



Weatherford®

30-025-41032

Devon Energy
Thistle Unit 44H
Lea County, New Mexico

Section 4

Weatherford Final BHA Reports

OCT 22 2013



Devon Energy Corp

Drilling Services

v4.2.2674

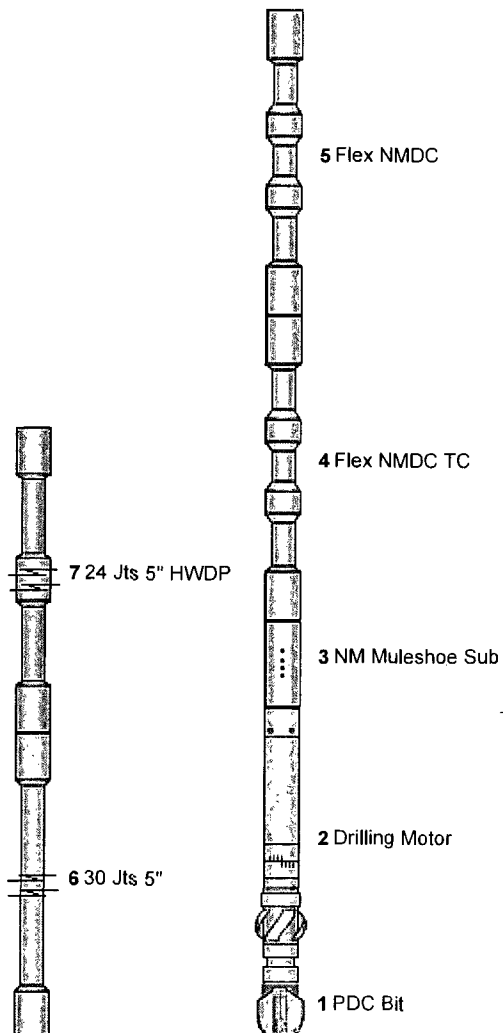
Thistle Unit 44H

BHA NO.: 1

ITEM#	QTY	COMPONENT	SERIAL #	DETAIL	BOT OD	TOP OD	I.D.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	1	PDC Bit	12164974		0	8.75	0		4 1/2" REG Pin	1.00 ft	1.00 ft
2	1	Drilling Motor	675 24XH 1391		6.75	6.75	0	4 1/2" REG Box	4 1/2" IF Box	26.50 ft	27.50 ft
3	1	NM Muleshoe Sub	675-44657		6.75	6.75	3.125	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	31.11 ft
4	1	Flex NMDC TC	675-38668		6.6	6.6	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	61.44 ft
5	1	Flex NMDC	675-37431		6.21	6.21	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	92.02 ft
6	30	30 Jts 5"	Rig	5	6.25	6.25	0	4 1/2" IF Pin	4 1/2" IF Box	947.28 ft	1039.30 ft
7	24	24 Jts 5" HWDP	Rig	5	5	5	3	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	1766.87 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

TOTAL: 1766.87 ft



COMMENTS



Devon Energy Corp

Drilling Services

v4.2.2674

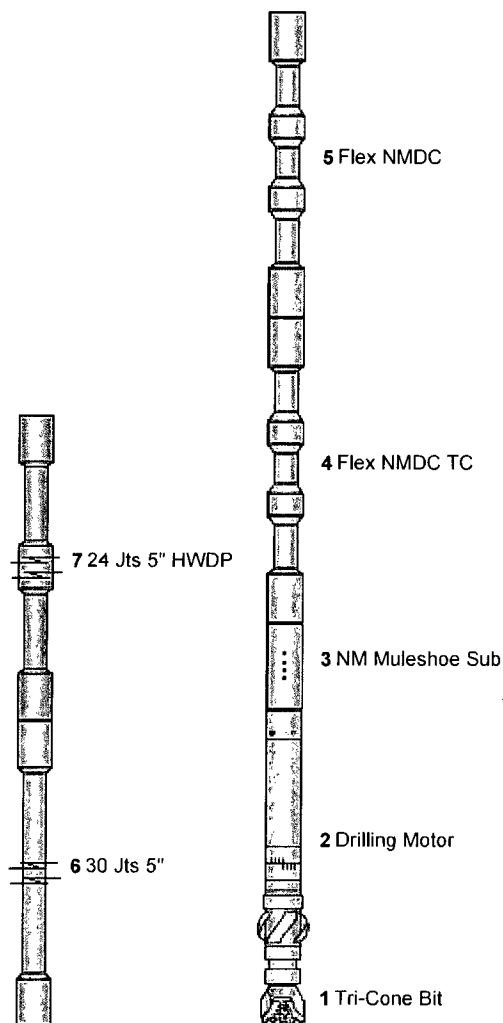
Thistle Unit 44H

BHA NO.: 2

ITEM#	QTY	COMPONENT	SERIAL #	DETAIL	BOT OD	TOP OD	I.D.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	1	Tri-Cone Bit	5227098		0	8.75	0		4 1/2" REG Pin	1.00 ft	1.00 ft
2	1	Drilling Motor	675 24XH 1391		6.75	6.75	0	4 1/2" REG Box	4 1/2" IF Box	26.50 ft	27.50 ft
3	1	NM Muleshoe Sub	675-44657		6.75	6.75	3.125	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	31.11 ft
4	1	Flex NMDC TC	675-38668		6.6	6.6	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	61.44 ft
5	1	Flex NMDC	675-37431		6.21	6.21	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	92.02 ft
6	30	30 Jts 5"	Rig	5	6.25	6.25	0	4 1/2" IF Pin	4 1/2" IF Box	947.28 ft	1039.30 ft
7	24	24 Jts 5" HWDP	Rig	5	5	5	3	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	1766.87 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

TOTAL: 1766.87 ft



COMMENTS



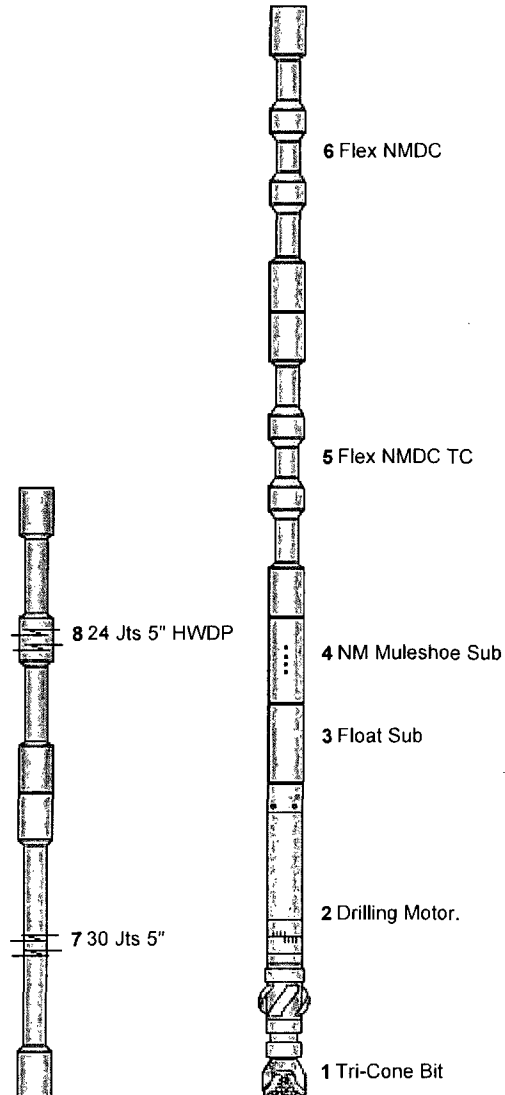
Devon Energy Corp

Drilling Services
v4.2.2674

Thistle Unit 44H

BHA NO.: 3

ITEM#	QTY	COMPONENT	SERIAL #	DETAIL	BOT OD	TOP OD	I.D.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	1	Tri-Cone Bit	5227845		0	8.75	0		4 1/2" REG Pin	1.00 ft	1.00 ft
2	1	Drilling Motor.	1080125-9	6 3/4"	6.75	6.75	0	4 1/2" REG Box	4 1/2" IF Box	26.42 ft	27.42 ft
3	1	Float Sub	47774	6.6875	6.6875	6.6875	8.125	1/2" IF Pin	4 1/2" IF Box	1.91 ft	29.33 ft
4	1	NM Muleshoe Sub	675-44657		6.75	6.75	3.125	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	32.94 ft
5	1	Flex NMDC TC	675-38668		6.6	6.6	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	63.27 ft
6	1	Flex NMDC	675-37431		6.21	6.21	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	93.85 ft
7	30	30 Jts 5"	Rig	5	6.25	6.25	0	4 1/2" IF Pin	4 1/2" IF Box	947.28 ft	1041.13 ft
8	24	24 Jts 5" HWDP	Rig	5	5	5	3	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	1768.70 ft
(O.D. units are in; I.D. units are in; FNeck units are ft)										TOTAL:	1768.70 ft



