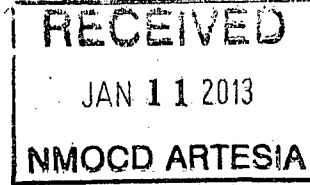




A GYRO TECHNOLOGIES INC. COMPANY

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

June 12, 2012



Devon Energy Production Company
20 North Broadway
Oklahoma City, OK 73102

15-40099

Attn: Mark Cooper

Re: **Spica 25 Federal 1H**

Please find enclosed a copy of the survey from 0' to 755' 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

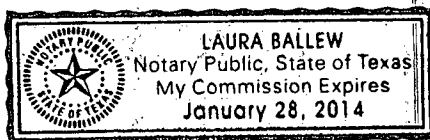
§

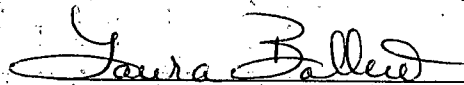
COUNTY OF NUECES

§

§

This instrument was acknowledged before me on the 15th day of Jan,
A.D., 2012, by Keith Havelka.





Laura Ballew
Notary Public, State of Texas



Company: Devon Energy Production Co., LP
Lease/Well: Spica 25 Federal/1H
Location: S26 T19s R31e
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



RKB : 26.2 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: spica 25 fed #1h gyro survey.ut

Minimum Curvature Method

Report Date/Time: 6/12/2012 / 13:18

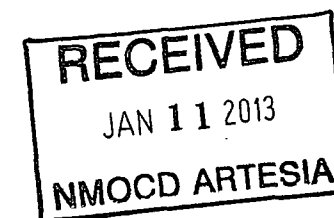
Vaughn Energy Services

(432) 563-5444

Gardendale, TX

Surveyor: Dustin Wedel

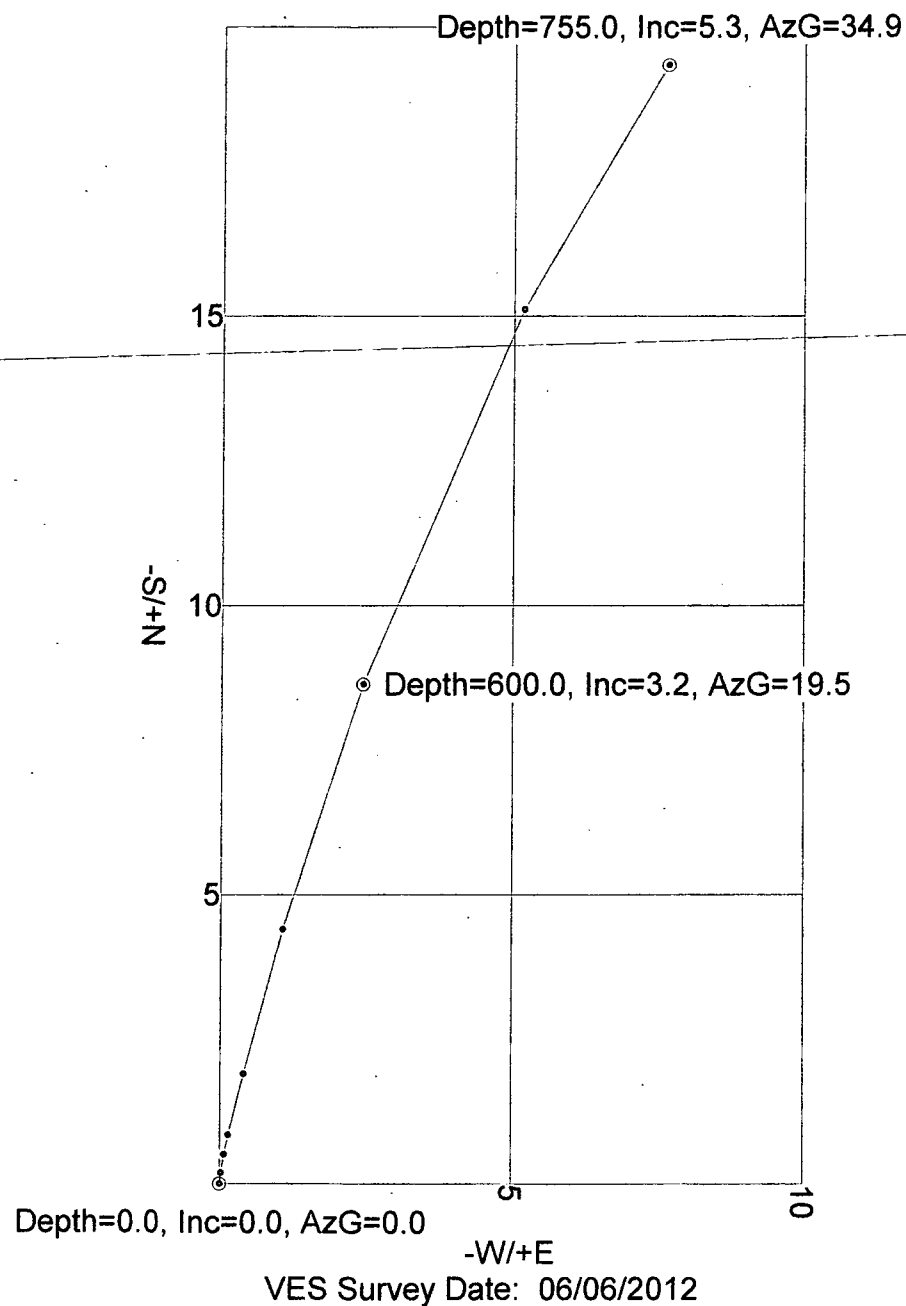
Spica 25 Federal 1H / API 30-015-40099



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	0.21	7.24	100.00	0.18	0.02	0.18	0.19	7.24	0.21
200.00	0.16	11.45	200.00	0.50	0.07	0.50	0.51	8.39	0.05
300.00	0.23	12.17	300.00	0.84	0.14	0.84	0.85	9.79	0.07
400.00	1.01	14.28	399.99	1.89	0.40	1.89	1.93	12.09	0.78
500.00	1.96	15.13	499.96	4.40	1.07	4.40	4.52	13.66	0.95
600.00	3.16	19.53	599.86	8.64	2.44	8.64	8.98	15.74	1.21
700.00	4.91	25.17	699.60	15.11	5.18	15.11	15.97	18.91	1.80
755.00	5.33	34.94	754.39	19.34	7.64	19.34	20.79	21.56	1.76



Vaughn Energy Services
(432) 563-5444
Gardendale, TX
Surveyor: Dustin Wedel
Spica 25 Federal 1H / API 30-015-40099

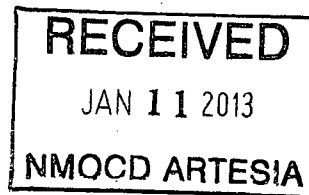


Pathfinder

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

PATHFINDER
A Schlumberger Company

July 30, 2012



Devon Energy
20 N. Broadway
Oklahoma City, OK

RE: Devon Energy
Spica '25' Federal #1H
API: 30-015-40099
Eddy County, NM
RIG: H&P 300
FIELD: Lusk; Bone Spring (West)
PES FILE NO.: 12MLD0247

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,

A handwritten signature in dark ink, appearing to read "Juan Alcocer". The signature is fluid and cursive, with a long horizontal stroke at the end.

JUAN ALCOCER
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh

HALLIBURTON

3950 Interwood South Parkway • Houston, TX 77032

PHONE 281.986.4400 • FAX 281.986.4499

RECEIVED

JAN 11 2013

NMOCD ARTESIA

State of New Mexico, Eddy County

I, Brandon Machacek, certify that I am employed by Halliburton Energy Services, Inc. (aka Sperry Drilling) and that on the dates of 5-June-12 through 25-June-12. I did conduct or supervise the taking of a DWD directional survey for the well from a depth of 820' MD to a depth of 8526' MD. This data is true, correct, complete and within the limitations of the tools as set forth by Halliburton Energy Services, Inc. (aka Sperry Drilling). I am authorized and qualified to make this report and this survey was conducted at the request of Devon Energy Production Company, for the Spica 25 Federal 1H well, API No. 30-015-40099 in Eddy County, New Mexico. I have reviewed this report and find that it conforms to the principles and procedures as set forth by Halliburton Energy Services, Inc. (aka Sperry Drilling).



