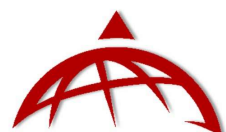




**Anglian Oil Company Ltd.
Northern Lights
AA Pad
AA16
Lateral #1
Job No. AB-CD-12345678**

**True North Directional Services Inc.
Daily Drilling Report**

25 September 2017



True North
Directional Services Inc.

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Job Number: AB-CD-12345678	Region:	Lease/Block: 07654321	Company Rep. #1: Henry Samuel Quelch
Customer: Anglian Oil Company Ltd.	Field: Northern Lights	UWI No.:	Company Rep. #2: Eusebius Twigg
Well Name: AA16	Project: Northern Lights	Date: 25 September 2017	Geologist: Algemon Jasper Capper
Rig Name: Northern Skies III	Structure: AA Pad		Directional Supervisor: Paul Pontifax Prout Esq.

Personnel Summary

Directional Drillers				MWD Operators				Gyro Surveyors/Others			
Name	Start Date	End Date	Days	Name	Start Date	End Date	Days	Name	Start Date	End Date	Days
Robert Cherry	19/09/2017	26/09/2017	8	Hurree Jamset Ram Singh	19/09/2017	26/09/2017	8	Herbert Vernon-Smith	21/09/2017	26/09/2017	6
				Herbert Henry Locke	21/09/2017	26/09/2017	6				

Drilling Summary

Start Depth: 3,977.54ft	End Depth: 5,423.25ft	Below Rotary Hours: 29.39hrs	Circulating Hours: 17.56hrs
Total Depth Drilled: 1,445.71ft	Total Drilled Hours: 14.59hrs	Ave. Total ROP: 99.06ft/hr	Percent Drilling: 49.66%
Total Rotating: 763.29ft	Rotating Hours: 7.59hrs	Ave. Rotating ROP: 100.62ft/hr	Percent Rotating: 52.80%
Total Sliding: 682.41ft	Sliding Hours: 7.01hrs	Ave. Sliding ROP: 97.38ft/hr	Percent Sliding: 47.20%

Pump Details

#	Model	Liner Size (in)	Liner Rating (%)	Volume Efficiency (%)	Vol. per Stroke (gal(US))	Maximum Pressure (psi)	Maximum Flow (gpm(US))
1	Gardner-Denver PZ-11-1600	5 1/2	100.00	100.00	3.39	5595	542
2	Gardner-Denver PZ-11-1600	5 1/2	100.00	100.00	3.39	5595	542
3	Gardner-Denver PZ-11-1600	5 1/2	100.00	100.00	3.39	5595	542

Drilling Parameters - Run #4

	Min	Max		Min	Max
WOB (lbf)	3	28	SPP Off Bottom (psi)	730	2625
Pick Up (lbf)	8	753	SPP On Bottom (psi)	742	3800
Slack Off (lbf)	8	416	Delta Pressure (psi)	44	1175
Rot. Off Bottom (lbf)	8	652	Flow Rate (gpm(US))	740	792
Bottom Hole Temp (°F)	212.0	229.5	Pump Rate (SPM)	16	132
Rotary Speed (RPM)	34	60	Motor Speed (RPM)	248	273
ROP (ft/hr)	NaN	NaN	Surface Torque (ft-lbs)	2281	22000

Bit Record - Run #4

Bit Number (Bit Run): 4 (Run 1)	Description: 6 1/2" PDC Bit	
Manufacturer: Bits'R'Us	TFA: 1.561in ²	Jets: 1 x 20, 2 x 21
Model: Grabber	Bit Diameter: 6 1/2in	Bit Hours: 14.59Hrs
Type: Bit	IADC#:	Bit Footage: 1,445.71ft
Serial Number: 87345967	Condition: Good	
Grade:	Reason for pulling out of hole: TD Well	

Motor Properties - Run #4

Description: 4 3/4" Motor Lobe 4:5 - 7.0 stg	Motor Type: Motor	Manufacturer: Motors'R'Us	Model: Roughneck X	Serial Number: 22776575	Lobe/Stage: 7:8/5.0
Mud Type: Water Based	Stabilizer Type: Straight		Rubber Type: HR		Fit Type:
Pad OD: 6.890in	NB Stabilizer: 8.268	Bit to Bend: 3.61ft	Bend Angle: 1.25°	Pressure Drop: 0psi	Rev. Rate: 0.29Rev/gal(US)
Motor Footage: 1,445.71ft	Below Rotary Hours: 29.39hrs	Circulating Hours: 17.56hrs	Rotating Footage: 763.29ft	Rotating Hours: 7.59hrs	Sliding Footage: 682.41ft
Proposed Build Rate: 9.40°/100ft	Actual Build Rate: 7.92°/100ft	Date/Time In: 24/09/2017 21:52	Date/Time Out: 26/09/2017 03:15	Number of Stalls: 0	Stall Duration: 0.00mins
Motor Failed: No	Condition: Good	Extended Motor: No			

Motor Discussion

Drilled as expected.
 Drained fully.
 No visible damage.
 No slack in the bearings.

Drillstring Components - Run #4 (BHA #4)

Bit to Sensor Distance: 51.53ft

Item #	Description	Vendor	Serial No.	Outside Diameter (in)	Inside Diameter (in)	Linear Weight (lbs/ft)	Component Weight (lb)	Top Connection	Length (ft)	Total Length (ft)
1	6 1/2" PDC Bit	Bits'R'Us	87345967	6 1/2	3	159.86	101	4 1/2 REGP	0.63	0.63
2	4 3/4" Bit Sub	Subs'R'Us	39848716	4 3/4	3	129.85	107	4 1/2 REGP	0.82	1.45
3	4 3/4" Motor Lobe 4:5 - 7.0 stg	Motors'R'Us	22776575	4 3/4	2 3/8	370.03	11486	4 1/2 REGP	31.04	32.49
4	Float Sub	Subs'R'Us	8845865	4 3/4	1.969	43.43	165	4 1/2 REGP	3.81	36.30
5	4 3/4" MWD	MWDs'R'Us	2884688	4 3/4	1 1/4	57.70	1731	4 1/2 REGP	30.00	66.30
6	4 3/4" DC - 44.00 lb/ft			4 3/4	2 1/2	44.00	2723	4 1/2 REGP	61.88	128.17
7	4 3/4" Cross Over			4 3/4	2.480	40.59	77	3 1/2 REG	1.90	130.08
8	4 3/4" Mechanical Jar			4 3/4	2.244	45.69	748	3 1/2 REG	16.37	146.45
9	4 3/4" Cross Over			4 3/4	2.480	40.59	77	3 1/2 REG	1.90	148.35
10	4 1/2" DP (X) H90 - 20.00 lb/ft			4 1/2	3.640	21.79	42894	3 1/2 REG	1,968.50	2,116.85

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Drillstring Components - Run #4 (BHA #4)									Bit to Sensor Distance: 51.53ft	
Item #	Description	Vendor	Serial No.	Outside Diameter (in)	Inside Diameter (in)	Linear Weight (lbs/ft)	Component Weight (lbf)	Top Connection	Length (ft)	Total Length (ft)
11	4 1/2" HWD NC46(IF) - 41.00 lb/ft			4 1/2	2 3/4	41.00	107612	3 1/2 REG	2,624.67	4,741.52
12	4 1/2" DP (X) H90 - 20.00 lb/ft			4 1/2	3.640	21.79	13543	3 1/2 REG	621.53	5,363.05

Mud Properties															
Date	Time	Bit Depth (ft)	Mud Weight (ppg)	Yield Point (lbf/100ft²)	Plastic Viscosity (cp)	Funnel Viscosity (Secs)	Chlorides (ppm)	pH	Oil (%)	Gas (%)	Sand (%)	Solids (%)	Water Line (ft)	Bot.Hole Temp. (°F)	Flow Temp. (°F)
25 Sep 2017	03:10	3,993.94	13.9	21.9	20.00	50	1000.00	5.00	0.00	0.00	10.00	10.00	18.04	212.0	176.0
25 Sep 2017	07:21	4,239.33	13.5	22.0	20.31	52	101.71	5.95	0.00	2058.08	0.00	10.45	16.99	222.6	170.1
25 Sep 2017	11:09	4,539.65	12.6	21.7	21.98	51	109.24	5.32	0.00	2054.44	0.00	10.08	16.99	227.6	179.6
25 Sep 2017	14:52	4,785.03	13.7	21.3	20.01	54	100.44	5.28	0.00	2063.03	0.00	10.67	17.15	223.3	170.6
25 Sep 2017	18:16	5,079.25	13.5	21.1	21.77	54	103.61	5.54	0.00	2023.12	0.00	10.96	17.32	212.8	162.5
25 Sep 2017	22:24	5,388.47	14.2	21.4	21.42	52	102.22	5.48	0.00	2063.54	0.00	10.07	16.72	229.5	183.5