COMMENTS



Devon Energy Corp

Drilling Services
v4.2.2674

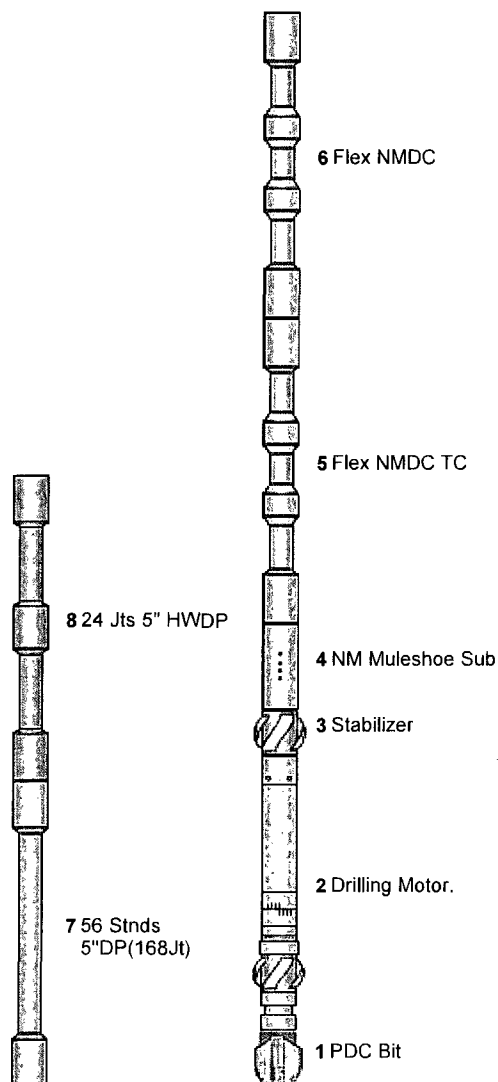
Thistle Unit 44H

BHA NO.: 4

ITEM#	QTY	COMPONENT	SERIAL #	DETAIL	BOT OD	TOP OD	I.D.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	1	PDC Bit	7142840		0	8.75	0		4 1/2" REG Pin	1.00 ft	1.00 ft
2	1	Drilling Motor.	1080125-9	6 3/4"	6.75	6.75	0	4 1/2" REG Box	4 1/2" IF Box	26.42 ft	27.42 ft
3	1	Stabilizer	SD 20103	8 3/8"	6.8	6.8	0	4 1/2" IF Pin	4 1/2" IF Box	5.11 ft	32.53 ft
4	1	NM Muleshoe Sub	675-44657		6.75	6.75	3.125	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	36.14 ft
5	1	Flex NMDC TC	675-38668		6.6	6.6	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	66.47 ft
6	1	Flex NMDC	675-37431		6.21	6.21	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	97.05 ft
7	1	56 Stnds	Rig		5	5	0	4 1/2" IF Pin	4 1/2" IF Box	5298.88	5395.93 ft
8	1	24 Jts 5" HWDP	Rig	5	5	5	3	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	6123.50 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

TOTAL: 6123.50 ft



COMMENTS



Devon Energy Corp

Drilling Services
v4.2.2674

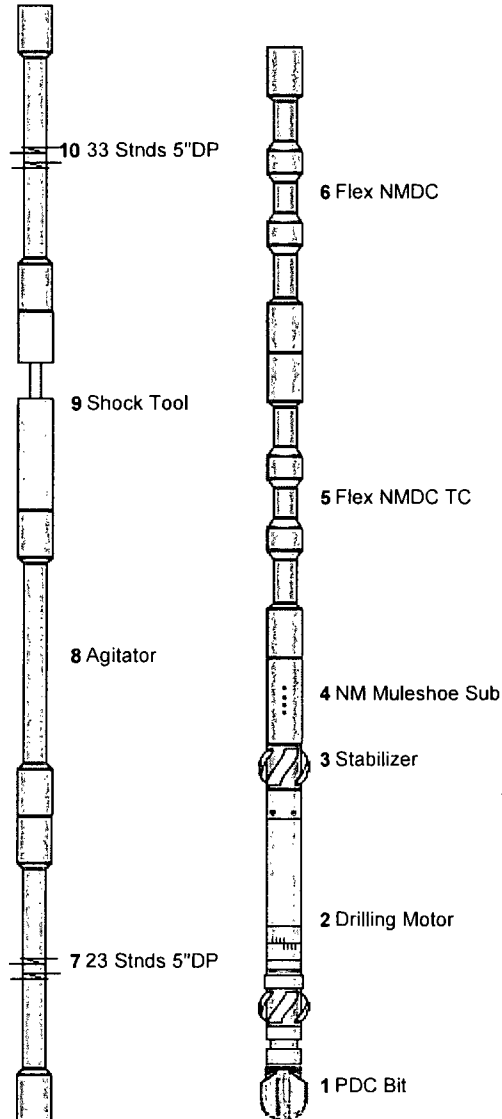
Thistle Unit 44H

BHA NO.: 5

ITEM#	QTY	COMPONENT	SERIAL #	DETAIL	BOT OD	TOP OD	I.D.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	1	PDC Bit	7141774		0	8.75	0		4 1/2" REG Pin	1.00 ft	1.00 ft
2	1	Drilling Motor	MM360675 0108	6 3/4"	6.75	6.75	0	4 1/2" REG Box	4 1/2" IF Box	25.81 ft	26.81 ft
3	1	Stabilizer	SD 20103	8 3/8"	6.8	6.8	0	4 1/2" IF Pin	4 1/2" IF Box	5.11 ft	31.92 ft
4	1	NM Muleshoe Sub	675-44657		6.75	6.75	3.125	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	35.53 ft
5	1	Flex NMDC TC	675-38668		6.6	6.6	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	65.86 ft
6	1	Flex NMDC	675-37431		6.21	6.21	3.25	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	96.44 ft
7	69	23 Stnds 5"DP			5	5	0	4 1/2" IF Pin	4 1/2" IF Box	2176.26	2272.70 ft
8	1	Agitator	A-675-1U	6 11/16"	6.6875	6.687	0	4 1/2" IF Pin	4 1/2" IF Box	12.98 ft	2285.68 ft
9	1	Shock Tool	1098689-4	6 3/4"	6.75	6.75	0	4 1/2" IF Pin	4 1/2" IF Box	10.84 ft	2296.52 ft
10	99	33 Stnds 5"DP	Rig	5"	5	5	0	4 1/2" IF Pin	4 1/2" IF Box	3122.01	5418.53 ft
11	24	24 Jts 5" HWDP	Rig	5	5	5	3	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	6146.10 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

TOTAL: 6146.10 ft



COMMENTS

**Weatherford**

BHA Report

Drilling Services

v4.2.2674

BHA 1 - Curve Section

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields

DIR Supervisor: Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	PDC Bit	Halliburton	12164974	MMD55DM	8.75	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor	NOV	675 24XH 1391	3R Party	6.75	0	0	4 1/2" REG Box	4 1/2" IF Box	26.50 ft	27.50 ft
1	NM Muleshoe Sub	WFT	675-44657	AES	6.75	3.125	0	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	31.11 ft
1	Flex NMDC TC	Weatherford	675-38668	Flex TC	6.6	3.25	4.83	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	61.44 ft
1	Flex NMDC	Weatherford	675-37431	Flex	6.21	3.25	4.98	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	92.02 ft
30	30 Jts 5"	Rig	Rig		6.25	0	0	4 1/2" IF Pin	4 1/2" IF Box	947.28 ft	1039.30 ft
24	24 Jts 5" HWDP	Rig	Rig	HWDP	5	3	0	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	1766.87 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/06/27 TO 2013/06/29
 DEPTH IN: 10776.00 ft ANGLE IN: 3.28 °
 DEPTH OUT: 11050.00 ft ANGLE OUT: 22.85 °
 DRILL HRS: 11.75 BUILD: 19.57 °
 ORIENTING HRS: 0.00 HOLE MADE: 274.00 ft
 ROTATING HRS: 0.00 AVG R.O.P.: 23.32 ft/hr

MOTOR INFORMATION

MANFCT: n/a SETTING: 2.12 °
 SERIAL #: n/a KICK PAD: No
 MODEL: n/a STABILIZER: 8 1/2"
 LOBE CFG: n/a MOTOR HRS: 0.00
 BIT TO BEND: 0

PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	57	57	0
STROKE VOLUME:	4.5112 gal/stk	4.5112 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	488.55946 gal/min		
PUMP PRESSURE:	OFF BTM: 1740 psi	ON BTM: 1890 psi	

MUD INFORMATION

MUD TYPE: Brine or Salt LIQUID BASE: Water
 DENSITY: 8.7 lb/gal TEMP: 0 °F
 VISCOSITY: 28 sec/qt pH: 0
 WTR LOSS: 0 cc/30min SAND: 0 LIQUID RATE: 475 gal/min
 PLAST VISC: 1 cP SOLIDS: 0 GAS TYPE:
 YIELD PT: 1 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Halliburton TYPE: MMD55DM IADC BIT GRADE: 1 1/2 / CT / G / X / I / NO / BHA
 NOZZLES: 0.552 in² TFA

REASON FOR BHA CHANGE

CHANGE OUT BIT

FORMATION CHARACTERISTICS

90% SS 10% Shale.