Brandon Machacek
Field Engineer

Devon Energy Corporation

Spica 25 Federal 1H

Eddy County, New Mexico

H&P 300

API# 30-015-40099

RECEIVED

JAN 11 2013

NMOCD ARTESIA

June 5, 2012 – June 25, 2012

HD-MJ-0009555764

Sperry Drilling

MWD Survey Report

Submitted by Brandon Machacek

3950 Interwood South PKWY Houston, TX 77032

Ph: 281.986.4400

HALLIBURTON

**Drilling and Formation
Evaluation**

Survey Report for Devon Energy Corporation

Rig:	H&P 300
Well Name:	Spica 25 Federal 1H
Field Name:	Huckberry Bone Springs
Country:	U.S.A.
Job Number:	HD-XX-0009555764
Job Start Date:	05-Jun-12
API Number:	30-015-40099-0000

Directional Survey Data

Tie-in

0.00

0.00

0.00

0.00

0.00 N

0.00 E

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (%/100)
100.00	0.21	7.24	100.00	0.18 N	0.02 E	0.02	0.21
200.00	0.16	11.45	200.00	0.50 N	0.07 E	0.08	0.05
300.00	0.23	12.17	300.00	0.83 N	0.14 E	0.15	0.07
400.00	1.01	14.28	399.99	1.88 N	0.40 E	0.41	0.78
500.00	1.96	15.13	499.96	4.39 N	1.07 E	1.08	0.95
600.00	3.16	19.53	599.86	8.64 N	2.44 E	2.46	1.22
700.00	4.91	25.17	699.60	15.11 N	5.18 E	5.22	1.79
755.00	5.33	34.94	754.39	19.33 N	7.64 E	7.70	1.76
820.00	5.83	35.66	819.08	24.49 N	11.29 E	11.37	0.77
850.00	5.79	37.14	848.92	26.93 N	13.09 E	13.18	0.52
941.00	4.80	54.01	939.54	32.83 N	18.95 E	19.05	2.01
1032.00	3.70	56.51	1,030.29	36.69 N	24.48 E	24.60	1.23
1128.00	2.33	55.66	1,126.15	39.50 N	28.68 E	28.80	1.43
1189.00	1.52	68.61	1,187.12	40.49 N	30.45 E	30.58	1.50
1283.00	0.96	108.87	1,281.10	40.69 N	32.36 E	32.48	1.07
1378.00	1.25	167.66	1,376.08	39.43 N	33.33 E	33.45	1.17
1472.00	1.34	172.84	1,470.06	37.34 N	33.68 E	33.80	0.16
1567.00	1.22	169.76	1,565.04	35.24 N	34.00 E	34.11	0.14
1661.00	1.26	163.84	1,659.01	33.26 N	34.47 E	34.57	0.14
1756.00	1.31	153.29	1,753.99	31.30 N	35.24 E	35.34	0.25
1851.00	1.28	147.43	1,848.97	29.44 N	36.30 E	36.39	0.14
1945.00	1.21	145.50	1,942.94	27.73 N	37.43 E	37.51	0.09
2040.00	1.19	135.52	2,037.92	26.20 N	38.69 E	38.77	0.22
2134.00	1.70	171.37	2,131.89	24.13 N	39.58 E	39.66	1.07
2229.00	1.97	175.75	2,226.85	21.11 N	39.91 E	39.98	0.32
2323.00	1.76	173.15	2,320.80	18.07 N	40.20 E	40.26	0.23
2418.00	1.73	174.49	2,415.75	15.19 N	40.52 E	40.56	0.05
2512.00	1.66	174.42	2,509.71	12.42 N	40.79 E	40.82	0.08
2540.00	1.58	172.35	2,537.70	11.63 N	40.88 E	40.91	0.35
2702.00	1.90	176.17	2,699.62	6.74 N	41.35 E	41.37	0.21
2796.00	1.52	212.00	2,793.59	4.13 N	40.79 E	40.81	1.18
2891.00	1.45	217.23	2,888.55	2.10 N	39.40 E	39.40	0.16
2985.00	1.38	218.38	2,982.52	0.26 N	37.97 E	37.97	0.08
3079.00	1.31	213.17	3,076.50	1.53 S	36.68 E	36.67	0.15
3174.00	1.23	218.76	3,171.48	3.23 S	35.45 E	35.44	0.16
3269.00	1.16	215.76	3,266.45	4.81 S	34.24 E	34.23	0.10
3363.00	1.08	202.85	3,360.44	6.40 S	33.34 E	33.32	0.28
3457.00	1.09	206.64	3,454.42	8.01 S	32.60 E	32.57	0.08
3552.00	0.99	205.96	3,549.40	9.55 S	31.84 E	31.81	0.10
3646.00	0.98	206.85	3,643.39	11.00 S	31.12 E	31.08	0.02
3741.00	1.02	198.39	3,738.38	12.53 S	30.48 E	30.44	0.16
3836.00	1.05	229.88	3,833.36	13.90 S	29.55 E	29.51	0.59

Directional Survey Data

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (°/100)
3930.00	1.29	255.34	3,927.34	14.72 S	27.87 E	27.82	0.60
4025.00	1.28	269.15	4,022.32	15.01 S	25.77 E	25.72	0.33
4119.00	1.11	266.65	4,116.30	15.08 S	23.81 E	23.76	0.19
4214.00	1.01	259.13	4,211.28	15.29 S	22.06 E	22.01	0.18
4308.00	0.95	244.15	4,305.27	15.78 S	20.55 E	20.50	0.28
4394.00	0.74	250.76	4,391.26	16.28 S	19.38 E	19.33	0.26
4556.00	0.82	174.80	4,553.25	17.78 S	18.49 E	18.44	0.60
4650.00	0.59	248.31	4,647.24	18.63 S	18.10 E	18.04	0.92
4745.00	0.65	237.03	4,742.24	19.11 S	17.19 E	17.13	0.14
4839.00	1.85	242.93	4,836.21	20.09 S	15.40 E	15.33	1.28
4934.00	0.75	233.48	4,931.19	21.15 S	13.54 E	13.47	1.18
5029.00	1.22	283.19	5,026.17	21.29 S	12.05 E	11.98	0.98
5123.00	0.78	194.87	5,120.16	21.67 S	10.91 E	10.84	1.52
5218.00	1.12	166.38	5,215.15	23.19 S	10.96 E	10.89	0.60
5312.00	0.24	263.27	5,309.15	24.11 S	10.98 E	10.91	1.24
5407.00	0.51	126.26	5,404.14	24.38 S	11.13 E	11.05	0.75
5501.00	0.28	202.54	5,498.14	24.84 S	11.38 E	11.30	0.55
5596.00	0.55	225.01	5,593.14	25.37 S	10.97 E	10.89	0.33
5690.00	0.46	261.89	5,687.14	25.75 S	10.28 E	10.19	0.35
5785.00	0.96	334.74	5,782.13	25.08 S	9.56 E	9.48	0.98
5880.00	0.04	301.58	5,877.13	24.34 S	9.19 E	9.11	0.97
5974.00	0.79	281.28	5,971.12	24.20 S	8.52 E	8.45	0.80
6069.00	1.14	277.88	6,066.11	23.94 S	6.95 E	6.87	0.37
6163.00	0.99	273.26	6,160.09	23.77 S	5.22 E	5.14	0.18
6258.00	1.01	264.53	6,255.08	23.80 S	3.57 E	3.50	0.16
6352.00	0.59	318.69	6,349.07	23.52 S	2.43 E	2.36	0.87
6447.00	0.93	324.68	6,444.06	22.52 S	1.66 E	1.59	0.38
6541.00	1.41	319.01	6,538.04	21.02 S	0.46 E	0.40	0.52
6636.00	0.57	337.91	6,633.03	19.70 S	0.48 W	-0.54	0.94
6730.00	1.95	303.55	6,727.00	18.39 S	1.99 W	-2.05	1.61
6825.00	0.71	316.78	6,821.98	17.06 S	3.74 W	-3.79	1.33
6920.00	1.94	301.21	6,916.95	15.80 S	5.52 W	-5.57	1.33
7014.00	1.40	331.43	7,010.91	13.97 S	7.42 W	-7.47	1.08
7109.00	1.47	317.82	7,105.88	12.05 S	8.80 W	-8.84	0.37
7203.00	1.33	329.40	7,199.85	10.21 S	10.16 W	-10.20	0.34
7298.00	1.23	345.29	7,294.83	8.28 S	10.98 W	-11.01	0.39
7392.00	1.20	19.42	7,388.81	6.38 S	10.91 W	-10.93	0.76
7487.00	1.74	330.97	7,483.78	4.18 S	11.28 W	-11.29	1.37
7581.00	1.40	324.02	7,577.75	2.01 S	12.65 W	-12.65	0.42
7675.00	0.33	45.79	7,671.74	0.89 S	13.13 W	-13.13	1.48
7770.00	0.50	336.99	7,766.73	0.32 S	13.10 W	-13.10	0.52
7865.00	1.05	308.27	7,861.73	0.60 N	13.94 W	-13.94	0.69
7959.00	0.75	47.29	7,955.72	1.55 N	14.16 W	-14.16	1.47
8054.00	0.98	58.65	8,050.71	2.40 N	13.01 W	-13.00	0.30
8148.00	0.77	43.50	8,144.70	3.28 N	11.89 W	-11.88	0.33