Lost Circulation Material				
Date	Time	Bit Depth (ft)	Type	Weight (ppg)
25 Sep 2017	03:10	3,993.94	Cottonseed Husks	10.3

Activity Breakdown									
Date	Start Time	End Time	Hours	Start Depth (ft)	End Depth (ft)	Depth Drilled (ft)	Rate of Penetr'n (ft/hr)	Activity	Comment
25 Sep 2017	00:00	01:22	1.37	3,977.54	3,977.54			Tripping In	Tag cement at 3650 ft.
25 Sep 2017	01:22	03:10	1.80	3,977.54	3,977.54			Drill Cement and/or Float Equipment	
25 Sep 2017	03:10	03:24	0.23	3,977.54	3,993.94	16.40	70.52	Rotating	
25 Sep 2017	03:24	04:00	0.60	3,993.94	3,993.94			Circulate and/or Condition Mud	Circulate Bottoms Up
25 Sep 2017	04:00	04:19	0.33	3,993.94	3,993.94			Pressure Integrity Test	FIT
25 Sep 2017	04:19	04:26	0.11	3,993.94	4,007.26	13.32	123.58	Rotating	
25 Sep 2017	04:26	04:36	0.17	4,007.26	4,007.26			Rig Repair	Replace cap gasket on pump
25 Sep 2017	04:36	04:45	0.15	4,007.26	4,015.93	8.67	57.80	Rotating	
25 Sep 2017	04:45	04:48	0.05	4,015.93	4,015.93			Survey & Connection	
25 Sep 2017	04:48	04:56	0.14	4,015.93	4,035.62	19.69	145.03	Sliding	
25 Sep 2017	04:56	05:05	0.14	4,035.62	4,045.27	9.65	70.03	Rotating	
25 Sep 2017	05:05	05:08	0.05	4,045.27	4,045.27			Survey & Connection	
25 Sep 2017	05:08	05:13	0.09	4,045.27	4,058.39	13.12	141.15	Sliding	
25 Sep 2017	05:13	05:27	0.23	4,058.39	4,077.09	18.70	83.07	Rotating	
25 Sep 2017	05:27	05:30	0.05	4,077.09	4,077.09			Survey & Connection	
25 Sep 2017	05:30	05:41	0.18	4,077.09	4,090.21	13.12	71.56	Sliding	
25 Sep 2017	05:41	05:50	0.16	4,090.21	4,107.86	17.65	110.30	Rotating	
25 Sep 2017	05:50	05:53	0.05	4,107.86	4,107.86			Survey & Connection	
25 Sep 2017	05:53	06:00	0.11	4,107.86	4,127.55	19.69	185.11	Sliding	
25 Sep 2017	06:00	06:14	0.24	4,127.55	4,136.57	9.02	38.03	Rotating	
25 Sep 2017	06:14	06:17	0.05	4,136.57	4,136.57			Survey & Connection	
25 Sep 2017	06:17	06:24	0.11	4,136.57	4,146.41	9.84	87.89	Sliding	
25 Sep 2017	06:24	06:37	0.23	4,146.41	4,165.15	18.73	83.00	Rotating	
25 Sep 2017	06:37	06:40	0.05	4,165.15	4,165.15			Survey & Connection	
25 Sep 2017	06:40	06:47	0.12	4,165.15	4,181.55	16.40	138.67	Sliding	
25 Sep 2017	06:47	06:56	0.15	4,181.55	4,197.36	15.81	104.27	Rotating	
25 Sep 2017	06:56	06:59	0.05	4,197.36	4,197.36			Survey & Connection	
25 Sep 2017	06:59	07:10	0.18	4,197.36	4,213.77	16.40	89.51	Sliding	
25 Sep 2017	07:10	07:18	0.13	4,213.77	4,226.20	12.43	98.53	Rotating	
25 Sep 2017	07:18	07:21	0.05	4,226.20	4,226.20			Survey & Connection	
25 Sep 2017	07:21	07:27	0.10	4,226.20	4,239.33	13.12	137.40	Sliding	
25 Sep 2017	07:27	07:33	0.10	4,239.33	4,239.33			Check Shot	Survey Depth: 4,187.80 ft., Inc: 90.25°, Azm: 65.75°
25 Sep 2017	07:33	07:42	0.15	4,239.33	4,256.42	17.09	110.38	Rotating	
25 Sep 2017	07:42	07:45	0.05	4,256.42	4,256.42			Survey & Connection	
25 Sep 2017	07:45	07:56	0.19	4,256.42	4,266.26	9.84	51.91	Sliding	Hanging up, hard time controlling toolface
25 Sep 2017	07:56	07:56	0.00	4,266.26	4,266.26			Circulate and/or Condition Mud	Swap pumps, sync MWD
25 Sep 2017	07:56	08:02	0.09	4,266.26	4,286.54	20.28	230.82	Rotating	

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Activity Breakdown									
Date	Start Time	End Time	Hours	Start Depth (ft)	End Depth (ft)	Depth Drilled (ft)	Rate of Penetr'n (ft/hr)	Activity	Comment
25 Sep 2017	08:02	08:05	0.05	4,286.54	4,286.54			Survey & Connection	
25 Sep 2017	08:05	08:13	0.15	4,286.54	4,299.66	13.12	90.26	Sliding	
25 Sep 2017	08:13	08:20	0.11	4,299.66	4,315.64	15.98	143.09	Rotating	
25 Sep 2017	08:20	08:23	0.05	4,315.64	4,315.64			Survey & Connection	
25 Sep 2017	08:23	08:30	0.11	4,315.64	4,328.76	13.12	117.71	Sliding	
25 Sep 2017	08:30	08:52	0.38	4,328.76	4,328.76			Rig Repair	CO2 on floor
25 Sep 2017	08:52	09:03	0.18	4,328.76	4,346.05	17.29	95.11	Rotating	
25 Sep 2017	09:03	09:06	0.05	4,346.05	4,346.05			Survey & Connection	
25 Sep 2017	09:06	09:15	0.15	4,346.05	4,359.18	13.12	90.22	Sliding	
25 Sep 2017	09:15	09:22	0.11	4,359.18	4,375.32	16.14	144.96	Rotating	
25 Sep 2017	09:22	09:25	0.05	4,375.32	4,375.32			Survey & Connection	
25 Sep 2017	09:25	09:39	0.24	4,375.32	4,385.16	9.84	41.61	Sliding	
25 Sep 2017	09:39	09:45	0.11	4,385.16	4,406.94	21.78	203.93	Rotating	
25 Sep 2017	09:45	09:48	0.05	4,406.94	4,406.94			Survey & Connection	
25 Sep 2017	09:48	09:56	0.12	4,406.94	4,420.07	13.12	109.78	Sliding	
25 Sep 2017	09:56	10:05	0.15	4,420.07	4,435.59	15.52	100.74	Rotating	
25 Sep 2017	10:05	10:08	0.05	4,435.59	4,435.59			Survey & Connection	
25 Sep 2017	10:08	10:19	0.18	4,435.59	4,448.71	13.12	71.59	Sliding	
25 Sep 2017	10:19	10:25	0.11	4,448.71	4,468.10	19.39	176.40	Rotating	
25 Sep 2017	10:25	10:28	0.05	4,468.10	4,468.10			Survey & Connection	
25 Sep 2017	10:28	10:40	0.19	4,468.10	4,481.22	13.12	69.38	Sliding	
25 Sep 2017	10:40	10:45	0.08	4,481.22	4,495.40	14.17	169.04	Rotating	
25 Sep 2017	10:45	10:48	0.05	4,495.40	4,495.40			Survey & Connection	
25 Sep 2017	10:48	11:01	0.22	4,495.40	4,505.24	9.84	45.27	Sliding	
25 Sep 2017	11:01	11:06	0.09	4,505.24	4,526.53	21.29	233.59	Rotating	
25 Sep 2017	11:06	11:09	0.05	4,526.53	4,526.53			Survey & Connection	
25 Sep 2017	11:09	11:16	0.11	4,526.53	4,539.65	13.12	117.00	Sliding	
25 Sep 2017	11:16	11:29	0.21	4,539.65	4,555.99	16.34	78.36	Rotating	
25 Sep 2017	11:29	11:32	0.05	4,555.99	4,555.99			Survey & Connection	
25 Sep 2017	11:32	11:38	0.10	4,555.99	4,569.12	13.12	129.89	Sliding	
25 Sep 2017	11:38	11:49	0.18	4,569.12	4,587.98	18.86	102.09	Rotating	
25 Sep 2017	11:49	11:52	0.05	4,587.98	4,587.98			Survey & Connection	
25 Sep 2017	11:52	12:01	0.16	4,587.98	4,597.82	9.84	63.36	Sliding	
25 Sep 2017	12:01	12:12	0.19	4,597.82	4,617.61	19.78	105.89	Rotating	
25 Sep 2017	12:12	12:15	0.05	4,617.61	4,617.61			Survey & Connection	
25 Sep 2017	12:15	12:19	0.07	4,617.61	4,630.73	13.12	187.26	Sliding	
25 Sep 2017	12:19	12:32	0.21	4,630.73	4,646.05	15.32	73.28	Rotating	
25 Sep 2017	12:32	12:35	0.05	4,646.05	4,646.05			Survey & Connection	
25 Sep 2017	12:35	12:47	0.21	4,646.05	4,665.74	19.69	94.73	Sliding	
25 Sep 2017	12:47	12:53	0.09	4,665.74	4,677.38	11.65	125.87	Rotating	
25 Sep 2017	12:53	12:56	0.05	4,677.38	4,677.38			Survey & Connection	
25 Sep 2017	12:56	13:03	0.12	4,677.38	4,687.23	9.84	84.42	Sliding	
25 Sep 2017	13:03	13:16	0.22	4,687.23	4,706.06	18.83	86.55	Rotating	
25 Sep 2017	13:16	13:26	0.17	4,706.06	4,706.06			Circulate and/or Condition Mud	Totco crashed
25 Sep 2017	13:26	13:29	0.05	4,706.06	4,706.06			Survey & Connection	
25 Sep 2017	13:29	13:38	0.14	4,706.06	4,715.90	9.84	70.25	Sliding	
25 Sep 2017	13:38	13:49	0.19	4,715.90	4,735.52	19.62	101.08	Rotating	
25 Sep 2017	13:49	13:52	0.05	4,735.52	4,735.52			Survey & Connection	
25 Sep 2017	13:52	14:04	0.20	4,735.52	4,748.64	13.12	64.87	Sliding	
25 Sep 2017	14:04	14:09	0.08	4,748.64	4,765.34	16.70	217.86	Rotating	
25 Sep 2017	14:09	14:12	0.05	4,765.34	4,765.34			Survey & Connection	
25 Sep 2017	14:12	14:32	0.34	4,765.34	4,765.34			Short Trip Out	
25 Sep 2017	14:32	14:52	0.32	4,765.34	4,765.34			Short Trip In	
25 Sep 2017	14:52	15:00	0.14	4,765.34	4,785.03	19.69	136.98	Sliding	
25 Sep 2017	15:00	15:12	0.20	4,785.03	4,796.31	11.29	57.09	Rotating	
25 Sep 2017	15:12	15:15	0.05	4,796.31	4,796.31			Survey & Connection	
25 Sep 2017	15:15	15:19	0.07	4,796.31	4,806.16	9.84	150.11	Sliding	
25 Sep 2017	15:19	15:31	0.19	4,806.16	4,827.88	21.72	111.45	Rotating	
25 Sep 2017	15:31	15:34	0.05	4,827.88	4,827.88			Survey & Connection	
25 Sep 2017	15:34	15:39	0.09	4,827.88	4,847.56	19.69	223.80	Sliding	
25 Sep 2017	15:39	15:50	0.17	4,847.56	4,856.29	8.73	49.97	Rotating	

