

**McVAY DRILLING COMPANY**

P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

RECEIVED

JUL 12 2013

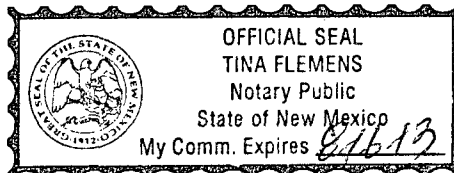
NMOCD ARTESIA

Well Name and Num: Butter Cup 36 State Com 2H
Location: Sec. 35, T18S, R34E
Operator: Devon
Drilling Contractor: McVay Drilling Company

30-015-40407

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
0.30	8806	89.78	11868				
0.21	9062	92.24	12058				
0.63	9466	91.89	12436				
1.20	10071	89.52	12720				
11.61	10165	88.29	13004				
29.11	10416	91.54	13477				
38.51	10510	90.66	13761				
57.16	10700	90.13	13950				
61.03	10731	90.57	14380				
69.73	10794	90.13	14612				
73.78	10826	89.60	14895				
80.72	10889	88.46	15085				
84.77	10952	88.46	15274				
88.02	11015	88.29	15368				
92.33	11229	88.46	15549				
88.90	11679						

By: Hedley CrowSubscribed and sworn to before me this 18th day of March, 2013Tina FLEMENS
Notary Public, Lea County, New Mexico



Company: Devon Energy Production Co., LP

Lease/Well: Bootes Fed Com/No 001H

Rig Name: McVay 10

State/County: New Mexico/Eddy

Latitude: 32.67, Longitude: 0.00

GRID North is 0.26 Degrees East of True North

VS-Azi: 0.00 Degrees



DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: survey.ut

Minimum Curvature Method

Report Date/Time: 3/12/2013 / 08:12

Vaughn Energy Services

Woodward, Oklahoma

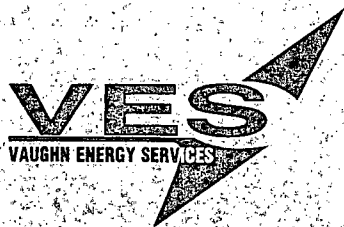
(580) 254-5000

Surveyor: Ryan Langley

Bootes 15 Fed Com No 001H / API 30-015-40407

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	0.07	230.41	100.00	-0.04	-0.05	-0.04	0.06	230.41	0.07
200.00	0.26	126.24	200.00	-0.21	0.09	-0.21	0.23	157.12	0.28
300.00	0.09	31.03	300.00	-0.28	0.31	-0.28	0.41	132.12	0.28
400.00	0.40	233.18	400.00	-0.42	0.07	-0.42	0.43	170.97	0.48
500.00	0.35	155.83	500.00	-0.91	-0.09	-0.91	0.91	185.51	0.47
600.00	0.54	214.79	599.99	-1.57	-0.23	-1.57	1.59	188.42	0.47
700.00	0.48	215.72	699.99	-2.30	-0.75	-2.30	2.42	198.01	0.06
800.00	0.25	328.92	799.99	-2.46	-1.11	-2.46	2.70	204.22	0.62
900.00	0.28	171.77	899.99	-2.52	-1.18	-2.52	2.78	205.18	0.52
1000.00	0.30	197.14	999.99	-3.01	-1.23	-3.01	3.25	202.16	0.13
1100.00	0.25	281.19	1099.99	-3.22	-1.52	-3.22	3.56	205.31	0.37
1200.00	0.27	50.98	1199.99	-3.03	-1.56	-3.03	3.40	207.24	0.47
1300.00	0.37	86.62	1299.98	-2.86	-1.05	-2.86	3.05	200.22	0.22
1400.00	0.48	71.20	1399.98	-2.71	-0.33	-2.71	2.73	187.00	0.16
1500.00	0.81	55.85	1499.98	-2.17	0.65	-2.17	2.27	163.21	0.37
1600.00	1.97	48.41	1599.94	-0.63	2.53	-0.63	2.60	104.06	1.16
1700.00	2.88	48.98	1699.85	2.15	5.70	2.15	6.10	69.31	0.91
1800.00	2.83	56.13	1799.73	5.18	9.65	5.18	10.95	61.78	0.36
1900.00	2.48	55.96	1899.62	7.76	13.49	7.76	15.56	60.08	0.35

