194.05	0.36	110.81	198.12	55.99
5300	3.79	67.44	113.74	170.30	5293.83	0.46	113.74	204.79	56.26
5400	3.55	60.76	116.52	176.05	5393.62	0.49	116.52	211.11	56.50
5500	3.20	53.13	119.70	180.98	5493.45	0.57	119.70	216.98	56.52
5600	2.99	71.04	122.22	185.68	5593.31	0.98	122.22	222.29	56.65
5700	2.63	66.40	123.99	190.25	5693.19	0.43	123.99	227.09	56.91
5800	2.48	72.39	125.56	194.41	5793.09	0.31	125.56	231.44	57.14
5900	2.00	72.11	126.75	198.13	5893.01	0.48	126.75	235.21	57.39
6000	1.96	63.87	128.04	201.32	5992.95	0.29	128.04	238.59	57.54
6100	1.78	77.01	129.14	204.37	6092.90	0.46	129.14	241.75	57.71
6200	1.85	73.58	129.94	207.43	6192.85	0.13	129.94	244.77	57.94
6300	1.50	70.38	130.84	210.22	6292.80	0.36	130.84	247.61	58.10
6400	1.32	67.54	131.72	212.51	6392.77	0.20	131.72	250.02	58.21
6500	1.04	81.04	132.30	214.48	6492.75	0.39	132.30	252.00	58.33
6600	1.01	69.11	132.76	216.20	6592.74	0.22	132.76	253.70	58.45
6700	0.54	83.39	133.12	217.49	6692.73	0.51	133.12	254.99	58.53
6800	0.60	69.09	133.36	218.44	6792.72	0.15	133.36	255.93	58.59
6900	0.37	29.61	133.83	219.09	6892.72	0.39	133.83	256.73	58.58
7000	0.18	332.71	134.25	219.17	6992.72	0.31	134.25	257.02	58.51
7100	0.53	8.10	134.85	219.17	7092.72	0.40	134.85	257.33	58.40
7200	0.35	357.95	135.61	219.22	7192.71	0.20	135.61	257.78	58.26
7300	0.34	18.04	136.19	219.30	7292.71	0.12	136.19	258.15	58.16
7400	0.68	5.69	137.06	219.45	7392.71	0.36	137.06	258.74	58.01
7500	0.45	351.39	138.04	219.45	7492.70	0.26	138.04	259.26	57.83
7600	0.25	311.92	138.58	219.23	7592.70	0.31	138.58	259.35	57.70
7700	0.06	90.64	138.72	219.12	7692.70	0.30	138.72	259.34	57.66
7800	0.18	102.99	138.69	219.32	7792.70	0.13	138.69	259.49	57.69
7900	0.70	86.93	138.68	220.09	7892.70	0.53	138.68	260.14	57.78
8000	0.89	81.06	138.84	221.46	7992.69	0.21	138.84	261.38	57.92
8100	1.06	71.41	139.25	223.10	8092.67	0.23	139.25	262.99	58.03
8200	0.93	72.86	139.78	224.75	8192.66	0.13	139.78	264.67	58.12
8300	1.57	55.49	140.79	226.65	8292.63	0.74	140.79	266.82	58.15
8400	1.86	42.99	142.76	228.88	8392.59	0.47	142.76	269.75	58.05

8500	1.73	40.56	145.09	230.97	8492.54	0.15	145.09	272.76	57.86
8600	1.46	41.98	147.18	232.80	8592.50	0.27	147.18	275.43	57.70
			147.02	232.85					



A Schlumberger Company

PathFinder Energy Services, Inc. Magnetic & Grid Calculations

Devon Energy
Regulus 26 Federal #1H
Eddy County, Nm
Rig:HP 300

Thu May 10 17:39:57 2012

Coordinates

Latitude: 32.637683 N (32 deg. 38 min. 15.6596 sec.)
Longitude: 103.832424 W (-103 deg. 49 min. 56.7280 sec.)
Elevation: 3524.30 feet.
Calculation Date: May/10/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5027 degrees
Total Magnetic Field: 0.48746 gauss
Magnetic Declination: 7.626698 degrees
Horizontal Intensity: 0.240017 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.626698 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 695529.8300 feet
Y: 596083.5600 feet
True to Grid: (convergence) -0.270158 degrees
Magnetic to Grid: 7.356540 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.356540 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

DEVON ENERGY CORP.
REGULUS 26 FEDERAL 1H
LUSK; (BONE SPRING WEST)
Rig:HP 300

Sun May 20 23:32:35 2012

Coordinates

Latitude: 32.637683 N (32 deg. 38 min. 15.6596 sec.)
Longitude: 103.832424 W (-103 deg. 49 min. 56.7280 sec.)
Elevation: 3524.30 feet.
Calculation Date: May/20/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5020 degrees
Total Magnetic Field: 0.48743 gauss
Magnetic Declination: 7.623328 degrees
Horizontal Intensity: 0.240008 gauss

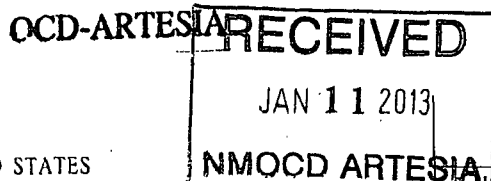
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.623328 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 695529.8300 feet
Y: 596083.5600 feet
True to Grid: (convergence) -0.270158 degrees
Magnetic to Grid: 7.353170 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.353170 Degr.

ATS-12-189



Form 3160-3
(February 2005)

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007 EA 347

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER		4. Lease Serial No. USA NM 0107697	
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Devon Energy Production Co., LP		7. If Unit or CA Agreement, Name and No.	
3a. Address: 20 North Broadway OKC, OK 73102		8. Lease Name and Well No. Regulus 26 Federal 1H [39114]	
3b. Phone No. (include area code) (405)-552-7802		9. API Well No. 30-015-40098	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface: NENE 380' FNL & 330' FEL Lot A At proposed prod zone: NWNW 400' FNL & 340' FWL Lot D		10. Field and Pool, or Exploratory Lusk; B.S (West) [E1480]	
11. Sec, T & M. or Blk and Survey or Area Sec 26-T19S-R31E		12. County or Parish Eddy	
13. State NM		14. Distance in miles and direction from nearest town or post office* Approximately 15 miles southeast of Loco Hills, NM.	
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 330'		16. No of acres in lease 2321.52 acres	
17. Spacing Unit dedicated to this well 160		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft See Plat	
19. Proposed Depth 41' 900'		20. BLM/BIA Bond No on file PH: 9600' CO-1104 NM8000801	
21. Elevations (Show whether DF, KDB, RT, GL, etc) 3498.3' GL		22. Approximate date work will start* 02/15/2012	
23. Estimated duration 45 days		24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form

- Well plat certified by a registered surveyor
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
- Bond to cover the operations unless covered by an existing bond on file (see item 20 above)
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM

25. Signature 	Name (Printed/Typed) Stephanie A. Ysasaga	Date 12/09/2011
Title Sr Staff Engineering Technician		
Approved by (Signature) 	Name (Printed/Typed) John A. Amos	Date MAR 19 2012
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

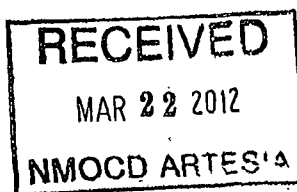
APPROVAL FOR TWO YEARS

Title 18 USC Section 1001 and Title 43 USC Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

*(Instructions on page 2)

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL



Approval Subject to General Requirements
& Special Stipulations Attached