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Activity Breakdown									
Date	Start Time	End Time	Hours	Start Depth (ft)	End Depth (ft)	Depth Drilled (ft)	Rate of Penetr'n (ft/hr)	Activity	Comment
25 Sep 2017	15:50	15:53	0.05	4,856.29	4,856.29			Survey & Connection	
25 Sep 2017	15:53	15:58	0.09	4,856.29	4,869.41	13.12	142.34	Sliding	
25 Sep 2017	15:58	16:10	0.20	4,869.41	4,886.11	16.70	84.33	Rotating	
25 Sep 2017	16:10	16:13	0.05	4,886.11	4,886.11			Survey & Connection	
25 Sep 2017	16:13	16:21	0.12	4,886.11	4,905.79	19.69	158.48	Sliding	
25 Sep 2017	16:21	16:31	0.17	4,905.79	4,916.92	11.12	65.03	Rotating	
25 Sep 2017	16:31	16:34	0.05	4,916.92	4,916.92			Survey & Connection	
25 Sep 2017	16:34	16:41	0.12	4,916.92	4,933.32	16.40	131.57	Sliding	
25 Sep 2017	16:41	16:41	0.00	4,933.32	4,933.32			Circulate and/or Condition Mud	Auto driller issues
25 Sep 2017	16:41	16:49	0.13	4,933.32	4,946.18	12.86	98.98	Rotating	
25 Sep 2017	16:49	16:52	0.05	4,946.18	4,946.18			Survey & Connection	
25 Sep 2017	16:52	17:00	0.13	4,946.18	4,959.31	13.12	98.02	Sliding	
25 Sep 2017	17:00	17:08	0.14	4,959.31	4,976.50	17.19	126.04	Rotating	
25 Sep 2017	17:08	17:11	0.05	4,976.50	4,976.50			Survey & Connection	
25 Sep 2017	17:11	17:20	0.14	4,976.50	4,996.18	19.69	137.09	Sliding	
25 Sep 2017	17:20	17:27	0.13	4,996.18	5,005.53	9.35	74.44	Rotating	
25 Sep 2017	17:27	17:30	0.05	5,005.53	5,005.53			Survey & Connection	
25 Sep 2017	17:30	17:36	0.10	5,005.53	5,018.66	13.12	133.31	Sliding	
25 Sep 2017	17:36	17:49	0.20	5,018.66	5,037.00	18.34	89.50	Rotating	
25 Sep 2017	17:49	17:52	0.05	5,037.00	5,037.00			Survey & Connection	
25 Sep 2017	17:52	18:07	0.25	5,037.00	5,053.40	16.40	65.67	Sliding	
25 Sep 2017	18:07	18:13	0.10	5,053.40	5,066.13	12.73	127.49	Rotating	
25 Sep 2017	18:13	18:16	0.05	5,066.13	5,066.13			Survey & Connection	
25 Sep 2017	18:16	18:28	0.21	5,066.13	5,079.25	13.12	62.81	Sliding	
25 Sep 2017	18:28	18:34	0.10	5,079.25	5,098.28	19.03	188.15	Rotating	
25 Sep 2017	18:34	18:37	0.05	5,098.28	5,098.28			Survey & Connection	
25 Sep 2017	18:37	18:45	0.13	5,098.28	5,114.69	16.40	128.25	Sliding	
25 Sep 2017	18:45	18:57	0.20	5,114.69	5,114.69			Other	Work On Pumps
25 Sep 2017	18:57	19:07	0.17	5,114.69	5,127.42	12.73	74.43	Rotating	
25 Sep 2017	19:07	19:10	0.05	5,127.42	5,127.42			Survey & Connection	
25 Sep 2017	19:10	19:23	0.21	5,127.42	5,147.10	19.69	94.05	Sliding	
25 Sep 2017	19:23	19:27	0.08	5,147.10	5,157.96	10.86	137.10	Rotating	
25 Sep 2017	19:27	19:30	0.05	5,157.96	5,157.96			Survey & Connection	
25 Sep 2017	19:30	19:40	0.16	5,157.96	5,171.08	13.12	79.93	Sliding	
25 Sep 2017	19:40	19:52	0.20	5,171.08	5,171.08			Circulate and/or Condition Mud	Work On Pumps
25 Sep 2017	19:52	19:58	0.10	5,171.08	5,188.57	17.49	172.66	Rotating	
25 Sep 2017	19:58	20:01	0.05	5,188.57	5,188.57			Survey & Connection	
25 Sep 2017	20:01	20:11	0.16	5,188.57	5,204.97	16.40	104.90	Sliding	
25 Sep 2017	20:11	20:22	0.18	5,204.97	5,216.62	11.65	63.58	Rotating	
25 Sep 2017	20:22	20:25	0.05	5,216.62	5,216.62			Survey & Connection	
25 Sep 2017	20:25	20:40	0.25	5,216.62	5,233.03	16.40	65.02	Sliding	
25 Sep 2017	20:40	20:52	0.20	5,233.03	5,233.03			Circulate and/or Condition Mud	Swap Pumps
25 Sep 2017	20:52	20:57	0.09	5,233.03	5,247.33	14.30	153.36	Rotating	
25 Sep 2017	20:57	21:00	0.05	5,247.33	5,247.33			Survey & Connection	
25 Sep 2017	21:00	21:11	0.18	5,247.33	5,260.45	13.12	72.03	Sliding	
25 Sep 2017	21:11	21:21	0.16	5,260.45	5,275.84	15.39	95.51	Rotating	
25 Sep 2017	21:21	21:24	0.05	5,275.84	5,275.84			Survey & Connection	
25 Sep 2017	21:24	21:35	0.19	5,275.84	5,292.24	16.40	87.46	Sliding	
25 Sep 2017	21:35	21:43	0.13	5,292.24	5,307.66	15.42	118.73	Rotating	
25 Sep 2017	21:43	21:46	0.05	5,307.66	5,307.66			Survey & Connection	
25 Sep 2017	21:46	21:51	0.07	5,307.66	5,320.79	13.12	178.89	Sliding	Attempted to slide, Pressure was up and down, sweep was in the hole and dusting up mud. Could not control TF. Decided to rotate and slide on the next stand.
25 Sep 2017	21:51	22:03	0.20	5,320.79	5,336.96	16.17	79.12	Rotating	
25 Sep 2017	22:03	22:06	0.05	5,336.96	5,336.96			Survey & Connection	
25 Sep 2017	22:06	22:14	0.14	5,336.96	5,356.65	19.69	143.63	Sliding	
25 Sep 2017	22:14	22:21	0.12	5,356.65	5,368.79	12.14	99.44	Rotating	
25 Sep 2017	22:21	22:24	0.05	5,368.79	5,368.79			Survey & Connection	
25 Sep 2017	22:24	22:34	0.16	5,368.79	5,388.47	19.69	125.38	Sliding	
25 Sep 2017	22:34	22:44	0.16	5,388.47	5,396.02	7.55	45.95	Rotating	
25 Sep 2017	22:44	22:47	0.05	5,396.02	5,396.02			Survey & Connection	
25 Sep 2017	22:47	23:00	0.22	5,396.02	5,409.14	13.12	60.50	Sliding	