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
2000.00	1.94	57.08	1999.55	9.89	16.70	9.89	19.41	59.36	0.54
2100.00	2.21	53.86	2099.48	11.95	19.68	11.95	23.03	58.73	0.29
2200.00	2.28	49.53	2199.41	14.38	22.75	14.38	26.92	57.71	0.19
2300.00	2.17	45.32	2299.33	17.01	25.62	17.01	30.75	56.42	0.20
2400.00	1.78	46.97	2399.27	19.40	28.10	19.40	34.15	55.38	0.40
2500.00	1.62	38.08	2499.23	21.58	30.11	21.58	37.05	54.38	0.31
2600.00	1.47	33.05	2599.19	23.77	31.69	23.77	39.61	53.13	0.21
2700.00	1.30	46.97	2699.16	25.62	33.21	25.62	41.94	52.36	0.37
2800.00	1.07	41.77	2799.14	27.09	34.67	27.09	44.00	52.00	0.26
2900.00	0.98	43.89	2899.12	28.40	35.88	28.40	45.76	51.64	0.10
3000.00	0.58	63.93	2999.11	29.23	36.92	29.23	47.10	51.63	0.48
3100.00	0.45	32.50	3099.11	29.79	37.59	29.79	47.96	51.60	0.30
3200.00	0.65	33.43	3199.11	30.59	38.11	30.59	48.87	51.24	0.19
3300.00	0.47	64.59	3299.10	31.24	38.79	31.24	49.81	51.15	0.34
3400.00	0.70	25.94	3399.10	31.96	39.43	31.96	50.76	50.97	0.44
3500.00	0.48	5.39	3499.09	32.93	39.73	32.93	51.61	50.35	0.30
3600.00	0.22	242.69	3599.09	33.27	39.60	33.27	51.72	49.97	0.63
3700.00	0.28	352.24	3699.09	33.42	39.40	33.42	51.67	49.69	0.41
3800.00	0.45	4.78	3799.09	34.06	39.40	34.06	52.08	49.16	0.18
3900.00	0.27	16.39	3899.09	34.68	39.50	34.68	52.56	48.72	0.19
4000.00	0.60	332.23	3999.08	35.38	39.32	35.38	52.89	48.03	0.45
4100.00	0.51	279.34	4099.08	35.91	38.63	35.91	52.75	47.09	0.50
4200.00	0.32	334.53	4199.08	36.24	38.07	36.24	52.56	46.42	0.42
4300.00	0.52	324.76	4299.07	36.86	37.69	36.86	52.72	45.64	0.21
4400.00	0.87	297.87	4399.07	37.58	36.76	37.58	52.57	44.37	0.47
4500.00	0.80	295.75	4499.06	38.24	35.46	38.24	52.15	42.84	0.07
4600.00	1.13	316.39	4599.04	39.26	34.15	39.26	52.03	41.02	0.47
4700.00	0.67	323.77	4699.03	40.45	33.12	40.45	52.28	39.31	0.47
4800.00	0.86	322.30	4799.02	41.51	32.31	41.51	52.61	37.90	0.18
4900.00	0.76	314.94	4899.01	42.58	31.38	42.58	52.89	36.39	0.14
5000.00	0.79	289.63	4999.00	43.28	30.26	43.28	52.81	34.96	0.34
5100.00	1.06	296.45	5098.99	43.92	28.78	43.92	52.51	33.24	0.29
5200.00	0.81	288.22	5198.97	44.56	27.28	44.56	52.25	31.48	0.28
5300.00	0.81	281.69	5298.96	44.92	25.92	44.92	51.86	29.98	0.09
5400.00	0.64	319.05	5398.96	45.48	24.86	45.48	51.83	28.66	0.49
5500.00	0.84	291.85	5498.95	46.18	23.81	46.18	51.95	27.28	0.40
5600.00	0.67	292.16	5598.94	46.67	22.59	46.67	51.85	25.83	0.18
5700.00	0.34	323.05	5698.94	47.12	21.87	47.12	51.95	24.90	0.42
5800.00	0.27	9.95	5798.94	47.59	21.74	47.59	52.32	24.55	0.25
5900.00	0.76	5.82	5898.93	48.47	21.85	48.47	53.17	24.26	0.49



A GYRO TECHNOLOGIES INC. COMPANY

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

March 12, 2013



Devon Energy Production Co., LP
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

Attn: Patti Riechers

Re: **Bootes 15 Fed Com No 001H**

Please find enclosed a copy of the survey from 0' to 8,494' ran on the above referenced well.

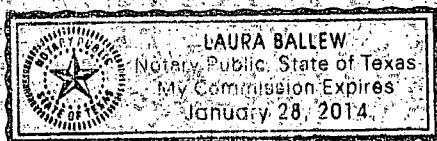
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 12th day of March
A.D., 2013, by Keith Havelka



Laura Ballew
Notary Public, State of Texas



Weatherford®

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy
333 W. Sherridan Ave
Oklahoma City, OK, 73102

Date: March 14, 2013

Attention: Spencer Stuart

Re: Devon Energy
Well: Bootes 15 Fed Com 1H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Justin Nguyen MWD Supervisor	1H	8533' MD 13817' MD	3/3/2013 3/13/2013	Measurement While Drilling

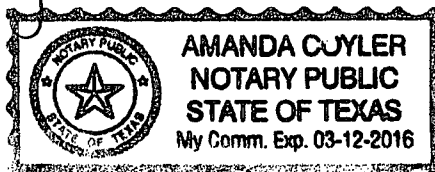
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Jesse Aguilar
MWD Coordinator

On this, the 18th day of March, 2013, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Amanda Cuyler
Notary Public





Weatherford

WFT Survey Report X & Y's



Weatherford

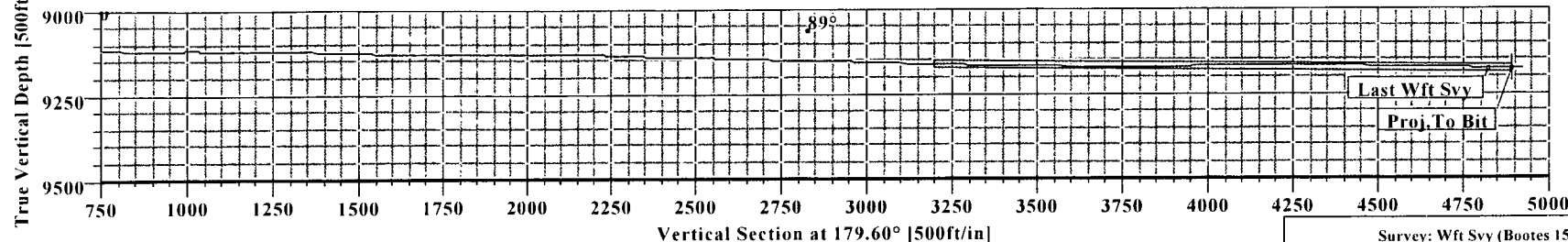
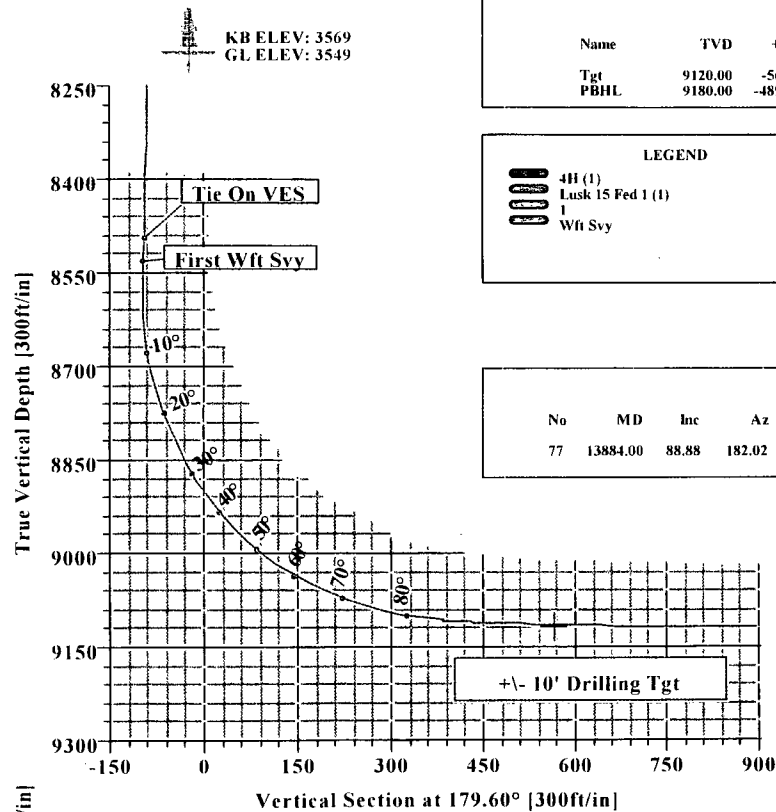
Company: Devon Energy Date: 3/13/2013 Time: 08:51:09 Page: 3
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: Bootes 15 Fed Com 1H, Grid North
Site: Bootes 15 Fed Com 1H Vertical (TVD) Reference: SITE 3569.0
Well: Bootes 15 Fed Com 1H Section (VS) Reference: Well (0:00N,0:00E,179.60Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Annotation

MD ft	TVD ft	
8494.00	8492.32	Tie On VES
8533.00	8531.31	First Wft Svy
13817.00	9178.34	Last Wft Svy
13884.00	9179.64	Proj. To Bit

devon

Bootes 15 Fed Com 1H
Eddy Co., New Mexico



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	12143.00	88.04	179.15	9162.55	-3150.69	-6.29	0.00	0.00	3150.57	
2	12192.70	89.45	178.65	9163.64	-3200.37	-5.34	3.00	-19.45	3200.25	
3	13884.41	89.45	178.65	9180.00	-4891.54	34.41	0.00	0.00	4891.66	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Bootes 15 Fed Com 1H	0.00	0.00	606941.15	690160.83	32°40'03.330N	103°50'58.954W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Tgt	9120.00	-565.93	3.98	606375.22	690164.81	Point
PBHL	9180.00	-4891.54	34.41	602049.61	690195.24	Rectangle (1692x40)

LEGEND

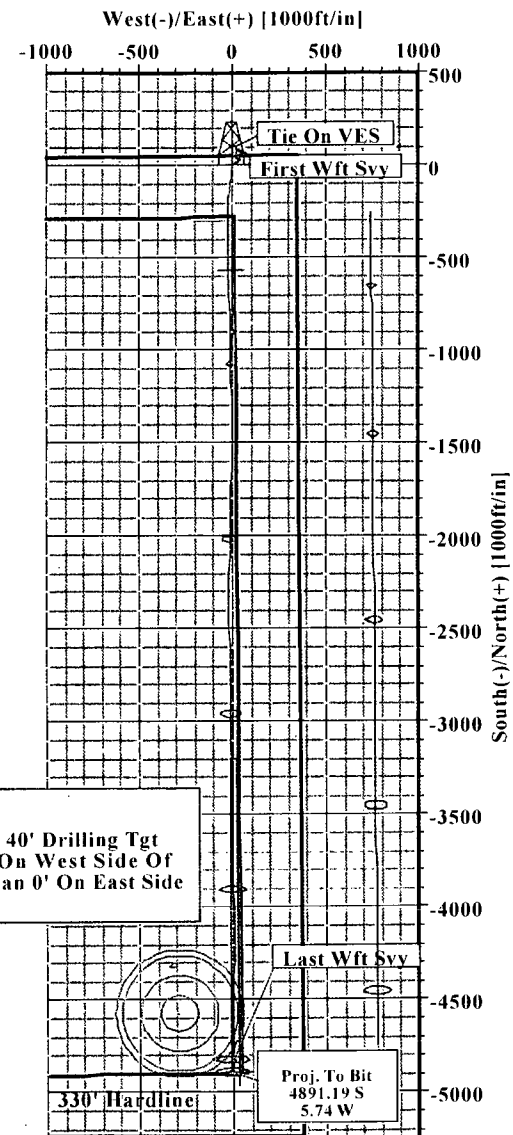
- 4H (1)
- Lusk 15 Fed 1 (1)
- Wft Svy

SITE DETAILS

Bootes 15 Fed Com 1H
Site Centre Northing: 606941.15
Easting: 690160.83
Ground Level: 3549.00
Positional Uncertainty: 0.00
Convergence: 0.26

Survey: Wft Svy (Bootes 15 Fed Com 1H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
77	13884.00	88.88	182.02	9179.64	-4891.19	-5.74	0.00	0.00	4891.03



Weatherford

Survey: Wft Svy (Bootes 15 Fed Com 1H/1)

Created By: Russell W. Joyner

Date: 3/13/2013