Directional Survey Data

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (°/100)
8243.00	1.69	65.11	8,239.67	4.33 N	10.17 W	-10.16	1.07
8337.00	0.47	68.53	8,333.65	5.06 N	8.56 W	-8.54	1.30
8431.00	1.09	1.78	8,427.65	6.09 N	8.17 W	-8.15	1.06
8526.00	1.00	80.18	8,522.64	7.14 N	7.32 W	-7.30	1.39

DIRECTIONAL SURVEY DATA NOTES

- Calculation based on minimum curvature method.
- Survey coordinates relative to well system reference point.
- TVD values given relative to drilling measurement point.
- Vertical section relative to well head.
- Vertical section is computed along a direction of 89.82 degrees (Grid)
- A total correction of 7.44 deg from Magnetic north to Grid north has been applied
- Horizontal displacement is relative to the well head.

SURVEYS CALCULATED USING SHORT COLLAR METHOD.

WELL ASSUMED VERTICAL AT WELLHEAD.

SURVEYS FROM 0'MD TO 755'MD PROVIDED BY VAUGHN ENERGY SERVICES.

SURVEYS FROM 820'MD TO 8526'MD PROVIDED BY SPERRY DRILLING.

SPERRY DRILLING ENGINEERS: B. MACHACEK, J. GUNTERMAN

WARRANTY

HALLIBURTON ENERGY SERVICES, INC. WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HALLIBURTON ENERGY SERVICES, INC. CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION, AND PRODUCTION OPERATION. HALLIBURTON ENERGY SERVICES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HALLIBURTON ENERGY SERVICES, INC. SERVICES BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HALLIBURTON ENERGY SERVICES, INC.

HALLIBURTON

Sperry Drilling

Halliburton/Sperry Drilling
3950 Interwood S. Pkwy
Houston, Texas 77032
Phone 281.986.4400
Fax 281.986.4498

Pathfinder

6213 WCR. 112
Midland, Texas. 79706-3725, USA
Tel. (432) 687-1647
Fax (432) 687-1544



July 30, 2012

Devon Energy
20 N. Broadway
Oklahoma City, OK

RE: Devon Energy
Spica '25' Federal #1H
API: 30-015-40099
Eddy County, NM
RIG: H&P 300
FIELD: Lusk; Bone Spring (West)
PES FILE NO.: 12MLD0247

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,

A handwritten signature in black ink, appearing to read "MARCUS MITCHAM".

MARCUS MITCHAM
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh



A Schlumberger Company

DIRECTIONAL SURVEY REPORT

DEVON ENERGY

SPICA '25' FEDERAL #1H

EDDY COUNTY, NEW MEXICO

PREPARED BY: JUAN ALCOCER

Pathfinder

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



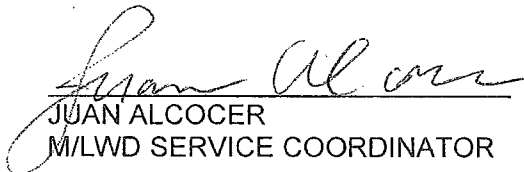
DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) HUEY SANDIFER
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 6/25/12 TO 7/01/12
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
SPICA '25' FEDERAL #1H
EDDY COUNTY, NM
RIG: H&P 300

9. SURVEY CERTIFIED FROM: 8,578 TO 14,190 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 5,216.52 FEET ON A BEARING OF 90.08 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 14,270 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: 06/25/2012
Date Completed: 07/01/2012

DEVON ENERGY PRODUCTION COMPANY
SPICA 25 FED 1H
EDDY COUNTY, NM
Rig:H&P 300
PathFinder Office Supervisor: JUAN ALCOCER
PathFinder Field Engineers:H SANDIFER
F LICERO
JAMES BURLESON

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.38.15.6601 N LON:103.49.56.1432 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 695579.8400 Y: 596083.8400
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.34° EAST TO GRID
Vertical Section Plane: 89.82
Survey Vert. Reference: 26.00' Rotary Table To Ground
Altitude:3524.10' Ground To MSL

Measured Depth	14270.00	(feet)
Inclination	89.69	(deg)
Azimuth	90.74	(deg)
True Vertical Depth	9266.16	(feet)
Vertical Section	5216.46	(feet)
Survey X cord	700796.35	(feet)
Survey Y cord	596076.53	(feet)
Survey Lat	32.63759448 N	(deg)
Survey Lon	103.81531635 W	(deg)
Rectangular Corr. N/S	7.31 S	(feet)
Rectangular Corr. E/W	5216.51 E	(feet)
Closure Distance	5216.52	(feet)
Direction of Closure	90.08	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 Rig:H&P 300
 PathFinder Office Supervisor: JUAN ALCOCER
 PathFinder Field Engineers: H SANDIFER
 F LICERO
 JAMES BURLESON
 Survey Calculations by RX5 V6.04A using Minimum Curvature

Page 01/07
 Tie-in Date: 06/25/2012
 Date Completed: 07/01/2012

Survey Horiz. Reference:WELLHEAD
 Ref Coordinates: LAT:32.38.15.6601 N LON:103.49.56.1432 W
 GRID Reference:NAD83 new mexico east Transverse Mercator
 Ref GRID Coord: X: 695579.8400 Y: 596083.8400
 North Aligned To:GRID NORTH
 Total Magnetic Correction: 7.34° EAST TO GRID
 Vertical Section Plane: 89.82
 Survey Vert. Reference: 26.00' Rotary Table To Ground
 Altitude:3524.10' Ground To MSL