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Activity Breakdown									
Date	Start Time	End Time	Hours	Start Depth (ft)	End Depth (ft)	Depth Drilled (ft)	Rate of Penetr'n (ft/hr)	Activity	Comment
25 Sep 2017	23:00	23:04	0.08	5,409.14	5,409.14			Rig Repair	Swap pumps
25 Sep 2017	23:04	23:12	0.12	5,409.14	5,423.25	14.11	112.99	Rotating	
25 Sep 2017	23:12	23:15	0.05	5,423.25	5,423.25			Survey & Connection	
25 Sep 2017	23:15	00:00	0.74	5,423.25	5,423.25			Tripping Out	

Drilling Records										*Surveys are interpolated from actual surveys									
Date	Drilling Mode	Start Time	End Time	Hours	Start Depth (ft)	End Depth (ft)	Depth Drilled (ft)	WOB (lbf)	ROP (ft/hr)	RPM (RPM)	Surface Torque (ft-lbs)	Flow Rate gpm(US)	On Bttm. SPP (psi)	Delta SPP (psi)	TFO (")	INC (")	AZM (")	DLS (°/100ft)	Comment
25 Sep	Rotating	03:10	03:24	0.23	3,977.54	3,993.94	16.40	27	70.52	0	0	740	3626	1015		89.80	64.76	2.20	
25 Sep	Rotating	04:19	04:26	0.11	3,993.94	4,007.26	13.32	28	123.58	60	22000	740	3800	1175		89.75	64.47	2.20	
25 Sep	Rotating	04:36	04:45	0.15	4,007.26	4,015.93	8.67	28	57.80	60	22000	740	3800	1175		89.72	64.28	2.20	
25 Sep	Sliding	04:48	04:56	0.14	4,015.93	4,035.62	19.69		145.03						120	89.86	64.26	2.55	
25 Sep	Rotating	04:56	05:05	0.14	4,035.62	4,045.27	9.65	28	70.03	60	22000	740	3800	1175		90.03	64.44	2.55	
25 Sep	Sliding	05:08	05:13	0.09	4,045.27	4,058.39	13.12		141.15						-90	90.18	64.68	2.97	
25 Sep	Rotating	05:13	05:27	0.23	4,058.39	4,077.09	18.70	28	83.07	60	22000	740	3800	1175		89.77	65.07	2.97	
25 Sep	Sliding	05:30	05:41	0.18	4,077.09	4,090.21	13.12	27	71.56	0	0	740	3626	1015	30	89.64	65.20	0.91	
25 Sep	Rotating	05:41	05:50	0.16	4,090.21	4,107.86	17.65	28	110.30	60	22000	740	3800	1175		89.75	65.08	0.91	
25 Sep	Sliding	05:53	06:00	0.11	4,107.86	4,127.55	19.69	27	185.11	0	0	740	3626	1015	120	89.71	65.11	0.73	
25 Sep	Rotating	06:00	06:14	0.24	4,127.55	4,136.57	9.02	28	38.03	60	22000	740	3800	1175		89.66	65.16	0.73	
25 Sep	Sliding	06:17	06:24	0.11	4,136.57	4,146.41	9.84	27	87.89	0	0	740	3626	1015	-50	89.63	65.19	2.99	
25 Sep	Rotating	06:24	06:37	0.23	4,146.41	4,165.15	18.73	28	83.00	60	22000	740	3800	1175		90.09	64.88	2.99	
25 Sep	Sliding	06:40	06:47	0.12	4,165.15	4,181.55	16.40	27	138.67	0	0	740	3626	1015	140	90.26	64.98	3.80	
25 Sep	Rotating	06:47	06:56	0.15	4,181.55	4,197.36	15.81	28	104.27	60	22000	740	3800	1175		90.08	65.55	3.80	
25 Sep	Sliding	06:59	07:10	0.18	4,197.36	4,213.77	16.40	27	89.51	0	0	740	3626	1015	-70	89.94	65.72	1.39	
25 Sep	Rotating	07:10	07:18	0.13	4,213.77	4,226.20	12.43	28	98.53	60	22000	740	3800	1175		89.86	65.56	1.39	
25 Sep	Sliding	07:21	07:27	0.10	4,226.20	4,239.33	13.12	27	137.40	0	0	740	3626	1015	120	89.79	65.41	1.01	
25 Sep	Rotating	07:33	07:42	0.15	4,239.33	4,256.42	17.09	28	110.38	60	22000	740	3800	1175		89.78	65.24	1.01	
25 Sep	Sliding	07:45	07:56	0.19	4,256.42	4,266.26	9.84	27	51.91	0	0	740	3626	1015	-140	89.81	65.14	2.12	Hanging up, hard time controlling toolface
25 Sep	Rotating	07:56	08:02	0.09	4,266.26	4,286.54	20.28	28	230.82	60	22000	740	3800	1175		90.20	64.95	2.12	
25 Sep	Sliding	08:05	08:13	0.15	4,286.54	4,299.66	13.12	27	90.26	0	0	740	3626	1015	-120	90.29	64.97	2.32	
25 Sep	Rotating	08:13	08:20	0.11	4,299.66	4,315.64	15.98	28	143.09	60	22000	740	3800	1175		90.10	65.29	2.32	
25 Sep	Sliding	08:23	08:30	0.11	4,315.64	4,328.76	13.12	27	117.71	0	0	740	3626	1015	-30	90.05	65.27	3.80	
25 Sep	Rotating	08:52	09:03	0.18	4,328.76	4,346.05	17.29	28	95.11	60	22000	740	3800	1175		90.24	64.64	3.80	
25 Sep	Sliding	09:06	09:15	0.15	4,346.05	4,359.18	13.12	27	90.22	0	0	740	3626	1015	140	90.28	64.28	1.77	
25 Sep	Rotating	09:15	09:22	0.11	4,359.18	4,375.32	16.14	28	144.96	60	22000	740	3800	1175		90.01	64.18	1.77	
25 Sep	Sliding	09:25	09:39	0.24	4,375.32	4,385.16	9.84	27	41.61	0	0	740	3626	1015	-90	89.86	64.14	1.30	
25 Sep	Rotating	09:39	09:45	0.11	4,385.16	4,406.94	21.78	28	203.93	60	22000	740	3800	1175		89.74	64.40	1.30	
25 Sep	Sliding	09:48	09:56	0.12	4,406.94	4,420.07	13.12	27	109.78	0	0	740	3626	1015	-120	89.77	64.64	4.11	
25 Sep	Rotating	09:56	10:05	0.15	4,420.07	4,435.59	15.52	28	100.74	60	22000	740	3800	1175		90.09	65.19	4.11	
25 Sep	Sliding	10:08	10:19	0.18	4,435.59	4,448.71	13.12	27	71.59	0	0	740	3626	1015	130	90.17	65.56	2.35	
25 Sep	Rotating	10:19	10:25	0.11	4,448.71	4,468.10	19.39	28	176.40	60	22000	740	3800	1175		89.82	65.85	2.35	
25 Sep	Sliding	10:28	10:40	0.19	4,468.10	4,481.22	13.12	27	69.38	0	0	740	3626	1015	60	89.69	65.68	4.40	
25 Sep	Rotating	10:40	10:45	0.08	4,481.22	4,495.40	14.17	28	169.04	60	22000	740	3800	1175		89.67	65.05	4.40	
25 Sep	Sliding	10:48	11:01	0.22	4,495.40	4,505.24	9.84	27	45.27	0	0	740	3626	1015	140	89.66	64.67	2.33	
25 Sep	Rotating	11:01	11:06	0.09	4,505.24	4,526.53	21.29	28	233.59	60	22000	740	3800	1175		89.60	65.16	2.33	
25 Sep	Sliding	11:09	11:16	0.11	4,526.53	4,539.65	13.12	27	117.00	0	0	740	3626	1015	-80	89.59	65.42	1.00	
25 Sep	Rotating	11:16	11:29	0.21	4,539.65	4,555.99	16.34	28	78.36	60	22000	740	3800	1175		89.67	65.56	1.00	
25 Sep	Sliding	11:32	11:38	0.10	4,555.99	4,569.12	13.12	27	129.89	0	0	740	3626	1015	100	89.69	65.48	5.71	
25 Sep	Rotating	11:38	11:49	0.18	4,569.12	4,587.98	18.86	28	102.09	60	22000	740	3800	1175		89.47	64.42	5.71	
25 Sep	Sliding	11:52	12:01	0.16	4,587.98	4,597.82	9.84	27	63.36	0	0	740	3626	1015	50	89.47	64.22	5.35	
25 Sep	Rotating	12:01	12:12	0.19	4,597.82	4,617.61	19.78	28	105.89	60	22000	740	3800	1175		89.91	65.18	5.35	
25 Sep	Sliding	12:15	12:19	0.07	4,617.61	4,630.73	13.12	27	187.26	0	0	740	3626	1015	-110	90.11	65.49	2.05	
25 Sep	Rotating	12:19	12:32	0.21	4,630.73	4,646.05	15.32	28	73.28	60	22000	740	3800	1175		90.16	65.18	2.05	
25 Sep	Sliding	12:35	12:47	0.21	4,646.05	4,665.74	19.69	27	94.73	0	0	740	3626	1015	70	90.01	64.79	2.47	
25 Sep	Rotating	12:47	12:53	0.09	4,665.74	4,677.38	11.65	28	125.87	60	22000	740	3800	1175		89.82	64.57	2.47	
25 Sep	Sliding	12:56	13:03	0.12	4,677.38	4,687.23	9.84	27	84.42	0	0	740	3626	1015	-90	89.76	64.52	2.77	
25 Sep	Rotating	13:03	13:16	0.22	4,687.23	4,706.06	18.83	28	86.55	60	22000	740	3800	1175		90.01	64.98	2.77	
25 Sep	Sliding	13:29	13:38	0.14	4,706.06	4,715.90	9.84	27	70.25	0	0	740	3626	1015	-150	90.09	65.22	2.47	
25 Sep	Rotating	13:38	13:49	0.19	4,715.90	4,735.52	19.62	28	101.08	60	22000	740	3800	1175		89.86	65.64	2.47	