MWD COMMENTS

Worked good with agitator settings.

SIDETRACKING PROCEDURE COMMENTS

N/A.



Weatherford

BHA Report

Drilling Services

v4.2.2674

BHA 1 - Curve Section

RUN SUMMARY

Since when we started to slide we had problems to hold the Toolface, drilled with low WOB until we had 10° Inc was possible increase the WOB and hold TF, the ROP was between 40 ft/hr - 60 ft/hr. When we seen the first slide feet, we notice that the BHA build more, than the Turn, during the all run. Other issue was that we did not reach the Dogleg needed, We had only 10.63°/100 ft when the plan was 12°/100 ft. At this point we needed at least 13.50°/100 ft for land the curve.

The engineer decided POOH for change only the bit for a tricone and made a new plan for turn and build.

Weatherford Suggested use a 2.38° Bend motor with a Tricone or 2.60° Bend motor with PDC.

When we pulled the motor out, the NB stabilizer was completely backed off, the threads were'nt damaged and seemed to be in good shape. Company man and i inspected the motor and all seemed to be good it drained stronge and only has 11.75 drilling hours on it, Companyman said that we would re-run thesame NOV motor.

This was likely the reason for why the Toolface was moving a lot, and the motor build more than turn.

**Weatherford®**

BHA Report

Drilling Services

v4.2.2674

BHA 2 - Curve Section

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields

DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	Tri-Cone Bit	Hughes	5227098	VGD-38CH	8.75	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor	NOV	675 24XH 1391	3R Party	6.75	0	0	4 1/2" REG Box	4 1/2" IF Box	26.50 ft	27.50 ft
1	NM Muleshoe Sub	WFT	675-44657	AES	6.75	3.125	0	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	31.11 ft
1	Flex NMDC TC	Weatherford	675-38668	Flex TC	6.6	3.25	4.83	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	61.44 ft
1	Flex NMDC	Weatherford	675-37431	Flex	6.21	3.25	4.98	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	92.02 ft
30	30 Jts 5"	Rig	Rig		6.25	0	0	4 1/2" IF Pin	4 1/2" IF Box	947.28 ft	1039.30 ft
24	24 Jts 5" HWDP	Rig	Rig	HWDP	5	3	0	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	1766.87 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

— GENERAL INFORMATION

DATES RUN: 2013/06/29 TO 2013/06/30
 DEPTH IN: 11050.00 ft ANGLE IN: 22.85 °
 DEPTH OUT: 11256.00 ft ANGLE OUT: 43.48 °
 DRILL HRS: 10.00 BUILD: 20.63 °
 ORIENTING HRS: 0.00 HOLE MADE: 206.00 ft
 ROTATING HRS: 0.00 AVG R.O.P.: 20.60 ft/hr

— MOTOR INFORMATION

MANFCT. n/a SETTING: 2.12 °
 SERIAL #: n/a KICK PAD: No
 MODEL: n/a STABILIZER: 8 1/2"
 LOBE CFG: n/a MOTOR HRS: 0.00
 BIT TO BEND: 0

— PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	0	0	0
STROKE VOLUME:	0.0 gal/stk	0.0 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	0 gal/min		
PUMP PRESSURE:	OFF BTM: 0 psi ON BTM: 0 psi		

— MUD INFORMATION

MUD TYPE: Brine or Salt LIQUID BASE: Water
 DENSITY: 8.7 lb/gal TEMP: 0 °F
 VISCOSITY: 28 sec/qt pH: 0
 WTR LOSS: 0 cc/30min SAND: 0 LIQUID RATE: 475 gal/min
 PLAST VISC: 1 cP SOLIDS: 0 GAS TYPE:
 YIELD PT: 1 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

— BIT INFORMATION

MANFCT: Hughes TYPE: VGD-38CH IADC BIT GRADE: 1 / 2 / NO / 2 / E / 1 / NO / BHA
 NOZZLES: 14, 14, 14, n/a: 0.451 in² TFA

— REASON FOR BHA CHANGE

Pick new motor with a setting of 2.60 degree bend.

— FORMATION CHARACTERISTICS

90% Sandstone and 10%

— MWD COMMENTS

Worked good with agitator settings.

— SIDETRACKING PROCEDURE COMMENTS

N/A.



Weatherford

BHA Report

Drilling Services

v4.2.2674

BHA 2 - Curve Section

RUN SUMMARY

We started to drill this section from 11050' to 11256', where we pull out of the Hole because, do not reach the dogleg needed to land the curve. Drilled with the Max WOB Allowed 50 Klb, and 150 Differential Pressure, it was turning pretty well, but we will not reach to the Dog leg needed to land. The dog leg average for this motor is 11.24°/100' and now, we need 17.25° to land.

Weatherford International suggested since the beginning of this Run, use the motor with 2.32° and tricone bit. The handbook showed 12.9°/100 ft, we could landing the curve.

Devon decided T.O.H. change motor and use 2.60° bend housing.

**Weatherford**

BHA Report

Drilling Services

v4.2.2674

BHA 3 - Curve Section

FILE #: 4029823

WELL NAME: Thistle Unit 44H

SERVICE CO.: Weatherford

JOB TYPE:

COMPANY: Devon Energy Corp

SURVEY TYPE: Positive Pulse MWD

RIG & NO: H & P 416

SURFACE LOCATION: 350' FSL & 1980' FWL

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields

DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	Tri-Cone Bit	Hughes	5227845	VGD-38CH	8.75	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor.	NOV	1080125-9	7850	6.75	0	0	4 1/2" REG Box	4 1/2" IF Box	26.42 ft	27.42 ft
1	Float Sub	Weatherford	47774	Float Sub	6.68752.8125	0	0	4 1/2" IF Pin	4 1/2" IF Box	1.91 ft	29.33 ft
1	NM Muleshoe Sub	WFT	675-44657	AES	6.75	3.125	0	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	32.94 ft
1	Flex NMDC TC	Weatherford	675-38668	Flex TC	6.6	3.25	4.83	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	63.27 ft
1	Flex NMDC	Weatherford	675-37431	Flex	6.21	3.25	4.98	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	93.85 ft
30	30 Jts 5"	Rig	Rig		6.25	0	0	4 1/2" IF Pin	4 1/2" IF Box	947.28 ft	1041.13 ft
24	24 Jts 5" HWDP	Rig	Rig	HWDP	5	3	0	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	1768.70 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

— GENERAL INFORMATION —

DATES RUN: 2013/06/30 TO 2013/07/01
DEPTH IN: 11256.00 ft **ANGLE IN:** 43.48 °
DEPTH OUT: 11368.00 ft **ANGLE OUT:** 56.27 °
DRILL HRS: 5.25 **BUILD:** 12.79 °
ORIENTING HRS: 0.00 **HOLE MADE:** 112.00 ft
ROTATING HRS: 0.00 **AVG R.O.P.:** 21.33 ft/hr

— MOTOR INFORMATION —

MANFCT. n/a **SETTING:** 2.60 °
SERIAL #: n/a **KICK PAD:** No
MODEL: n/a **STABILIZER:** 8 1/2"
LOBE CFG: n/a **MOTOR HRS:** 0.00
BIT TO BEND: 0

— PUMP INFORMATION —

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	55	55	0
STROKE VOLUME:	4.5112 gal/stk	4.5112 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	500 gal/min		
PUMP PRESSURE:	OFF BTM: 2200 psi	ON BTM: 2325 psi	

— MUD INFORMATION —

MUD TYPE: Brine or Salt **LIQUID BASE:** Water
DENSITY: 8.7 lb/gal **TEMP:** 0 °F
VISCOSITY: 9 sec/qt **pH:** 10
WTR LOSS: 0 cc/30min **SAND:** 0 **LIQUID RATE:** 0 gal/min
PLAST VISC: 0 cP **SOLIDS:** 0 **GAS TYPE:**
YIELD PT: 0 lb/100 ft² **OIL:** 0 **GAS RATE:** 0 cu ft/min

— BIT INFORMATION —

MANFCT: Hughes **TYPE:** VGD-38CH **IADC BIT GRADE:** 2 / 2 / NO / 1 / E / 1 / NO / BHA
NOZZLES: 0.451 in² TFA

— REASON FOR BHA CHANGE —

Change assembly for land the curve and continue drilling Lateral.