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 HALLIBURTON SURVEYS.										
100.00	0.21	7.24	99.99	100.00	0.03	0.18 N	0.02 E	0.18@	7.74	0.21
200.00	0.16	11.45	199.99	100.00	0.08	0.50 N	0.08 E	0.51@	8.58	0.05
300.00	0.23	12.17	299.99	100.00	0.15	0.83 N	0.15 E	0.85@	9.90	0.07
400.00	1.01	14.28	399.99	100.00	0.41	1.88 N	0.41 E	1.93@	12.14	0.78
500.00	1.96	15.13	499.95	100.00	1.08	4.39 N	1.07 E	4.52@	13.69	0.95
600.00	3.16	19.53	599.85	100.00	2.46	8.64 N	2.44 E	8.97@	15.75	1.22
700.00	4.91	25.17	699.60	100.00	5.23	15.11 N	5.18 E	15.97@	18.92	1.79
755.00	5.33	34.94	754.38	55.00	7.70	19.33 N	7.64 E	20.79@	21.57	1.76
820.00	5.83	35.66	819.07	65.00	11.37	24.49 N	11.30 E	26.97@	24.76	0.78
850.00	5.79	37.14	848.92	30.00	13.18	26.93 N	13.10 E	29.95@	25.93	0.52
941.00	4.80	54.01	939.53	91.00	19.05	32.83 N	18.95 E	37.91@	29.99	2.02
1032.00	3.70	56.51	1030.28	91.00	24.60	36.69 N	24.48 E	44.11@	33.71	1.23
1128.00	2.33	55.66	1126.15	96.00	28.80	39.50 N	28.68 E	48.81@	35.98	1.43
1189.00	1.52	68.61	1187.11	61.00	30.58	40.49 N	30.45 E	50.67@	36.94	1.50
1283.00	0.96	108.87	1281.09	94.00	32.49	40.69 N	32.36 E	51.99@	38.49	1.07
1378.00	1.25	167.66	1376.08	95.00	33.46	39.42 N	33.33 E	51.63@	40.21	1.17
1472.00	1.34	172.84	1470.05	94.00	33.81	37.33 N	33.69 E	50.29@	42.06	0.16
1567.00	1.22	169.76	1565.03	95.00	34.12	35.24 N	34.01 E	48.97@	43.98	0.14
1661.00	1.26	163.84	1659.01	94.00	34.58	33.26 N	34.47 E	47.90@	46.03	0.14
1756.00	1.31	153.29	1753.98	95.00	35.35	31.28 N	35.25 E	47.13@	48.41	0.25
1851.00	1.28	147.43	1848.96	95.00	36.40	29.42 N	36.31 E	46.73@	50.98	0.14
1945.00	1.21	145.50	1942.94	94.00	37.53	27.72 N	37.44 E	46.58@	53.49	0.09
2040.00	1.19	135.52	2037.92	95.00	38.78	26.19 N	38.70 E	46.73@	55.91	0.22

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 RIG:H&P 300

Page 02/07

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)
2134.00	1.70	171.37	2131.89	94.00	39.67	24.11 N	39.59 E	46.36@	58.66	1.08
2229.00	1.97	175.75	2226.84	95.00	39.99	21.09 N	39.92 E	45.15@	62.15	0.32
2323.00	1.76	173.15	2320.79	94.00	40.27	18.05 N	40.21 E	44.08@	65.83	0.24
2418.00	1.73	174.49	2415.75	95.00	40.57	15.17 N	40.53 E	43.27@	69.48	0.05
2512.00	1.66	174.42	2509.70	94.00	40.83	12.40 N	40.80 E	42.64@	73.09	0.08
2540.00	1.58	172.35	2537.69	28.00	40.92	11.62 N	40.89 E	42.50@	74.14	0.35
2702.00	1.90	176.17	2699.62	162.00	41.38	6.72 N	41.36 E	41.91@	80.77	0.21
2796.00	1.52	212.00	2793.58	94.00	40.82	4.11 N	40.81 E	41.01@	84.25	1.18
2891.00	1.45	217.23	2888.55	95.00	39.42	2.09 N	39.41 E	39.47@	86.97	0.16
2985.00	1.38	218.38	2982.52	94.00	37.99	0.25 N	37.99 E	37.99@	89.62	0.08
3079.00	1.31	213.17	3076.49	94.00	36.69	1.54 S	36.70 E	36.73@	92.40	0.15
3174.00	1.23	218.76	3171.47	95.00	35.46	3.24 S	35.47 E	35.61@	95.22	0.16
3269.00	1.16	215.76	3266.45	95.00	34.25	4.81 S	34.27 E	34.60@	98.00	0.10
3363.00	1.08	202.85	3360.43	94.00	33.35	6.40 S	33.37 E	33.97@	100.86	0.28
3457.00	1.09	206.64	3454.41	94.00	32.60	8.02 S	32.62 E	33.59@	103.81	0.08
3552.00	0.99	205.96	3549.40	95.00	31.83	9.56 S	31.86 E	33.26@	106.71	0.11
3646.00	0.98	206.85	3643.38	94.00	31.10	11.01 S	31.14 E	33.03@	109.48	0.02
3741.00	1.02	198.39	3738.37	95.00	30.46	12.54 S	30.50 E	32.98@	112.35	0.16
3836.00	1.05	229.88	3833.36	95.00	29.53	13.90 S	29.57 E	32.68@	115.18	0.59
3930.00	1.29	255.34	3927.34	94.00	27.84	14.72 S	27.89 E	31.54@	117.83	0.60
4025.00	1.28	269.15	4022.31	95.00	25.75	15.01 S	25.79 E	29.84@	120.20	0.32
4119.00	1.11	266.65	4116.29	94.00	23.79	15.08 S	23.84 E	28.20@	122.32	0.19
4214.00	1.01	259.13	4211.28	95.00	22.05	15.29 S	22.09 E	26.87@	124.69	0.18
4308.00	0.95	244.15	4305.26	94.00	20.53	15.79 S	20.58 E	25.94@	127.49	0.28
4394.00	0.74	250.76	4391.25	86.00	19.36	16.28 S	19.41 E	25.34@	129.99	0.27
4556.00	0.82	174.80	4553.24	162.00	18.47	17.78 S	18.53 E	25.68@	133.82	0.59
4650.00	0.59	248.31	4647.24	94.00	18.08	18.63 S	18.14 E	26.00@	135.76	0.92

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 RIG:H&P 300

Page 03/07

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)
4745.00	0.65	237.03	4742.23	95.00	17.18	19.10 S	17.24 E	25.73@	137.94	0.14
4839.00	1.85	242.93	4836.21	94.00	15.37	20.08 S	15.44 E	25.33@	142.45	1.28
4934.00	0.75	233.48	4931.18	95.00	13.51	21.15 S	13.57 E	25.13@	147.31	1.18
5029.00	1.22	283.19	5026.17	95.00	12.02	21.29 S	12.09 E	24.48@	150.42	0.98
5123.00	0.78	194.87	5120.16	94.00	10.88	21.68 S	10.95 E	24.29@	153.21	1.52
5218.00	1.12	166.38	5215.15	95.00	10.93	23.21 S	11.00 E	25.68@	154.64	0.60
5312.00	0.24	263.27	5309.14	94.00	10.95	24.12 S	11.02 E	26.52@	155.45	1.25
5407.00	0.51	126.26	5404.14	95.00	11.09	24.40 S	11.17 E	26.83@	155.41	0.74
5501.00	0.28	202.54	5498.14	94.00	11.34	24.86 S	11.41 E	27.35@	155.34	0.55
5596.00	0.55	225.01	5593.13	95.00	10.92	25.39 S	11.00 E	27.68@	156.57	0.33
5690.00	0.46	261.89	5687.13	94.00	10.23	25.77 S	10.31 E	27.75@	158.19	0.35
5785.00	0.96	334.74	5782.12	95.00	9.51	25.10 S	9.59 E	26.87@	159.08	0.98
5880.00	0.04	301.58	5877.12	95.00	9.15	24.36 S	9.23 E	26.05@	159.26	0.98
5974.00	0.79	281.28	5971.12	94.00	8.49	24.22 S	8.56 E	25.69@	160.53	0.80
6069.00	1.14	277.88	6066.10	95.00	6.91	23.96 S	6.98 E	24.96@	163.75	0.37
6163.00	0.99	273.26	6160.09	94.00	5.17	23.79 S	5.25 E	24.36@	167.56	0.18
6258.00	1.01	264.53	6255.07	95.00	3.52	23.82 S	3.59 E	24.09@	171.42	0.16
6352.00	0.59	318.69	6349.06	94.00	2.38	23.54 S	2.45 E	23.66@	174.06	0.87
6447.00	0.93	324.68	6444.06	95.00	1.61	22.54 S	1.68 E	22.60@	175.73	0.37
6541.00	1.41	319.01	6538.04	94.00	0.42	21.04 S	0.48 E	21.05@	178.69	0.52
6636.00	0.57	337.91	6633.02	95.00	-0.52	19.72 S	0.46 W	19.73@	181.34	0.94
6730.00	1.95	303.55	6727.00	94.00	-2.03	18.41 S	1.97 W	18.51@	186.11	1.61
6825.00	0.71	316.78	6821.97	95.00	-3.78	17.08 S	3.72 W	17.49@	192.29	1.34
6920.00	1.94	301.21	6916.94	95.00	-5.55	15.82 S	5.50 W	16.75@	199.17	1.34
7014.00	1.40	331.43	7010.90	94.00	-7.45	13.99 S	7.41 W	15.83@	207.91	1.08
7109.00	1.47	317.82	7105.87	95.00	-8.82	12.07 S	8.78 W	14.93@	216.05	0.36
7203.00	1.33	329.40	7199.85	94.00	-10.18	10.24 S	10.15 W	14.41@	224.76	0.34