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Drilling Records													*Surveys are interpolated from actual surveys							
Date	Drilling Mode	Start Time	End Time	Hours	Start Depth (ft)	End Depth (ft)	Depth Drilled (ft)	WOB (lbf)	ROP (ft/hr)	RPM (RPM)	Surface Torque (ft-lbs)	Flow Rate gpm(US)	On Btm. SPP (psi)	Delta SPP (psi)	TFO (°)	INC (°)	AZM (°)	DLS (°/100ft)	Comment	
25 Sep	Sliding	13:52	14:04	0.20	4,735.52	4,748.64	13.12	27	64.87	0	0	740	3626	1015	90	89.81	65.85	1.42		
25 Sep	Rotating	14:04	14:09	0.08	4,748.64	4,765.34	16.70	28	217.86	60	22000	740	3800	1175		90.04	65.89	1.42		
25 Sep	Sliding	14:52	15:00	0.14	4,765.34	4,785.03	19.69	27	136.98	0	0	740	3626	1015	130	90.18	65.72	2.29		
25 Sep	Rotating	15:00	15:12	0.20	4,785.03	4,796.31	11.29	28	57.09	60	22000	740	3800	1175		90.16	65.46	2.29		
25 Sep	Sliding	15:15	15:19	0.07	4,796.31	4,806.16	9.84	27	150.11	0	0	740	3626	1015	20	90.13	65.21	4.41		
25 Sep	Rotating	15:19	15:31	0.19	4,806.16	4,827.88	21.72	28	111.45	60	22000	740	3800	1175		89.84	64.30	4.41		
25 Sep	Sliding	15:34	15:39	0.09	4,827.88	4,847.56	19.69	27	223.80	0	0	740	3626	1015	-110	89.67	64.35	2.68		
25 Sep	Rotating	15:39	15:50	0.17	4,847.56	4,856.29	8.73	28	49.97	60	22000	740	3800	1175		89.61	64.58	2.68		
25 Sep	Sliding	15:53	15:58	0.09	4,856.29	4,869.41	13.12	27	142.34	0	0	740	3626	1015	-120	89.58	64.89	2.04		
25 Sep	Rotating	15:58	16:10	0.20	4,869.41	4,886.11	16.70	28	84.33	60	22000	740	3800	1175		89.71	65.20	2.04		
25 Sep	Sliding	16:13	16:21	0.12	4,886.11	4,905.79	19.69	27	158.48	0	0	740	3626	1015	120	89.74	64.69	6.06		
25 Sep	Rotating	16:21	16:31	0.17	4,905.79	4,916.92	11.12	28	65.03	60	22000	740	3800	1175		89.70	64.02	6.06		
25 Sep	Sliding	16:34	16:41	0.12	4,916.92	4,933.32	16.40	27	131.57	0	0	740	3626	1015	50	89.80	64.06	6.48		
25 Sep	Rotating	16:41	16:49	0.13	4,933.32	4,946.18	12.86	28	98.98	60	22000	740	3800	1175		89.99	64.87	6.48		
25 Sep	Sliding	16:52	17:00	0.13	4,946.18	4,959.31	13.12	27	98.02	0	0	740	3626	1015	-120	90.05	65.07	5.61		
25 Sep	Rotating	17:00	17:08	0.14	4,959.31	4,976.50	17.19	28	126.04	60	22000	740	3800	1175		89.85	64.13	5.61		
25 Sep	Sliding	17:11	17:20	0.14	4,976.50	4,996.18	19.69	27	137.09	0	0	740	3626	1015	80	89.90	63.82	2.22		
25 Sep	Rotating	17:20	17:27	0.13	4,996.18	5,005.53	9.35	28	74.44	60	22000	740	3800	1175		90.02	63.99	2.22		
25 Sep	Sliding	17:30	17:36	0.10	5,005.53	5,018.66	13.12	27	133.31	0	0	740	3626	1015	-90	90.08	64.21	2.49		
25 Sep	Rotating	17:36	17:49	0.20	5,018.66	5,037.00	18.34	28	89.50	60	22000	740	3800	1175		89.74	64.53	2.49		
25 Sep	Sliding	17:52	18:07	0.25	5,037.00	5,053.40	16.40	27	65.67	0	0	740	3626	1015	60	89.66	64.80	2.11		
25 Sep	Rotating	18:07	18:13	0.10	5,053.40	5,066.13	12.73	28	127.49	60	22000	740	3800	1175		89.85	64.99	2.11		
25 Sep	Sliding	18:16	18:28	0.21	5,066.13	5,079.25	13.12	27	62.81	0	0	740	3626	1015	120	90.03	64.97	5.32		
25 Sep	Rotating	18:28	18:34	0.10	5,079.25	5,098.28	19.03	28	188.15	60	22000	740	3800	1175		90.27	63.99	5.32		
25 Sep	Sliding	18:37	18:45	0.13	5,098.28	5,114.69	16.40	27	128.25	0	0	740	3626	1015	40	90.18	63.56	2.43		
25 Sep	Rotating	18:57	19:07	0.17	5,114.69	5,127.42	12.73	28	74.43	60	22000	740	3800	1175		89.87	63.56	2.43		
25 Sep	Sliding	19:10	19:23	0.21	5,127.42	5,147.10	19.69	27	94.05	0	0	740	3626	1015	-60	89.86	63.93	4.32		
25 Sep	Rotating	19:23	19:27	0.08	5,147.10	5,157.96	10.86	28	137.10	60	22000	740	3800	1175		90.10	64.33	4.32		
25 Sep	Sliding	19:30	19:40	0.16	5,157.96	5,171.08	13.12	27	79.93	0	0	740	3626	1015	180	90.12	64.49	2.98		
25 Sep	Rotating	19:52	19:58	0.10	5,171.08	5,188.57	17.49	28	172.66	60	22000	740	3800	1175		89.68	64.20	2.98		
25 Sep	Sliding	20:01	20:11	0.16	5,188.57	5,204.97	16.40	27	104.90	0	0	740	3626	1015	30	89.80	64.16	3.40		
25 Sep	Rotating	20:11	20:22	0.18	5,204.97	5,216.62	11.65	28	63.58	60	22000	740	3800	1175		90.19	64.26	3.40		
25 Sep	Sliding	20:25	20:40	0.25	5,216.62	5,233.03	16.40	27	65.02	0	0	740	3626	1015	-130	90.31	64.37	1.52		
25 Sep	Rotating	20:52	20:57	0.09	5,233.03	5,247.33	14.30	28	153.36	60	22000	740	3800	1175		90.10	64.43	1.52		
25 Sep	Sliding	21:00	21:11	0.18	5,247.33	5,260.45	13.12	27	72.03	0	0	740	3626	1015	40	89.97	64.55	1.87		
25 Sep	Rotating	21:11	21:21	0.16	5,260.45	5,275.84	15.39	28	95.51	60	22000	740	3800	1175		89.97	64.84	1.87		
25 Sep	Sliding	21:24	21:35	0.19	5,275.84	5,292.24	16.40	27	87.46	0	0	740	3626	1015	130	90.05	64.89	2.27		
25 Sep	Rotating	21:35	21:43	0.13	5,292.24	5,307.66	15.42	28	118.73	60	22000	740	3800	1175		90.23	64.59	2.27		
25 Sep	Sliding	21:46	21:51	0.07	5,307.66	5,320.79	13.12	0	178.89	0	0	0	0	0	70	90.30	64.36	1.68	Attempted to slide, Pressure was up and down, sweep was in the hole and dusting up mud. Could not control TF. Decided to rotate and slide on the next stand.	
25 Sep	Rotating	21:51	22:03	0.20	5,320.79	5,336.96	16.17	28	79.12	60	22000	740	3800	1175		90.10	64.18	1.68		
25 Sep	Sliding	22:06	22:14	0.14	5,336.96	5,356.65	19.69		143.63						-70	89.83	63.88	2.25		
25 Sep	Rotating	22:14	22:21	0.12	5,356.65	5,368.79	12.14	28	99.44	60	22000	740	3800	1175		89.66	63.67	2.25		
25 Sep	Sliding	22:24	22:34	0.16	5,368.79	5,388.47	19.69		125.38						-130	89.62	63.62	2.25		
25 Sep	Rotating	22:34	22:44	0.16	5,388.47	5,396.02	7.55	28	45.95	60	22000	740	3800	1175		89.62	63.62	2.25		
25 Sep	Sliding	22:47	23:00	0.22	5,396.02	5,409.14	13.12	27	60.50	0	0	740	3626	1015	-100	89.62	63.62	2.25		
25 Sep	Rotating	23:04	23:12	0.12	5,409.14	5,423.25	14.11	28	112.99	60	22000	740	3800	1175		89.62	63.62	2.25		

