

Company: NN Energy

Field:

Well: Boggess 1H

Rig Name: Patterson 334

Country: US

Report Date: Thursday, 25 April 2019

(UTC-06:00) Central Time (US & Canada)

Prepared by: Francis Kalukal / Luis Castaneda

Well Placement Daily Report

Product Code:

Schlumberger

Well:Boggess 1H, 04/25/2019 16:31



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Summary of Operations

Total lateral drilled (since entry into target): 20,898 - 9,570 = 11,328 ft MD

In Zone: 10,832 ft Out of Zone: 496 ft

TD was called on April 25, 2019 at 2:48 PM at 20,898' MD.

- Average Dip over length of lateral was 89.8° (0.2° down), with dip varying between 88.6° (1.4°down) and 91.3° (1.3° up)
- TVD change from Target Top at entry and Target Top at TD was 48.5 ft down-dip
- Bit at TD is projected to be below Target Top (4.5' above the Target Base) and inclined at 90.39°
- Current formation dip is estimated to be 90.1° +/- 0.5deg.
- Total drilling time bit-on-bottom is ~100 hours over 2 runs.
- Last survey: MD:20,898'; INC:90.39; AZI:327.81; TVD:8,022.52'; VS:12,642.79; DLS:0.00 deg/100ft
- Projection to bit: MD:20,898'; INC:90.39; AZI:327.81; TVD:8,022.52; VS:12,642.79; DLS: 0.00 deg/100ft

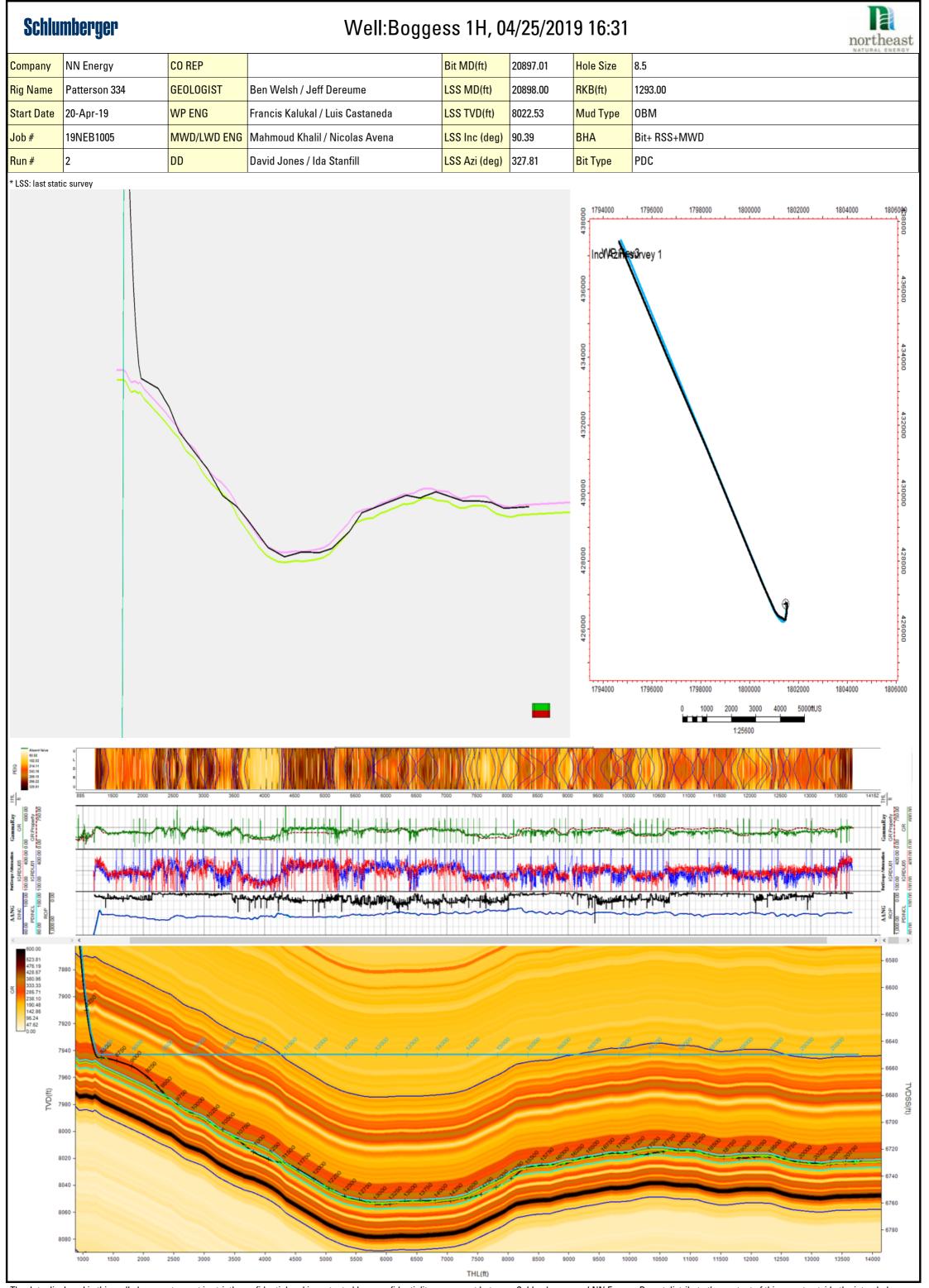
Marker Tops Crossed:

- Entered to Target Top at 9,570' MD (7,974' TVD)
 - Exited to Target Base at ~ 10,997' MD (8,015' TVD)
- Entered to Target Base at 11,322' MD (8,022' TVD)
- Exited to Target Base at ~ 14,777' MD (8,046' TVD)
- Entered to Target Base at 14,902' MD (8,044' TVD)
- Exited to Target Base at ~ 15,180' MD (8,038' TVD) Entered to Target Base at 15,226' MD (8,035' TVD)

No.	Time	MD	Inclination	Azimuth	Recommendation	Decision
52	04/25/2019 11:56:37	20661.00	90.45	328.78	90	90
51	04/25/2019 10:11:21	20513.00	90.25	329.74	90.3	90.3
	04/25/2019 07:13:01	20215.00	89.90	329.66	89.6	89.6
49	04/24/2019 13:43:16	19974.43	88.90	331.38	89	89
	04/24/2019 11:04:59	19643.15	89.09	328.72	90.1	90.1
	04/24/2019 06:21:12	19370.97	90.10	332.46	90.4	90.4
46	04/24/2019 16:30:43	18979.00	90.30	330.18	90.2	90.2
// 5	04/24/2019 09:49:52	18229.00	89.95	330.10	89	89
1/1/1	04/24/2019 09:26:35	18161.00	89.97	330.10	89.5	89.5
43	04/23/2019 15:52:26	17641.41	90.05	328.81	90.8	90.8
42	04/23/2019 14:40:24	17540.92	90.40	331.83	90	90
41	04/23/2019 13:58:18	17444.26	89.95	329.30	90.5	90.5
40	04/23/2019 12:51:31	17349.97	89.40	328.87	90.3	90.3
	04/23/2019 10:06:46	17162.81	90.25	329.62	89	89
	04/23/2019 09:44:23	17109.66	90.22	329.62	89.5	89.5
	04/23/2019 17:38:43	16366.00	90.31	328.98	90	90
36	04/23/2019 15:38:40	16273.00	91.12	328.71	90.6	90.6
35	04/23/2019 13:39:16	16087.00	89.83	329.13	91	91
34	04/23/2019 12:49:44	16068.00	90.05	329.79	90.6	90.6
	04/23/2019 11:07:10	15889.00	90.60	329.55	89.8	89.8
32	04/23/2019 10:43:50	15806.00	90.01	327.75	90	90

Schlumberger Well:Boggess 1H, 04/25/2019 16:31 CO REP 20897.01 8.5 Company NN Energy Bit MD(ft) Hole Size Patterson 334 **GEOLOGIST** Ben Welsh / Jeff Dereume LSS MD(ft) 20898.00 RKB(ft) 1293.00 Rig Name 8022.53 WP ENG **OBM** Start Date 20-Apr-19 LSS TVD(ft) Mud Type Francis Kalukal / Luis Castaneda Job# BHABit+ RSS+MWD 19NEB1005 MWD/LWD ENG Mahmoud Khalil / Nicolas Avena LSS Inc (deg) 90.39 DD Run# David Jones / Ida Stanfill LSS Azi (deg) 327.81 Bit Type PDC * LSS: last static survey Report Well Path Well Placement Engineers: 91,9 102 29.0 30.9 30.5 30.5 30.2 35.0 Francis Advent Kalukal (Day, 7am-7pm) Email: FAdvent@slb.com, Cell: +61 436 291 268 Luis Castaneda (Night, 7pm-7am) Email: Lzigala@slb.com, Cell: 832 494 8748 523.81 476.19 428.57 380.95 6710 8005 238.10 190.48 6715 142.86 95.24 47.62 8010 8010 6720 8015 6725 SS(ft) 8020 Target To: 6730 Target Top Center 8025 8025 Target Basi 6735 8030 -8030 6740 8035 -8035 TVD The data displayed in this well placement report is strictly confidential and is protected by a confidentiality agreement between Schlumberger and NN Energy. Do not distribute the content of this report outside the intended

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Schlu	mberger	Well:Boggess 1H, 04/25/2019 16:31										
Company	NN Energy	CO REP			Bit MD(ft)	20897.01	Hole Size	8.5				
Rig Name	Patterson 334	GEOLOGIST	Ben Welsh / Jeff Dereume		LSS MD(ft)	20898.00	RKB(ft)	1293.00				
Start Date	20-Apr-19	WP ENG	Francis Kalukal / Luis Castaneda		LSS TVD(ft)	8022.53	Mud Type	ОВМ				
Job#	19NEB1005	MWD/LWD ENG	Mahmoud Khalil / Nicolas Avena		LSS Inc (deg)	90.39	вна	Bit+ RSS+MWD				
Run #	2	DD	David Jones / Ida Stanfill		LSS Azi (deg)	327.81	Bit Type	PDC				
* LSS: last stat	ic survey	U Ř		ь	Ř	B L	. 0					
		170.009 154.009	Orientation: Top of Hole	134.839 Absent	Static Gaussia RAB - G	Top of Hole Fig. 15 15 15 15 15 15 15 15 15 15 15 15 15	on	Dip_ApparentTOH Boggess 1H-Bed boundary Bog	True_Dip agess 1H-Bed boundary			
Boggess 1H: t	GR (GR) 9API	600		<u> </u>			,	o deg 900	900 90			
19400									-			
19800 -	A Comment of the Control of the Cont											
20000 -	Night and the second							<u> </u>				
20200	- Header											
20400	factor of the control											
20800 -												
20900	1											