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 RIG:H&P 300

Page 04/07

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)
7298.00	1.23	345.29	7294.82	95.00	-10.99	8.30 S	10.97 W	13.75@	232.89	0.39
7392.00	1.20	19.42	7388.80	94.00	-10.92	6.40 S	10.90 W	12.64@	239.59	0.76
7487.00	1.74	330.97	7483.78	95.00	-11.28	4.20 S	11.27 W	12.02@	249.57	1.37
7581.00	1.40	324.02	7577.74	94.00	-12.64	2.02 S	12.63 W	12.79@	260.92	0.41
7675.00	0.33	45.79	7671.73	94.00	-13.12	0.90 S	13.11 W	13.15@	266.07	1.48
7770.00	0.50	336.99	7766.73	95.00	-13.08	0.33 S	13.08 W	13.08@	268.56	0.52
7865.00	1.05	308.27	7861.72	95.00	-13.92	0.59 N	13.93 W	13.94@	272.43	0.69
7959.00	0.75	47.29	7955.71	94.00	-14.14	1.54 N	14.15 W	14.23@	276.22	1.47
8054.00	0.98	58.65	8050.70	95.00	-12.99	2.39 N	13.00 W	13.22@	280.41	0.30
8148.00	0.77	43.50	8144.69	94.00	-11.87	3.26 N	11.88 W	12.32@	285.36	0.33
8243.00	1.69	65.11	8239.67	95.00	-10.15	4.32 N	10.17 W	11.05@	293.00	1.07
8337.00	0.47	68.53	8333.65	94.00	-8.54	5.04 N	8.55 W	9.93@	300.52	1.30
8431.00	1.09	1.78	8427.64	94.00	-8.15	6.08 N	8.16 W	10.18@	306.65	1.07
** TIED-IN TO HALLIBURTON SURVEYS AT 8526'MD.										
8526.00	1.00	80.18	8522.63	95.00	-7.30	7.12 N	7.32 W	10.21@	314.21	1.39
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8578.00	0.35	330.92	8574.63	52.00	-6.93	7.34 N	6.95 W	10.11@	316.55	2.24
8675.00	0.62	288.03	8671.62	97.00	-7.57	7.76 N	7.59 W	10.86@	315.61	0.45
8738.00	3.08	89.51	8734.60	63.00	-6.20	7.88 N	6.22 W	10.04@	321.69	5.83
8770.00	5.98	92.38	8766.49	32.00	-3.67	7.82 N	3.70 W	8.65@	334.67	9.09
8801.00	9.41	92.47	8797.21	31.00	0.47	7.64 N	0.45 E	7.65@	336	11.07
8833.00	12.57	89.38	8828.62	32.00	6.57	7.56 N	6.54 E	10.00@	40.87	10.04
8864.00	15.74	88.42	8858.67	31.00	14.15	7.72 N	14.12 E	16.09@	61.35	10.25
8896.00	19.17	88.35	8889.20	32.00	23.74	7.99 N	23.72 E	25.03@	71.39	10.72
8927.00	22.07	89.27	8918.21	31.00	34.66	8.21 N	34.63 E	35.59@	76.66	9.41
8959.00	24.89	90.91	8947.56	32.00	47.40	8.18 N	47.38 E	48.08@	80.21	9.04
8990.00	27.79	92.38	8975.34	31.00	61.15	7.77 N	61.12 E	61.62@	82.75	9.59
9022.00	30.86	93.81	9003.23	32.00	76.79	6.92 N	76.77 E	77.08@	84.85	9.84

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 RIG:H&P 300

Page 05/07

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
9053.00	33.50	93.94	9029.47	31.00	93.26	5.80 N	93.24 E	93.42@	86.44	8.52
9085.00	36.49	92.75	9055.68	32.00	111.57	4.74 N	111.56 E	111.66@	87.57	9.58
9116.00	39.31	91.09	9080.14	31.00	130.60	4.11 N	130.59 E	130.65@	88.20	9.67
9148.00	42.12	90.75	9104.39	32.00	151.47	3.78 N	151.46 E	151.50@	88.57	8.81
9179.00	45.02	89.41	9126.85	31.00	172.83	3.75 N	172.82 E	172.86@	88.76	9.82
9211.00	48.10	89.33	9148.85	32.00	196.06	4.01 N	196.05 E	196.09@	88.83	9.63
9242.00	50.74	88.84	9169.01	31.00	219.60	4.39 N	219.59 E	219.63@	88.86	8.60
9274.00	54.17	88.56	9188.51	32.00	244.97	4.96 N	244.95 E	245.00@	88.84	10.74
9305.00	57.24	88.51	9205.98	31.00	270.57	5.62 N	270.55 E	270.61@	88.81	9.90
9337.00	59.97	89.15	9222.64	32.00	297.87	6.17 N	297.86 E	297.92@	88.81	8.70
9368.00	63.22	90.07	9237.39	31.00	325.14	6.36 N	325.12 E	325.18@	88.88	10.80
9400.00	66.65	90.96	9250.94	32.00	354.12	6.09 N	354.10 E	354.15@	89.01	11.01
9431.00	70.00	91.49	9262.39	31.00	382.91	5.48 N	382.90 E	382.94@	89.18	10.92
9463.00	73.60	91.99	9272.39	32.00	413.29	4.55 N	413.28 E	413.30@	89.37	11.35
9494.00	77.03	92.15	9280.24	31.00	443.25	3.47 N	443.24 E	443.26@	89.55	11.08
9526.00	80.28	91.89	9286.54	32.00	474.60	2.36 N	474.59 E	474.60@	89.71	10.19
9620.00	89.25	91.50	9295.11	94.00	568.06	0.40 S	568.06 E	568.06@	90.04	9.55
9715.00	89.60	91.40	9296.06	95.00	663.02	2.80 S	663.03 E	663.03@	90.24	0.38
9809.00	91.01	91.80	9295.56	94.00	756.97	5.43 S	756.99 E	757.01@	90.41	1.56
9903.00	91.28	91.78	9293.68	94.00	850.89	8.36 S	850.92 E	850.96@	90.56	0.29
9998.00	90.31	90.79	9292.36	95.00	945.85	10.49 S	945.89 E	945.95@	90.64	1.46
10092.00	90.04	90.36	9292.07	94.00	1039.84	11.44 S	1039.88 E	1039.94@	90.63	0.54
10187.00	90.40	89.08	9291.71	95.00	1134.84	10.97 S	1134.88 E	1134.93@	90.55	1.40
10282.00	90.66	88.12	9290.83	95.00	1229.81	8.65 S	1229.84 E	1229.88@	90.40	1.05
10376.00	90.66	88.66	9289.75	94.00	1323.78	6.01 S	1323.80 E	1323.81@	90.26	0.57
10471.00	90.13	89.15	9289.09	95.00	1418.76	4.20 S	1418.78 E	1418.79@	90.17	0.76
10566.00	89.69	88.99	9289.24	95.00	1513.75	2.65 S	1513.77 E	1513.77@	90.10	0.49