Slide Sheet																
Bit Depth (ft)	Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Dogleg Rate (°/100ft)	Calc'd Toolface (°)	Build Rate (°/100ft)	Build Seen (°/ft)	Turn Rate (°/100ft)	Slide Seen (ft)	Motor Output (°/100ft)	Motor Output (°/ft)	Slide Length (ft)	Toolface Orient (°)	Rotate Length (ft)	
4,015.93	3,964.40	90.31	64.06	1,595.66	3.01	-68.79	1.09		-2.81							38.39
4,045.27	3,993.73	89.80	64.76	1,595.63	2.94	126.11	-1.73		2.38				19.69	120		9.65
4,077.09	4,025.56	89.68	64.07	1,595.78	2.20	-100.03	-0.38	-0.04	-2.17	9.62	7.28	0.07	13.12	-90		18.70
4,107.86	4,056.33	90.22	64.64	1,595.80	2.55	46.63	1.75	0.08	1.86	21.13	3.72	0.04	13.12	30		17.65
4,136.57	4,085.04	89.60	65.23	1,595.85	2.97	136.52	-2.15	-0.20	2.04	10.01	8.52	0.09	19.69	120		9.02

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

Slide Sheet																
Bit Depth (ft)	Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Dogleg Rate (°/100ft)	Calc'd Toolface (°)	Build Rate (°/100ft)	Build Seen (°/ft)	Turn Rate (°/100ft)	Slide Seen (ft)	Motor Output (°/100ft)	Motor Output (°/ft)	Slide Length (ft)	Toolface Orient (°)	Rotate Length (ft)	
4,165.15	4,113.62	89.78	65.04	1,596.00	0.91	-45.60	0.64	0.05	-0.65	10.93	2.38	0.02	9.84	-50	18.73	
4,197.36	4,145.83	89.61	65.20	1,596.17	0.73	137.58	-0.54	-0.02	0.49	23.20	1.01	0.01	16.40	140	15.81	
4,226.20	4,174.67	90.33	64.73	1,596.18	2.99	-33.42	2.50	0.23	-1.65	10.10	8.54	0.09	16.40	-70	12.43	
4,256.42	4,204.89	90.00	65.82	1,596.10	3.80	106.87	-1.10	-0.08	3.64	14.40	7.97	0.08	13.12	120	17.09	
4,286.54	4,235.01	89.80	65.46	1,596.15	1.39	-118.54	-0.67	-0.04	-1.23	17.68	2.38	0.02	9.84	-140	20.28	
4,315.64	4,264.11	89.77	65.16	1,596.26	1.01	-94.79	-0.08	-0.01	-1.01	12.01	2.45	0.02	13.12	-120	15.98	
4,346.05	4,294.52	90.35	64.87	1,596.23	2.12	-27.19	1.89	0.19	-0.97	10.14	6.36	0.06	13.12	-30	17.29	
4,375.32	4,323.79	90.00	65.45	1,596.14	2.32	120.77	-1.19	-0.09	2.00	13.29	5.11	0.05	13.12	140	16.14	
4,406.94	4,355.41	90.34	64.30	1,596.04	3.80	-73.42	1.08	0.08	-3.64	14.34	8.38	0.08	9.84	-90	21.78	
4,435.59	4,384.05	89.87	64.13	1,595.99	1.77	-160.26	-1.66	-0.12	-0.60	12.50	4.04	0.04	13.12	-120	15.52	
4,468.10	4,416.57	89.69	64.52	1,596.12	1.30	114.09	-0.53	-0.05	1.19	10.73	3.94	0.04	13.12	130	19.39	
4,495.40	4,443.86	90.26	65.48	1,596.13	4.11	59.80	2.07	0.16	3.55	11.78	9.52	0.10	13.12	60	14.17	
4,526.53	4,475.00	89.69	65.95	1,596.14	2.35	140.61	-1.82	-0.16	1.49	11.75	6.24	0.06	9.84	140	21.29	
4,555.99	4,504.46	89.66	64.65	1,596.31	4.40	-91.20	-0.09	-0.01	-4.40	15.29	8.48	0.08	13.12	-80	16.34	
4,587.98	4,536.45	89.57	65.39	1,596.52	2.33	97.10	-0.29	-0.03	2.31	10.70	6.97	0.07	13.12	100	18.86	
4,617.61	4,566.08	89.72	65.65	1,596.70	1.00	59.56	0.51	0.04	0.86	13.29	2.22	0.02	9.84	50	19.78	
4,646.05	4,594.52	89.40	64.06	1,596.92	5.71	-101.47	-1.13	-0.11	-5.59	9.58	16.95	0.17	13.12	-110	15.32	
4,677.38	4,625.85	90.09	65.58	1,597.06	5.35	65.53	2.22	0.20	4.87	11.55	14.53	0.15	19.69	70	11.65	
4,706.06	4,654.53	90.18	65.00	1,596.99	2.05	-81.35	0.31	0.02	-2.02	13.35	4.39	0.04	9.84	-90	18.83	
4,735.52	4,683.99	89.72	64.44	1,597.02	2.47	-129.71	-1.58	-0.09	-1.90	17.81	4.08	0.04	9.84	-150	19.62	
4,765.34	4,713.81	90.11	65.17	1,597.06	2.77	61.49	1.32	0.12	2.43	10.99	7.52	0.08	13.12	90	16.70	
4,796.31	4,744.78	89.76	65.85	1,597.10	2.47	117.81	-1.15	-0.10	2.18	11.35	6.73	0.07	19.69	130	11.29	
4,827.88	4,776.34	90.20	65.92	1,597.11	1.42	9.47	1.40	0.10	0.23	14.86	3.02	0.03	9.84	20	21.72	
4,856.29	4,804.76	90.15	65.27	1,597.02	2.29	-94.65	-0.19	-0.01	-2.28	17.13	3.79	0.04	19.69	-110	8.73	
4,886.11	4,834.58	89.76	64.01	1,597.05	4.41	-107.18	-1.30	-0.16	-4.21	8.10	16.24	0.16	13.12	-120	16.70	
4,916.92	4,865.39	89.55	64.81	1,597.24	2.68	104.58	-0.67	-0.03	2.59	22.08	3.73	0.04	19.69	120	11.12	
4,946.18	4,894.65	89.77	65.37	1,597.41	2.04	68.13	0.76	0.06	1.89	12.57	4.75	0.05	16.40	50	12.86	
4,976.50	4,924.97	89.68	63.53	1,597.55	6.06	-92.93	-0.31	-0.02	-6.06	19.19	9.58	0.10	13.12	-120	17.19	
5,005.53	4,954.00	90.11	65.36	1,597.61	6.48	76.85	1.48	0.09	6.31	16.17	11.64	0.12	19.69	80	9.35	
5,037.00	4,985.46	89.75	63.64	1,597.65	5.61	-101.73	-1.14	-0.08	-5.49	14.27	12.36	0.12	13.12	-90	18.34	
5,066.13	5,014.60	90.15	64.14	1,597.68	2.22	51.58	1.38	0.07	1.74	19.78	3.28	0.03	16.40	60	12.73	
5,098.28	5,046.75	89.57	64.69	1,597.75	2.49	136.62	-1.81	-0.14	1.71	13.81	5.80	0.06	13.12	120	19.03	
5,127.42	5,075.88	89.99	65.15	1,597.87	2.11	47.08	1.44	0.08	1.55	16.40	3.75	0.04	16.40	40	12.73	
5,157.96	5,106.43	90.38	63.57	1,597.77	5.32	-76.12	1.28	0.11	-5.17	11.52	14.12	0.14	19.69	-60	10.86	
5,188.57	5,137.04	89.63	63.56	1,597.77	2.43	-179.09	-2.43	-0.14	-0.04	17.88	4.16	0.04	13.12	180	17.49	
5,216.62	5,165.09	90.26	64.59	1,597.79	4.32	58.67	2.25	0.12	3.69	17.19	7.05	0.07	16.40	30	11.65	
5,247.33	5,195.80	89.50	64.08	1,597.86	2.98	-146.49	-2.49	-0.19	-1.65	13.22	6.93	0.07	16.40	-130	14.30	
5,275.84	5,224.31	90.44	64.33	1,597.87	3.40	14.56	3.29	0.18	0.86	16.86	5.75	0.06	13.12	40	15.39	
5,307.66	5,256.13	89.98	64.47	1,597.76	1.52	162.94	-1.45	-0.09	0.45	17.52	2.76	0.03	16.40	130	15.42	
5,336.96	5,285.43	89.96	65.02	1,597.77	1.87	91.15	-0.04	0.00	1.87	13.91	3.93	0.04	13.12	70	16.17	
5,368.79	5,317.26	90.34	64.40	1,597.68	2.27	-58.32	1.19	0.08	-1.93	16.40	4.41	0.04	19.69	-70	12.14	
5,396.02	5,344.49	90.01	64.10	1,597.60	1.68	-137.80	-1.25	-0.10	-1.13	11.06	4.14	0.04	19.69	-130	7.55	
5,423.25	5,371.72	89.62	63.62	1,597.69	2.25	-128.70	-1.41	-0.08	-1.75	15.09	4.05	0.04	13.12	-100	14.11	