— FORMATION CHARACTERISTICS —

Sandstone.

— MWD COMMENTS —

Worked without issues with agitator settings.

— SIDETRACKING PROCEDURE COMMENTS —

N/A.



Weatherford

BHA Report

Drilling Services

v4.2.2674

BHA 3 - Curve Section

RUN SUMMARY

Drilled 112' with this BHA. We seen the first 31' and we get 18.57° Dog leg, so continued drilled 15 more feet and took a checkshot and gave us 20.38° Dog leg.

According to the last checkshot, we have 70.33° and 354.95 to the Bit, so we need to landing point 12.56° Dogleg.

-10' TVD = 9.37°

-15' TVD = 8.26°.

-20' TVD = 7.38°

The engineer talked with the geologist and they say that we can land 10' or 20' below, so they decided pull out of the hole and pick up the Lateral assembly with 1.83° to land and keep drilling the Lateral # 1.

**Weatherford**

BHA Report

Drilling Services
v4.2.2674

BHA 4 - Lateral 1 Section

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields

DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	PDC Bit	Hughes	7142840	T606X	8.75	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor.	NOV	1080125-9	7850	6.75	0	0	4 1/2" REG Box	4 1/2" IF Box	26.42 ft	27.42 ft
1	Stabilizer	Stabil Drill	SD 20103	Nortrac	6.8	0	1.72	4 1/2" IF Pin	4 1/2" IF Box	5.11 ft	32.53 ft
1	NM Muleshoe Sub	WFT	675-44657	AES	6.75	3.125	0	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	36.14 ft
1	Flex NMDC TC	Weatherford	675-38668	Flex TC	6.6	3.25	4.83	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	66.47 ft
1	Flex NMDC	Weatherford	675-37431	Flex	6.21	3.25	4.98	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	97.05 ft
1	56 Stnds 5"DP(168R)g	Rig		5"	5	0	0	4 1/2" IF Pin	4 1/2" IF Box	5298.88	5395.93 ft
1	24 Jts 5" HWDP	Rig		HWDP	5	3	0	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	6123.50 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2013/07/01 TO 2013/07/04
 DEPTH IN: 11368.00 ft ANGLE IN: 59.32 °
 DEPTH OUT: 13045.00 ft ANGLE OUT: 88.25 °
 DRILL HRS: 30.83 BUILD: 28.93 °
 ORIENTING HRS: 0.00 HOLE MADE: 1677.00 ft
 ROTATING HRS: 0.00 AVG R.O.P.: 54.40 ft/hr

MOTOR INFORMATION

MANFCT. n/a
 SERIAL #: n/a
 MODEL: n/a
 LOBE CFG: n/a
 BIT TO BEND: 0
 SETTING: 1.83 °
 KICK PAD: No
 STABILIZER: 8 1/2"
 MOTOR HRS: 0.00

PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	70	70	0
STROKE VOLUME:	4.5112 gal/stk	4.5112 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	625 gal/min		
PUMP PRESSURE:	OFF BTM: 3450 psi ON BTM: 3750 psi		

MUD INFORMATION

MUD TYPE: Brine or Salt LIQUID BASE: Water
 DENSITY: 8.8 lb/gal TEMP: 0 °F
 VISCOSITY: 28 sec/qt pH: 8.5
 WTR LOSS: 0 cc/30min SAND: 0 LIQUID RATE: 625 gal/min
 PLAST VISC: 1 cP SOLIDS: 3 GAS TYPE:
 YIELD PT: 2 lb/100 ft² OIL: 0 GAS RATE: 0 cu ft/min

BIT INFORMATION

MANFCT: Hughes TYPE: T606X IADC BIT GRADE: 1 / 1 / NO / A / X / 1 / NO / DMF
 NOZZLES: 0.662 in² TFA

REASON FOR BHA CHANGE

For a new motor.

FORMATION CHARACTERISTICS

Sand stone

MWD COMMENTS

Worked without issues with agitator settings.

SIDETRACKING PROCEDURE COMMENTS

N/A

**BHA 4 - Lateral 1 Section**

RUN SUMMARY

We had pretty good BR from the motor between 8 to 10 deg per 100'

Continued drilling the lateral until 13027' where the pressure increase 800 Psi off bottom (2700 psi to 3500 psi). Swap the pumps and used only 1 for discard some problem on the pumps, used 500 GPM and the pressure continue oscilate (1950psi to 2400 psi off bottom). Pump a sweep and the pressure was decreased again to slow.

Rotate 10' and the motor started to stalling. Attempt slide and the pressure was changed again to up and down, we slid 8 feet and the motor stall, pick up 10 feet and observed that the pressure goes to 3500' and drops by it self off bottom in several ocations.

Decided to pull out of hole and Change Motor.

**Weatherford**

BHA Report

Drilling Services

v4.2.2674

BHA 5 - Lateral 2 Section

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Wade Kelsoe, Chris Shields

DIR Supervisor: Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	PDC Bit	Hughes	7141774	T606X	8.75	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor	NOV	MM360675 0108	7850	6.75	0	0	4 1/2" REG Box	4 1/2" IF Box	25.81 ft	26.81 ft
1	Stabilizer	Stabil Drill	SD 20103	Nortrac	6.8	0	1.72	4 1/2" IF Pin	4 1/2" IF Box	5.11 ft	31.92 ft
1	NM Muleshoe Sub	WFT	675-44657	AES	6.75	3.125	0	4 1/2" IF Pin	4 1/2" IF Box	3.61 ft	35.53 ft
1	Flex NMDC TC	Weatherford	675-38668	Flex TC	6.6	3.25	4.83	4 1/2" IF Pin	4 1/2" IF Box	30.33 ft	65.86 ft
1	Flex NMDC	Weatherford	675-37431	Flex	6.21	3.25	4.98	4 1/2" IF Pin	4 1/2" IF Box	30.58 ft	96.44 ft
69	23 Stnds 5"DP	Rig			5	0	0	4 1/2" IF Pin	4 1/2" IF Box	2176.26	2272.70 ft
1	Agitator	NOV	A-675-1U	Agitator	6.6875	0	0	4 1/2" IF Pin	4 1/2" IF Box	12.98 ft	2285.68 ft
1	Shock Tool	NOV	1098689-4	Shock Tool	6.75	0	0	4 1/2" IF Pin	4 1/2" IF Box	10.84 ft	2296.52 ft
99	33 Stnds 5"DP	Rig	Rig	5"	5	0	0	4 1/2" IF Pin	4 1/2" IF Box	3122.01	5418.53 ft
24	24 Jts 5" HWDP	Rig	Rig	HWDP	5	3	0	4 1/2" IF Pin	4 1/2" IF Box	727.57 ft	6146.10 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

— GENERAL INFORMATION

DATES RUN: 2013/07/04 TO 2013/07/07
DEPTH IN: 13045.00 ft **ANGLE IN:** 0.00 °
DEPTH OUT: 15666.00 ft **ANGLE OUT:** 90.28 °
DRILL HRS: 34.42 **BUILD:** 90.28 °
ORIENTING HRS: 0.00 **HOLE MADE:** 2621.00 ft
ROTATING HRS: 0.00 **AVG R.O.P.:** 76.15 ft/hr

— MOTOR INFORMATION

MANFCT. n/a **SETTING:** 1.50 °
SERIAL #: n/a **KICK PAD:** No
MODEL: n/a **STABILIZER:** 8 1/2"
LOBE CFG: n/a **MOTOR HRS:** 0.00
BIT TO BEND: 0

— PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	0	0	0
STROKE VOLUME:	0.0 gal/stk	0.0 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	0 gal/min		
PUMP PRESSURE:	OFF BTM: 0 psi	ON BTM: 0 psi	

— MUD INFORMATION

MUD TYPE: Brine or Salt **LIQUID BASE:** Water
DENSITY: 8.8 lb/gal **TEMP:** 0 °F
VISCOSITY: 29 sec/qt **pH:** 8.5
WTR LOSS: 0 cc/30min **SAND:** 0 **LIQUID RATE:** 0 gal/min
PLAST VISC: 1 cP **SOLIDS:** 3 **GAS TYPE:**
YIELD PT: 2 lb/100 ft² **OIL:** 0 **GAS RATE:** 0 cu ft/min

— BIT INFORMATION

MANFCT: Hughes **TYPE:** T606X **IADC BIT GRADE:** 1 / 2 / ? / ? / X / ? / ? / TD
NOZZLES: 0.662 in² TFA

— REASON FOR BHA CHANGE

TD.

— FORMATION CHARACTERISTICS

The well showed a tendency towards the right, and build at reason .40°/per stand, in some spots drops and in others hold, only in few ocations.



Weatherford

BHA Report

Drilling Services

v4.2.2674

BHA 5 - Lateral 2 Section

—MWD COMMENTS—

Worked without issues with agitator settings.

—SIDETRACKING PROCEDURE COMMENTS—

N/A.

—RUN SUMMARY—

On this section we drilled 2621'.

2429' Rotate = 92.67%

192' slide = 7.32%

The mototr yiel was 7"/100 ft. We should continue use of the Agitator and shock tool.

We recomend use the same BHA during the lateral.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services

v4.2.2674

BHA 1 - Curve Section, Motor #n/a

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields

DIR Supervisor: Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 1
 DATE IN: 2013/06/27
 DATE OUT: 2013/06/29
 ANGLE IN: 3.28 °
 ANGLE OUT: 22.85 °
 ORIENTING HRS: 0.00

START DEPTH: 10776.00 ft
 END DEPTH: 11050.00 ft
 HOLE MADE: 274.00 ft
 AVG ROP: 23.32 ft/hr
 ROTATING HRS: 0.00

MOTOR INFORMATION:

MANFCT: n/a
 SERIAL #: n/a
 MODEL: n/a
 LOBE: n/a
 SETTING: 2.12 °

BIT TO BEND: 0 ft
 KICKPAD: No
 STABILIZER: 8 1/2"

DRILLING INFORMATION:

BIT TYPE: MMD55DM
 BIT PRESS DROP: 300.00 psi
 MTR PRESS DROP: 300.00 psi

IADC BIT GRADE: 1 / 2 / CT / G / X / I / NO / BHA
 TOTAL FLOW RATE: 488.56 gal/min
 NOZZLES: 0.552 in² TFA

PUMP PRESS: (OFF) 1740.00 psi
 (ON) 1890.00 psi

MUD INFORMATION:

MUD TYPE: Brine or Salt
 DENSITY: 9 lb/gal
 SAND: 0.000
 SOLIDS: 0.000
 OIL: 0.000
 TEMP: 0 °F

LIQUID BASE: Water
 VISCOSITY: 28 sec/qt
 WATER LOSS: 0.00 cc/30min
 PLASTIC VISC: 1.0 cP
 YIELD POINT: 1.0 lb/100 ft²
 pH: 0.0

LIQUID RATE: 475.00 gal/min
 GAS TYPE:
 GAS RATE: 0.00 cu ft/min

(All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 3.00
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 0.00
 MOTOR HOURS THIS RUN: 0.00
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 0.00
 TOTAL BRT HOURS: 14.75

MOTOR EVALUATION COMMENTS:

NOV 3rd Party motor. Will rerun in BHA #2

REASON FOR BHA CHANGE:

CHANGE OUT BIT

COMMENTS FROM LAST DAY RAN:

When we pulled the motor out, the NB stabilizer was completely backed off, the threads were'nt damaged and seemed to be in good shape. Company man and I inspected the motor and all seemed to be good it drained strong and only has 11.75 drilling hours on it, we would re-run the same NOV motor. I torqued the NB stabilizer back up (15k) and changed out the bit.

Change bit and R.I.H.



Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 1 - Curve Section, Motor #n/a

Drilling ahead building the curve.

@ 22.15

We took a survey and the motor builds are still too low...average BR is about 10.5. We will be pooh to pick up a new motor with a bend of 2.60 and a new bit.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 2 - Curve Section, Motor #n/a

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWLSERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USACompany Man: Jeff Foster, Chris Shields
DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:BHA #: 2
DATE IN: 2013/06/29
DATE OUT: 2013/06/30
ANGLE IN: 22.85 °
ANGLE OUT: 43.48 °
ORIENTING HRS: 0.00
START DEPTH: 11050.00 ft
END DEPTH: 11256.00 ft
HOLE MADE: 206.00 ft
AVG ROP: 20.60 ft/hr
ROTATING HRS: 0.00**MOTOR INFORMATION:**MANFCT: n/a
SERIAL #: n/a
MODEL: n/a
LOBE: n/a
SETTING: 2.12 °
BIT TO BEND: 0 ft
KICKPAD: No
STABILIZER: 8 1/2"**DRILLING INFORMATION:**BIT TYPE: VGD-38CH
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi
IADC BIT GRADE: 1 / 2 / NO / 2 / E / I / NO / BHA
TOTAL FLOW RATE: 0.00 gal/min
NOZZLES: 14, 14, 14, n/a: 0.451 in² TFA
PUMP PRESS: (OFF) 0.00 psi
(ON) 0.00 psi**MUD INFORMATION:**MUD TYPE: Brine or Salt
DENSITY: 9 lb/gal
SAND: 0.000
SOLIDS: 0.000
OIL: 0.000
TEMP: 0 °F
LIQUID BASE: Water
VISCOSITY: 28 sec/qt
WATER LOSS: 0.00 cc/30min
PLASTIC VISC: 1.0 cP
YIELD POINT: 1.0 lb/100 ft²
pH: 0.0
LIQUID RATE: 475.00 gal/min
GAS TYPE:
GAS RATE: 0.00 cu ft/min
(All units are imperial.)**TIME INFORMATION:**CIRCULATING HOURS: 2.75
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 0.00
MOTOR HOURS THIS RUN: 0.00
PREVIOUS HOURS: 0.00
TOTAL MOTOR HOURS: 0.00
TOTAL BRT HOURS: 12.75**MOTOR EVALUATION COMMENTS:**

3RD PARTY NOV MUD MOTOR/ Motor drained stronge, no audible bearing sounds.

REASON FOR BHA CHANGE:

Pick new motor with a setting of 2.60 degree bend.

COMMENTS FROM LAST DAY RAN:T.O.H.
Change motor with 2.60° Bend housing and the Bit.
Torqued the Motor stab Sleeve of the new motor.

Shallow Hole Test: 400GPM, 88SPM, 550 Psi.



Weatherford

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 2 - Curve Section, Motor #n/a

R.I.H. @ 1335' where they started to have troubles with the Drawworks.
H&P Worked on it and continued to R.I.H. @ 5181'.

When they finished filling the pipe, the block picked up 2 feet and fall down by itself.
Right now they are working on the block and waiting for personal for fix the problem.

R.I.H.

Drilling ahead building the curve.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 3 - Curve Section, Motor #n/a

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields

DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 3
 DATE IN: 2013/06/30
 DATE OUT: 2013/07/01
 ANGLE IN: 43.48 °
 ANGLE OUT: 56.27 °
 ORIENTING HRS: 0.00

START DEPTH: 11256.00 ft
 END DEPTH: 11368.00 ft
 HOLE MADE: 112.00 ft
 AVG ROP: 21.33 ft/hr
 ROTATING HRS: 0.00

MOTOR INFORMATION:

MANFCT: n/a
 SERIAL #: n/a
 MODEL: n/a
 LOBE: n/a
 SETTING: 2.60 °

BIT TO BEND: 0 ft
 KICKPAD: No
 STABILIZER: 8 1/2"

DRILLING INFORMATION:

BIT TYPE: VGD-38CH IADC BIT GRADE: 2 / 2 / NO / 1 / E / 1 / NO / BHA
 BIT PRESS DROP: 300.00 psi TOTAL FLOW RATE: 500.00 gal/min PUMP PRESS: (OFF) 2200.00 psi
 MTR PRESS DROP: 300.00 psi NOZZLES: 0.451 in² TFA (ON) 2325.00 psi

MUD INFORMATION:

MUD TYPE: Brine or Salt LIQUID BASE: Water (All units are imperial.)
 DENSITY: 9 lb/gal VISCOSITY: 8.728 sec/qt
 SAND: 0.000 WATER LOSS: 0.00 cc/30min LIQUID RATE: 0.00 gal/min
 SOLIDS: 0.000 PLASTIC VISC: 0.0 cP GAS TYPE:
 OIL: 0.000 YIELD POINT: 0.0 lb/100 ft² GAS RATE: 0.00 cu ft/min
 TEMP: 0 °F pH: 10.0

TIME INFORMATION:

CIRCULATING HOURS: 2.25
 REAMING HOURS: 0.00
 TIME DRILL HOURS: 0.00
 MOTOR DRILL HOURS: 0.00
 MOTOR HOURS THIS RUN: 0.00
 PREVIOUS HOURS: 0.00
 TOTAL MOTOR HOURS: 0.00
 TOTAL BRT HOURS: 7.50

MOTOR EVALUATION COMMENTS:

3rd party NOV motor

REASON FOR BHA CHANGE:

Change assembly for land the curve and continue drilling Lateral.

COMMENTS FROM LAST DAY RAN:

Drilling ahead building the curve.
 Drilled 112' with this BHA. We seen the first 31' and we get 18.57° Dog leg, so continued drilled 15 more feet and took a checkshot and gave us 20.38° Dog leg.
 According to the last checkshot, we have 70.33° and 354.95 to the Bit, so we need to landing point 12.56° Dogleg.
 -10' TVD = 9.37°



Weatherford

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 3 - Curve Section, Motor #n/a

-15' TVD = 8.26°

-20' TVD = 7.38°

The engineer talked with the geologist and they say that we can landing 10' or 20' below, so they decided pull out of the hole and pick up the Lateral assembly with 1.83° to land and keep drilling the Lateral # 1.

POOH for change BHA.

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 4 - Lateral 1 Section, Motor #n/a

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWLSERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USACompany Man: Jeff Foster, Chris Shields
DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #:	4	START DEPTH:	11368.00 ft
DATE IN:	2013/07/01	END DEPTH:	13045.00 ft
DATE OUT:	2013/07/04	HOLE MADE:	1677.00 ft
ANGLE IN:	59.32 °	AVG ROP:	54.40 ft/hr
ANGLE OUT:	88.25 °		
ORIENTING HRS:	0.00	ROTATING HRS:	0.00

MOTOR INFORMATION:

MANFCT:	n/a		
SERIAL #:	n/a		
MODEL:	n/a		
LOBE:	n/a	BIT TO BEND:	0 ft
SETTING:	1.83 °	KICKPAD:	No
		STABILIZER:	8 1/2"

DRILLING INFORMATION:

BIT TYPE:	T606X	IADC BIT GRADE:	1 / 1 / NO / A / X / 1 / NO / DMF		
BIT PRESS DROP:	250.00 psi	TOTAL FLOW RATE:	625.00 gal/min	PUMP PRESS:	(OFF) 3450.00 psi
MTR PRESS DROP:	350.00 psi	NOZZLES:	0.662 in ² TFA		(ON) 3750.00 psi

MUD INFORMATION:

MUD TYPE:	Brine or Salt	LIQUID BASE:	Water	(All units are imperial.)	
DENSITY:	9 lb/gal	VISCOSITY:	28 sec/qt		
SAND:	0.000	WATER LOSS:	0.00 cc/30min	LIQUID RATE:	625.00 gal/min
SOLIDS:	3.000	PLASTIC VISC:	1.0 cP	GAS TYPE:	
OIL:	0.000	YIELD POINT:	2.0 lb/100 ft ²	GAS RATE:	0.00 cu ft/min
TEMP:	0 °F	pH:	8.5		

TIME INFORMATION:

CIRCULATING HOURS:	7.42
REAMING HOURS:	0.00
TIME DRILL HOURS:	0.00
MOTOR DRILL HOURS:	0.00
MOTOR HOURS THIS RUN:	0.00
PREVIOUS HOURS:	0.00
TOTAL MOTOR HOURS:	0.00
TOTAL BRT HOURS:	38.25

MOTOR EVALUATION COMMENTS:

3rd party NOV motor

REASON FOR BHA CHANGE:

For a new motor.

COMMENTS FROM LAST DAY RAN:H2S Alarm and wait on safety.
Continue POOH.
Change motor and MWD String.
Shallow Hole Test, Ok.
RIH with New BHA.



Weatherford

Motor / RSS Evaluation Report

Drilling Services
v4.2.2674

BHA 4 - Lateral 1 Section, Motor #n/a

Drilling Lateral.

16:00 - 24:00 Drilled F/ 13,045' - 13,274'

**Weatherford**

Motor / RSS Evaluation Report

Drilling Services

v4.2.2674

BHA 5 - Lateral 2 Section, Motor #n/a

FILE #: 4029823

JOB TYPE:

RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H

COMPANY: Devon Energy Corp

SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford

SURVEY TYPE: Positive Pulse MWD

FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Wade Kelsoe, Chris Shields

DIR Supervisor: Jesus Ramirez, Rene Rosas

MWD Supervisor: Dave Latch, Derrick Brown

BHA SURVEY TYPE: Positive Pulse MWD

HOLE SIZE: 8.75 in

GENERAL INFORMATION:

BHA #: 5
DATE IN: 2013/07/04
DATE OUT: 2013/07/07
ANGLE IN: 0.00 °
ANGLE OUT: 90.28 °
ORIENTING HRS: 0.00
START DEPTH: 13045.00 ft
END DEPTH: 15666.00 ft
HOLE MADE: 2621.00 ft
AVG ROP: 76.15 ft/hr
ROTATING HRS: 0.00

MOTOR INFORMATION:

MANFCT: n/a
SERIAL #: n/a
MODEL: n/a
LOBE: n/a
SETTING: 1.50 °
BIT TO BEND: 0 ft
KICKPAD: No
STABILIZER: 8 1/2"

DRILLING INFORMATION:

BIT TYPE: T606X
BIT PRESS DROP: 0.00 psi
MTR PRESS DROP: 0.00 psi
IADC BIT GRADE: 1/2/?/?/X/?/?/TD
TOTAL FLOW RATE: 0.00 gal/min
NOZZLES: 0.662 in² TFA
PUMP PRESS: (OFF) 0.00 psi
(ON) 0.00 psi

MUD INFORMATION:

MUD TYPE: Brine or Salt
DENSITY: 9 lb/gal
SAND: 0.000
SOLIDS: 3.000
OIL: 0.000
TEMP: 0 °F
LIQUID BASE: Water
VISCOSITY: 29 sec/qt
WATER LOSS: 0.00 cc/30min
PLASTIC VISC: 1.0 cP
YIELD POINT: 2.0 lb/100 ft²
pH: 8.5
LIQUID RATE: 0.00 gal/min
GAS TYPE:
GAS RATE: 0.00 cu ft/min
(All units are imperial.)

TIME INFORMATION:

CIRCULATING HOURS: 14.33
REAMING HOURS: 0.00
TIME DRILL HOURS: 0.00
MOTOR DRILL HOURS: 0.00
MOTOR HOURS THIS RUN: 0.00
PREVIOUS HOURS: 0.00
TOTAL MOTOR HOURS: 0.00
TOTAL BRT HOURS: 48.75

MOTOR EVALUATION COMMENTS:

3rd party motor. NOV Drained good.

REASON FOR BHA CHANGE:

TD.

COMMENTS FROM LAST DAY RAN:

POOH SIDE WAYS. WE SHOULD BE OUT OF THE HOLE THIS EVENING.



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 1 - 2013/06/27 TO 2013/06/29

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields
DIR Supervisor: Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA NO: 1	DATES RUN: 2013/06/27 TO 2013/06/29	SECTION: Curve	TOOLFACE OFFSET: 285 °	SURVEY OFFSET: 59 ft
MOTOR SETTING: 2.12 °	KICKPAD: No	STABILIZER: 8 1/2"	MODEL: n/a	SERIAL NO: n/a
			BHA SURVEY TYPE: Positive Pulse MWD	

(Distances are shown in feet.)

BIT		SURVEY				----- ORIENTING -----			----- ROTATING -----			SLIDE	BUR	BUR	COMMENTS	
DEPTH	DRILLED	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET	SEEN	/ft	/100ft		
10776.00	39.00	10717.00	3.28	251.84	80R	GTF	10776.00	10815.00	39.00	10815.00	10815.00	0.00	0.00	0.00	0.00	CHECK SHOT
10815.00	32.00	10756.00	2.85	256.00	60R		10815.00	10847.00	32.00	10847.00	10847.00	0.00	0.00	0.00	-1.10	
10847.00	31.00	10788.00	3.74	277.19	20R		10847.00	10878.00	31.00	10878.00	10878.00	0.00	12.00	0.07	2.78	
10878.00	31.00	10819.00	6.41	299.26	30R		10878.00	10909.00	31.00	10909.00	10909.00	0.00	31.00	0.09	8.61	
10909.00	32.00	10850.00	9.36	305.03	60R		10909.00	10941.00	32.00	10941.00	10941.00	0.00	31.00	0.10	9.52	
10941.00	31.00	10882.00	12.64	310.38	35R		10941.00	10972.00	31.00	10972.00	10972.00	0.00	32.00	0.10	10.25	
10972.00	32.00	10913.00	15.59	319.95	30R		10972.00	11004.00	32.00	11004.00	11004.00	0.00	31.00	0.10	9.52	
11004.00	31.00	10945.00	18.48	327.00	30R		11004.00	11035.00	31.00	11035.00	11035.00	0.00	32.00	0.09	9.03	
11035.00	15.00	10976.00	21.32	329.49	30R		11035.00	11050.00	15.00	11050.00	11050.00	0.00	31.00	0.09	9.16	POOH TO CHANGE OUT THE BIT
11050.00	0.00	10991.00	22.85	330.43			11050.00	11050.00	0.00	11050.00	11050.00	0.00	15.00	0.10	10.20	

Totals:	274.00 ft	0.00 ft
Percentages:	100.0%	0.0%
Time:	0.00 hrs	0.00 hrs
Percentages:	0.0%	0.0%



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 2 - 2013/06/29 TO 2013/06/30

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields
DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA NO: 2	DATES RUN: 2013/06/29 TO 2013/06/30	SECTION: Curve	TOOLFACE OFFSET: 285 °	SURVEY OFFSET: 59 ft
MOTOR SETTING: 2.12 °	KICKPAD: No	STABILIZER: 8 1/2"	MODEL: n/a	SERIAL NO: n/a
			BHA SURVEY TYPE: Positive Pulse MWD	

(Distances are shown in feet.)