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 RIG:H&P 300

Page 06/07

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)
10660.00	91.01	88.12	9288.67	94.00	1607.72	0.28 S	1607.73 E	1607.73@	90.01	1.68
10755.00	91.10	89.16	9286.92	95.00	1702.69	1.97 N	1702.69 E	1702.69@	89.93	1.10
10849.00	90.57	89.72	9285.55	94.00	1796.67	2.89 N	1796.67 E	1796.68@	89.91	0.82
10944.00	90.22	90.00	9284.89	95.00	1891.67	3.12 N	1891.67 E	1891.67@	89.91	0.47
11038.00	89.52	90.09	9285.11	94.00	1985.67	3.05 N	1985.67 E	1985.67@	89.91	0.75
11133.00	89.87	90.55	9285.61	95.00	2080.66	2.52 N	2080.67 E	2080.67@	89.93	0.61
11228.00	90.22	90.50	9285.54	95.00	2175.66	1.65 N	2175.66 E	2175.66@	89.96	0.37
11322.00	89.43	91.24	9285.83	94.00	2269.64	0.22 N	2269.65 E	2269.65@	89.99	1.15
11417.00	89.78	90.98	9286.48	95.00	2364.61	1.62 S	2364.63 E	2364.63@	90.04	0.46
11511.00	88.20	91.46	9288.14	94.00	2458.57	3.62 S	2458.59 E	2458.59@	90.08	1.76
11605.00	87.85	91.34	9291.38	94.00	2552.48	5.92 S	2552.51 E	2552.51@	90.13	0.39
11700.00	87.93	89.83	9294.88	95.00	2647.40	6.89 S	2647.43 E	2647.44@	90.15	1.59
11794.00	89.08	88.55	9297.33	94.00	2741.36	5.56 S	2741.39 E	2741.40@	90.12	1.83
11889.00	88.55	88.18	9299.29	95.00	2836.31	2.85 S	2836.33 E	2836.33@	90.06	0.68
11984.00	88.55	88.62	9301.70	95.00	2931.25	0.20 S	2931.26 E	2931.26@	90.00	0.46
12078.00	88.37	90.06	9304.22	94.00	3025.21	0.89 N	3025.22 E	3025.22@	89.98	1.54
12173.00	90.31	90.02	9305.32	95.00	3120.20	0.82 N	3120.21 E	3120.21@	89.98	2.04
12267.00	90.92	90.04	9304.31	94.00	3214.19	0.77 N	3214.20 E	3214.20@	89.99	0.65
12362.00	92.07	89.93	9301.83	95.00	3309.15	0.79 N	3309.17 E	3309.17@	89.99	1.22
12456.00	91.80	90.11	9298.66	94.00	3403.10	0.76 N	3403.12 E	3403.12@	89.99	0.35
12551.00	91.10	90.67	9296.25	95.00	3498.06	0.12 N	3498.08 E	3498.08@	90.00	0.94
12645.00	90.66	91.28	9294.81	94.00	3592.03	1.48 S	3592.06 E	3592.06@	90.02	0.80
12740.00	92.24	90.82	9292.40	95.00	3686.98	3.22 S	3687.01 E	3687.01@	90.05	1.73
12834.00	92.33	91.39	9288.66	94.00	3780.88	5.04 S	3780.91 E	3780.92@	90.08	0.61
12929.00	91.45	91.03	9285.52	95.00	3875.80	7.04 S	3875.84 E	3875.85@	90.10	1.00
13023.00	91.01	90.75	9283.51	94.00	3969.76	8.50 S	3969.81 E	3969.82@	90.12	0.56
13118.00	91.89	87.49	9281.10	95.00	4064.71	7.04 S	4064.75 E	4064.76@	90.10	3.55

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION COMPANY
 SPICA 25 FED 1H
 EDDY COUNTY, NM
 RIG:H&P 300

Page 07/07

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
13212.00	90.31	89.03	9279.30	94.00	4158.65	4.19 S	4158.68 E	4158.69@	90.06	2.35
13307.00	90.57	90.10	9278.57	95.00	4253.65	3.47 S	4253.68 E	4253.68@	90.05	1.16
13401.00	90.84	89.82	9277.41	94.00	4347.64	3.40 S	4347.67 E	4347.67@	90.04	0.41
13496.00	91.36	90.17	9275.59	95.00	4442.62	3.39 S	4442.65 E	4442.65@	90.04	0.66
13590.00	91.54	90.34	9273.21	94.00	4536.59	3.81 S	4536.62 E	4536.62@	90.05	0.26
13685.00	91.54	90.82	9270.65	95.00	4631.54	4.77 S	4631.58 E	4631.58@	90.06	0.50
13780.00	91.28	89.78	9268.32	95.00	4726.51	5.27 S	4726.55 E	4726.55@	90.06	1.13
13874.00	90.84	89.67	9266.58	94.00	4820.50	4.82 S	4820.53 E	4820.54@	90.06	0.48
13969.00	90.13	89.92	9265.77	95.00	4915.49	4.48 S	4915.53 E	4915.53@	90.05	0.79
14063.00	90.04	90.48	9265.63	94.00	5009.49	4.81 S	5009.53 E	5009.53@	90.05	0.60
14158.00	89.96	90.78	9265.63	95.00	5104.48	5.85 S	5104.52 E	5104.53@	90.07	0.33
14190.00	89.69	90.74	9265.73	32.00	5136.47	6.28 S	5136.52 E	5136.52@	90.07	0.85
STRAIGHT LINE PROJECTION TO BIT DEPTH AT 14270' MD.										
14270.00	89.69	90.74	9266.16	80.00	5216.46	7.31 S	5216.51 E	5216.52@	90.08	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		
LEASE / WELL No.:	SPICA 25	#1H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	H&P 300		
API WELL No:	30-015-40099		
JOB No:	12MLD0120		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.4	LWD Calculated:	7.34
Agreed Upon:		7.34	
X =	695579.840000	Feet	Y =
695579.840000		Feet	596083.840000
SITE LATITUDE:	32.637683	SITE LONGITUDE:	103.832262
GRID SYSTEM:	TRUE ☐	UTM ☐	LAMBERT ☒
ZONE:		NEW MEXICO EAST	
PROPOSED DRIFT DIRECTION:	89.92		
KELLY BUSHING ELEVATION:	26		
ALTITUDE:	3524.1	Feet	WATER DEPTH:
		Feet	

TIE-IN SURVEY

MEASURED DEPTH:	8526		
DRIFT ANGLE:	1		
DRIFT DIRECTION:	80.18		
TRUE VERTICAL DEPTH:	8522.63		
VERTICAL SECTION:	-7.3		
RECTANGULAR COORDINATE (N / S):	7.14		
RECTANGULAR COORDINATE (E / W):	-7.32		
CLOSURE DISTANCE / DIRECTION:	10.23	314.25	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐
BT ☐			
SOURCE OF TIE-IN DATA (COMPANY):	HALLIBURTON		
COPY OF TIE-IN SURVEY REPORT	☒ YES		☐ NO

WELL PLAN

KICKOFF DEPTH:	8717	TOTAL DEPTH:	14268
KICKOFF ANGLE:	0	MAX ANGLE:	90.37

PES Engineers:

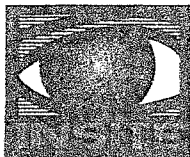
H. SANDIFER

**Signature of both field engineers required if applicable

F. LICERO

Directional Driller:

DATE: 25-Jun-2012



HALLIBURTON

DIRECTIONAL SURVEY REPORT

Devon
Spica 25 Federal 1H
New Mexico
U.S.A.
HD-XX-0009555764

Measured Depth (feet)	Inclination (degrees)	Direction (degrees)	Vertical Depth (feet)	Latitude (feet)	Departure (feet)	Vertical Section (feet)	Dogleg (deg/100ft)
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	TIE-IN
100.00	0.21	7.24	100.00	0.18 N	0.02 E	0.02	0.21
200.00	0.16	11.45	200.00	0.50 N	0.07 E	0.08	0.05
300.00	0.23	12.17	300.00	0.83 N	0.14 E	0.15	0.07
400.00	1.01	14.28	399.99	1.88 N	0.40 E	0.41	0.78
500.00	1.96	15.13	499.96	4.39 N	1.07 E	1.08	0.95
600.00	3.16	19.53	599.86	8.64 N	2.44 E	2.46	1.22
700.00	4.91	25.17	699.60	15.11 N	5.18 E	5.22	1.79
755.00	5.33	34.94	754.39	19.33 N	7.64 E	7.70	1.76
820.00	5.83	35.66	819.08	24.49 N	11.29 E	11.37	0.77
850.00	5.79	37.14	848.92	26.93 N	13.09 E	13.18	0.52
941.00	4.80	54.01	939.54	32.83 N	18.95 E	19.05	2.01
1032.00	3.70	56.51	1030.29	36.69 N	24.48 E	24.60	1.23
1128.00	2.33	55.66	1126.15	39.50 N	28.68 E	28.80	1.43
1189.00	1.52	68.61	1187.12	40.49 N	30.45 E	30.58	1.50
1283.00	0.96	108.87	1281.10	40.69 N	32.36 E	32.48	1.07
1378.00	1.25	167.66	1376.08	39.43 N	33.33 E	33.45	1.17
1472.00	1.34	172.84	1470.06	37.34 N	33.68 E	33.80	0.16
1567.00	1.22	169.76	1565.04	35.24 N	34.00 E	34.11	0.14
1661.00	1.26	163.84	1659.01	33.26 N	34.47 E	34.57	0.14
1756.00	1.31	153.29	1753.99	31.30 N	35.24 E	35.34	0.25
1851.00	1.28	147.43	1848.97	29.44 N	36.30 E	36.39	0.14
1945.00	1.21	145.50	1942.94	27.73 N	37.43 E	37.51	0.09
2040.00	1.19	135.52	2037.92	26.20 N	38.69 E	38.77	0.22
2134.00	1.70	171.37	2131.89	24.13 N	39.58 E	39.66	1.07
2229.00	1.97	175.75	2226.85	21.11 N	39.91 E	39.98	0.32
2323.00	1.76	173.15	2320.80	18.07 N	40.20 E	40.26	0.23
2418.00	1.73	174.49	2415.75	15.19 N	40.52 E	40.56	0.05
2512.00	1.66	174.42	2509.71	12.42 N	40.79 E	40.82	0.08
2540.00	1.58	172.35	2537.70	11.63 N	40.88 E	40.91	0.35
2702.00	1.90	176.17	2699.62	6.74 N	41.35 E	41.37	0.21
2795.00	1.52	212.00	2793.58	4.13 N	40.79 E	40.81	1.18
2891.00	1.45	217.23	2888.55	2.10 N	39.40 E	39.40	0.16
2985.00	1.38	218.38	2982.52	0.26 N	37.97 E	37.97	0.08
3079.00	1.31	213.17	3076.50	1.53 S	36.68 E	36.67	0.15
3174.00	1.23	218.76	3171.47	3.23 S	35.45 E	35.44	0.16
3269.00	1.16	215.76	3266.45	4.81 S	34.24 E	34.23	0.10
3363.00	1.08	202.85	3360.44	6.40 S	33.34 E	33.32	0.28
3457.00	1.09	206.64	3454.42	8.01 S	32.60 E	32.57	0.08
3552.00	0.99	205.96	3549.40	9.55 S	31.84 E	31.81	0.10
3646.00	0.98	206.85	3643.39	11.00 S	31.12 E	31.08	0.02
3741.00	1.02	198.39	3738.38	12.53 S	30.48 E	30.44	0.16
3836.00	1.05	229.88	3833.36	13.90 S	29.55 E	29.51	0.59
3930.00	1.29	255.34	3927.34	14.72 S	27.87 E	27.82	0.60
4025.00	1.28	269.15	4022.32	15.01 S	25.77 E	25.72	0.33
4119.00	1.11	266.65	4116.30	15.08 S	23.81 E	23.76	0.19
4214.00	1.01	259.13	4211.28	15.29 S	22.06 E	22.01	0.18
4308.00	0.95	244.15	4305.27	15.78 S	20.55 E	20.50	0.28
4394.00	0.74	250.76	4391.26	16.28 S	19.38 E	19.33	0.26
4556.00	0.82	174.80	4553.25	17.78 S	18.49 E	18.44	0.60
4650.00	0.59	248.31	4647.24	18.63 S	18.10 E	18.04	0.92
4745.00	0.65	237.03	4742.24	19.11 S	17.19 E	17.13	0.14
4839.00	1.85	242.93	4836.21	20.09 S	15.40 E	15.33	1.28
4934.00	0.75	233.48	4931.19	21.15 S	13.54 E	13.47	1.18
5029.00	1.22	283.19	5026.17	21.29 S	12.05 E	11.98	0.98

5123.00	0.78	194.87	5120.16	21.67 S	10.91 E	10.84	1.52
5218.00	1.12	166.38	5215.15	23.19 S	10.96 E	10.89	0.60
5312.00	0.24	263.27	5309.14	24.11 S	10.98 E	10.91	1.24
5407.00	0.51	126.26	5404.14	24.38 S	11.13 E	11.05	0.75
5501.00	0.28	202.54	5498.14	24.84 S	11.38 E	11.30	0.55
5596.00	0.55	225.01	5593.14	25.37 S	10.97 E	10.89	0.33
5690.00	0.46	261.89	5687.14	25.75 S	10.28 E	10.19	0.35
5785.00	0.96	334.74	5782.13	25.08 S	9.56 E	9.48	0.98
5880.00	0.04	301.58	5877.13	24.34 S	9.19 E	9.11	0.97
5974.00	0.79	281.28	5971.12	24.20 S	8.52 E	8.45	0.80
6069.00	1.14	277.88	6066.11	23.94 S	6.95 E	6.87	0.37
6163.00	0.99	273.26	6160.09	23.77 S	5.22 E	5.14	0.18
6258.00	1.01	264.53	6255.08	23.80 S	3.57 E	3.50	0.16
6352.00	0.59	318.69	6349.07	23.52 S	2.43 E	2.36	0.87
6447.00	0.93	324.68	6444.06	22.52 S	1.66 E	1.59	0.38
6541.00	1.41	319.01	6538.04	21.02 S	0.46 E	0.40	0.52
6636.00	0.57	337.91	6633.03	19.70 S	0.48 W	-0.54	0.94
6730.00	1.95	303.55	6727.00	18.39 S	1.99 W	-2.05	1.61
6825.00	0.71	316.78	6821.98	17.06 S	3.74 W	-3.79	1.33
6920.00	1.94	301.21	6916.95	15.80 S	5.52 W	-5.57	1.33
7014.00	1.40	331.43	7010.91	13.97 S	7.42 W	-7.47	1.08
7109.00	1.47	317.82	7105.88	12.05 S	8.80 W	-8.84	0.37
7203.00	1.33	329.40	7199.85	10.21 S	10.16 W	-10.20	0.34
7298.00	1.23	345.29	7294.83	8.28 S	10.98 W	-11.01	0.39
7392.00	1.20	19.42	7388.81	6.38 S	10.91 W	-10.93	0.76
7487.00	1.74	330.97	7483.78	4.18 S	11.28 W	-11.29	1.37
7581.00	1.40	324.02	7577.75	2.01 S	12.65 W	-12.65	0.42
7675.00	0.33	45.79	7671.74	0.89 S	13.13 W	-13.13	1.48
7770.00	0.50	336.99	7766.73	0.32 S	13.10 W	-13.10	0.52
7865.00	1.05	308.27	7861.72	0.60 N	13.94 W	-13.94	0.69
7959.00	0.75	47.29	7955.72	1.55 N	14.16 W	-14.16	1.47
8054.00	0.98	58.65	8050.71	2.40 N	13.01 W	-13.00	0.30
8148.00	0.77	43.50	8144.70	3.28 N	11.89 W	-11.88	0.33
8243.00	1.69	65.11	8239.67	4.33 N	10.17 W	-10.16	1.07
8337.00	0.47	68.53	8333.65	5.06 N	8.56 W	-8.54	1.30
8431.00	1.09	1.78	8427.65	6.09 N	8.17 W	-8.15	1.06
8526.00	1.00	80.18	8522.64	7.14 N	7.32 W	-7.30	1.39

CALCULATION BASED ON MINIMUM CURVATURE METHOD

**SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT**

**VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 89.82 DEGREES (GRID)
A TOTAL CORRECTION OF 7.44 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED**

**HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 8526.00 FEET
IS 10.23 FEET ALONG 314.25 DEGREES (GRID)**



A Schlumberger Company

PathFinder Energy Services, Inc. Magnetic & Grid Calculations

DEVON ENERGY PRODUCTION COMPANY, L.P.
SPICA "25" FEDERAL #1H
EDDY COUNTY, NEW MEXICO
Rig:HP #300

Thu Jun 14 12:52:35 2012

Coordinates

Latitude:	32.637683 N (32 deg. 38 min. 15.6601 sec.)
Longitude:	103.832262 W (-103 deg. 49 min. 56.1432 sec.)
Elevation:	3524.10 feet.
Calculation Date:	Jun/14/2012

Magnetic Calculations

Model:	IGRF2010
Dip Angle:	60.5003 degrees
Total Magnetic Field:	0.48736 gauss
Magnetic Declination:	7.614827 degrees
Horizontal Intensity:	0.239987 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.614827 Degr

Transverse Mercator Grid Calculations NAD83

Grid System:	Transverse Mercator: new mexico east
Ellipsoid:	GRS80
X:	695579.8400 feet
Y:	596083.8400 feet
True to Grid: (convergence)	-0.270245 degrees
Magnetic to Grid:	7.344581 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.344581 Degr.

PathFinder Energy Services, Inc.
Magnetic & Grid Calculations

DEVON ENERGY PRODUCTION COMPANY, L.P.
SPICA "25" #1H
EDDY COUNTY, NM
Rig:HP 300

FIELD CALCULATIONS

Mon Jun 25 08:52:43 2012

Coordinates

Latitude: 32.637683 N (32-deg. 38 min. 15.6601 sec.)
Longitude: 103.832262 W (-103 deg. 49 min. 56.1432 sec.)
Elevation: 3524.10 feet.
Calculation Date: Jun/25/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.4996 degrees
Total Magnetic Field: 0.48733 gauss
Magnetic Declination: 7.611119 degrees
Horizontal Intensity: 0.239978 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.611119 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 695579.8400 feet
Y: 596083.8400 feet
True to Grid: (convergence) -0.270245 degrees
Magnetic to Grid: 7.340874 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.340874 Degr.

OCD-ARTESIA

Form 3160-3
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No 1004-0117
Expires March 31, 2007 **EA347**

1a. Type of work ☒ DRILL ☐ REENTER		5. Lease Serial No. USA NMNM 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. Spica 25 Federal 1H [39137]
3b. Phone No. (include area code) (405)-552-7802		9. API Well No. 30-015-40099
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface NENE 380' FNL & 280' FEL Lot A At proposed prod zone NENE 400' FNL & 340' FEL Lot A		10. Field and Pool, or Exploratory Lusk; B.S. (West) [41480]
11. Sec, T R 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 drig unit line, if any) 280'	16. No. of acres in lease 2321.52 acres
17. Spacing Unit dedicated to this well 160	18. Distance from proposed location* shortest is to to nearest well, drilling, completed, applied for, on this lease, ft See Plat regularly	19. Proposed Depth MD 14283' 9305' TD at end of hole
20. BLM/BLA Bond No. on file CO-1104 NMB000801	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3498.1' 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.

- | | |
|---|---|
| 1 Well plat certified by a registered surveyor | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6 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) James A. Ames	Date MAR 21 2012
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

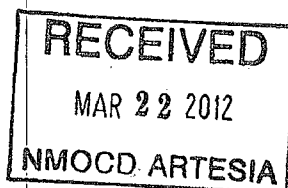
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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

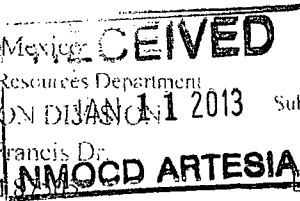


Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

District I
1625 S. French Ave., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Bravos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505



Form C-102
Revised October 15, 2009
Submit one copy to appropriate
District Office
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40099	Pool Code 41480	Pool Name LUSK; B.S. WEST
Property Code 39137	Property Name SPICA "25" FEDERAL	Well Number 1H
OGRIID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3498.1

Surface Location

TL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	26	19 S	31 E		380	NORTH	280	EAST	EDDY

Bottom Hole Location If Different From Surface

TL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	25	19 S	31 E		400	NORTH	340	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NW CORNER SEC. 26 LAT. = 32.6387061°N LONG. = 103.8485135°W NMSP EAST (FT) N = 596432.70 E = 690575.37	SECTION CORNER LAT. = 32.6387282°N LONG. = 103.8313556°W NMSP EAST (FT) N = 596465.51 E = 695857.07	NE CORNER SEC. 25 LAT. = 32.6387803°N LONG. = 103.814913°W NMSP EAST (FT) N = 596502.34 E = 701140.60	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that this represents an entire and correct statement of the mineral interest in the land on which the proposed well is located and that I have a right to drill this well on the location pursuant to a contract, an agreement or other mineral or working interest, or a written pooling agreement or a completion, resulting under the statute enacted by the division. Signature: <i>[Signature]</i> Date: 12/09/2011 Printed Name: STEPHANIE A. YSASAGA
SPICA "25" FEDERAL #1H ELEV. = 3498.1' LAT. = 32.6376834°N (NAD83) LONG. = 103.8322620°W NMSP EAST (FT) N = 596083.84 E = 695579.84	SURFACE LOCATION BOTTOM OF HOLE LAT. = 32.6376587°N LONG. = 103.8152937°W NMSP EAST (FT) N = 596099.93 E = 700803.21		
SW CORNER SEC. 26 LAT. = 32.6241363°N LONG. = 103.8484791°W NMSP EAST (FT) N = 591151.41 E = 690810.15	SECTION CORNER LAT. = 32.6242126°N LONG. = 103.8313170°W NMSP EAST (FT) N = 591184.42 E = 695893.90	SE CORNER SEC. 25 LAT. = 32.6242367°N LONG. = 103.8141643°W NMSP EAST (FT) N = 591218.56 E = 701174.72	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge. NOVEMBER 9, 2011 Date of Survey: 12/09/2011 Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: 2011058 E. LAF. 10010 PLS 12797 STATE OF NEW MEXICO OFFICE OF LAND SURVEY (N.M.S.)

PENETRATION POINT: 400' FNL & 330' FWL



PRODUCING AREA



PROJECT AREA