Survey Data									
Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100ft)
					Northings (ft)	Eastings (ft)	Northings (ft)	Eastings (ft)	
3,964.40	90.31	64.06	1,595.66	-469.98	384.96 S	2,375.13 E	22,274,275.91 N	1,880,629.38 E	3.01
3,993.73	89.80	64.76	1,595.63	-470.01	372.29 S	2,401.59 E	22,274,288.57 N	1,880,655.84 E	2.94
4,025.56	89.68	64.07	1,595.78	-469.87	358.55 S	2,430.29 E	22,274,302.32 N	1,880,684.54 E	2.20
4,056.33	90.22	64.64	1,595.80	-469.84	345.23 S	2,458.03 E	22,274,315.63 N	1,880,712.28 E	2.55
4,085.04	89.60	65.23	1,595.85	-469.80	333.07 S	2,484.04 E	22,274,327.80 N	1,880,738.29 E	2.97
4,113.62	89.78	65.04	1,596.00	-469.65	321.05 S	2,509.96 E	22,274,339.81 N	1,880,764.21 E	0.91
4,145.83	89.61	65.20	1,596.17	-469.48	307.50 S	2,539.19 E	22,274,353.36 N	1,880,793.44 E	0.73
4,174.67	90.33	64.73	1,596.18	-469.46	295.30 S	2,565.32 E	22,274,365.57 N	1,880,819.57 E	2.99
4,204.89	90.00	65.82	1,596.10	-469.55	282.66 S	2,592.77 E	22,274,378.21 N	1,880,847.02 E	3.80
4,235.01	89.80	65.46	1,596.15	-469.50	270.24 S	2,620.20 E	22,274,390.63 N	1,880,874.45 E	1.39
4,264.11	89.77	65.16	1,596.26	-469.39	258.08 S	2,646.64 E	22,274,402.78 N	1,880,900.89 E	1.01
4,294.52	90.35	64.87	1,596.23	-469.42	245.23 S	2,674.21 E	22,274,415.63 N	1,880,928.46 E	2.12
4,323.79	90.00	65.45	1,596.14	-469.51	232.94 S	2,700.77 E	22,274,427.92 N	1,880,955.02 E	2.32

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

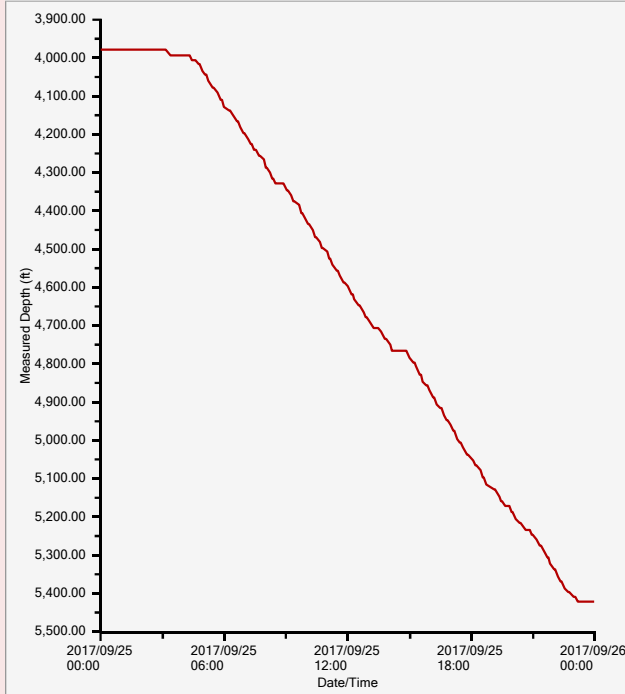
Survey Data										
Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	Local Coordinates		Map Coordinates		Vertical Section (ft)	Dogleg Rate (°/100ft)
					Northings (ft)	Eastings (ft)	Northings (ft)	Eastings (ft)		
4,355.41	90.34	64.30	1,596.04	-469.60	219.51 S	2,729.40 E	22,274,441.35 N	1,880,983.65 E	2,707.44	3.80
4,384.05	89.87	64.13	1,595.99	-469.65	207.05 S	2,755.19 E	22,274,453.81 N	1,881,009.44 E	2,734.04	1.77
4,416.57	89.69	64.52	1,596.12	-469.53	192.97 S	2,784.49 E	22,274,467.90 N	1,881,038.74 E	2,764.25	1.30
4,443.86	90.26	65.48	1,596.13	-469.52	181.43 S	2,809.23 E	22,274,479.43 N	1,881,063.48 E	2,789.73	4.11
4,475.00	89.69	65.95	1,596.14	-469.50	168.63 S	2,837.61 E	22,274,492.24 N	1,881,091.86 E	2,818.94	2.35
4,504.46	89.66	64.65	1,596.31	-469.34	156.32 S	2,864.38 E	22,274,504.55 N	1,881,118.63 E	2,846.50	4.40
4,536.45	89.57	65.39	1,596.52	-469.12	142.81 S	2,893.37 E	22,274,518.06 N	1,881,147.63 E	2,876.36	2.33
4,566.08	89.72	65.65	1,596.70	-468.94	130.53 S	2,920.34 E	22,274,530.33 N	1,881,174.59 E	2,904.12	1.00
4,594.52	89.40	64.06	1,596.92	-468.72	118.45 S	2,946.08 E	22,274,542.42 N	1,881,200.33 E	2,930.64	5.71
4,625.85	90.09	65.58	1,597.06	-468.59	105.12 S	2,974.44 E	22,274,555.75 N	1,881,228.69 E	2,959.86	5.35
4,654.53	90.18	65.00	1,596.99	-468.66	93.13 S	3,000.49 E	22,274,567.73 N	1,881,254.74 E	2,986.68	2.05
4,683.99	89.72	64.44	1,597.02	-468.63	80.55 S	3,027.13 E	22,274,580.31 N	1,881,281.38 E	3,014.13	2.47
4,713.81	90.11	65.17	1,597.06	-468.59	67.86 S	3,054.11 E	22,274,593.01 N	1,881,308.36 E	3,041.94	2.77
4,744.78	89.76	65.85	1,597.10	-468.55	55.02 S	3,082.30 E	22,274,605.84 N	1,881,336.55 E	3,070.95	2.47
4,776.34	90.20	65.92	1,597.11	-468.54	42.12 S	3,111.10 E	22,274,618.74 N	1,881,365.36 E	3,100.59	1.42
4,804.76	90.15	65.27	1,597.02	-468.62	30.38 S	3,136.98 E	22,274,630.48 N	1,881,391.23 E	3,127.22	2.29
4,834.58	89.76	64.01	1,597.05	-468.60	17.61 S	3,163.93 E	22,274,643.25 N	1,881,418.18 E	3,154.99	4.41
4,865.39	89.55	64.81	1,597.24	-468.41	4.31 S	3,191.71 E	22,274,656.56 N	1,881,445.96 E	3,183.64	2.68
4,894.65	89.77	65.37	1,597.41	-468.24	8.02 N	3,218.25 E	22,274,668.88 N	1,881,472.50 E	3,210.97	2.04
4,924.97	89.68	63.53	1,597.55	-468.09	21.09 N	3,245.60 E	22,274,681.96 N	1,881,499.85 E	3,239.17	6.06
4,954.00	90.11	65.36	1,597.61	-468.04	33.62 N	3,271.80 E	22,274,694.48 N	1,881,526.05 E	3,266.17	6.48
4,985.46	89.75	63.64	1,597.65	-468.00	47.16 N	3,300.19 E	22,274,708.03 N	1,881,554.44 E	3,295.44	5.61
5,014.60	90.15	64.14	1,597.68	-467.97	59.98 N	3,326.35 E	22,274,720.85 N	1,881,580.61 E	3,322.43	2.22
5,046.75	89.57	64.69	1,597.75	-467.89	73.86 N	3,355.35 E	22,274,734.73 N	1,881,609.61 E	3,352.33	2.49
5,075.88	89.99	65.15	1,597.87	-467.78	86.21 N	3,381.74 E	22,274,747.08 N	1,881,635.99 E	3,379.52	2.11
5,106.43	90.38	63.57	1,597.77	-467.88	99.43 N	3,409.28 E	22,274,760.30 N	1,881,663.53 E	3,407.91	5.32
5,137.04	89.63	63.56	1,597.77	-467.88	113.06 N	3,436.68 E	22,274,773.93 N	1,881,690.94 E	3,436.20	2.43
5,165.09	90.26	64.59	1,597.79	-467.85	125.33 N	3,461.91 E	22,274,786.19 N	1,881,716.16 E	3,462.22	4.32
5,195.80	89.50	64.08	1,597.86	-467.79	138.62 N	3,489.59 E	22,274,799.49 N	1,881,743.84 E	3,490.76	2.98
5,224.31	90.44	64.33	1,597.87	-467.78	151.03 N	3,515.26 E	22,274,811.89 N	1,881,769.51 E	3,517.23	3.40
5,256.13	89.98	64.47	1,597.76	-467.89	164.78 N	3,543.96 E	22,274,825.64 N	1,881,798.21 E	3,546.82	1.52
5,285.43	89.96	65.02	1,597.77	-467.88	177.28 N	3,570.46 E	22,274,838.14 N	1,881,824.71 E	3,574.13	1.87
5,317.26	90.34	64.40	1,597.68	-467.96	190.88 N	3,599.23 E	22,274,851.74 N	1,881,853.48 E	3,603.78	2.27
5,344.49	90.01	64.10	1,597.60	-468.04	202.71 N	3,623.76 E	22,274,863.57 N	1,881,878.01 E	3,629.07	1.68
5,371.72	89.62	63.62	1,597.69	-467.96	214.70 N	3,648.20 E	22,274,875.57 N	1,881,902.45 E	3,654.29	2.25