BIT		SURVEY				ORIENTING			ROTATING			SLIDE	BUR	BUR	COMMENTS
DEPTH	DRILLED	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET	SEEN	/ft	/100ft	
11050.00	17.00	10991.00	22.85	330.43	30R	11050.00	11067.00	17.00	11067.00	11067.00	0.00	0.00	0.00	0.00	
11067.00	31.00	11008.00	24.64	331.35	30R	11067.00	11098.00	31.00	11098.00	11098.00	0.00	0.00	0.00	10.53	
11098.00	32.00	11039.00	27.53	333.69	30R	11098.00	11130.00	32.00	11130.00	11130.00	0.00	0.00	0.00	9.32	
11130.00	32.00	11071.00	30.57	337.08	30R	11130.00	11162.00	32.00	11162.00	11162.00	0.00	21.00	0.14	9.50	
11162.00	31.00	11103.00	34.07	339.90	30R	11162.00	11193.00	31.00	11193.00	11193.00	0.00	32.00	0.11	10.94	
11193.00	32.00	11134.00	37.29	342.62	15R	11193.00	11225.00	32.00	11225.00	11225.00	0.00	31.00	0.10	10.39	
11225.00	31.00	11166.00	40.59	344.02	10R	11225.00	11256.00	31.00	11256.00	11256.00	0.00	32.00	0.10	10.31	
11256.00	0.00	11197.00	43.48	346.32		11256.00	11256.00	0.00	11256.00	11256.00	0.00	31.00	0.09	9.32	

Totals:	206.00 ft	0.00 ft
Percentages:	100.0%	0.0%
Time:	0.00 hrs	0.00 hrs
Percentages:	0.0%	0.0%



Slide Sheet Report

BHA 3 - 2013/06/30 TO 2013/07/01

Drilling Services
v4.2.2674

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields
DIR Supervisor: Larry Brennan, Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA NO: 3	DATES RUN: 2013/06/30 TO 2013/07/01	SECTION: Curve	TOOLFACE OFFSET: 208 °	SURVEY OFFSET: 59 ft
MOTOR SETTING: 2.60 °	KICKPAD: No	STABILIZER: 8 1/2"	MODEL: n/a	SERIAL NO: n/a
			BHA SURVEY TYPE: Positive Pulse MWD	

(Distances are shown in feet.)

BIT		SURVEY				ORIENTING			ROTATING			SLIDE	BUR	BUR	COMMENTS
DEPTH	DRILLED	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET	SEEN	/ft	/100ft	
11256.00	34.00	11197.00	43.48	346.32	10R	11256.00	11290.00	34.00	11290.00	11290.00	0.00	0.00	0.00	0.00	
11290.00	31.00	11231.00	46.44	348.95	15R	11290.00	11321.00	31.00	11321.00	11321.00	0.00	0.00	0.00	8.71	
11321.00	32.00	11262.00	50.33	349.98	20R	11321.00	11353.00	32.00	11353.00	11353.00	0.00	6.00	0.65	12.55	
11353.00	15.00	11294.00	56.27	349.84		11353.00	11353.00	0.00	11353.00	11368.00	15.00	32.00	0.19	18.56	

Totals:	97.00 ft	15.00 ft
Percentages:	86.6%	13.4%
Time:	0.00 hrs	0.00 hrs
Percentages:	0.0%	0.0%



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 4 - 2013/07/01 TO 2013/07/04

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Jeff Foster, Chris Shields
DIR Supervisor: Larry Brenan, Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA NO: 4	DATES RUN: 2013/07/01 TO 2013/07/04	SECTION: Lateral 1	TOOLFACE OFFSET: 239 °	SURVEY OFFSET: 64 ft
MOTOR SETTING: 1.83 °	KICKPAD: No	STABILIZER: 8 1/2"	MODEL: n/a	SERIAL NO: n/a
			BHA SURVEY TYPE: Positive Pulse MWD	

(Distances are shown in feet.)

BIT DEPTH DRILLED	SURVEY					ORIENTING			ROTATING			SLIDE SEEN	BUR /ft	BUR /100ft	COMMENTS
	DEPTH	INC	AZM	TF		FROM	TO	FEET	FROM	TO	FEET				
11368.00	19.00	11304.00	59.32	349.59	20R	11368.00	11387.00	19.00	11387.00	11387.00	0.00	0.00	0.00	0.00	
11387.00	32.00	11323.00	62.43	349.90	25R	11387.00	11419.00	32.00	11419.00	11419.00	0.00	0.00	0.00	16.37	
11419.00	31.00	11355.00	67.32	350.60	15R	11419.00	11450.00	31.00	11450.00	11450.00	0.00	0.00	0.00	15.28	
11450.00	32.00	11386.00	70.37	352.08	HS	11450.00	11482.00	32.00	11482.00	11482.00	0.00	18.00	0.17	9.84	
11482.00	31.00	11418.00	73.91	353.00	20R	11482.00	11513.00	31.00	11513.00	11513.00	0.00	32.00	0.11	11.06	
11513.00	32.00	11449.00	77.36	353.87	30R	11513.00	11545.00	32.00	11545.00	11545.00	0.00	31.00	0.11	11.13	
11545.00	32.00	11481.00	81.78	354.37	60R	11545.00	11572.00	27.00	11572.00	11577.00	5.00	32.00	0.14	13.81	
11577.00	31.00	11513.00	85.94	355.14		11577.00	11577.00	0.00	11577.00	11608.00	31.00	32.00	0.13	13.00	
11608.00	32.00	11544.00	88.88	357.13		11608.00	11608.00	0.00	11608.00	11640.00	32.00	31.00	0.09	9.48	
11640.00	22.00	11576.00	89.37	359.03	60R	11640.00	11662.00	22.00	11662.00	11662.00	0.00	28.00	0.02	1.53	
11662.00	72.00	11598.00	0.00	0.00		11662.00	11662.00	0.00	11662.00	11734.00	72.00	0.00	0.00	-406.23	
11734.00	63.00	11670.00	91.33	0.65		11734.00	11734.00	0.00	11734.00	11797.00	63.00	22.00	4.15	126.85	
11797.00	95.00	11733.00	91.54	0.57		11797.00	11797.00	0.00	11797.00	11892.00	95.00	0.00	0.00	0.33	
11892.00	95.00	11828.00	91.75	0.72		11892.00	11892.00	0.00	11892.00	11987.00	95.00	0.00	0.00	0.22	
11987.00	94.00	11923.00	92.31	0.90	150R	11987.00	11993.00	6.00	11993.00	12081.00	88.00	0.00	0.00	0.59	
12081.00	95.00	12017.00	91.89	1.31		12081.00	12081.00	0.00	12081.00	12176.00	95.00	6.00	-0.07	-0.45	
12176.00	10.00	12112.00	92.24	1.48		12176.00	12176.00	0.00	12176.00	12186.00	10.00	0.00	0.00	0.37	
12186.00	84.00	12122.00	0.00	0.00	180 GTF	12186.00	12209.00	23.00	12209.00	12270.00	61.00	0.00	0.00	-922.40	
12270.00	95.00	12206.00	89.86	1.41		12270.00	12270.00	0.00	12270.00	12365.00	95.00	20.00	4.49	106.98	
12365.00	94.00	12301.00	90.00	1.21		12365.00	12365.00	0.00	12365.00	12459.00	94.00	3.00	0.05	0.15	
12459.00	95.00	12395.00	90.49	1.63		12459.00	12459.00	0.00	12459.00	12554.00	95.00	0.00	0.00	0.52	
12554.00	94.00	12490.00	90.84	1.78		12554.00	12554.00	0.00	12554.00	12648.00	94.00	0.00	0.00	0.37	
12648.00	95.00	12584.00	91.47	1.83		12648.00	12648.00	0.00	12648.00	12743.00	95.00	0.00	0.00	0.67	
12743.00	95.00	12679.00	92.03	1.86	LS	12743.00	12765.00	22.00	12765.00	12838.00	73.00	0.00	0.00	0.59	



Weatherford®

(Distances are shown in feet.)

Slide Sheet Report

BHA 4 - 2013/07/01 TO 2013/07/04

Drilling Services
v4.2.2674

BIT		SURVEY				----- ORIENTING -----			----- ROTATING -----			SLIDE	BUR	BUR	COMMENTS
DEPTH	DRILLED	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET	SEEN	/ft	/100ft	
12838.00	95.00	12774.00	89.51	1.28		12838.00	12838.00	0.00	12838.00	12933.00	95.00	22.00	-0.11	-2.65	
12933.00	94.00	12869.00	89.65	1.60		12933.00	12933.00	0.00	12933.00	13027.00	94.00	0.00	0.00	0.15	
13027.00	18.00	12963.00	88.39	1.97	340	13027.00	13035.00	8.00	13035.00	13045.00	10.00	0.00	0.00	-1.34	
13045.00	0.00	12981.00	88.25	0.00		13045.00	13045.00	0.00	13045.00	13045.00	0.00	0.00	0.00	-0.78	

Totals:	285.00 ft	1392.00 ft
Percentages:	17.0%	83.0%
Time:	0.00 hrs	0.00 hrs
Percentages:	0.0%	0.0%



Slide Sheet Report

BHA 5 - 2013/07/04 TO 2013/07/07

Drilling Services
v4.2.2674

FILE #: 4029823
JOB TYPE:
RIG & NO: H & P 416

WELL NAME: Thistle Unit 44H
COMPANY: Devon Energy Corp
SURFACE LOCATION: 350' FSL & 1980' FWL

SERVICE CO.: Weatherford
SURVEY TYPE: Positive Pulse MWD
FIELD / LOCATION: Delaware Basin / New Mexico / USA

Company Man: Wade Kelsoe, Chris Shields
DIR Supervisor: Jesus Ramirez, Rene Rosas
MWD Supervisor: Dave Latch, Derrick Brown

BHA NO: 5	DATES RUN: 2013/07/04 TO 2013/07/07	SECTION: Lateral 2	TOOLFACE OFFSET:	SURVEY OFFSET: 64 ft
MOTOR SETTING: 1.50 °	KICKPAD: No	STABILIZER: 8 1/2"	MODEL: n/a	SERIAL NO: n/a
				BHA SURVEY TYPE: Positive Pulse MWD

(Distances are shown in feet.)

BIT DEPTH DRILLED	SURVEY				ORIENTING			ROTATING			SLIDE SEEN	BUR /ft	BUR /100ft	COMMENTS
	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET				
13045.00	15.00	12981.00	0.00	0.00	13045.00	13045.00	0.00	13045.00	13060.00	15.00	0.00	0.00	0.00	
13060.00	85.00	12996.00	0.00	0.00	13060.00	13082.00	22.00	13082.00	13145.00	63.00	0.00	0.00	0.00	
13145.00	10.00	13081.00	89.44	1.81	13145.00	13145.00	0.00	13145.00	13155.00	10.00	21.00	4.26	105.22	
13155.00	84.00	13091.00	0.00	0.00	13155.00	13185.00	30.00	13185.00	13239.00	54.00	1.00	-89.44	-894.40	
13239.00	95.00	13175.00	90.84	1.03	13239.00	13239.00	0.00	13239.00	13334.00	95.00	20.00	4.54	108.14	
13334.00	94.00	13270.00	91.82	0.87	13334.00	13334.00	0.00	13334.00	13428.00	94.00	10.00	0.10	1.03	
13428.00	95.00	13364.00	91.75	0.64	13428.00	13428.00	0.00	13428.00	13523.00	95.00	0.00	0.00	-0.07	
13523.00	95.00	13459.00	91.47	1.01	13523.00	13523.00	0.00	13523.00	13618.00	95.00	0.00	0.00	-0.29	
13618.00	94.00	13554.00	91.68	1.70	13618.00	13629.00	11.00	13629.00	13712.00	83.00	0.00	0.00	0.22	
13712.00	95.00	13648.00	91.40	0.54	13712.00	13712.00	0.00	13712.00	13807.00	95.00	11.00	-0.03	-0.30	
13807.00	95.00	13743.00	91.61	1.02	13807.00	13807.00	0.00	13807.00	13902.00	95.00	0.00	0.00	0.22	
13902.00	94.00	13838.00	92.17	1.08	13902.00	13902.00	0.00	13902.00	13996.00	94.00	0.00	0.00	0.59	
13996.00	95.00	13932.00	93.08	1.59	13996.00	14018.00	22.00	14018.00	14091.00	73.00	0.00	0.00	0.97	
14091.00	95.00	14027.00	91.33	0.98	14091.00	14091.00	0.00	14091.00	14186.00	95.00	22.00	-0.08	-1.84	
14186.00	94.00	14122.00	92.17	1.36	14186.00	14207.00	21.00	14207.00	14280.00	73.00	0.00	0.00	0.88	
14280.00	95.00	14216.00	91.05	359.99	14280.00	14280.00	0.00	14280.00	14375.00	95.00	21.00	-0.05	-1.19	
14375.00	95.00	14311.00	91.12	0.21	14375.00	14375.00	0.00	14375.00	14470.00	95.00	0.00	0.00	0.07	
14470.00	95.00	14406.00	91.12	359.35	14470.00	14470.00	0.00	14470.00	14565.00	95.00	0.00	0.00	0.00	
14565.00	95.00	14501.00	91.61	359.23	14565.00	14565.00	0.00	14565.00	14660.00	95.00	0.00	0.00	0.52	
14660.00	95.00	14596.00	92.10	359.15	14660.00	14660.00	0.00	14660.00	14755.00	95.00	0.00	0.00	0.52	
14755.00	94.00	14691.00	92.52	385.85	14755.00	14755.00	0.00	14755.00	14849.00	94.00	0.00	0.00	0.44	
14849.00	10.00	14785.00	93.15	358.70	14849.00	14849.00	0.00	14849.00	14859.00	10.00	0.00	0.00	0.67	
14859.00	85.00	14795.00	0.00	0.00	14859.00	14879.00	20.00	14879.00	14944.00	65.00	0.00	0.00	-931.50	
14944.00	95.00	14880.00	91.54	359.82	14944.00	14944.00	0.00	14944.00	15039.00	95.00	20.00	4.58	107.69	



(Distances are shown in feet.)

Slide Sheet Report

BHA 5 - 2013/07/04 TO 2013/07/07

Drilling Services
v4.2.2674

BIT DEPTH DRILLED	SURVEY						ORIENTING			ROTATING			SLIDE SEEN	BUR /ft	BUR /100ft	COMMENTS
	DEPTH	INC	AZM	TF			FROM	TO	FEET	FROM	TO	FEET				
15039.00	10.00	14975.00	92.66	359.36			15039.00	15039.00	0.00	15039.00	15049.00	10.00	0.00	0.00	1.18	
15049.00	85.00	14985.00	0.00	0.00	150		15049.00	15074.00	25.00	15074.00	15134.00	60.00	0.00	0.00	-926.60	
15134.00	94.00	15070.00	92.66	1.34	180		15134.00	15174.00	40.00	15174.00	15228.00	54.00	21.00	4.41	109.01	
15228.00	95.00	15164.00	90.07	359.88			15228.00	15228.00	0.00	15228.00	15323.00	95.00	34.00	-0.08	-2.76	
15323.00	95.00	15259.00	89.58	0.06			15323.00	15323.00	0.00	15323.00	15418.00	95.00	10.00	-0.05	-0.52	
15418.00	94.00	15354.00	89.58	359.79			15418.00	15418.00	0.00	15418.00	15512.00	94.00	0.00	0.00	0.00	
15512.00	95.00	15448.00	89.65	0.11			15512.00	15512.00	0.00	15512.00	15607.00	95.00	0.00	0.00	0.07	
15607.00	59.00	15543.00	90.07	359.86			15607.00	15607.00	0.00	15607.00	15666.00	59.00	0.00	0.00	0.44	
15666.00	0.00	15602.00	90.28	359.61			15666.00	15666.00	0.00	15666.00	15666.00	0.00	0.00	0.00	0.36	

Totals:	191.00 ft	2430.00 ft
Percentages:	7.3%	92.7%
Time:	0.00 hrs	0.00 hrs
Percentages:	0.0%	0.0%