Run Discussion(s)

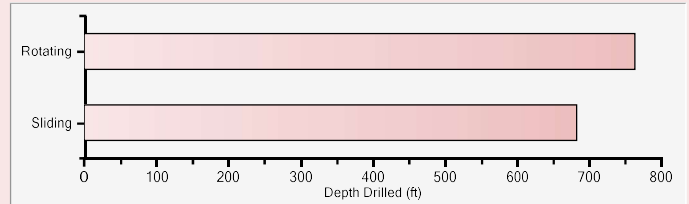
Run #4 - Drilled ahead rotating until we could get good signal. Tried various parameters with the pump rate: WOB and rotary speed to try and get ROP to improve. ROP would mostly stay at 4-6m/hr. despite the different parameters. When sliding, it was difficult due to stick-slip even when oscillating the pipe 15.5 to 3.5 turns. Would take 30DN over string weight to pull out of slide due to hang-ups. Hole drag was still high:20DN over going up and 12-16DN going down with only 45m of new hole out of the casing. Decided to POOH to pick a ratler agitator, a 7:8 3.8 stage motor and a different PDC bit. Motor drained fine. Washed out with two cubes of fresh water. No sign of bearing wear or axial play. Good re-run on later date.

Daily Drilling Report for AA Pad, AA16 for 25 September 2017

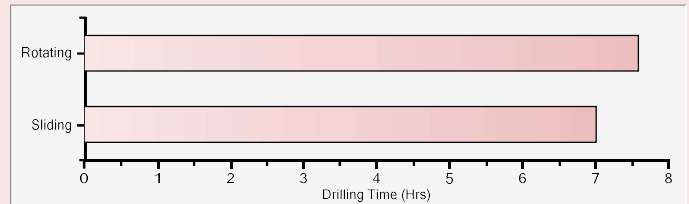
Time vs Depth



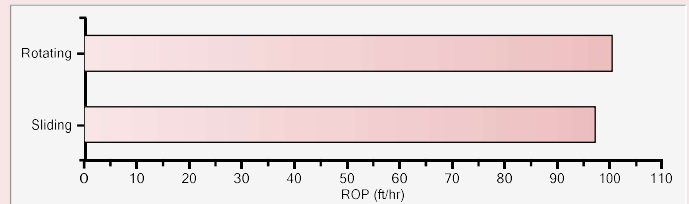
Depth Drilled



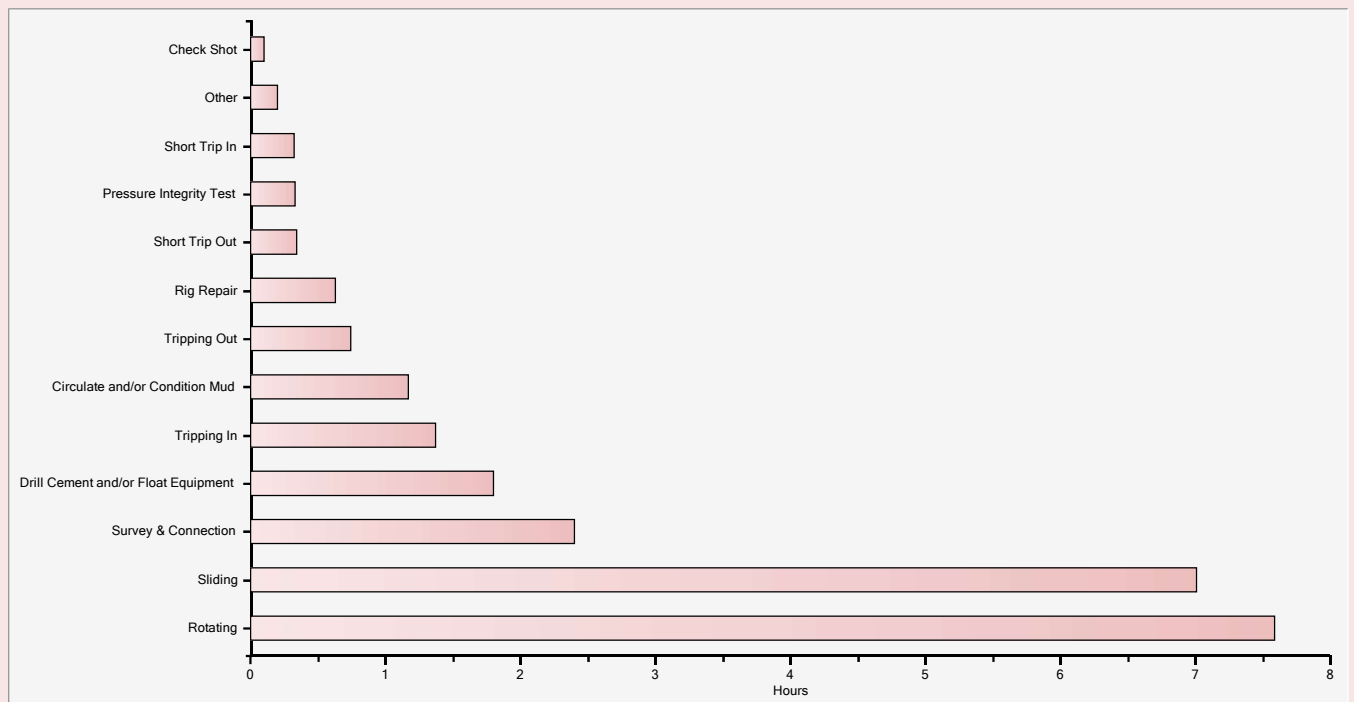
Drilling Time



Average Rate of Penetration



Activity



Daily Drilling Report for AA Pad, AA16 for 25 September 2017

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Client Representative:	True North Directional Services Inc. Representative:	True North Directional Services Inc. Directional Coordinator:	True North Directional Services Inc. Manager: