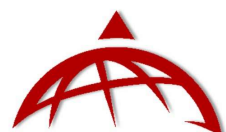




**Anglian Oil Company Ltd.
Northern Lights
AA Pad
AA16
Lateral #1
Job No. AB-CD-12345678**

**True North Directional Services Inc.
End of Well Report**

**Start Time: 21 Sep 2017 03:00 Hrs.
End Time: 26 Sep 2017 05:15 Hrs.**



True North
Directional Services Inc.

End of Well Report for AA Pad, AA16

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	Start Date: 21 September 2017	Geologist: Algemon Jasper Capper
Rig Name: Northern Skies III	Structure: AA Pad	End Date: 26 September 2017	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: 0.00ft	End Depth: 5,423.25ft	Below Rotary Hours: 84.86hrs	Circulating Hours: 60.52hrs
Total Depth Drilled: 5,423.25ft	Total Drilled Hours: 54.31hrs	Ave. Total ROP: 99.86ft/hr	Percent Drilling: 63.99%
Total Rotating: 2,811.70ft	Rotating Hours: 27.19hrs	Ave. Rotating ROP: 103.41ft/hr	Percent Rotating: 51.85%
Total Sliding: 2,611.54ft	Sliding Hours: 27.12hrs	Ave. Sliding ROP: 96.31ft/hr	Percent Sliding: 48.15%

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 #1

	Min	Max		Min	Max
WOB (lbf)	3	4	SPP Off Bottom (psi)	725	739
Pick Up (lbf)	8	9	SPP On Bottom (psi)	728	748
Slack Off (lbf)	8	9	Delta Pressure (psi)	44	50
Rot. Off Bottom (lbf)	8	9	Flow Rate (gpm(US))	666	792
Bottom Hole Temp (°F)	213.9	217.3	Pump Rate (SPM)	15	20
Rotary Speed (RPM)	29	38	Motor Speed (RPM)	144	170
ROP (ft/hr)	43.39	111.10	Surface Torque (ft-lbs)	2234	2561

Bit Record - Run #1

Bit Number (Bit Run): 1 (Run 1)	Description: T506X	
Manufacturer: Smith	TFA: 2.126in ²	Jets: 4 x 18, 2 x 15
Model: T506X	Bit Diameter: 0in	Bit Hours: 10.55Hrs
Type: PDC Bit	IADC#:	Bit Footage: 1,033.76ft
Serial Number: 789012	Condition: Worn Teeth or Cutters	
Grade:	Reason for pulling out of hole: Lost Circulation	

Drilling Summary - Run #1

Start Depth: 0.00ft	Total Rotating: 531.79ft	End Depth: 1,033.76ft	Rotating Hours: 5.18hrs	Below Rotary Hours: 12.87hrs	Ave. Rotating ROP: 102.63ft/hr	Circulating Hours: 11.79hrs	Percent Rotating: 51.44%
Total Depth Drilled: 1,033.76ft	Total Sliding: 501.97ft	Total Drilled Hours: 10.55hrs	Sliding Hours: 5.37hrs	Ave. Total ROP: 98.01ft/hr	Ave. Sliding ROP: 93.56ft/hr	Percent Drilling: 81.92%	Percent Sliding: 48.56%

Motor Properties - Run #1

Description: 7:8 5.7 1.83* Fixed @ 1.75 Slick	Motor Type: Motor	Manufacturer: Hunting	Model: Extended	Serial Number: 8901	Lobe/Stage: 7:8/2.5
Mud Type: Water based mud	Stabilizer Type:	Rubber Type: HR	Fit Type:		
Pad OD: 8.268in	NB Stabilizer: 12.008	Bit to Bend: 5.97ft	Bend Angle: 1.75°	Pressure Drop: 660psi	Rev. Rate: 0.17Rev/gal(US)
Motor Footage: 1,033.76ft	Below Rotary Hours: 12.87hrs	Circulating Hours: 11.79hrs	Rotating Footage: 531.79ft	Rotating Hours: 5.18hrs	Sliding Footage: 501.97ft
Proposed Build Rate: 6.00°/100ft	Actual Build Rate: 3.50°/100ft	Date/Time In: 21/09/2017 12:15	Date/Time Out: 22/09/2017 01:07	Number of Stalls: 0	Stall Duration: 0.00mins
Motor Failed: No	Condition: Good	Extended Motor: Yes			

Motor Discussion

Bit was DBR. Motor was in good shape.

Drillstring Components - Run #1 (BHA #1)

										Bit to Sensor Distance: 52.49ft
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)
1	12 1/4in XS616S (6x16's)	Smith	JN0197	12 1/4	0	0.00	0	6 5/8 REG	1.50	1.50
2	8in FBH@1.75 12"NB (Lobe 7/8 - 2.5 stage)	Hunting	8034	8	0	0.00	0	6 5/8 REG	33.88	35.38
3	12" NM Spiral	SD	28735	8 5/16	2 13/16	0.00	0	6 5/8 REG	5.96	41.34
4	8 1/16in Non Mag Drill Collar	SDI	84-333	8 1/16	3 3/4	0.00	0	6 5/8 REG	27.46	68.80
5	8in Pulser Sub	SDI	74-125	8	3 3/4	0.00	0	6 5/8 REG	5.93	74.73
6	8 1/8in Non Mag Drill Collar	SDI	84-430	8 1/8	3 3/4	0.00	0	6 5/8 REG	29.98	104.71

End of Well Report for AA Pad, AA16

Drillstring Components - Run #1 (BHA #1)										Bit to Sensor Distance: 52.49ft
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)
7	12" Steel Spiral	SD	19037	8 1/4	2 7/8	0.00	0	6 5/8 REG	6.29	111.00
8	8in X/O (6 5/8Reg-NC56)	SDI	1018	8	3 1/4	0.00	0	NC 56	3.13	114.13
9	8 1/8in Thruster	Cougar	FX-800-87	8 1/8	3 7/16	0.00	0	NC 56	25.74	139.87
10	8" Steel DC (3 Joints)	RIG	RIG	8	2 7/8	0.00	0	NC 56	90.91	230.78
11	8in X-Over(NC56-4 1/2XH)	RIG	RIG	8	2 7/8	0.00	0	4 1/2 XH	3.54	234.32
12	6 1/2"DC (6 Joints)	RIG	RIG	6 1/2	2 7/8	0.00	0	4 1/2 XH	184.73	419.05
13	6 1/2in X/O(4 1/2HX-4 1/2IF)	RIG	RIG	6 1/2	2 7/8	0.00	0	4 1/2 IF	3.56	422.61
14	5" HWDP (30 Joints)	RIG	RIG	5	2 7/8	0.00	0	4 1/2 IF	914.47	1,337.08

Drilling Parameters - Run #2						Bit Record - Run #2			
	Min	Max		Min	Max				
WOB (lbf)	3	4	SPP Off Bottom (psi)	726	740	Bit Number (Bit Run): 2 (Run 1)			
Pick Up (lbf)	8	9	SPP On Bottom (psi)	729	753	Description: B400FX			
Slack Off (lbf)	8	9	Delta Pressure: (psi)	44	51	Manufacturer: TFA			
Rot. Off Bottom (lbf)	8	9	Flow Rate (gpm(US))	662	790	Baker 1.491in ² 6 x 18			
Bottom Hole Temp (°F)	214.3	229.4	Pump Rate (SPM)	15	20	Model: Bit Diameter: 12.244in Bit Hours: 15.45Hrs			
Rotary Speed (RPM)	29	38	Motor Speed (RPM)	90	108	Type: PDC Bit IADC#: Bit Footage: 1,531.94ft			
ROP (ft/hr)	39.71	246.06	Surface Torque (ft-lbs)	2224	2576	Serial Number: 716789 Condition: No Dull Characteristics			
						Grade: Reason for pulling out of hole: Change Bit			

Drilling Summary - Run #2							
Start Depth: 1,033.76ft	Total Rotating: 810.15ft	End Depth: 2,565.69ft	Rotating Hours: 7.61hrs	Below Rotary Hours: 21.04hrs	Ave. Rotating ROP: 106.43ft/hr	Circulating Hours: 15.54hrs	Percent Rotating: 52.88%
Total Depth Drilled: 1,531.94ft	Total Sliding: 721.78ft	Total Drilled Hours: 15.45hrs	Sliding Hours: 7.84hrs	Ave. Total ROP: 99.14ft/hr	Ave. Sliding ROP: 92.07ft/hr	Percent Drilling: 73.45%	Percent Sliding: 47.12%

Motor Properties - Run #2							
Description: 11 1/4" Motor Lobe 3:4 - 3.6 stg		Motor Type: Motor	Manufacturer: Bico	Model:	Serial Number: G1234	Lobe/Stage: 7:8/2.0	
Mud Type: Water Based		Stabilizer Type: Slick Sleeve		Rubber Type: HR		Fit Type:	
Pad OD: 8.307in	NB Stabilizer: 0	Bit to Bend: 9.81ft	Bend Angle: 1.83°	Pressure Drop: 0psi	Rev. Rate: 0.09Rev/gal(US)	Rotor Jet: 0/32's	
Motor Footage: 1,531.94ft	Below Rotary Hours: 21.04hrs	Circulating Hours: 15.54hrs	Rotating Footage: 810.15ft	Rotating Hours: 7.61hrs	Sliding Footage: 721.78ft	Sliding Hours: 7.84hrs	
Proposed Build Rate: 8.00°/100ft	Actual Build Rate: 0.91°/100ft	Date/Time In: 22/09/2017 03:07	Date/Time Out: 23/09/2017 00:09	Number of Stalls: 0	Stall Duration: 0.00mins	Extended Motor: No	
Motor Failed: No		Condition: Good					

Drillstring Components - Run #2 (BHA #2)										Bit to Sensor Distance: 57.41ft
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	T506FX (6x18's)	Baker	7163114	12 1/4	0	0.00	0	6 5/8 REG	1.50	1.50
2	7:8, 2.0 FBH @ 1.83 Slick	Bico	G1724	8	0	0.00	0	6 5/8 REG	33.16	34.66
3	Pony NMDC	SDI	126-073	8 3/16	3 1/4	0.00	0	6 5/8 REG	7.65	42.31
4	Non Magnetic Drill Collar	SDI	84-333	8 1/16	3 3/4	0.00	0	6 5/8 REG	27.46	69.77
5	Pulser Sub	SDI	74-125	8	3 3/4	0.00	0	6 5/8 REG	5.93	75.70
6	Non Magnetic Drill Collar	SDI	84-430	8 1/8	3 3/4	0.00	0	6 5/8 REG	29.98	105.68
7	X-O (6 5/8 Reg. Pin - NC56 Box)	SDI	1018	8	3 1/4	0.00	0	NC 56	3.13	108.81
8	Steel Drill Collar (3 Jts.)	RIG	RIG	8	2 7/8	0.00	0	NC 56	90.91	199.72
9	X-O (NC56 Pin - 4 1/2 XH Box)	RIG	RIG	8	2 7/8	0.00	0	4 1/2 XH	3.54	203.26
10	Steel Drill Collar (6 Jts.)	RIG	RIG	6 1/2	2 7/8	0.00	0	4 1/2 XH	184.73	387.99
11	X-O (4 1/2 XH Pin - 4 1/2 IF Box)	RIG	RIG	6 1/2	2 7/8	0.00	0	4 1/2 IF	3.56	391.55
12	HWDP (9 Jts.)	RIG	RIG	5	2 7/8	0.00	0	4 1/2 IF	274.32	665.87
13	Jars	Knight	KJ9338	6 5/8	2 1/2	0.00	0	4 1/2 IF	33.88	699.75
14	HWDP (21 Jts.)	RIG	RIG	5	2 7/8	0.00	0	4 1/2 IF	640.15	1,339.90

End of Well Report for AA Pad, AA16

Drilling Parameters - Run #3						Bit Record - Run #3		
	Min	Max		Min	Max	Bit Number (Bit Run):	Description:	
WOB (lbf)	3	4	SPP Off Bottom (psi)	726	740	3 (Run 1)	6 1/2" PDC Bit	
Pick Up (lbf)	8	9	SPP On Bottom (psi)	728	752	Manufacturer:	TFA:	Jets:
Slack Off (lbf)	8	9	Delta Pressure: (psi)	44	50	Bits' R' Us	2.496in ²	2 x 20, 2 x 25
Rot. Off Bottom (lbf)	8	9	Flow Rate (gpm(US))	664	787	Model:	Bit Diameter:	Bit Hours:
Bottom Hole Temp (°F)	215.1	229.7	Pump Rate (SPM)	15	20	Grabber	6 1/2in	13.71Hrs
Rotary Speed (RPM)	29	38	Motor Speed (RPM)	91	109	Type:	IADC#:	Bit Footage:
ROP (ft/hr)	NaN	NaN	Surface Torque (ft-lbs)	2213	2569	Bit		1,411.85ft
						Serial Number:	Condition:	
						87345967		
						Grade:	Reason for pulling out of hole:	
							Change Bit	

Drilling Summary - Run #3							
Start Depth:	Total Rotating:	End Depth:	Rotating Hours:	Below Rotary Hours:	Ave. Rotating ROP:	Circulating Hours:	Percent Rotating:
2,565.69ft	706.47ft	3,977.54ft	6.81hrs	21.56hrs	103.72ft/hr	15.46hrs	50.04%
Total Depth Drilled:	Total Sliding:	Total Drilled Hours:	Sliding Hours:	Ave. Total ROP:	Ave. Sliding ROP:	Percent Drilling:	Percent Sliding:
1,411.85ft	705.38ft	13.71hrs	6.90hrs	102.95ft/hr	102.19ft/hr	63.60%	49.96%

Motor Properties - Run #3							
Description:	4 3/4" Motor Lobe 4:5 - 7.0 stg		Motor Type:	Motor	Manufacturer:	Motors' R' Us	Model:
Mud Type:	Water Based		Stabilizer Type:	Slick Sleeve	Rubber Type:	HR	Serial Number:
Pad OD:	NB Stabilizer:	Bit to Bend:	Bend Angle:	Pressure Drop:	Rev. Rate:	Rotor Jet:	Lobe/Stage:
0in	0	9.81ft	1.83°	0psi	0.09Rev/gal(US)	0/32's	7:8/2.0
Motor Footage:	Below Rotary Hours:	Circulating Hours:	Rotating Footage:	Rotating Hours:	Sliding Footage:	Sliding Hours:	
1,411.85ft	21.56hrs	15.46hrs	706.47ft	6.81hrs	705.38ft	6.90hrs	
Proposed Build Rate:	Actual Build Rate:	Date/Time In:	Date/Time Out:	Number of Stalls:	Stall Duration:	Extended Motor:	
8.00°/100ft	1.00°/100ft	23/09/2017 06:24	24/09/2017 03:57	0	0.00mins	No	
Motor Failed:	Condition:						
No	Good						

Motor Discussion

Bit was in great shape 1/1 in gauge. Motor was in good shape.

Drilling Parameters - Run #4						Bit Record - Run #4		
	Min	Max		Min	Max	Bit Number (Bit Run):	Description:	
WOB (lbf)	3	28	SPP Off Bottom (psi)	730	2625	4 (Run 1)	6 1/2" PDC Bit	
Pick Up (lbf)	8	753	SPP On Bottom (psi)	742	3800	Manufacturer:	TFA:	Jets:
Slack Off (lbf)	8	416	Delta Pressure: (psi)	44	1175	Bits' R' Us	1.561in ²	1 x 20, 2 x 21
Rot. Off Bottom (lbf)	8	652	Flow Rate (gpm(US))	668	792	Model:	Bit Diameter:	Bit Hours:
Bottom Hole Temp (°F)	212.0	229.5	Pump Rate (SPM)	16	132	Grabber	6 1/2in	14.59Hrs
Rotary Speed (RPM)	33	60	Motor Speed (RPM)	225	273	Type:	IADC#:	Bit Footage:
ROP (ft/hr)	NaN	NaN	Surface Torque (ft-lbs)	2281	22000	Bit		1,445.71ft
						Serial Number:	Condition:	
						87345967	Good	
						Grade:	Reason for pulling out of hole:	
							TD Well	

Drilling Summary - Run #4							
Start Depth:	Total Rotating:	End Depth:	Rotating Hours:	Below Rotary Hours:	Ave. Rotating ROP:	Circulating Hours:	Percent Rotating:
3,977.54ft	763.29ft	5,423.25ft	7.59hrs	29.39hrs	100.62ft/hr	17.73hrs	52.80%
Total Depth Drilled:	Total Sliding:	Total Drilled Hours:	Sliding Hours:	Ave. Total ROP:	Ave. Sliding ROP:	Percent Drilling:	Percent Sliding:
1,445.71ft	682.41ft	14.59hrs	7.01hrs	99.06ft/hr	97.38ft/hr	49.66%	47.20%

Motor Properties - Run #4							
Description:	4 3/4" Motor Lobe 4:5 - 7.0 stg		Motor Type:	Motor	Manufacturer:	Motors' R' Us	Model:
Mud Type:	Water Based		Stabilizer Type:	Straight	Rubber Type:	HR	Serial Number:
Pad OD:	NB Stabilizer:	Bit to Bend:	Bend Angle:	Pressure Drop:	Rev. Rate:	Rotor Jet:	Lobe/Stage:
6.890in	8.268	3.61ft	1.25°	0psi	0.29Rev/gal(US)	0/32's	7:8/5.0
Motor Footage:	Below Rotary Hours:	Circulating Hours:	Rotating Footage:	Rotating Hours:	Sliding Footage:	Sliding Hours:	
1,445.71ft	29.39hrs	17.73hrs	763.29ft	7.59hrs	682.41ft	7.01hrs	
Proposed Build Rate:	Actual Build Rate:	Date/Time In:	Date/Time Out:	Number of Stalls:	Stall Duration:	Extended Motor:	
9.40°/100ft	7.92°/100ft	24/09/2017 21:52	26/09/2017 03:15	0	0.00mins	No	
Motor Failed:	Condition:						
No	Good						

Motor Discussion

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

End of Well Report for AA Pad, AA16

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)
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
11	4 1/2" HWDP 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 (lb/100ft²)	Plastic Viscosity (cp)	Funnel Viscosity (Secs)	Chlorides (ppm)	pH	Oil (%)	Gas (%)	Sand (%)	Solids (%)	Water Line (ft)	Bot.Hole Temp. (°F)	Flow Temp. (°F)
21 Sep 2017	14:14	207.85	13.3	21.3	20.66	50	101.70	5.59	0.00	2092.76	0.00	10.44	16.56	216.9	164.1
21 Sep 2017	17:41	509.69	14.1	22.6	21.39	52	101.68	5.02	0.00	2016.42	0.00	10.41	17.24	213.9	166.4
21 Sep 2017	21:09	792.82	13.8	21.8	21.81	51	108.90	5.67	0.00	2028.14	0.00	10.01	17.01	217.3	163.4
22 Sep 2017	07:23	1,285.58	13.5	22.7	20.73	50	100.55	5.51	0.00	2037.50	0.00	10.30	17.14	229.4	184.3
22 Sep 2017	10:52	1,583.12	13.8	21.7	21.51	53	100.46	5.45	0.00	2003.86	0.00	10.42	17.00	218.6	167.9
22 Sep 2017	14:21	1,883.69	14.1	23.0	21.38	53	101.75	5.18	0.00	2096.67	0.00	10.89	17.54	214.3	167.9
22 Sep 2017	17:45	2,188.79	13.6	22.3	21.47	52	108.53	5.99	0.00	2017.29	0.00	10.28	17.49	227.7	176.1
22 Sep 2017	21:07	2,487.86	13.9	21.9	21.36	51	103.40	5.08	0.00	2024.13	0.00	10.33	17.12	223.5	174.7
23 Sep 2017	11:38	2,826.62	13.9	22.3	21.55	50	105.95	5.23	0.00	2098.83	0.00	10.18	17.68	222.9	172.0
23 Sep 2017	15:11	3,122.92	13.6	21.9	20.54	51	107.46	5.73	0.00	2016.01	0.00	10.15	17.56	216.9	167.5
23 Sep 2017	18:38	3,426.23	13.7	22.1	20.12	51	105.37	5.62	0.00	2022.90	0.00	10.66	17.61	229.7	181.3
23 Sep 2017	22:03	3,723.87	12.6	21.1	20.92	54	100.80	5.58	0.00	2041.31	0.00	10.61	17.32	215.1	162.9
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
Run #1									
21 Sep 2017	03:00	10:30	7.50	0.00	0.00			Standby	
21 Sep 2017	10:30	11:30	1.00	0.00	0.00			Test BOP	
21 Sep 2017	11:30	12:15	0.75	0.00	0.00			Rig Up & Tear Down	
21 Sep 2017	12:15	12:20	0.08	0.00	0.00			Tripping In	
21 Sep 2017	12:20	00:07	11.79	0.00	1,033.76	1,033.76	87.67	Drilling	
22 Sep 2017	00:07	01:07	1.00	1,033.76	1,033.76			Tripping Out	
Run #2									
22 Sep 2017	01:07	01:52	0.75	1,033.76	1,033.76			Change BHA	
22 Sep 2017	01:52	03:02	1.17	1,033.76	1,033.76			Cut/Slip Drilling Line	
22 Sep 2017	03:02	03:07	0.08	1,033.76	1,033.76			Circulate and/or Condition Mud	
22 Sep 2017	03:07	04:37	1.50	1,033.76	1,033.76			Tripping In	
22 Sep 2017	04:37	04:41	0.08	1,033.76	1,053.44	19.69	241.32	Sliding	
22 Sep 2017	04:41	04:53	0.20	1,053.44	1,065.21	11.77	59.96	Rotating	
22 Sep 2017	04:53	04:55	0.03	1,065.21	1,065.21			Survey & Connection	
22 Sep 2017	04:55	05:00	0.08	1,065.21	1,084.89	19.69	246.06	Sliding	

End of Well Report for AA Pad, AA16

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
22 Sep 2017	05:00	05:12	0.20	1,084.89	1,094.98	10.09	50.44	Rotating	
22 Sep 2017	05:12	05:14	0.03	1,094.98	1,094.98			Survey & Connection	
22 Sep 2017	05:14	05:26	0.20	1,094.98	1,108.10	13.12	65.33	Sliding	
22 Sep 2017	05:26	05:33	0.12	1,108.10	1,122.76	14.65	124.44	Rotating	
22 Sep 2017	05:33	05:35	0.04	1,122.76	1,122.76			Survey & Connection	
22 Sep 2017	05:35	05:41	0.10	1,122.76	1,135.88	13.12	127.39	Sliding	
22 Sep 2017	05:41	05:54	0.21	1,135.88	1,154.31	18.43	86.73	Rotating	
22 Sep 2017	05:54	05:57	0.05	1,154.31	1,154.31			Survey & Connection	
22 Sep 2017	05:57	06:09	0.20	1,154.31	1,167.44	13.12	64.56	Sliding	
22 Sep 2017	06:09	06:17	0.12	1,167.44	1,185.27	17.83	147.85	Rotating	
22 Sep 2017	06:17	06:20	0.05	1,185.27	1,185.27			Survey & Connection	
22 Sep 2017	06:20	06:27	0.12	1,185.27	1,204.95	19.69	161.75	Sliding	
22 Sep 2017	06:27	06:39	0.20	1,204.95	1,212.87	7.92	39.71	Rotating	
22 Sep 2017	06:39	06:41	0.04	1,212.87	1,212.87			Survey & Connection	
22 Sep 2017	06:41	06:51	0.17	1,212.87	1,222.71	9.84	57.77	Sliding	
22 Sep 2017	06:51	07:00	0.14	1,222.71	1,243.84	21.13	152.54	Rotating	
22 Sep 2017	07:00	07:02	0.03	1,243.84	1,243.84			Survey & Connection	
22 Sep 2017	07:02	07:16	0.23	1,243.84	1,253.68	9.84	42.26	Sliding	
22 Sep 2017	07:16	07:21	0.08	1,253.68	1,272.46	18.77	230.29	Rotating	
22 Sep 2017	07:21	07:23	0.03	1,272.46	1,272.46			Survey & Connection	
22 Sep 2017	07:23	07:34	0.19	1,272.46	1,285.58	13.12	67.91	Sliding	
22 Sep 2017	07:34	07:40	0.10	1,285.58	1,305.41	19.83	205.48	Rotating	
22 Sep 2017	07:40	07:43	0.04	1,305.41	1,305.41			Survey & Connection	
22 Sep 2017	07:43	07:53	0.18	1,305.41	1,321.81	16.40	93.49	Sliding	
22 Sep 2017	07:53	08:01	0.14	1,321.81	1,334.37	12.55	89.97	Rotating	
22 Sep 2017	08:01	08:04	0.05	1,334.37	1,334.37			Survey & Connection	
22 Sep 2017	08:04	08:18	0.23	1,334.37	1,347.49	13.12	57.22	Sliding	
22 Sep 2017	08:18	08:23	0.08	1,347.49	1,362.22	14.73	187.78	Rotating	
22 Sep 2017	08:23	08:26	0.05	1,362.22	1,362.22			Survey & Connection	
22 Sep 2017	08:26	08:37	0.20	1,362.22	1,378.62	16.40	84.10	Sliding	
22 Sep 2017	08:37	08:45	0.12	1,378.62	1,394.08	15.45	128.83	Rotating	
22 Sep 2017	08:45	08:48	0.05	1,394.08	1,394.08			Survey & Connection	
22 Sep 2017	08:48	08:53	0.08	1,394.08	1,413.76	19.69	235.36	Sliding	
22 Sep 2017	08:53	09:05	0.21	1,413.76	1,422.54	8.78	41.14	Rotating	
22 Sep 2017	09:05	09:07	0.03	1,422.54	1,422.54			Survey & Connection	
22 Sep 2017	09:07	09:17	0.16	1,422.54	1,435.66	13.12	84.09	Sliding	
22 Sep 2017	09:17	09:28	0.18	1,435.66	1,452.57	16.91	92.90	Rotating	
22 Sep 2017	09:28	09:30	0.04	1,452.57	1,452.57			Survey & Connection	
22 Sep 2017	09:30	09:41	0.18	1,452.57	1,468.97	16.40	91.92	Sliding	
22 Sep 2017	09:41	09:51	0.17	1,468.97	1,484.87	15.90	93.59	Rotating	
22 Sep 2017	09:51	09:54	0.04	1,484.87	1,484.87			Survey & Connection	
22 Sep 2017	09:54	10:00	0.11	1,484.87	1,494.71	9.84	90.96	Sliding	
22 Sep 2017	10:00	10:09	0.15	1,494.71	1,513.20	18.49	120.05	Rotating	
22 Sep 2017	10:09	10:12	0.04	1,513.20	1,513.20			Survey & Connection	
22 Sep 2017	10:12	10:17	0.09	1,513.20	1,523.04	9.84	109.05	Sliding	
22 Sep 2017	10:17	10:32	0.25	1,523.04	1,542.44	19.39	77.66	Rotating	
22 Sep 2017	10:32	10:34	0.03	1,542.44	1,542.44			Survey & Connection	
22 Sep 2017	10:34	10:39	0.08	1,542.44	1,558.84	16.40	205.71	Sliding	
22 Sep 2017	10:39	10:50	0.19	1,558.84	1,573.28	14.44	77.58	Rotating	
22 Sep 2017	10:50	10:52	0.03	1,573.28	1,573.28			Survey & Connection	
22 Sep 2017	10:52	11:00	0.13	1,573.28	1,583.12	9.84	76.17	Sliding	
22 Sep 2017	11:00	11:13	0.22	1,583.12	1,603.58	20.46	92.79	Rotating	
22 Sep 2017	11:13	11:16	0.05	1,603.58	1,603.58			Survey & Connection	
22 Sep 2017	11:16	11:23	0.13	1,603.58	1,619.98	16.40	131.03	Sliding	
22 Sep 2017	11:23	11:32	0.14	1,619.98	1,633.33	13.35	93.44	Rotating	
22 Sep 2017	11:32	11:34	0.04	1,633.33	1,633.33			Survey & Connection	
22 Sep 2017	11:34	11:47	0.21	1,633.33	1,643.18	9.84	47.39	Sliding	
22 Sep 2017	11:47	11:52	0.09	1,643.18	1,665.48	22.30	241.56	Rotating	
22 Sep 2017	11:52	11:55	0.05	1,665.48	1,665.48			Survey & Connection	
22 Sep 2017	11:55	12:01	0.10	1,665.48	1,681.88	16.40	161.11	Sliding	
22 Sep 2017	12:01	12:13	0.20	1,681.88	1,695.60	13.72	67.06	Rotating	

End of Well Report for AA Pad, AA16

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
22 Sep 2017	12:13	12:16	0.05	1,695.60	1,695.60			Survey & Connection	
22 Sep 2017	12:16	12:29	0.22	1,695.60	1,708.72	13.12	59.62	Sliding	
22 Sep 2017	12:29	12:36	0.12	1,708.72	1,723.72	15.00	129.30	Rotating	
22 Sep 2017	12:36	12:39	0.04	1,723.72	1,723.72			Survey & Connection	
22 Sep 2017	12:39	12:47	0.15	1,723.72	1,740.13	16.40	112.93	Sliding	
22 Sep 2017	12:47	12:54	0.12	1,740.13	1,753.34	13.21	112.16	Rotating	
22 Sep 2017	12:54	12:57	0.04	1,753.34	1,753.34			Survey & Connection	
22 Sep 2017	12:57	13:06	0.16	1,753.34	1,769.74	16.40	105.82	Sliding	
22 Sep 2017	13:06	13:14	0.13	1,769.74	1,782.97	13.23	101.35	Rotating	
22 Sep 2017	13:14	13:16	0.04	1,782.97	1,782.97			Survey & Connection	
22 Sep 2017	13:16	13:21	0.09	1,782.97	1,799.37	16.40	186.35	Sliding	
22 Sep 2017	13:21	13:36	0.24	1,799.37	1,813.00	13.62	56.76	Rotating	
22 Sep 2017	13:36	13:38	0.04	1,813.00	1,813.00			Survey & Connection	
22 Sep 2017	13:38	13:48	0.17	1,813.00	1,822.84	9.84	58.44	Sliding	
22 Sep 2017	13:48	13:59	0.17	1,822.84	1,844.60	21.76	127.67	Rotating	
22 Sep 2017	13:59	14:01	0.04	1,844.60	1,844.60			Survey & Connection	
22 Sep 2017	14:01	14:12	0.18	1,844.60	1,857.73	13.12	72.32	Sliding	
22 Sep 2017	14:12	14:19	0.11	1,857.73	1,873.85	16.12	145.17	Rotating	
22 Sep 2017	14:19	14:21	0.04	1,873.85	1,873.85			Survey & Connection	
22 Sep 2017	14:21	14:33	0.19	1,873.85	1,883.69	9.84	52.17	Sliding	
22 Sep 2017	14:33	14:38	0.10	1,883.69	1,903.88	20.19	205.39	Rotating	
22 Sep 2017	14:38	14:41	0.04	1,903.88	1,903.88			Survey & Connection	
22 Sep 2017	14:41	14:45	0.07	1,903.88	1,917.00	13.12	178.28	Sliding	
22 Sep 2017	14:45	14:58	0.20	1,917.00	1,934.88	17.88	87.94	Rotating	
22 Sep 2017	14:58	15:00	0.04	1,934.88	1,934.88			Survey & Connection	
22 Sep 2017	15:00	15:07	0.12	1,934.88	1,948.00	13.12	110.01	Sliding	
22 Sep 2017	15:07	15:20	0.22	1,948.00	1,963.63	15.63	69.50	Rotating	
22 Sep 2017	15:20	15:23	0.04	1,963.63	1,963.63			Survey & Connection	
22 Sep 2017	15:23	15:30	0.13	1,963.63	1,976.76	13.12	102.92	Sliding	
22 Sep 2017	15:30	15:40	0.16	1,976.76	1,994.66	17.90	111.90	Rotating	
22 Sep 2017	15:40	15:42	0.04	1,994.66	1,994.66			Survey & Connection	
22 Sep 2017	15:42	15:54	0.19	1,994.66	2,007.78	13.12	67.66	Sliding	
22 Sep 2017	15:54	16:00	0.11	2,007.78	2,023.28	15.50	144.66	Rotating	
22 Sep 2017	16:00	16:03	0.04	2,023.28	2,023.28			Survey & Connection	
22 Sep 2017	16:03	16:15	0.20	2,023.28	2,039.69	16.40	81.55	Sliding	
22 Sep 2017	16:15	16:21	0.10	2,039.69	2,053.23	13.54	131.84	Rotating	
22 Sep 2017	16:21	16:23	0.04	2,053.23	2,053.23			Survey & Connection	
22 Sep 2017	16:23	16:30	0.11	2,053.23	2,063.07	9.84	86.49	Sliding	
22 Sep 2017	16:30	16:44	0.23	2,063.07	2,084.55	21.48	94.96	Rotating	
22 Sep 2017	16:44	16:46	0.04	2,084.55	2,084.55			Survey & Connection	
22 Sep 2017	16:46	16:56	0.17	2,084.55	2,104.24	19.69	112.98	Sliding	
22 Sep 2017	16:56	17:03	0.10	2,104.24	2,112.92	8.69	82.99	Rotating	
22 Sep 2017	17:03	17:05	0.04	2,112.92	2,112.92			Survey & Connection	
22 Sep 2017	17:05	17:17	0.20	2,112.92	2,129.33	16.40	84.07	Sliding	
22 Sep 2017	17:17	17:24	0.12	2,129.33	2,144.18	14.85	124.77	Rotating	
22 Sep 2017	17:24	17:27	0.05	2,144.18	2,144.18			Survey & Connection	
22 Sep 2017	17:27	17:35	0.14	2,144.18	2,160.59	16.40	115.39	Sliding	
22 Sep 2017	17:35	17:42	0.12	2,160.59	2,175.67	15.08	122.25	Rotating	
22 Sep 2017	17:42	17:45	0.04	2,175.67	2,175.67			Survey & Connection	
22 Sep 2017	17:45	17:57	0.20	2,175.67	2,188.79	13.12	67.13	Sliding	
22 Sep 2017	17:57	18:02	0.08	2,188.79	2,203.58	14.78	181.51	Rotating	
22 Sep 2017	18:02	18:04	0.04	2,203.58	2,203.58			Survey & Connection	
22 Sep 2017	18:04	18:09	0.09	2,203.58	2,213.42	9.84	113.82	Sliding	
22 Sep 2017	18:09	18:21	0.20	2,213.42	2,235.31	21.90	107.88	Rotating	
22 Sep 2017	18:21	18:24	0.04	2,235.31	2,235.31			Survey & Connection	
22 Sep 2017	18:24	18:35	0.19	2,235.31	2,251.72	16.40	86.23	Sliding	
22 Sep 2017	18:35	18:41	0.09	2,251.72	2,264.00	12.28	133.94	Rotating	
22 Sep 2017	18:41	18:44	0.05	2,264.00	2,264.00			Survey & Connection	
22 Sep 2017	18:44	18:49	0.09	2,264.00	2,280.40	16.40	176.95	Sliding	
22 Sep 2017	18:49	19:00	0.18	2,280.40	2,293.73	13.32	73.42	Rotating	
22 Sep 2017	19:00	19:03	0.05	2,293.73	2,293.73			Survey & Connection	

End of Well Report for AA Pad, AA16

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
22 Sep 2017	19:03	19:12	0.14	2,293.73	2,310.13	16.40	119.53	Sliding	
22 Sep 2017	19:12	19:21	0.15	2,310.13	2,325.81	15.68	104.94	Rotating	
22 Sep 2017	19:21	19:23	0.04	2,325.81	2,325.81			Survey & Connection	
22 Sep 2017	19:23	19:29	0.11	2,325.81	2,345.50	19.69	180.63	Sliding	
22 Sep 2017	19:29	19:39	0.16	2,345.50	2,354.89	9.39	60.19	Rotating	
22 Sep 2017	19:39	19:41	0.04	2,354.89	2,354.89			Survey & Connection	
22 Sep 2017	19:41	19:51	0.16	2,354.89	2,368.01	13.12	81.54	Sliding	
22 Sep 2017	19:51	19:58	0.12	2,368.01	2,384.90	16.88	141.82	Rotating	
22 Sep 2017	19:58	20:00	0.04	2,384.90	2,384.90			Survey & Connection	
22 Sep 2017	20:00	20:11	0.17	2,384.90	2,398.02	13.12	75.06	Sliding	
22 Sep 2017	20:11	20:20	0.15	2,398.02	2,414.26	16.24	106.59	Rotating	
22 Sep 2017	20:20	20:22	0.04	2,414.26	2,414.26			Survey & Connection	
22 Sep 2017	20:22	20:32	0.16	2,414.26	2,427.38	13.12	83.70	Sliding	
22 Sep 2017	20:32	20:42	0.17	2,427.38	2,443.20	15.81	92.47	Rotating	
22 Sep 2017	20:42	20:45	0.04	2,443.20	2,443.20			Survey & Connection	
22 Sep 2017	20:45	20:59	0.24	2,443.20	2,453.04	9.84	41.68	Sliding	
22 Sep 2017	20:59	21:04	0.09	2,453.04	2,474.74	21.70	238.21	Rotating	
22 Sep 2017	21:04	21:07	0.04	2,474.74	2,474.74			Survey & Connection	
22 Sep 2017	21:07	21:19	0.21	2,474.74	2,487.86	13.12	62.96	Sliding	
22 Sep 2017	21:19	21:24	0.09	2,487.86	2,505.19	17.33	198.32	Rotating	
22 Sep 2017	21:24	21:27	0.05	2,505.19	2,505.19			Survey & Connection	
22 Sep 2017	21:27	21:37	0.16	2,505.19	2,518.32	13.12	81.33	Sliding	
22 Sep 2017	21:37	21:47	0.17	2,518.32	2,535.93	17.62	101.94	Rotating	
22 Sep 2017	21:47	21:49	0.04	2,535.93	2,535.93			Survey & Connection	
22 Sep 2017	21:49	22:01	0.19	2,535.93	2,549.06	13.12	67.32	Sliding	
22 Sep 2017	22:01	22:06	0.08	2,549.06	2,565.69	16.64	198.87	Rotating	
22 Sep 2017	22:06	22:09	0.04	2,565.69	2,565.69			Survey & Connection	
22 Sep 2017	22:09	00:09	2.00	2,565.69	2,565.69			Tripping Out	
Run #3									
23 Sep 2017	00:09	04:24	4.25	2,565.69	2,565.69			Standby	Safety meeting, clean floor
23 Sep 2017	04:24	05:54	1.50	2,565.69	2,565.69			Change BHA	Pick up BHA
23 Sep 2017	05:54	06:09	0.25	2,565.69	2,565.69			Cut/Slip Drilling Line	
23 Sep 2017	06:09	06:24	0.25	2,565.69	2,565.69			Shallow Test	Shallow test MWD and Motor
23 Sep 2017	06:24	08:54	2.50	2,565.69	2,565.69			Tripping In	
23 Sep 2017	08:54	08:54	0.00	2,565.69	2,565.69			Reaming	Wash to bottom
23 Sep 2017	08:54	09:05	0.19	2,565.69	2,575.54	9.84	52.47	Sliding	
23 Sep 2017	09:05	09:14	0.16	2,575.54	2,597.42	21.88	135.38	Rotating	
23 Sep 2017	09:14	09:17	0.05	2,597.42	2,597.42			Survey & Connection	
23 Sep 2017	09:17	09:27	0.16	2,597.42	2,613.82	16.40	100.45	Sliding	
23 Sep 2017	09:27	09:33	0.10	2,613.82	2,628.69	14.87	148.13	Rotating	
23 Sep 2017	09:33	09:36	0.05	2,628.69	2,628.69			Survey & Connection	
23 Sep 2017	09:36	09:43	0.12	2,628.69	2,641.81	13.12	109.30	Sliding	
23 Sep 2017	09:43	09:56	0.22	2,641.81	2,657.10	15.29	70.62	Rotating	
23 Sep 2017	09:56	09:59	0.05	2,657.10	2,657.10			Survey & Connection	
23 Sep 2017	09:59	10:06	0.11	2,657.10	2,676.79	19.69	172.21	Sliding	
23 Sep 2017	10:06	10:17	0.18	2,676.79	2,687.94	11.15	62.89	Rotating	
23 Sep 2017	10:17	10:20	0.05	2,687.94	2,687.94			Survey & Connection	
23 Sep 2017	10:20	10:28	0.14	2,687.94	2,707.63	19.69	143.88	Sliding	
23 Sep 2017	10:28	10:37	0.14	2,707.63	2,717.37	9.74	69.09	Rotating	
23 Sep 2017	10:37	10:40	0.05	2,717.37	2,717.37			Survey & Connection	
23 Sep 2017	10:40	10:49	0.15	2,717.37	2,727.21	9.84	66.45	Sliding	
23 Sep 2017	10:49	10:56	0.12	2,727.21	2,747.42	20.21	167.31	Rotating	
23 Sep 2017	10:56	10:59	0.05	2,747.42	2,747.42			Survey & Connection	
23 Sep 2017	10:59	11:08	0.15	2,747.42	2,757.27	9.84	63.84	Sliding	
23 Sep 2017	11:08	11:15	0.11	2,757.27	2,777.28	20.01	182.76	Rotating	
23 Sep 2017	11:15	11:18	0.05	2,777.28	2,777.28			Survey & Connection	
23 Sep 2017	11:18	11:30	0.21	2,777.28	2,790.40	13.12	62.28	Sliding	
23 Sep 2017	11:30	11:35	0.08	2,790.40	2,806.94	16.54	219.57	Rotating	
23 Sep 2017	11:35	11:38	0.05	2,806.94	2,806.94			Survey & Connection	
23 Sep 2017	11:38	11:42	0.08	2,806.94	2,826.62	19.69	252.05	Sliding	
23 Sep 2017	11:42	11:55	0.21	2,826.62	2,837.12	10.50	50.82	Rotating	

End of Well Report for AA Pad, AA16

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
23 Sep 2017	11:55	11:58	0.05	2,837.12	2,837.12			Survey & Connection	
23 Sep 2017	11:58	12:08	0.17	2,837.12	2,853.53	16.40	94.83	Sliding	
23 Sep 2017	12:08	12:18	0.17	2,853.53	2,866.72	13.19	77.61	Rotating	
23 Sep 2017	12:18	12:21	0.05	2,866.72	2,866.72			Survey & Connection	
23 Sep 2017	12:21	12:30	0.14	2,866.72	2,879.84	13.12	96.89	Sliding	
23 Sep 2017	12:30	12:40	0.17	2,879.84	2,896.05	16.21	94.28	Rotating	
23 Sep 2017	12:40	12:43	0.05	2,896.05	2,896.05			Survey & Connection	
23 Sep 2017	12:43	12:51	0.14	2,896.05	2,912.45	16.40	118.41	Sliding	
23 Sep 2017	12:51	12:59	0.14	2,912.45	2,926.66	14.21	105.19	Rotating	
23 Sep 2017	12:59	13:02	0.05	2,926.66	2,926.66			Survey & Connection	
23 Sep 2017	13:02	13:12	0.15	2,926.66	2,939.78	13.12	85.15	Sliding	
23 Sep 2017	13:12	13:19	0.13	2,939.78	2,959.10	19.32	146.82	Rotating	
23 Sep 2017	13:19	13:22	0.05	2,959.10	2,959.10			Survey & Connection	
23 Sep 2017	13:22	13:32	0.16	2,959.10	2,972.23	13.12	83.44	Sliding	
23 Sep 2017	13:32	13:41	0.16	2,972.23	2,986.11	13.88	89.15	Rotating	
23 Sep 2017	13:41	13:44	0.05	2,986.11	2,986.11			Survey & Connection	
23 Sep 2017	13:44	13:54	0.17	2,986.11	2,995.95	9.84	58.22	Sliding	
23 Sep 2017	13:54	14:05	0.18	2,995.95	3,017.21	21.26	117.89	Rotating	
23 Sep 2017	14:05	14:08	0.05	3,017.21	3,017.21			Survey & Connection	
23 Sep 2017	14:08	14:21	0.22	3,017.21	3,036.89	19.69	90.00	Sliding	
23 Sep 2017	14:21	14:27	0.10	3,036.89	3,047.13	10.24	107.22	Rotating	
23 Sep 2017	14:27	14:30	0.05	3,047.13	3,047.13			Survey & Connection	
23 Sep 2017	14:30	14:37	0.12	3,047.13	3,056.97	9.84	82.00	Sliding	
23 Sep 2017	14:37	14:45	0.13	3,056.97	3,077.57	20.60	156.76	Rotating	
23 Sep 2017	14:45	14:48	0.05	3,077.57	3,077.57			Survey & Connection	
23 Sep 2017	14:48	14:54	0.10	3,077.57	3,090.70	13.12	136.86	Sliding	
23 Sep 2017	14:54	15:08	0.23	3,090.70	3,106.51	15.81	67.44	Rotating	
23 Sep 2017	15:08	15:11	0.05	3,106.51	3,106.51			Survey & Connection	
23 Sep 2017	15:11	15:26	0.25	3,106.51	3,122.92	16.40	65.77	Sliding	
23 Sep 2017	15:26	15:32	0.10	3,122.92	3,137.55	14.63	153.00	Rotating	
23 Sep 2017	15:32	15:35	0.05	3,137.55	3,137.55			Survey & Connection	
23 Sep 2017	15:35	15:46	0.19	3,137.55	3,153.95	16.40	84.38	Sliding	
23 Sep 2017	15:46	15:51	0.09	3,153.95	3,166.88	12.93	149.77	Rotating	
23 Sep 2017	15:51	15:54	0.05	3,166.88	3,166.88			Survey & Connection	
23 Sep 2017	15:54	16:05	0.17	3,166.88	3,176.72	9.84	56.77	Sliding	
23 Sep 2017	16:05	16:11	0.10	3,176.72	3,198.11	21.39	214.73	Rotating	
23 Sep 2017	16:11	16:14	0.05	3,198.11	3,198.11			Survey & Connection	
23 Sep 2017	16:14	16:21	0.13	3,198.11	3,214.52	16.40	129.33	Sliding	
23 Sep 2017	16:21	16:31	0.17	3,214.52	3,227.84	13.32	79.81	Rotating	
23 Sep 2017	16:31	16:34	0.05	3,227.84	3,227.84			Survey & Connection	
23 Sep 2017	16:34	16:44	0.16	3,227.84	3,244.24	16.40	100.16	Sliding	
23 Sep 2017	16:44	16:53	0.15	3,244.24	3,256.61	12.37	82.51	Rotating	
23 Sep 2017	16:53	16:56	0.05	3,256.61	3,256.61			Survey & Connection	
23 Sep 2017	16:56	17:06	0.15	3,256.61	3,266.45	9.84	63.69	Sliding	
23 Sep 2017	17:06	17:16	0.17	3,266.45	3,289.19	22.74	130.72	Rotating	
23 Sep 2017	17:16	17:19	0.05	3,289.19	3,289.19			Survey & Connection	
23 Sep 2017	17:19	17:26	0.12	3,289.19	3,302.31	13.12	108.70	Sliding	
23 Sep 2017	17:26	17:35	0.14	3,302.31	3,318.26	15.94	115.43	Rotating	
23 Sep 2017	17:35	17:38	0.05	3,318.26	3,318.26			Survey & Connection	
23 Sep 2017	17:38	17:42	0.08	3,318.26	3,334.66	16.40	201.94	Sliding	
23 Sep 2017	17:42	17:53	0.17	3,334.66	3,347.82	13.16	77.71	Rotating	
23 Sep 2017	17:53	17:56	0.05	3,347.82	3,347.82			Survey & Connection	
23 Sep 2017	17:56	18:04	0.13	3,347.82	3,364.22	16.40	123.73	Sliding	
23 Sep 2017	18:04	18:12	0.14	3,364.22	3,377.44	13.22	93.37	Rotating	
23 Sep 2017	18:12	18:15	0.05	3,377.44	3,377.44			Survey & Connection	
23 Sep 2017	18:15	18:25	0.17	3,377.44	3,397.13	19.69	118.87	Sliding	
23 Sep 2017	18:25	18:35	0.16	3,397.13	3,406.54	9.42	58.87	Rotating	
23 Sep 2017	18:35	18:38	0.05	3,406.54	3,406.54			Survey & Connection	
23 Sep 2017	18:38	18:49	0.19	3,406.54	3,426.23	19.69	102.72	Sliding	
23 Sep 2017	18:49	18:57	0.13	3,426.23	3,438.76	12.53	93.78	Rotating	
23 Sep 2017	18:57	19:00	0.05	3,438.76	3,438.76			Survey & Connection	

End of Well Report for AA Pad, AA16

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
23 Sep 2017	19:00	19:10	0.17	3,438.76	3,458.45	19.69	119.05	Sliding	
23 Sep 2017	19:10	19:15	0.09	3,458.45	3,467.73	9.28	107.39	Rotating	
23 Sep 2017	19:15	19:18	0.05	3,467.73	3,467.73			Survey & Connection	
23 Sep 2017	19:18	19:29	0.17	3,467.73	3,484.14	16.40	94.83	Sliding	
23 Sep 2017	19:29	19:34	0.09	3,484.14	3,498.70	14.57	158.05	Rotating	
23 Sep 2017	19:34	19:37	0.05	3,498.70	3,498.70			Survey & Connection	
23 Sep 2017	19:37	19:46	0.14	3,498.70	3,511.83	13.12	90.74	Sliding	
23 Sep 2017	19:46	19:56	0.17	3,511.83	3,528.23	16.40	94.35	Rotating	
23 Sep 2017	19:56	19:59	0.05	3,528.23	3,528.23			Survey & Connection	
23 Sep 2017	19:59	20:09	0.16	3,528.23	3,544.63	16.40	102.19	Sliding	
23 Sep 2017	20:09	20:18	0.15	3,544.63	3,559.00	14.37	92.79	Rotating	
23 Sep 2017	20:18	20:21	0.05	3,559.00	3,559.00			Survey & Connection	
23 Sep 2017	20:21	20:28	0.11	3,559.00	3,568.85	9.84	88.90	Sliding	
23 Sep 2017	20:28	20:38	0.17	3,568.85	3,586.37	17.52	100.90	Rotating	
23 Sep 2017	20:38	20:41	0.05	3,586.37	3,586.37			Survey & Connection	
23 Sep 2017	20:41	20:46	0.08	3,586.37	3,602.77	16.40	201.14	Sliding	
23 Sep 2017	20:46	20:58	0.20	3,602.77	3,617.01	14.24	72.17	Rotating	
23 Sep 2017	20:58	21:01	0.05	3,617.01	3,617.01			Survey & Connection	
23 Sep 2017	21:01	21:10	0.15	3,617.01	3,636.69	19.69	131.25	Sliding	
23 Sep 2017	21:10	21:18	0.13	3,636.69	3,646.57	9.88	77.47	Rotating	
23 Sep 2017	21:18	21:21	0.05	3,646.57	3,646.57			Survey & Connection	
23 Sep 2017	21:21	21:30	0.16	3,646.57	3,662.97	16.40	99.55	Sliding	
23 Sep 2017	21:30	21:38	0.12	3,662.97	3,676.72	13.75	115.65	Rotating	
23 Sep 2017	21:38	21:41	0.05	3,676.72	3,676.72			Survey & Connection	
23 Sep 2017	21:41	21:50	0.16	3,676.72	3,686.56	9.84	62.15	Sliding	
23 Sep 2017	21:50	22:00	0.17	3,686.56	3,707.46	20.90	124.70	Rotating	
23 Sep 2017	22:00	22:03	0.05	3,707.46	3,707.46			Survey & Connection	
23 Sep 2017	22:03	22:10	0.12	3,707.46	3,723.87	16.40	140.55	Sliding	
23 Sep 2017	22:10	22:19	0.14	3,723.87	3,736.83	12.96	91.79	Rotating	
23 Sep 2017	22:19	22:22	0.05	3,736.83	3,736.83			Survey & Connection	
23 Sep 2017	22:22	22:32	0.18	3,736.83	3,746.67	9.84	54.61	Sliding	
23 Sep 2017	22:32	22:41	0.14	3,746.67	3,766.42	19.75	141.97	Rotating	
23 Sep 2017	22:41	22:44	0.05	3,766.42	3,766.42			Survey & Connection	
23 Sep 2017	22:44	22:49	0.09	3,766.42	3,782.82	16.40	189.59	Sliding	
23 Sep 2017	22:49	22:59	0.17	3,782.82	3,798.21	15.39	92.05	Rotating	
23 Sep 2017	22:59	23:02	0.05	3,798.21	3,798.21			Survey & Connection	
23 Sep 2017	23:02	23:07	0.09	3,798.21	3,817.89	19.69	220.34	Sliding	
23 Sep 2017	23:07	23:19	0.19	3,817.89	3,828.62	10.73	57.36	Rotating	
23 Sep 2017	23:19	23:22	0.05	3,828.62	3,828.62			Survey & Connection	
23 Sep 2017	23:22	23:29	0.13	3,828.62	3,845.03	16.40	129.35	Sliding	
23 Sep 2017	23:29	23:37	0.13	3,845.03	3,858.25	13.22	103.10	Rotating	
23 Sep 2017	23:37	23:40	0.05	3,858.25	3,858.25			Survey & Connection	
23 Sep 2017	23:40	23:48	0.13	3,858.25	3,874.65	16.40	122.52	Sliding	
23 Sep 2017	23:48	23:57	0.15	3,874.65	3,889.22	14.57	98.17	Rotating	
23 Sep 2017	23:57	00:00	0.05	3,889.22	3,889.22			Survey & Connection	
24 Sep 2017	00:00	00:08	0.14	3,889.22	3,908.91	19.69	145.51	Sliding	
24 Sep 2017	00:08	00:16	0.14	3,908.91	3,916.78	7.87	56.12	Rotating	
24 Sep 2017	00:16	00:19	0.05	3,916.78	3,916.78			Survey & Connection	
24 Sep 2017	00:19	00:26	0.11	3,916.78	3,933.18	16.40	144.74	Sliding	
24 Sep 2017	00:26	00:36	0.16	3,933.18	3,947.16	13.98	85.07	Rotating	
24 Sep 2017	00:36	00:39	0.05	3,947.16	3,947.16			Survey & Connection	
24 Sep 2017	00:39	00:50	0.18	3,947.16	3,957.00	9.84	53.96	Sliding	
24 Sep 2017	00:50	00:54	0.07	3,957.00	3,977.54	20.54	279.33	Rotating	
24 Sep 2017	00:54	00:57	0.05	3,977.54	3,977.54			Survey & Connection	
24 Sep 2017	00:57	03:57	3.00	3,977.54	3,977.54			Tripping Out	Pull out of hole to BHA
24 Sep 2017	03:57	04:42	0.75	3,977.54	3,977.54			Other	Lay down BHA
24 Sep 2017	04:42	09:42	5.00	3,977.54	3,977.54			Run Casing	Run casing
24 Sep 2017	09:42	11:12	1.50	3,977.54	3,977.54			Circulate and/or Condition Mud	
24 Sep 2017	11:12	14:42	3.50	3,977.54	3,977.54			Cementing	
24 Sep 2017	14:42	16:57	2.25	3,977.54	3,977.54			Standby	
24 Sep 2017	16:57	17:57	1.00	3,977.54	3,977.54			Test BOP	

End of Well Report for AA Pad, AA16

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	
Run #4										
24 Sep 2017	17:57	18:42	0.75	3,977.54	3,977.54			Change BHA	Make up Directional BHA, scribe & install MWD	
24 Sep 2017	18:42	21:12	2.50	3,977.54	3,977.54			Other	Ccleaning mud tanks and transferring oil base mud	
24 Sep 2017	21:12	21:22	0.17	3,977.54	3,977.54			Shallow Test	Test Motor & MWD at Surface	
24 Sep 2017	21:22	21:52	0.50	3,977.54	3,977.54			Other	Make up bit and rest of BHA	
24 Sep 2017	21:52	01:22	3.50	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		
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		

End of Well Report for AA Pad, AA16

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	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	
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	

End of Well Report for AA Pad, AA16

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	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	
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	03:15	4.00	5,423.25	5,423.25			Tripping Out	
26 Sep 2017	03:15	05:15	2.00	5,423.25	5,423.25			Rig Up & Tear Down	Rig up and tear down

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
Run #1																			
21 Sep	Sliding	12:20	12:33	0.22	0.00	16.40	16.40		74.38						30	0.10	120.07	0.61	
21 Sep	Rotating	12:33	12:39	0.10	16.40	29.89	13.48	4	140.27	29	2250	792	736	44		0.18	120.07		
21 Sep	Sliding	12:39	12:49	0.17	29.89	43.01	13.12		77.63						60	0.17	133.02	0.92	
21 Sep	Rotating	12:49	12:55	0.09	43.01	59.51	16.50	3	180.85	35	2365	682	745	46		0.14	189.33		
21 Sep	Sliding	12:55	13:02	0.13	59.51	75.92	16.40		123.60						60	0.15	182.59	0.88	
21 Sep	Rotating	13:02	13:14	0.19	75.92	88.58	12.66	3	67.12	37	2444	710	742	49		0.18	143.78		
21 Sep	Sliding	13:15	13:21	0.09	88.58	104.99	16.40		187.35						150	0.29	115.17	1.07	

End of Well Report for AA Pad, AA16

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
21 Sep	Rotating	13:21	13:33	0.21	104.99	119.16	14.17	4	69.06	33	2362	727	745	48		0.43	103.22		
21 Sep	Sliding	13:35	13:39	0.08	119.16	132.28	13.12		170.56						-90	0.36	100.49	2.26	
21 Sep	Rotating	13:39	13:51	0.20	132.28	148.60	16.32	3	81.58	30	2454	743	734	45		0.02	207.86		
21 Sep	Sliding	13:54	14:02	0.13	148.60	158.44	9.84		73.54						-30	0.14	271.12	0.52	
21 Sep	Rotating	14:02	14:12	0.17	158.44	178.78	20.34	3	122.01	30	2411	674	729	44		0.04	272.46		
21 Sep	Sliding	14:14	14:24	0.16	178.78	195.19	16.40		99.54						150	0.02	73.91	0.29	
21 Sep	Rotating	14:24	14:33	0.15	195.19	207.85	12.66	3	83.85	36	2383	730	738	50		0.06	77.00		
21 Sep	Sliding	14:35	14:42	0.13	207.85	224.26	16.40		130.58						160	0.11	86.01	0.42	
21 Sep	Rotating	14:42	14:54	0.20	224.26	237.91	13.66	3	68.50	29	2289	694	733	47		0.17	94.16		
21 Sep	Sliding	14:57	15:08	0.18	237.91	257.60	19.69		107.49						180	0.05	190.04	1.56	
21 Sep	Rotating	15:08	15:17	0.15	257.60	269.48	11.89	3	77.56	32	2390	782	745	44		0.21	249.41		
21 Sep	Sliding	15:19	15:31	0.20	269.48	279.33	9.84		48.46						0	0.30	253.26	0.94	
21 Sep	Rotating	15:31	15:35	0.07	279.33	297.01	17.68	3	256.84	38	2395	749	743	50		0.14	237.55		
21 Sep	Sliding	15:37	15:48	0.17	297.01	310.13	13.12		75.38						160	0.07	202.38	0.17	
21 Sep	Rotating	15:48	15:55	0.12	310.13	329.48	19.35	3	164.93	37	2324	725	736	48		0.05	224.13	0.17	
21 Sep	Sliding	15:57	16:03	0.09	329.48	345.88	16.40		180.64						180	0.13	257.51	0.99	
21 Sep	Rotating	16:03	16:14	0.19	345.88	359.67	13.79	4	73.22	30	2287	742	738	49		0.26	262.30		
21 Sep	Sliding	16:16	16:22	0.10	359.67	369.51	9.84		100.64						170	0.27	261.71	0.98	
21 Sep	Rotating	16:22	16:37	0.25	369.51	389.35	19.83	3	80.04	31	2488	731	728	49		0.08	240.32		
21 Sep	Sliding	16:40	16:49	0.15	389.35	405.75	16.40		112.22						40	0.01	136.06	0.35	
21 Sep	Rotating	16:49	16:59	0.18	405.75	417.19	11.44	3	63.86	35	2484	791	737	46		0.04	43.62		
21 Sep	Sliding	17:02	17:09	0.12	417.19	433.59	16.40		137.92						-150	0.06	35.80	0.27	
21 Sep	Rotating	17:09	17:19	0.16	433.59	448.42	14.83	3	93.34	33	2293	787	729	47		0.02	48.93	0.27	
21 Sep	Sliding	17:21	17:29	0.13	448.42	461.54	13.12		101.77						-160	0.05	198.40	0.92	
21 Sep	Rotating	17:29	17:39	0.16	461.54	479.91	18.37	3	115.65	36	2396	752	748	47		0.22	202.80		
21 Sep	Sliding	17:41	17:47	0.10	479.91	493.03	13.12		136.57						-170	0.19	198.70	1.18	
21 Sep	Rotating	17:47	17:57	0.17	493.03	509.69	16.66	3	98.31	37	2258	750	744	49		0.05	105.86		
21 Sep	Sliding	17:59	18:12	0.21	509.69	522.82	13.12		61.90						10	0.10	54.65	0.38	
21 Sep	Rotating	18:12	18:18	0.10	522.82	538.34	15.53	4	152.01	32	2530	776	735	45		0.04	47.52		
21 Sep	Sliding	18:20	18:34	0.22	538.34	554.75	16.40		74.27						180	0.04	199.54	0.70	
21 Sep	Rotating	18:34	18:39	0.09	554.75	570.29	15.55	4	177.21	35	2512	771	730	49		0.15	196.90		
21 Sep	Sliding	18:41	18:51	0.15	570.29	580.14	9.84		64.76						180	0.22	169.13	1.93	
21 Sep	Rotating	18:51	19:01	0.17	580.14	600.02	19.88	3	115.46	30	2446	693	736	50		0.24	147.85		
21 Sep	Sliding	19:03	19:16	0.22	600.02	613.14	13.12		60.39						180	0.07	220.64	1.75	
21 Sep	Rotating	19:16	19:22	0.09	613.14	627.36	14.22	4	153.45	34	2242	730	734	46		0.07	248.88		
21 Sep	Sliding	19:24	19:31	0.10	627.36	633.92	6.56		63.21						-60	0.07	192.25	0.99	
21 Sep	Rotating	19:31	19:45	0.24	633.92	643.90	9.97	3	42.33	32	2269	711	743	50		0.14	152.74		
21 Sep	Sliding	19:47	19:53	0.09	643.90	653.74	9.84		105.26						180	0.16	152.65	1.15	
21 Sep	Rotating	19:53	20:06	0.22	653.74	672.00	18.26	3	83.57	36	2253	760	731	46		0.13	244.28		
21 Sep	Sliding	20:08	20:13	0.08	672.00	685.12	13.12		160.45						-170	0.22	257.68	0.83	
21 Sep	Rotating	20:13	20:23	0.17	685.12	702.54	17.42	4	102.91	36	2379	770	731	44		0.31	232.44		
21 Sep	Sliding	20:25	20:37	0.20	702.54	718.95	16.40		82.40						130	0.23	226.08	1.19	
21 Sep	Rotating	20:37	20:43	0.11	718.95	733.36	14.41	3	135.35	31	2557	667	739	48		0.06	216.92		
21 Sep	Sliding	20:46	21:00	0.23	733.36	746.48	13.12		56.10						-60	0.08	101.34	0.86	
21 Sep	Rotating	21:00	21:07	0.12	746.48	761.04	14.56	4	126.31	31	2419	675	730	49		0.20	111.04		
21 Sep	Sliding	21:09	21:16	0.11	761.04	780.72	19.69		176.05						170	0.56	98.81	2.82	
21 Sep	Rotating	21:16	21:26	0.17	780.72	792.82	12.10	3	71.49	34	2428	786	745	46		0.90	94.06		
21 Sep	Sliding	21:28	21:39	0.18	792.82	809.23	16.40		93.07						30	1.57	105.46	5.80	
21 Sep	Rotating	21:39	21:48	0.15	809.23	822.44	13.21	3	88.15	33	2561	720	739	44		2.29	113.52		
21 Sep	Sliding	21:50	22:01	0.19	822.44	838.84	16.40		86.26						-20	3.27	112.07	6.86	
21 Sep	Rotating	22:01	22:10	0.16	838.84	851.90	13.06	3	82.54	29	2234	734	733	47		4.12	107.63		
21 Sep	Sliding	22:12	22:22	0.16	851.90	868.30	16.40		105.78						40	5.24	105.51	7.10	
21 Sep	Rotating	22:22	22:29	0.13	868.30	882.98	14.68	3	116.48	36	2340	668	742	45		6.29	105.43		
21 Sep	Sliding	22:31	22:44	0.21	882.98	892.82	9.84		47.87						-10	6.99	105.44	7.16	
21 Sep	Rotating	22:44	22:50	0.11	892.82	913.08	20.26	3	179.74	29	2240	748	748	44		8.44	105.60		
21 Sep	Sliding	22:53	23:02	0.15	913.08	929.49	16.40		108.50						-30	9.64	106.32	7.48	
21 Sep	Rotating	23:02	23:09	0.13	929.49	941.84	12.36	3	96.33	33	2494	703	743	47		10.55	107.03		
21 Sep	Sliding	23:11	23:22	0.18	941.84	958.25	16.40		92.46						0	11.88	108.95	9.93	
21 Sep	Rotating	23:22	23:30	0.13	958.25	971.91	13.67	4	104.61	36	2281	693	739	44		13.13	111.38		
21 Sep	Sliding	23:32	23:42	0.17	971.91	988.32	16.40		98.43						40	14.80	115.16	14.02	
21 Sep	Rotating	23:42	23:47	0.08	988.32	1,003.74	15.42	4	185.04	36	2281	693	739	44		16.61	119.53		
21 Sep	Sliding	23:50	00:00	0.17	1,003.74	1,020.14	16.40		98.43						10	18.10	122.77	9.76	

End of Well Report for AA Pad, AA16

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		
22 Sep	Rotating	00:00	00:05	0.08	1,020.14	1,033.76	13.62	4	163.39	36	2281	693	739	44		19.22	124.97				
Run #2																					
22 Sep	Sliding	04:37	04:41	0.08	1,033.76	1,053.44	19.69	4	241.32	33	2224	670	739	46	50	20.99	126.04	9.20			
22 Sep	Rotating	04:41	04:53	0.20	1,053.44	1,065.21	11.77		59.96							22.07	126.37	9.20			
22 Sep	Sliding	04:55	05:00	0.08	1,065.21	1,084.89	19.69	4	246.06	34	2476	703	737	50	50	23.97	127.70	10.02			
22 Sep	Rotating	05:00	05:12	0.20	1,084.89	1,094.98	10.09		50.44							24.95	128.31	10.02			
22 Sep	Sliding	05:14	05:26	0.20	1,094.98	1,108.10	13.12	3	65.33	29	2263	737	744	47	10	26.15	129.27	9.61			
22 Sep	Rotating	05:26	05:33	0.12	1,108.10	1,122.76	14.65		124.44							27.48	130.29	9.61			
22 Sep	Sliding	05:35	05:41	0.10	1,122.76	1,135.88	13.12	3	127.39	37	2382	689	736	49	10	28.74	130.88	9.99			
22 Sep	Rotating	05:41	05:54	0.21	1,135.88	1,154.31	18.43		86.73							30.56	131.42	9.99			
22 Sep	Sliding	05:57	06:09	0.20	1,154.31	1,167.44	13.12	3	64.56	34	2245	767	737	45	0	31.67	132.09	8.80			
22 Sep	Rotating	06:09	06:17	0.12	1,167.44	1,185.27	17.83		147.85							33.17	132.98	8.80			
22 Sep	Sliding	06:20	06:27	0.12	1,185.27	1,204.95	19.69	4	161.75	35	2466	688	735	45	0	34.93	132.97	8.97			
22 Sep	Rotating	06:27	06:39	0.20	1,204.95	1,212.87	7.92		39.71							35.64	132.95	8.97			
22 Sep	Sliding	06:41	06:51	0.17	1,212.87	1,222.71	9.84	3	57.77	29	2273	730	741	50	-10	36.42	132.91	7.67			
22 Sep	Rotating	06:51	07:00	0.14	1,222.71	1,243.84	21.13		152.54							38.04	132.84	7.67			
22 Sep	Sliding	07:02	07:16	0.23	1,243.84	1,253.68	9.84	4	42.26	37	2463	673	744	50	-20	38.86	132.83	8.80			
22 Sep	Rotating	07:16	07:21	0.08	1,253.68	1,272.46	18.77		230.29							40.51	132.86	8.80			
22 Sep	Sliding	07:23	07:34	0.19	1,272.46	1,285.58	13.12	3	67.91	33	2450	729	753	50	20	41.56	132.95	7.57			
22 Sep	Rotating	07:34	07:40	0.10	1,285.58	1,305.41	19.83		205.48							43.05	133.13	7.39			
22 Sep	Sliding	07:43	07:53	0.18	1,305.41	1,321.81	16.40	4	93.49	35	2425	692	735	46	-30	44.26	133.21	7.39			
22 Sep	Rotating	07:53	08:01	0.14	1,321.81	1,334.37	12.55		89.97							45.19	133.28	7.39			
22 Sep	Sliding	08:04	08:18	0.23	1,334.37	1,347.49	13.12	4	57.22	34	2253	788	740	44	-10	46.32	133.29	8.84			
22 Sep	Rotating	08:18	08:23	0.08	1,347.49	1,362.22	14.73		187.78							47.62	133.28	8.84			
22 Sep	Sliding	08:26	08:37	0.20	1,362.22	1,378.62	16.40	3	84.10	34	2366	702	733	45	0	48.92	133.13	7.79			
22 Sep	Rotating	08:37	08:45	0.12	1,378.62	1,394.08	15.45		128.83							50.12	132.96	7.79			
22 Sep	Sliding	08:48	08:53	0.08	1,394.08	1,413.76	19.69	4	235.36	35	2414	695	738	46	0	51.96	132.47	9.66			
22 Sep	Rotating	08:53	09:05	0.21	1,413.76	1,422.54	8.78		41.14							52.79	132.25	9.66			
22 Sep	Sliding	09:07	09:17	0.16	1,422.54	1,435.66	13.12	3	84.09	37	2508	666	740	45	-20	53.93	132.14	8.25			
22 Sep	Rotating	09:17	09:28	0.18	1,435.66	1,452.57	16.91		92.90							55.33	132.16	8.25			
22 Sep	Sliding	09:30	09:41	0.18	1,452.57	1,468.97	16.40	3	91.92	34	2482	680	734	50	0	56.66	132.34	8.15			
22 Sep	Rotating	09:41	09:51	0.17	1,468.97	1,484.87	15.90		93.59							57.94	132.54	8.15			
22 Sep	Sliding	09:54	10:00	0.11	1,484.87	1,494.71	9.84	4	90.96	34	2262	703	734	46	20	58.66	132.67	7.36			
22 Sep	Rotating	10:00	10:09	0.15	1,494.71	1,513.20	18.49		120.05							60.00	132.90	7.36			
22 Sep	Sliding	10:12	10:17	0.09	1,513.20	1,523.04	9.84	3	109.05	35	2237	733	734	48	20	60.82	132.79	8.85			
22 Sep	Rotating	10:17	10:32	0.25	1,523.04	1,542.44	19.39		77.66							62.51	132.42	8.85			
22 Sep	Sliding	10:34	10:39	0.08	1,542.44	1,558.84	16.40	4	205.71	38	2516	669	736	50	10	64.00	132.54	9.33			
22 Sep	Rotating	10:39	10:50	0.19	1,558.84	1,573.28	14.44		77.58							65.34	132.74	9.33			
22 Sep	Sliding	10:52	11:00	0.13	1,573.28	1,583.12	9.84	4	76.17	37	2567	709	731	48	0	66.13	132.75	7.63			
22 Sep	Rotating	11:00	11:13	0.22	1,583.12	1,603.58	20.46		92.79							67.69	132.66	7.63			
22 Sep	Sliding	11:16	11:23	0.13	1,603.58	1,619.98	16.40	3	131.03	33	2553	790	740	50	40	68.83	132.76	6.78			
22 Sep	Rotating	11:23	11:32	0.14	1,619.98	1,633.33	13.35		93.44							69.73	132.89	6.78			
22 Sep	Sliding	11:34	11:47	0.21	1,633.33	1,643.18	9.84	4	47.39	36	2485	771	746	50	-10	70.59	132.92	10.63			
22 Sep	Rotating	11:47	11:52	0.09	1,643.18	1,665.48	22.30		241.56							72.95	132.82	10.63			
22 Sep	Sliding	11:55	12:01	0.10	1,665.48	1,681.88	16.40	4	161.11	29	2426	763	747	47	10	74.22	132.82	7.55			
22 Sep	Rotating	12:01	12:13	0.20	1,681.88	1,695.60	13.72		67.06							75.25	132.82	7.55			
22 Sep	Sliding	12:16	12:29	0.22	1,695.60	1,708.72	13.12	3	59.62	32	2287	695	739	51	20	76.13	132.54	6.97			
22 Sep	Rotating	12:29	12:36	0.12	1,708.72	1,723.72	15.00		129.30							77.12	132.21	6.97			
22 Sep	Sliding	12:39	12:47	0.15	1,723.72	1,740.13	16.40	3	112.93	36	2437	789	741	46	20	78.63	132.42	9.62			
22 Sep	Rotating	12:47	12:54	0.12	1,740.13	1,753.34	13.21		112.16							79.88	132.65	9.62			
22 Sep	Sliding	12:57	13:06	0.16	1,753.34	1,769.74	16.40	3	105.82	37	2232	774	736	47	-20	81.20	132.65	7.81			
22 Sep	Rotating	13:06	13:14	0.13	1,769.74	1,782.97	13.23		101.35							82.23	132.62	7.81			
22 Sep	Sliding	13:16	13:21	0.09	1,782.97	1,799.37	16.40	3	186.35	32	2227	674	742	48	20	82.44	132.63	0.97			
22 Sep	Rotating	13:21	13:36	0.24	1,799.37	1,813.00	13.62		56.76							82.31	132.66	0.97			
22 Sep	Sliding	13:38	13:48	0.17	1,813.00	1,822.84	9.84	3	58.44	31	2332	680	740	46	20	82.37	132.61	1.62			
22 Sep	Rotating	13:48	13:59	0.17	1,822.84	1,844.60	21.76		127.67							82.66	132.42	1.62			
22 Sep	Sliding	14:01	14:12	0.18	1,844.60	1,857.73	13.12	4	72.32	35	2547	751	735	47	160	82.65	132.46	0.62			
22 Sep	Rotating	14:12	14:19	0.11	1,857.73	1,873.85	16.12		145.17							82.60	132.54	0.62			
22 Sep	Sliding	14:21	14:33	0.19	1,873.85	1,883.69	9.84	3	52.17	30	2229	748	739	44	-40	82.57	132.51	0.92			
22 Sep	Rotating	14:33	14:38	0.10	1,883.69	1,903.88	20.19		205.39							82.51	132.33	0.92			
22 Sep	Sliding	14:41	14:45	0.07	1,903.88	1,917.00	13.12	3	178.28	29	2383	674	749	45	130	82.76	132.46	2.74			

End of Well Report for AA Pad, AA16

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		
22 Sep	Rotating	14:45	14:58	0.20	1,917.00	1,934.88	17.88		87.94								83.18	132.71	2.74		
22 Sep	Sliding	15:00	15:07	0.12	1,934.88	1,948.00	13.12	3	110.01	37	2473	721	750	47	-120	83.14	132.19	5.21			
22 Sep	Rotating	15:07	15:20	0.22	1,948.00	1,963.63	15.63		69.50								82.99	131.38	5.21		
22 Sep	Sliding	15:23	15:30	0.13	1,963.63	1,976.76	13.12	3	102.92	32	2547	725	746	49	10	82.94	131.22	0.50			
22 Sep	Rotating	15:30	15:40	0.16	1,976.76	1,994.66	17.90		111.90								82.88	131.15	0.50		
22 Sep	Sliding	15:42	15:54	0.19	1,994.66	2,007.78	13.12	4	67.66	37	2334	780	749	44	-110	82.81	131.52	3.21			
22 Sep	Rotating	15:54	16:00	0.11	2,007.78	2,023.28	15.50		144.66								82.71	132.02	3.21		
22 Sep	Sliding	16:03	16:15	0.20	2,023.28	2,039.69	16.40	3	81.55	30	2394	747	752	44	-100	82.82	131.56	4.72			
22 Sep	Rotating	16:15	16:21	0.10	2,039.69	2,053.23	13.54		131.84								82.98	130.93	4.72		
22 Sep	Sliding	16:23	16:30	0.11	2,053.23	2,063.07	9.84	3	86.49	37	2275	787	736	44	110	82.89	130.96	2.24			
22 Sep	Rotating	16:30	16:44	0.23	2,063.07	2,084.55	21.48		94.96								82.58	131.32	2.24		
22 Sep	Sliding	16:46	16:56	0.17	2,084.55	2,104.24	19.69	3	112.98	32	2352	695	737	50	-90	82.60	131.75	2.20			
22 Sep	Rotating	16:56	17:03	0.10	2,104.24	2,112.92	8.69		82.99								82.62	131.94	2.20		
22 Sep	Sliding	17:05	17:17	0.20	2,112.92	2,129.33	16.40	3	84.07	36	2356	696	737	50	110	82.66	131.64	3.76			
22 Sep	Rotating	17:17	17:24	0.12	2,129.33	2,144.18	14.85		124.77								82.69	131.08	3.76		
22 Sep	Sliding	17:27	17:35	0.14	2,144.18	2,160.59	16.40	4	115.39	37	2478	786	729	45	70	82.92	130.99	1.59			
22 Sep	Rotating	17:35	17:42	0.12	2,160.59	2,175.67	15.08		122.25								83.16	130.97	1.59		
22 Sep	Sliding	17:45	17:57	0.20	2,175.67	2,188.79	13.12	3	67.13	33	2265	727	738	48	-80	82.88	130.71	3.75			
22 Sep	Rotating	17:57	18:02	0.08	2,188.79	2,203.58	14.78		181.51								82.45	130.36	3.75		
22 Sep	Sliding	18:04	18:09	0.09	2,203.58	2,213.42	9.84	4	113.82	30	2512	784	742	50	-20	82.52	129.79	7.69			
22 Sep	Rotating	18:09	18:21	0.20	2,213.42	2,235.31	21.90		107.88								83.05	128.17	7.69		
22 Sep	Sliding	18:24	18:35	0.19	2,235.31	2,251.72	16.40	4	86.23	31	2272	695	745	46	-150	83.04	127.04	6.83			
22 Sep	Rotating	18:35	18:41	0.09	2,251.72	2,264.00	12.28		133.94								83.02	126.20	6.83		
22 Sep	Sliding	18:44	18:49	0.09	2,264.00	2,280.40	16.40	3	176.95	35	2353	785	740	44	-50	82.97	124.71	9.83			
22 Sep	Rotating	18:49	19:00	0.18	2,280.40	2,293.73	13.32		73.42								82.94	123.39	9.83		
22 Sep	Sliding	19:03	19:12	0.14	2,293.73	2,310.13	16.40	4	119.53	35	2329	662	732	51	-110	83.00	121.97	8.18			
22 Sep	Rotating	19:12	19:21	0.15	2,310.13	2,325.81	15.68		104.94								83.09	120.69	8.18		
22 Sep	Sliding	19:23	19:29	0.11	2,325.81	2,345.50	19.69	3	180.63	38	2238	761	746	46	-70	83.14	119.63	5.07			
22 Sep	Rotating	19:29	19:39	0.16	2,345.50	2,354.89	9.39		60.19								83.16	119.15	5.07		
22 Sep	Sliding	19:41	19:51	0.16	2,354.89	2,368.01	13.12	3	81.54	30	2576	755	746	49	-60	83.39	117.71	12.05			
22 Sep	Rotating	19:51	19:58	0.12	2,368.01	2,384.90	16.88		141.82								83.74	115.70	12.05		
22 Sep	Sliding	20:00	20:11	0.17	2,384.90	2,398.02	13.12	4	75.06	33	2456	748	742	49	-100	84.03	114.70	7.58			
22 Sep	Rotating	20:11	20:20	0.15	2,398.02	2,414.26	16.24		106.59								84.39	113.52	7.58		
22 Sep	Sliding	20:22	20:32	0.16	2,414.26	2,427.38	13.12	4	83.70	30	2561	745	739	47	-80	84.39	112.51	7.81			
22 Sep	Rotating	20:32	20:42	0.17	2,427.38	2,443.20	15.81		92.47								84.28	111.27	7.81		
22 Sep	Sliding	20:45	20:59	0.24	2,443.20	2,453.04	9.84	4	41.68	36	2557	783	751	45	-80	84.29	110.65	5.08			
22 Sep	Rotating	20:59	21:04	0.09	2,453.04	2,474.74	21.70		238.21								84.44	109.55	5.08		
22 Sep	Sliding	21:07	21:19	0.21	2,474.74	2,487.86	13.12	3	62.96	31	2573	669	737	45	-90	84.74	108.34	11.22			
22 Sep	Rotating	21:19	21:24	0.09	2,487.86	2,505.19	17.33		198.32								85.24	106.46	11.22		
22 Sep	Sliding	21:27	21:37	0.16	2,505.19	2,518.32	13.12	4	81.33	38	2490	726	735	45	-80	84.93	105.65	6.18			
22 Sep	Rotating	21:37	21:47	0.17	2,518.32	2,535.93	17.62		101.94								84.23	104.82	6.18		
22 Sep	Sliding	21:49	22:01	0.19	2,535.93	2,549.06	13.12	4	67.32	31	2376	789	747	44	-90	83.84	104.10	8.42			
22 Sep	Rotating	22:01	22:06	0.08	2,549.06	2,565.69	16.64		198.87								84.07	102.71	8.42		
Run #3																					
23 Sep	Sliding	08:54	09:05	0.19	2,565.69	2,575.54	9.84	4	52.47	38	2443	773	738	48	-120	84.20	101.89	8.42			
23 Sep	Rotating	09:05	09:14	0.16	2,575.54	2,597.42	21.88		135.38								84.41	100.41	6.60		
23 Sep	Sliding	09:17	09:27	0.16	2,597.42	2,613.82	16.40	4	100.45	37	2286	786	735	44	-60	84.52	99.49	4.55			
23 Sep	Rotating	09:27	09:33	0.10	2,613.82	2,628.69	14.87		148.13								84.58	98.81	4.55		
23 Sep	Sliding	09:36	09:43	0.12	2,628.69	2,641.81	13.12	3	109.30	34	2557	705	749	44	-110	84.71	97.94	10.57			
23 Sep	Rotating	09:43	09:56	0.22	2,641.81	2,657.10	15.29		70.62								85.04	96.35	10.57		
23 Sep	Sliding	09:59	10:06	0.11	2,657.10	2,676.79	19.69	4	172.21	36	2337	689	728	49	-70	85.18	94.47	8.83			
23 Sep	Rotating	10:06	10:17	0.18	2,676.79	2,687.94	11.15		62.89								85.11	93.48	8.83		
23 Sep	Sliding	10:20	10:28	0.14	2,687.94	2,707.63	19.69	4	143.88	33	2272	664	739	48	-70	85.35	91.58	10.52			
23 Sep	Rotating	10:28	10:37	0.14	2,707.63	2,717.37	9.74		69.09								85.60	90.59	10.52		
23 Sep	Sliding	10:40	10:49	0.15	2,717.37	2,727.21	9.84	4	66.45	36	2364	720	743	46	-60	85.86	89.62	6.10			
23 Sep	Rotating	10:49	10:56	0.12	2,727.21	2,747.42	20.21		167.31								86.31	88.47	6.10		
23 Sep	Sliding	10:59	11:08	0.15	2,747.42	2,757.27	9.84	3	63.84	32	2338	718	737	45	-110	86.50	87.89	6.98			
23 Sep	Rotating	11:08	11:15	0.11	2,757.27	2,777.28	20.01		182.76								86.42	86.49	6.98		
23 Sep	Sliding	11:18	11:30	0.21	2,777.28	2,790.40	13.12	3	62.28	36	2379	684	740	46	-80	86.49	85.45	10.32			
23 Sep	Rotating	11:30	11:35	0.08	2,790.40	2,806.94	16.54		219.57								86.88	83.79	10.32		
23 Sep	Sliding	11:38	11:42	0.08	2,806.94	2,826.62	19.69	3	252.05	30	2397	675	748	45	-90	87.13	82.34	5.10			

End of Well Report for AA Pad, AA16

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			
23 Sep	Rotating	11:42	11:55	0.21	2,826.62	2,837.12	10.50		50.82								87.16	81.81	5.10			
23 Sep	Sliding	11:58	12:08	0.17	2,837.12	2,853.53	16.40	3	94.83	38	2466	785	741	50	-80	87.22	80.40	11.99				
23 Sep	Rotating	12:08	12:18	0.17	2,853.53	2,866.72	13.19		77.61							87.27	78.81	11.99				
23 Sep	Sliding	12:21	12:30	0.14	2,866.72	2,879.84	13.12	4	96.89	33	2421	780	743	47	-70	87.37	77.38	8.68				
23 Sep	Rotating	12:30	12:40	0.17	2,879.84	2,896.05	16.21		94.28							87.66	76.00	8.68				
23 Sep	Sliding	12:43	12:51	0.14	2,896.05	2,912.45	16.40	3	118.41	31	2511	770	739	48	-120	87.88	74.67	7.03				
23 Sep	Rotating	12:51	12:59	0.14	2,912.45	2,926.66	14.21		105.19							87.93	73.67	7.03				
23 Sep	Sliding	13:02	13:12	0.15	2,926.66	2,939.78	13.12	4	85.15	31	2283	783	743	44	-80	88.10	72.53	12.27				
23 Sep	Rotating	13:12	13:19	0.13	2,939.78	2,959.10	19.32		146.82							88.73	70.24	12.27				
23 Sep	Sliding	13:22	13:32	0.16	2,959.10	2,972.23	13.12	4	83.44	33	2482	747	731	47	-110	89.04	68.96	7.39				
23 Sep	Rotating	13:32	13:41	0.16	2,972.23	2,986.11	13.88		89.15							89.21	67.95	7.39				
23 Sep	Sliding	13:44	13:54	0.17	2,986.11	2,995.95	9.84	3	58.22	32	2469	755	744	44	-60	89.33	67.23	7.39				
23 Sep	Rotating	13:54	14:05	0.18	2,995.95	3,017.21	21.26		117.89							89.37	65.07	10.22				
23 Sep	Sliding	14:08	14:21	0.22	3,017.21	3,036.89	19.69	4	90.00	33	2437	670	730	45	-100	89.44	64.25	1.69				
23 Sep	Rotating	14:21	14:27	0.10	3,036.89	3,047.13	10.24		107.22							89.50	64.42	1.69				
23 Sep	Sliding	14:30	14:37	0.12	3,047.13	3,056.97	9.84	4	82.00	36	2299	783	745	47	-90	89.55	64.61	4.61				
23 Sep	Rotating	14:37	14:45	0.13	3,056.97	3,077.57	20.60		156.76							89.58	65.56	4.61				
23 Sep	Sliding	14:48	14:54	0.10	3,077.57	3,090.70	13.12	3	136.86	31	2432	758	750	48	50	89.60	65.92	1.62				
23 Sep	Rotating	14:54	15:08	0.23	3,090.70	3,106.51	15.81		67.44							89.66	65.67	1.62				
23 Sep	Sliding	15:11	15:26	0.25	3,106.51	3,122.92	16.40	3	65.77	32	2567	688	743	50	80	89.80	65.44	1.99				
23 Sep	Rotating	15:26	15:32	0.10	3,122.92	3,137.55	14.63		153.00							90.04	65.27	1.99				
23 Sep	Sliding	15:35	15:46	0.19	3,137.55	3,153.95	16.40	4	84.38	32	2250	754	749	50	-70	90.04	65.16	2.41				
23 Sep	Rotating	15:46	15:51	0.09	3,153.95	3,166.88	12.93		149.77							89.72	65.18	2.41				
23 Sep	Sliding	15:54	16:05	0.17	3,166.88	3,176.72	9.84	3	56.77	32	2421	763	738	49	-50	89.49	65.19	2.41				
23 Sep	Rotating	16:05	16:11	0.10	3,176.72	3,198.11	21.39		214.73							89.81	64.67	2.92				
23 Sep	Sliding	16:14	16:21	0.13	3,198.11	3,214.52	16.40	3	129.33	35	2569	745	746	50	180	90.00	64.61	1.67				
23 Sep	Rotating	16:21	16:31	0.17	3,214.52	3,227.84	13.32		79.81							90.10	64.81	1.67				
23 Sep	Sliding	16:34	16:44	0.16	3,227.84	3,244.24	16.40	4	100.16	30	2455	771	734	47	-70	90.20	65.10	2.28				
23 Sep	Rotating	16:44	16:53	0.15	3,244.24	3,256.61	12.37		82.51							90.22	65.38	2.28				
23 Sep	Sliding	16:56	17:06	0.15	3,256.61	3,266.45	9.84	4	63.69	35	2299	681	745	46	60	90.24	65.60	2.28				
23 Sep	Rotating	17:06	17:16	0.17	3,266.45	3,289.19	22.74		130.72							89.85	65.71	1.84				
23 Sep	Sliding	17:19	17:26	0.12	3,289.19	3,302.31	13.12	4	108.70	37	2413	743	740	48	90	89.84	65.47	5.57				
23 Sep	Rotating	17:26	17:35	0.14	3,302.31	3,318.26	15.94		115.43							90.21	64.66	5.57				
23 Sep	Sliding	17:38	17:42	0.08	3,318.26	3,334.66	16.40	4	201.94	29	2465	731	730	46	160	90.34	64.49	3.17				
23 Sep	Rotating	17:42	17:53	0.17	3,334.66	3,347.82	13.16		77.71							90.24	64.90	3.17				
23 Sep	Sliding	17:56	18:04	0.13	3,347.82	3,364.22	16.40	4	123.73	30	2213	716	749	45	-50	90.17	65.06	0.92				
23 Sep	Rotating	18:04	18:12	0.14	3,364.22	3,377.44	13.22		93.37							90.14	64.94	0.92				
23 Sep	Sliding	18:15	18:25	0.17	3,377.44	3,397.13	19.69	4	118.87	31	2248	669	752	49	130	90.18	64.62	2.59				
23 Sep	Rotating	18:25	18:35	0.16	3,397.13	3,406.54	9.42		58.87							90.24	64.38	2.59				
23 Sep	Sliding	18:38	18:49	0.19	3,406.54	3,426.23	19.69	4	102.72	34	2513	726	743	44	-140	90.30	64.36	2.54				
23 Sep	Rotating	18:49	18:57	0.13	3,426.23	3,438.76	12.53		93.78							90.29	64.67	2.54				
23 Sep	Sliding	19:00	19:10	0.17	3,438.76	3,458.45	19.69	3	119.05	36	2281	786	738	49	-70	90.12	65.09	2.37				
23 Sep	Rotating	19:10	19:15	0.09	3,458.45	3,467.73	9.28		107.39							89.97	65.25	2.37				
23 Sep	Sliding	19:18	19:29	0.17	3,467.73	3,484.14	16.40	4	94.83	30	2289	743	741	49	90	89.75	65.32	1.70				
23 Sep	Rotating	19:29	19:34	0.09	3,484.14	3,498.70	14.57		158.05							89.62	65.11	1.70				
23 Sep	Sliding	19:37	19:46	0.14	3,498.70	3,511.83	13.12	4	90.74	37	2374	683	734	45	140	89.65	64.95	3.23				
23 Sep	Rotating	19:46	19:56	0.17	3,511.83	3,528.23	16.40		94.35							90.17	64.85	3.23				
23 Sep	Sliding	19:59	20:09	0.16	3,528.23	3,544.63	16.40	4	102.19	36	2255	763	741	45	-100	90.34	65.13	3.64				
23 Sep	Rotating	20:09	20:18	0.15	3,544.63	3,559.00	14.37		92.79							90.25	65.64	3.64				
23 Sep	Sliding	20:21	20:28	0.11	3,559.00	3,568.85	9.84	4	88.90	35	2482	773	736	48	0	90.19	65.91	0.61				
23 Sep	Rotating	20:28	20:38	0.17	3,568.85	3,586.37	17.52		100.90							90.11	65.99	0.61				
23 Sep	Sliding	20:41	20:46	0.08	3,586.37	3,602.77	16.40	3	201.14	33	2219	671	743	45	100	90.02	65.85	2.73				
23 Sep	Rotating	20:46	20:58	0.20	3,602.77	3,617.01	14.24		72.17							89.91	65.47	2.73				
23 Sep	Sliding	21:01	21:10	0.15	3,617.01	3,636.69	19.69	3	131.25	35	2569	712	750	47	120	89.69	65.21	1.49				
23 Sep	Rotating	21:10	21:18	0.13	3,636.69	3,646.57	9.88		77.47							89.55	65.18	1.49				
23 Sep	Sliding	21:21	21:30	0.16	3,646.57	3,662.97	16.40	3	99.55	36	2514	787	752	47	-100	89.45	65.16	0.88				
23 Sep	Rotating	21:30	21:38	0.12	3,662.97	3,676.72	13.75		115.65							89.57	65.20	0.88				
23 Sep	Sliding	21:41	21:50	0.16	3,676.72	3,686.56	9.84	4	62.15	34	2233	688	738	46	-170	89.64	65.21	3.56				
23 Sep	Rotating	21:50	22:00	0.17	3,686.56	3,707.46	20.90		124.70							89.59	64.46	3.56				
23 Sep	Sliding	22:03	22:10	0.12	3,707.46	3,723.87	16.40	3	140.55	31	2368	767	747	48	70	89.65	64.24	1.26				
23 Sep	Rotating	22:10	22:19	0.14	3,723.87	3,736.83	12.96		91.79							89.79	64.33	1.26				
23 Sep	Sliding	22:22	22:32	0.18	3,736.83	3,746.67	9.84	4	54.61	33	2563	693	744	50	-110	89.89	64.40	1.26				

End of Well Report for AA Pad, AA16

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		
23 Sep	Rotating	22:32	22:41	0.14	3,746.67	3,766.42	19.75		141.97								89.81	64.52	0.76		
23 Sep	Sliding	22:44	22:49	0.09	3,766.42	3,782.82	16.40	4	189.59	33	2303	758	746	47	40		89.71	64.48	2.31		
23 Sep	Rotating	22:49	22:59	0.17	3,782.82	3,798.21	15.39		92.05								89.58	64.16	2.31		
23 Sep	Sliding	23:02	23:07	0.09	3,798.21	3,817.89	19.69	3	220.34	35	2260	664	737	48	150		89.55	64.08	1.30		
23 Sep	Rotating	23:07	23:19	0.19	3,817.89	3,828.62	10.73		57.36								89.61	64.21	1.30		
23 Sep	Sliding	23:22	23:29	0.13	3,828.62	3,845.03	16.40	4	129.35	34	2317	725	751	47	-100		89.74	64.45	2.14		
23 Sep	Rotating	23:29	23:37	0.13	3,845.03	3,858.25	13.22		103.10								89.89	64.69	2.14		
23 Sep	Sliding	23:40	23:48	0.13	3,858.25	3,874.65	16.40	3	122.52	37	2455	760	742	48	50		90.05	64.90	1.14		
23 Sep	Rotating	23:48	23:57	0.15	3,874.65	3,889.22	14.57		98.17								90.17	65.01	1.14		
24 Sep	Sliding	00:00	00:08	0.14	3,889.22	3,908.91	19.69	3	145.51	32	2375	753	732	49	-80		90.09	65.09	1.08		
24 Sep	Rotating	00:08	00:16	0.14	3,908.91	3,916.78	7.87		56.12								90.01	65.11	1.08		
24 Sep	Sliding	00:19	00:26	0.11	3,916.78	3,933.18	16.40	3	144.74	32	2240	721	733	49	40		89.97	64.94	3.01		
24 Sep	Rotating	00:26	00:36	0.16	3,933.18	3,947.16	13.98		85.07								90.12	64.55	3.01		
24 Sep	Sliding	00:39	00:50	0.18	3,947.16	3,957.00	9.84	3	53.96	29	2304	713	737	50	-150		90.23	64.27	3.01		
24 Sep	Rotating	00:50	00:54	0.07	3,957.00	3,977.54	20.54		279.33								90.08	64.38	2.94		
Run #4																					
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	3	145.03	29	2304	713	737	50	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	3	141.15	29	2304	713	737	50	-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		

End of Well Report for AA Pad, AA16

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	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		
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		

End of Well Report for AA Pad, AA16

Slide Sheet															
Depth Drilled (ft)	Bit Depth (ft)	Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Dogleg Rate (°/100ft)	Calc'd Toolface (°)	Start Slide (ft)	End Slide (ft)	Slide Length (ft)	Toolface Orient (°)	Slide Seen (ft)	Motor Output (°/100ft)	Motor Output (°/ft)	Rotate Length (ft)
Run #1											Bit to Sensor Distance: 52.49ft				
88.58	88.58	36.09	0.22	120.07	36.09	0.25	120.07	29.89	75.92	45.93	60	22.60	0.97	0.01	42.65
30.58	119.16	66.67	0.17	210.70	66.67	0.92	142.15	88.58	104.99	16.40	150	14.07	2.00	0.02	14.17
29.44	148.60	96.11	0.22	129.57	96.11	0.88	-122.23	119.16	132.28	13.12	-90	16.78	1.54	0.02	16.32
30.18	178.78	126.29	0.50	99.70	126.29	1.07	-49.83	148.60	158.44	9.84	-30	16.01	2.02	0.02	20.34
29.07	207.85	155.36	0.16	271.07	155.36	2.26	177.90	178.78	195.19	16.40	150	12.75	5.14	0.05	12.66
30.06	237.91	185.42	0.00	285.70	185.42	0.52	179.55	207.85	224.26	16.40	160	9.72	1.60	0.02	13.66
31.57	269.48	216.99	0.09	77.62	216.99	0.29	153.34	237.91	257.60	19.69	180	18.91	0.48	0.00	11.89
27.52	297.01	244.51	0.20	96.45	244.51	0.42	32.80	269.48	279.33	9.84	0	13.87	0.84	0.01	17.68
32.47	329.48	276.98	0.32	254.18	276.98	1.56	166.12	297.01	310.13	13.12	160	20.58	2.46	0.02	19.35
30.20	359.67	307.18	0.08	200.31	307.18	0.94	-167.26	329.48	345.88	16.40	180	12.51	2.26	0.02	13.79
29.67	389.35	336.85	0.04	237.93	336.85	0.17	148.42	359.67	369.51	9.84	170	10.33	0.49	0.00	19.83
27.84	417.19	364.69	0.31	263.01	364.69	0.99	28.88	389.35	405.75	16.40	40	14.05	1.97	0.02	11.44
31.23	448.42	395.92	0.04	187.97	395.92	0.98	-172.59	417.19	433.59	16.40	-150	11.40	2.69	0.03	14.83
31.49	479.91	427.42	0.07	34.51	427.41	0.35	-162.97	448.42	461.54	13.12	-160	20.05	0.55	0.01	18.37
29.78	509.69	457.20	0.01	172.63	457.20	0.27	175.63	479.91	493.03	13.12	-170	14.96	0.53	0.01	16.66
28.65	538.34	485.85	0.27	203.05	485.85	0.92	31.42	509.69	522.82	13.12	10	10.28	2.57	0.03	15.53
31.95	570.29	517.80	0.12	55.45	517.80	1.18	-170.28	538.34	554.75	16.40	180	15.29	2.47	0.02	15.55
29.72	600.02	547.52	0.01	1.28	547.52	0.38	-175.84	570.29	580.14	9.84	180	14.19	0.80	0.01	19.88
27.35	627.36	574.87	0.18	196.73	574.87	0.70	-165.37	600.02	613.14	13.12	180	11.80	1.62	0.02	14.22
16.54	643.90	591.40	0.39	141.52	591.40	1.93	-82.85	627.36	633.92	6.56	-60	5.27	6.07	0.06	9.97
28.10	672.00	619.50	0.13	279.76	619.50	1.75	169.88	643.90	653.74	9.84	180	13.12	3.74	0.04	18.26
30.55	702.54	650.05	0.20	145.16	650.05	0.99	-152.33	672.00	685.12	13.12	-170	12.71	2.38	0.02	17.42
30.81	733.36	680.86	0.21	266.64	680.86	1.15	149.98	702.54	718.95	16.40	130	12.56	2.81	0.03	14.41
27.68	761.04	708.54	0.35	227.15	708.54	0.83	-74.25	733.36	746.48	13.12	-60	10.25	2.25	0.02	14.56
31.79	792.82	740.33	0.03	72.73	740.33	1.19	-178.04	761.04	780.72	19.69	170	17.38	2.17	0.02	12.10
29.61	822.44	769.94	0.28	112.69	769.94	0.86	44.27	792.82	809.23	16.40	30	15.06	1.69	0.02	13.21
29.46	851.90	799.40	1.08	92.72	799.40	2.82	-26.51	822.44	838.84	16.40	-20	17.36	4.78	0.05	13.06
31.08	882.98	830.49	2.74	116.33	830.46	5.80	37.56	851.90	868.30	16.40	40	17.87	10.09	0.10	14.68
30.10	913.08	860.59	4.70	105.57	860.50	6.86	-25.12	882.98	892.82	9.84	-10	17.05	12.12	0.12	20.26
28.76	941.84	889.35	6.74	105.41	889.12	7.10	-0.52	913.08	929.49	16.40	-30	14.08	14.50	0.15	12.36
30.07	971.91	919.42	8.89	105.63	918.91	7.16	0.93	941.84	958.25	16.40	0	9.81	21.94	0.22	13.67
31.82	1,003.74	951.24	11.25	107.50	950.24	7.48	8.79	971.91	988.32	16.40	40	19.47	12.23	0.12	15.42
30.02	1,033.76	981.26	14.00	112.80	979.53	9.93	25.45	1,003.74	1,020.14	16.40	10	16.35	18.23	0.18	13.62
Run #2											Bit to Sensor Distance: 57.41ft				
31.45	1,065.21	1,007.79	17.10	120.53	1,005.09	14.02	37.54	1,033.76	1,053.44	19.69	50				11.77
29.77	1,094.98	1,037.57	19.54	125.54	1,033.35	9.76	35.21	1,065.21	1,084.89	19.69	50	3.81	76.30	0.76	10.09
27.78	1,122.76	1,065.34	22.08	126.37	1,059.31	9.20	7.03	1,094.98	1,108.10	13.12	10	16.01	15.97	0.16	14.65
31.56	1,154.31	1,096.90	25.14	128.42	1,088.22	10.02	16.00	1,122.76	1,135.88	13.12	10	21.47	14.73	0.15	18.43
30.95	1,185.27	1,127.85	27.95	130.62	1,115.91	9.61	20.26	1,154.31	1,167.44	13.12	0	16.30	18.25	0.18	17.83
27.60	1,212.87	1,155.46	30.67	131.45	1,139.98	9.99	8.85	1,185.27	1,204.95	19.69	0	9.17	30.06	0.30	7.92
30.97	1,243.84	1,186.43	33.27	133.03	1,166.26	8.80	18.56	1,212.87	1,222.71	9.84	-10	13.14	20.74	0.21	21.13
28.62	1,272.46	1,215.04	35.83	132.94	1,189.82	8.97	-1.24	1,243.84	1,253.68	9.84	-20	20.70	12.40	0.12	18.77
32.95	1,305.41	1,247.99	38.36	132.82	1,216.10	7.67	-1.63	1,272.46	1,285.58	13.12	20	11.82	21.38	0.21	19.83
28.96	1,334.37	1,276.95	40.91	132.87	1,238.40	8.80	0.71	1,305.41	1,321.81	16.40	-30	10.18	25.03	0.25	12.55
27.85	1,362.22	1,304.81	43.01	133.13	1,259.12	7.57	4.75	1,334.37	1,347.49	13.12	-10	8.63	24.42	0.24	14.73
31.86	1,394.08	1,336.66	45.36	133.29	1,281.96	7.39	2.76	1,362.22	1,378.62	16.40	0	18.70	12.60	0.13	15.45
28.46	1,422.54	1,365.12	47.88	133.28	1,301.51	8.84	-0.07	1,394.08	1,413.76	19.69	0	13.73	18.33	0.18	8.78
30.03	1,452.57	1,395.15	50.20	132.95	1,321.19	7.79	-6.32	1,422.54	1,435.66	13.12	-20	14.58	16.04	0.16	16.91
32.30	1,484.87	1,427.45	53.25	132.13	1,341.20	9.66	-12.19	1,452.57	1,468.97	16.40	0	23.53	13.27	0.13	15.90
28.33	1,513.20	1,455.79	55.59	132.17	1,357.68	8.25	0.80	1,484.87	1,494.71	9.84	20	11.43	20.46	0.20	18.49
29.24	1,542.44	1,485.02	57.95	132.55	1,373.70	8.15	7.80	1,513.20	1,523.04	9.84	20	13.34	17.86	0.18	19.39
30.84	1,573.28	1,515.86	60.20	132.93	1,389.55	7.36	8.40	1,542.44	1,558.84	16.40	10	12.35	18.38	0.18	14.44
30.30	1,603.58	1,546.16	62.83	132.36	1,404.00	8.85	-10.97	1,573.28	1,583.12	9.84	0	10.91	24.59	0.25	20.46
29.75	1,633.33	1,575.92	65.58	132.78	1,416.94	9.33	7.92	1,603.58	1,619.98	16.40	40	15.32	18.12	0.18	13.35
32.14	1,665.48	1,608.06	68.03	132.64	1,429.60	7.63	-2.88	1,633.33	1,643.18	9.84	-10	11.68	21.00	0.21	22.30
30.12	1,695.60	1,638.18	70.05	132.94	1,440.37	6.78	7.93	1,665.48	1,681.88	16.40	10	16.77	12.17	0.12	13.72
28.12	1,723.72	1,666.31	73.04	132.82	1,449.27	10.63	-2.28	1,695.60	1,708.72	13.12	20	5.82	51.38	0.51	15.00
29.62	1,753.34	1,695.92	75.28	132.82	1,457.36	7.55	0.01	1,723.72	1,740.13	16.40	20	15.90	14.06	0.14	13.21
29.63	1,782.97	1,725.56	77.25	132.17	1,464.39	6.97	-17.81	1,753.34	1,769.74	16.40	-20	14.63	14.12	0.14	13.23
30.03	1,813.00	1,755.58	80.09	132.69	1,470.29	9.62	10.15	1,782.97	1,799.37	16.40	20	16.82	17.18	0.17	13.62

End of Well Report for AA Pad, AA16

Slide Sheet															
Depth Drilled (ft)	Bit Depth (ft)	Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Dogleg Rate (°/100ft)	Calc'd Toolface (°)	Start Slide (ft)	End Slide (ft)	Slide Length (ft)	Toolface Orient (°)	Slide Seen (ft)	Motor Output (°/100ft)	Motor Output (°/ft)	Rotate Length (ft)
31.61	1,844.60	1,787.19	82.56	132.61	1,475.06	7.81	-1.75	1,813.00	1,822.84	9.84	20	18.38	13.44	0.13	21.76
29.24	1,873.85	1,816.43	82.28	132.66	1,478.92	0.97	169.14	1,844.60	1,857.73	13.12	160	15.62	1.82	0.02	16.12
30.03	1,903.88	1,846.46	82.69	132.40	1,482.84	1.62	-32.31	1,873.85	1,883.69	9.84	-40	8.26	5.89	0.06	20.19
31.00	1,934.88	1,877.47	82.58	132.56	1,486.82	0.62	124.11	1,903.88	1,917.00	13.12	130	14.88	1.29	0.01	17.88
28.75	1,963.63	1,906.22	82.51	132.31	1,490.55	0.92	-107.16	1,934.88	1,948.00	13.12	-120	8.57	3.07	0.03	15.63
31.03	1,994.66	1,937.24	83.24	132.74	1,494.40	2.74	30.50	1,963.63	1,976.76	13.12	10	13.15	6.47	0.06	17.90
28.62	2,023.28	1,965.87	82.97	131.27	1,497.84	5.21	-100.58	1,994.66	2,007.78	13.12	-110	13.00	11.47	0.11	15.50
29.95	2,053.23	1,995.82	82.88	131.14	1,501.53	0.50	-124.99	2,023.28	2,039.69	16.40	-100	12.05	1.24	0.01	13.54
31.32	2,084.55	2,027.14	82.68	132.14	1,505.46	3.21	101.36	2,053.23	2,063.07	9.84	110	15.82	6.36	0.06	21.48
28.37	2,112.92	2,055.51	83.00	130.83	1,509.00	4.72	-76.35	2,084.55	2,104.24	19.69	-90	14.83	9.04	0.09	8.69
31.26	2,144.18	2,086.77	82.55	131.36	1,512.93	2.24	130.59	2,112.92	2,129.33	16.40	110	9.78	7.15	0.07	14.85
31.49	2,175.67	2,118.26	82.64	132.06	1,516.99	2.20	82.60	2,144.18	2,160.59	16.40	70	22.80	3.04	0.03	15.08
27.91	2,203.58	2,146.16	82.69	131.00	1,520.55	3.76	-86.97	2,175.67	2,188.79	13.12	-80	13.05	8.04	0.08	14.78
31.74	2,235.31	2,177.90	83.20	130.97	1,524.45	1.59	-3.54	2,203.58	2,213.42	9.84	-20	16.65	3.03	0.03	21.90
28.69	2,264.00	2,206.59	82.36	130.29	1,528.05	3.75	-141.22	2,235.31	2,251.72	16.40	-150	13.90	7.73	0.08	12.28
29.73	2,293.73	2,236.31	83.07	128.10	1,531.82	7.69	-71.98	2,264.00	2,280.40	16.40	-50	7.83	29.18	0.29	13.32
32.09	2,325.81	2,268.40	83.01	125.89	1,535.71	6.83	-91.78	2,293.73	2,310.13	16.40	-110	19.80	11.07	0.11	15.68
29.08	2,354.89	2,297.47	82.93	123.02	1,539.27	9.83	-91.87	2,325.81	2,345.50	19.69	-70	15.75	18.14	0.18	9.39
30.01	2,384.90	2,327.48	83.10	120.55	1,542.92	8.18	-85.95	2,354.89	2,368.01	13.12	-60	14.32	17.14	0.17	16.88
29.37	2,414.26	2,356.85	83.17	119.05	1,546.43	5.07	-87.75	2,384.90	2,398.02	13.12	-100	19.98	7.45	0.07	16.24
28.94	2,443.20	2,385.78	83.76	115.59	1,549.73	12.05	-80.44	2,414.26	2,427.38	13.12	-80	12.05	28.93	0.29	15.81
31.54	2,474.74	2,417.32	84.46	113.29	1,552.96	7.58	-73.06	2,443.20	2,453.04	9.84	-80	15.30	15.63	0.16	21.70
30.46	2,505.19	2,447.78	84.25	110.91	1,555.96	7.81	-95.02	2,474.74	2,487.86	13.12	-90	14.65	16.24	0.16	17.33
30.74	2,535.93	2,478.52	84.46	109.36	1,558.98	5.08	-82.36	2,505.19	2,518.32	13.12	-80	9.04	17.26	0.17	17.62
29.76	2,565.69	2,508.28	85.34	106.12	1,561.63	11.22	-75.03	2,535.93	2,549.06	13.12	-90	12.43	26.87	0.27	16.64
Run #3												Bit to Sensor Distance: 50.85ft			
31.73	2,597.42	2,540.01	83.80	104.31	1,565.25	6.07	-130.13	2,565.69	2,575.54	9.84	-120				21.88
31.27	2,628.69	2,570.28	84.23	101.70	1,568.51	8.42	-80.73	2,597.42	2,613.82	16.40	-60	9.84	26.75	0.27	14.87
28.41	2,657.10	2,600.69	84.50	99.84	1,571.30	6.60	-82.04	2,628.69	2,641.81	13.12	-110	8.83	21.22	0.21	15.29
30.84	2,687.94	2,630.53	84.61	98.43	1,574.23	4.55	-85.48	2,657.10	2,676.79	19.69	-70	15.97	8.79	0.09	11.15
29.43	2,717.37	2,660.96	85.25	95.37	1,576.83	10.57	-78.32	2,687.94	2,707.63	19.69	-70	14.14	21.99	0.22	9.74
30.05	2,747.42	2,690.01	85.06	92.72	1,579.37	8.83	-94.09	2,717.37	2,727.21	9.84	-60	18.90	14.05	0.14	20.21
29.86	2,777.28	2,720.87	85.84	89.66	1,581.74	10.52	-75.75	2,747.42	2,757.27	9.84	-110	20.11	15.62	0.16	20.01
29.66	2,806.94	2,750.53	86.50	87.97	1,583.72	6.10	-68.64	2,777.28	2,790.40	13.12	-80	9.45	19.15	0.19	16.54
30.18	2,837.12	2,780.71	86.39	85.87	1,585.59	6.98	-93.04	2,806.94	2,826.62	19.69	-90	10.17	20.71	0.21	10.50
29.59	2,866.72	2,810.31	87.09	82.89	1,587.27	10.32	-76.82	2,837.12	2,853.53	16.40	-80	13.06	23.39	0.23	13.19
29.33	2,896.05	2,840.64	87.19	81.39	1,588.73	5.10	-86.33	2,866.72	2,879.84	13.12	-70	18.83	7.94	0.08	16.21
30.61	2,926.66	2,870.25	87.30	77.72	1,590.21	11.99	-88.38	2,896.05	2,912.45	16.40	-120	17.42	21.06	0.21	14.21
32.45	2,959.10	2,902.69	87.87	74.96	1,591.57	8.68	-78.35	2,926.66	2,939.78	13.12	-80	16.24	17.33	0.17	19.32
27.00	2,986.11	2,930.70	87.96	73.07	1,592.56	7.03	-87.42	2,959.10	2,972.23	13.12	-110	12.80	14.83	0.15	13.88
31.10	3,017.21	2,961.80	88.97	69.39	1,593.39	12.27	-74.65	2,986.11	2,995.95	9.84	-60	11.78	32.41	0.32	21.26
29.92	3,047.13	2,991.72	89.33	67.20	1,593.83	7.39	-80.69	3,017.21	3,036.89	19.69	-100	15.72	14.06	0.14	10.24
30.45	3,077.57	3,021.16	89.38	64.09	1,594.18	10.22	-89.07	3,047.13	3,056.97	9.84	-90	9.51	32.69	0.33	20.60
28.94	3,106.51	3,050.10	89.55	64.55	1,594.44	1.69	69.36	3,077.57	3,090.70	13.12	50	18.70	2.61	0.03	15.81
31.04	3,137.55	3,081.14	89.58	65.98	1,594.68	4.61	88.76	3,106.51	3,122.92	16.40	80	10.43	13.71	0.14	14.63
29.33	3,166.88	3,110.47	89.69	65.52	1,594.86	1.62	-77.01	3,137.55	3,153.95	16.40	-70	13.52	3.52	0.04	12.93
31.23	3,198.11	3,142.70	90.20	65.16	1,594.89	1.99	-35.56	3,166.88	3,176.72	9.84	-50	16.60	3.74	0.04	21.39
29.72	3,227.84	3,171.43	89.48	65.19	1,594.98	2.41	177.04	3,198.11	3,214.52	16.40	180	16.54	4.34	0.04	13.32
28.77	3,256.61	3,200.20	89.93	64.48	1,595.13	2.92	-57.78	3,227.84	3,244.24	16.40	-70	7.64	10.99	0.11	12.37
32.58	3,289.19	3,233.78	90.18	64.96	1,595.09	1.67	61.93	3,256.61	3,266.45	9.84	60	19.26	2.82	0.03	22.74
29.07	3,318.26	3,262.85	90.24	65.62	1,594.99	2.28	84.88	3,289.19	3,302.31	13.12	90	15.75	4.21	0.04	15.94
29.56	3,347.82	3,291.41	89.71	65.74	1,595.00	1.84	167.53	3,318.26	3,334.66	16.40	160	7.78	6.99	0.07	13.16
29.63	3,377.44	3,321.03	90.40	64.24	1,594.97	5.57	-65.23	3,347.82	3,364.22	16.40	-50	13.68	12.07	0.12	13.22
29.10	3,406.54	3,350.13	90.18	65.14	1,594.82	3.17	103.90	3,377.44	3,397.13	19.69	130	15.94	5.79	0.06	9.42
32.22	3,438.76	3,382.35	90.12	64.85	1,594.73	0.92	-101.76	3,406.54	3,426.23	19.69	-140	19.00	1.56	0.02	12.53
28.97	3,467.73	3,411.32	90.30	64.12	1,594.62	2.59	-76.02	3,438.76	3,458.45	19.69	-70	19.55	3.84	0.04	9.28
30.97	3,498.70	3,442.29	90.29	64.91	1,594.46	2.54	91.29	3,467.73	3,484.14	16.40	90	18.44	4.27	0.04	14.57
29.53	3,528.23	3,471.82	89.81	65.42	1,594.44	2.37	132.65	3,498.70	3,511.83	13.12	140	20.24	3.45	0.03	16.40
30.77	3,559.00	3,502.59	89.53	64.98	1,594.61	1.70	-122.39	3,528.23	3,544.63	16.40	-100	16.21	3.23	0.03	14.37
27.36	3,586.37	3,530.96	90.40	64.80	1,594.63	3.23	-11.41	3,559.00	3,568.85	9.84	0	10.96	8.07	0.08	17.52
30.64	3,617.01	3,560.60	90.20	65.90	1,594.47	3.64	100.35	3,586.37	3,602.77	16.40	100	16.27	6.86	0.07	14.24

End of Well Report for AA Pad, AA16

Slide Sheet															
Depth Drilled (ft)	Bit Depth (ft)	Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Dogleg Rate (°/100ft)	Calc'd Toolface (°)	Start Slide (ft)	End Slide (ft)	Slide Length (ft)	Toolface Orient (°)	Slide Seen (ft)	Motor Output (°/100ft)	Motor Output (°/ft)	Rotate Length (ft)
29.56	3,646.57	3,595.72	90.07	66.03	1,594.40	0.61	133.56	3,617.01	3,636.69	19.69	120	12.04	1.50	0.02	9.88
30.15	3,676.72	3,625.87	89.85	65.24	1,594.42	2.73	-105.93	3,646.57	3,662.97	16.40	-100	15.91	5.18	0.05	13.75
30.74	3,707.46	3,656.61	89.40	65.14	1,594.62	1.49	-168.06	3,676.72	3,686.56	9.84	-170	20.87	2.19	0.02	20.90
29.36	3,736.83	3,685.97	89.64	65.23	1,594.87	0.88	19.07	3,707.46	3,723.87	16.40	70	15.62	1.65	0.02	12.96
29.59	3,766.42	3,715.57	89.57	64.18	1,595.07	3.56	-94.13	3,736.83	3,746.67	9.84	-110	8.69	12.13	0.12	19.75
31.79	3,798.21	3,747.36	89.90	64.41	1,595.22	1.26	34.99	3,766.42	3,782.82	16.40	40	18.14	2.20	0.02	15.39
30.41	3,828.62	3,777.77	89.76	64.59	1,595.31	0.76	126.15	3,798.21	3,817.89	19.69	150	11.35	2.03	0.02	10.73
29.63	3,858.25	3,807.40	89.49	63.96	1,595.50	2.31	-112.91	3,828.62	3,845.03	16.40	-100	14.24	4.81	0.05	13.22
30.97	3,889.22	3,838.37	89.67	64.33	1,595.73	1.30	64.66	3,858.25	3,874.65	16.40	50	20.24	2.00	0.02	14.57
27.56	3,916.78	3,865.93	89.97	64.83	1,595.82	2.14	58.61	3,889.22	3,908.91	19.69	-80	14.34	4.12	0.04	7.87
30.38	3,947.16	3,896.31	90.22	65.07	1,595.77	1.14	43.80	3,916.78	3,933.18	16.40	40	15.81	2.19	0.02	13.98
30.38	3,977.54	3,926.69	89.90	65.12	1,595.73	1.08	170.35	3,947.16	3,957.00	9.84	-150	22.51	1.45	0.01	20.54
Run #4												Bit to Sensor Distance: 51.53ft			
38.39	4,015.93	3,964.40	90.31	64.06	1,595.66	3.01	-68.79								38.39
29.33	4,045.27	3,993.73	89.80	64.76	1,595.63	2.94	126.11	4,015.93	4,035.62	19.69	120				9.65
31.82	4,077.09	4,025.56	89.68	64.07	1,595.78	2.20	-100.03	4,045.27	4,058.39	13.12	-90	9.62	7.28	0.07	18.70
30.77	4,107.86	4,056.33	90.22	64.64	1,595.80	2.55	46.63	4,077.09	4,090.21	13.12	30	21.13	3.72	0.04	17.65
28.71	4,136.57	4,085.04	89.60	65.23	1,595.85	2.97	136.52	4,107.86	4,127.55	19.69	120	10.01	8.52	0.09	9.02
28.58	4,165.15	4,113.62	89.78	65.04	1,596.00	0.91	-45.60	4,136.57	4,146.41	9.84	-50	10.93	2.38	0.02	18.73
32.22	4,197.36	4,145.83	89.61	65.20	1,596.17	0.73	137.58	4,165.15	4,181.55	16.40	140	23.20	1.01	0.01	15.81
28.84	4,226.20	4,174.67	90.33	64.73	1,596.18	2.99	-33.42	4,197.36	4,213.77	16.40	-70	10.10	8.54	0.09	12.43
30.22	4,256.42	4,204.89	90.00	65.82	1,596.10	3.80	106.87	4,226.20	4,239.33	13.12	120	14.40	7.97	0.08	17.09
30.12	4,286.54	4,235.01	89.80	65.46	1,596.15	1.39	-118.54	4,256.42	4,266.26	9.84	-140	17.68	2.38	0.02	20.28
29.10	4,315.64	4,264.11	89.77	65.16	1,596.26	1.01	-94.79	4,286.54	4,299.66	13.12	-120	12.01	2.45	0.02	15.98
30.41	4,346.05	4,294.52	90.35	64.87	1,596.23	2.12	-27.19	4,315.64	4,328.76	13.12	-30	10.14	6.36	0.06	17.29
29.27	4,375.32	4,323.79	90.00	65.45	1,596.14	2.32	120.77	4,346.05	4,359.18	13.12	140	13.29	5.11	0.05	16.14
31.63	4,406.94	4,355.41	90.34	64.30	1,596.04	3.80	-73.42	4,375.32	4,385.16	9.84	-90	14.34	8.38	0.08	21.78
28.64	4,435.59	4,384.05	89.87	64.13	1,595.99	1.77	-160.26	4,406.94	4,420.07	13.12	-120	12.50	4.04	0.04	15.52
32.51	4,468.10	4,416.57	89.69	64.52	1,596.12	1.30	114.09	4,435.59	4,448.71	13.12	130	10.73	3.94	0.04	19.39
27.30	4,495.40	4,443.86	90.26	65.48	1,596.13	4.11	59.80	4,468.10	4,481.22	13.12	60	11.78	9.52	0.10	14.17
31.14	4,526.53	4,475.00	89.69	65.95	1,596.14	2.35	140.61	4,495.40	4,505.24	9.84	140	11.75	6.24	0.06	21.29
29.46	4,555.99	4,504.46	89.66	64.65	1,596.31	4.40	-91.20	4,526.53	4,539.65	13.12	-80	15.29	8.48	0.08	16.34
31.99	4,587.98	4,536.45	89.57	65.39	1,596.52	2.33	97.10	4,555.99	4,569.12	13.12	100	10.70	6.97	0.07	18.86
29.63	4,617.61	4,566.08	89.72	65.65	1,596.70	1.00	59.56	4,587.98	4,597.82	9.84	50	13.29	2.22	0.02	19.78
28.44	4,646.05	4,594.52	89.40	64.06	1,596.92	5.71	-101.47	4,617.61	4,630.73	13.12	-110	9.58	16.95	0.17	15.32
31.33	4,677.38	4,625.85	90.09	65.58	1,597.06	5.35	65.53	4,646.05	4,665.74	19.69	70	11.55	14.53	0.15	11.65
28.67	4,706.06	4,654.53	90.18	65.00	1,596.99	2.05	-81.35	4,677.38	4,687.23	9.84	-90	13.35	4.39	0.04	18.83
29.46	4,735.52	4,683.99	89.72	64.44	1,597.02	2.47	-129.71	4,706.06	4,715.90	9.84	-150	17.81	4.08	0.04	19.62
29.82	4,765.34	4,713.81	90.11	65.17	1,597.06	2.77	61.49	4,735.52	4,748.64	13.12	90	10.99	7.52	0.08	16.70
30.97	4,796.31	4,744.78	89.76	65.85	1,597.10	2.47	117.81	4,765.34	4,785.03	19.69	130	11.35	6.73	0.07	11.29
31.56	4,827.88	4,776.34	90.20	65.92	1,597.11	1.42	9.47	4,796.31	4,806.16	9.84	20	14.86	3.02	0.03	21.72
28.41	4,856.29	4,804.76	90.15	65.27	1,597.02	2.29	-94.65	4,827.88	4,847.56	19.69	-110	17.13	3.79	0.04	8.73
29.82	4,886.11	4,834.58	89.76	64.01	1,597.05	4.41	-107.18	4,856.29	4,869.41	13.12	-120	8.10	16.24	0.16	16.70
30.81	4,916.92	4,865.39	89.55	64.81	1,597.24	2.68	104.58	4,886.11	4,905.79	19.69	120	22.08	3.73	0.04	11.12
29.27	4,946.18	4,894.65	89.77	65.37	1,597.41	2.04	68.13	4,916.92	4,933.32	16.40	50	12.57	4.75	0.05	12.86
30.31	4,976.50	4,924.97	89.68	63.53	1,597.55	6.06	-92.93	4,946.18	4,959.31	13.12	-120	19.19	9.58	0.10	17.19
29.04	5,005.53	4,954.00	90.11	65.36	1,597.61	6.48	76.85	4,976.50	4,996.18	19.69	80	16.17	11.64	0.12	9.35
31.46	5,037.00	4,985.46	89.75	63.64	1,597.65	5.61	-101.73	5,005.53	5,018.66	13.12	-90	14.27	12.36	0.12	18.34
29.13	5,066.13	5,014.60	90.15	64.14	1,597.68	2.22	51.58	5,037.00	5,053.40	16.40	60	19.78	3.28	0.03	12.73
32.15	5,098.28	5,046.75	89.57	64.69	1,597.75	2.49	136.62	5,066.13	5,079.25	13.12	120	13.81	5.80	0.06	19.03
29.13	5,127.42	5,075.88	89.99	65.15	1,597.87	2.11	47.08	5,098.28	5,114.69	16.40	40	16.40	3.75	0.04	12.73
30.54	5,157.96	5,106.43	90.38	63.57	1,597.77	5.32	-76.12	5,127.42	5,147.10	19.69	-60	11.52	14.12	0.14	10.86
30.61	5,188.57	5,137.04	89.63	63.56	1,597.77	2.43	-179.09	5,157.96	5,171.08	13.12	180	17.88	4.16	0.04	17.49
28.05	5,216.62	5,165.09	90.26	64.59	1,597.79	4.32	58.67	5,188.57	5,204.97	16.40	30	17.19	7.05	0.07	11.65
30.71	5,247.33	5,195.80	89.50	64.08	1,597.86	2.98	-146.49	5,216.62	5,233.03	16.40	-130	13.22	6.93	0.07	14.30
28.51	5,275.84	5,224.31	90.44	64.33	1,597.87	3.40	14.56	5,247.33	5,260.45	13.12	40	16.86	5.75	0.06	15.39
31.82	5,307.66	5,256.13	89.98	64.47	1,597.76	1.52	162.94	5,275.84	5,292.24	16.40	130	17.52	2.76	0.03	15.42
29.30	5,336.96	5,285.43	89.96	65.02	1,597.77	1.87	91.15	5,307.66	5,320.79	13.12	70	13.91	3.93	0.04	16.17
31.82	5,368.79	5,317.26	90.34	64.40	1,597.68	2.27	-58.32	5,336.96	5,356.65	19.69	-70	16.40	4.41	0.04	12.14
27.23	5,396.02	5,344.49	90.01	64.10	1,597.60	1.68	-137.80	5,368.79	5,388.47	19.69	-130	11.06	4.14	0.04	7.55
27.23	5,423.25	5,371.72	89.62	63.62	1,597.69	2.25	-128.70	5,396.02	5,409.14	13.12	-100	15.09	4.05	0.04	14.11

End of Well Report for AA Pad, AA16

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)		
0.00	0.00	0.00	0.00	-2,065.65	0.00 N	0.00 E	22,274,660.86 N	1,878,254.25 E	0.00	0.00
36.09	0.22	120.07	36.09	-2,029.56	0.03 S	0.06 E	22,274,660.83 N	1,878,254.31 E	0.06	0.61
66.67	0.17	210.70	66.67	-1,998.98	0.10 S	0.09 E	22,274,660.76 N	1,878,254.34 E	0.08	0.92
96.11	0.22	129.57	96.11	-1,969.54	0.18 S	0.11 E	22,274,660.69 N	1,878,254.36 E	0.10	0.88
126.29	0.50	99.70	126.29	-1,939.36	0.24 S	0.28 E	22,274,660.63 N	1,878,254.53 E	0.27	1.07
155.36	0.16	271.07	155.36	-1,910.29	0.26 S	0.37 E	22,274,660.61 N	1,878,254.62 E	0.35	2.26
185.42	0.00	285.70	185.42	-1,880.23	0.26 S	0.32 E	22,274,660.61 N	1,878,254.57 E	0.30	0.52
216.99	0.09	77.62	216.99	-1,848.66	0.25 S	0.35 E	22,274,660.61 N	1,878,254.60 E	0.33	0.29
244.51	0.20	96.45	244.51	-1,821.13	0.25 S	0.41 E	22,274,660.61 N	1,878,254.66 E	0.39	0.42
276.98	0.32	254.18	276.98	-1,788.66	0.28 S	0.38 E	22,274,660.58 N	1,878,254.63 E	0.36	1.56
307.18	0.08	200.31	307.18	-1,758.47	0.33 S	0.29 E	22,274,660.54 N	1,878,254.54 E	0.27	0.94
336.85	0.04	237.93	336.85	-1,728.79	0.35 S	0.27 E	22,274,660.51 N	1,878,254.53 E	0.25	0.17
364.69	0.31	263.01	364.69	-1,700.95	0.36 S	0.19 E	22,274,660.50 N	1,878,254.44 E	0.16	0.99
395.92	0.04	187.97	395.92	-1,669.72	0.39 S	0.10 E	22,274,660.48 N	1,878,254.36 E	0.08	0.98
427.42	0.07	34.51	427.41	-1,638.23	0.38 S	0.11 E	22,274,660.48 N	1,878,254.36 E	0.09	0.35
457.20	0.01	172.63	457.20	-1,608.45	0.37 S	0.12 E	22,274,660.50 N	1,878,254.38 E	0.10	0.27
485.85	0.27	203.05	485.85	-1,579.80	0.43 S	0.10 E	22,274,660.43 N	1,878,254.35 E	0.07	0.92
517.80	0.12	55.45	517.80	-1,547.85	0.48 S	0.10 E	22,274,660.38 N	1,878,254.35 E	0.06	1.18
547.52	0.01	1.28	547.52	-1,518.12	0.46 S	0.12 E	22,274,660.40 N	1,878,254.37 E	0.09	0.38
574.87	0.18	196.73	574.87	-1,490.78	0.50 S	0.11 E	22,274,660.36 N	1,878,254.36 E	0.07	0.70
591.40	0.39	141.52	591.40	-1,474.24	0.57 S	0.14 E	22,274,660.29 N	1,878,254.39 E	0.10	1.93
619.50	0.13	279.76	619.50	-1,446.15	0.64 S	0.16 E	22,274,660.22 N	1,878,254.42 E	0.12	1.75
650.05	0.20	145.16	650.05	-1,415.60	0.68 S	0.16 E	22,274,660.19 N	1,878,254.41 E	0.11	0.99
680.86	0.21	266.64	680.86	-1,384.78	0.72 S	0.13 E	22,274,660.14 N	1,878,254.39 E	0.08	1.15
708.54	0.35	227.15	708.54	-1,357.11	0.78 S	0.02 E	22,274,660.08 N	1,878,254.27 E	-0.03	0.83
740.33	0.03	72.73	740.33	-1,325.32	0.85 S	0.04 W	22,274,660.02 N	1,878,254.21 E	-0.10	1.19
769.94	0.28	112.69	769.94	-1,295.71	0.87 S	0.03 E	22,274,659.99 N	1,878,254.28 E	-0.03	0.86
799.40	1.08	92.72	799.40	-1,266.25	0.91 S	0.38 E	22,274,659.95 N	1,878,254.63 E	0.31	2.82
830.49	2.74	116.33	830.46	-1,235.18	1.26 S	1.34 E	22,274,659.61 N	1,878,255.59 E	1.25	5.80
860.59	4.70	105.57	860.50	-1,205.14	1.91 S	3.17 E	22,274,658.96 N	1,878,257.42 E	3.03	6.86
889.35	6.74	105.41	889.12	-1,176.53	2.67 S	5.93 E	22,274,658.19 N	1,878,260.18 E	5.73	7.10
919.42	8.89	105.63	918.91	-1,146.74	3.77 S	9.87 E	22,274,657.10 N	1,878,264.12 E	9.58	7.16
951.24	11.25	107.50	950.24	-1,115.41	5.36 S	15.20 E	22,274,655.50 N	1,878,269.45 E	14.79	7.48
981.26	14.00	112.80	979.53	-1,086.12	7.65 S	21.34 E	22,274,653.21 N	1,878,275.59 E	20.76	9.93
1,007.79	17.10	120.53	1,005.09	-1,060.56	10.88 S	27.66 E	22,274,649.99 N	1,878,281.91 E	26.83	14.02
1,037.57	19.54	125.54	1,033.35	-1,032.29	16.00 S	35.48 E	22,274,644.87 N	1,878,289.74 E	34.28	9.76
1,065.34	22.08	126.37	1,059.31	-1,006.33	21.79 S	43.47 E	22,274,639.07 N	1,878,297.72 E	41.84	9.20
1,096.90	25.14	128.42	1,088.22	-977.42	29.48 S	53.50 E	22,274,631.39 N	1,878,307.75 E	51.31	10.02
1,127.85	27.95	130.62	1,115.91	-949.73	38.29 S	64.16 E	22,274,622.58 N	1,878,318.41 E	61.33	9.61
1,155.46	30.67	131.45	1,139.98	-925.66	47.16 S	74.34 E	22,274,613.70 N	1,878,328.60 E	70.87	9.99
1,186.43	33.27	133.03	1,166.26	-899.39	58.19 S	86.48 E	22,274,602.67 N	1,878,340.73 E	82.21	8.80
1,215.04	35.83	132.94	1,189.82	-875.82	69.25 S	98.35 E	22,274,591.61 N	1,878,352.60 E	93.28	8.97
1,247.99	38.36	132.82	1,216.10	-849.54	82.78 S	112.91 E	22,274,578.09 N	1,878,367.16 E	106.86	7.67
1,276.95	40.91	132.87	1,238.40	-827.24	95.34 S	126.45 E	22,274,565.53 N	1,878,380.70 E	119.49	8.80
1,304.81	43.01	133.13	1,259.12	-806.53	108.04 S	140.07 E	22,274,552.83 N	1,878,394.32 E	132.19	7.57
1,336.66	45.36	133.29	1,281.96	-783.69	123.24 S	156.25 E	22,274,537.63 N	1,878,410.50 E	147.27	7.39
1,365.12	47.88	133.28	1,301.51	-764.14	137.42 S	171.31 E	22,274,523.45 N	1,878,425.56 E	161.30	8.84
1,395.15	50.20	132.95	1,321.19	-744.46	152.91 S	187.86 E	22,274,507.95 N	1,878,442.11 E	176.73	7.79
1,427.45	53.25	132.13	1,341.20	-724.45	170.05 S	206.54 E	22,274,490.81 N	1,878,460.80 E	194.18	9.66
1,455.79	55.59	132.17	1,357.68	-707.97	185.52 S	223.63 E	22,274,475.35 N	1,878,477.88 E	210.14	8.25
1,485.02	57.95	132.55	1,373.70	-691.95	201.99 S	241.70 E	22,274,458.87 N	1,878,495.95 E	227.02	8.15
1,515.86	60.20	132.93	1,389.55	-676.10	219.95 S	261.13 E	22,274,440.92 N	1,878,515.38 E	245.15	7.36
1,546.16	62.83	132.36	1,404.00	-661.65	237.99 S	280.72 E	22,274,422.88 N	1,878,534.97 E	263.43	8.85
1,575.92	65.58	132.78	1,416.94	-648.70	256.11 S	300.45 E	22,274,404.76 N	1,878,554.70 E	281.85	9.33
1,608.06	68.03	132.64	1,429.60	-636.05	276.14 S	322.16 E	22,274,384.72 N	1,878,576.41 E	302.11	7.63
1,638.18	70.05	132.94	1,440.37	-625.27	295.25 S	342.80 E	22,274,365.61 N	1,878,597.05 E	321.37	6.78
1,666.31	73.04	132.82	1,449.27	-616.37	313.40 S	362.34 E	22,274,347.46 N	1,878,616.60 E	339.60	10.63
1,695.92	75.28	132.82	1,457.36	-608.29	332.77 S	383.24 E	22,274,328.10 N	1,878,637.49 E	359.10	7.55
1,725.56	77.25	132.17	1,464.39	-601.25	352.21 S	404.47 E	22,274,308.65 N	1,878,658.72 E	378.91	6.97
1,755.58	80.09	132.69	1,470.29	-595.35	372.07 S	426.19 E	22,274,288.79 N	1,878,680.45 E	399.20	9.62
1,787.19	82.56	132.61	1,475.06	-590.59	393.24 S	449.17 E	22,274,267.63 N	1,878,703.43 E	420.65	7.81

End of Well Report for AA Pad, AA16

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)		
1,816.43	82.28	132.66	1,478.92	-586.73	412.87 S	470.50 E	22,274,247.99 N	1,878,724.75 E	440.55	0.97
1,846.46	82.69	132.40	1,482.84	-582.80	433.00 S	492.44 E	22,274,227.86 N	1,878,746.69 E	461.03	1.62
1,877.47	82.58	132.56	1,486.82	-578.83	453.77 S	515.11 E	22,274,207.10 N	1,878,769.36 E	482.21	0.62
1,906.22	82.51	132.31	1,490.55	-575.10	473.00 S	536.15 E	22,274,187.86 N	1,878,790.41 E	501.85	0.92
1,937.24	83.24	132.74	1,494.40	-571.25	493.81 S	558.84 E	22,274,167.05 N	1,878,813.09 E	523.03	2.74
1,965.87	82.97	131.27	1,497.84	-567.81	512.83 S	579.96 E	22,274,148.04 N	1,878,834.21 E	542.77	5.21
1,995.82	82.88	131.14	1,501.53	-564.12	532.41 S	602.32 E	22,274,128.46 N	1,878,856.57 E	563.71	0.50
2,027.14	82.68	132.14	1,505.46	-560.18	553.05 S	625.54 E	22,274,107.81 N	1,878,879.79 E	585.44	3.21
2,055.51	83.00	130.83	1,509.00	-556.65	571.70 S	646.63 E	22,274,089.17 N	1,878,900.88 E	605.17	4.72
2,086.77	82.55	131.36	1,512.93	-552.72	592.08 S	670.00 E	22,274,068.78 N	1,878,924.25 E	627.06	2.24
2,118.26	82.64	132.06	1,516.99	-548.66	612.86 S	693.31 E	22,274,048.01 N	1,878,947.56 E	648.87	2.20
2,146.16	82.69	131.00	1,520.55	-545.10	631.21 S	714.03 E	22,274,029.66 N	1,878,968.28 E	668.26	3.76
2,177.90	83.20	130.97	1,524.45	-541.20	651.86 S	737.81 E	22,274,009.00 N	1,878,992.06 E	690.54	1.59
2,206.59	82.36	130.29	1,528.05	-537.59	670.40 S	759.40 E	22,273,990.47 N	1,879,013.66 E	710.79	3.75
2,236.31	83.07	128.10	1,531.82	-533.82	689.03 S	782.26 E	22,273,971.84 N	1,879,036.51 E	732.29	7.69
2,268.40	83.01	125.89	1,535.71	-529.94	708.19 S	807.69 E	22,273,952.67 N	1,879,061.94 E	756.32	6.83
2,297.47	82.93	123.02	1,539.27	-526.38	724.52 S	831.48 E	22,273,936.35 N	1,879,085.73 E	778.92	9.83
2,327.48	83.10	120.55	1,542.92	-522.73	740.20 S	856.80 E	22,273,920.66 N	1,879,111.05 E	803.08	8.18
2,356.85	83.17	119.05	1,546.43	-519.22	754.69 S	882.10 E	22,273,906.17 N	1,879,136.35 E	827.31	5.07
2,385.78	83.76	115.59	1,549.73	-515.92	767.88 S	907.63 E	22,273,892.98 N	1,879,161.89 E	851.86	12.05
2,417.32	84.46	113.29	1,552.96	-512.68	780.86 S	936.19 E	22,273,880.00 N	1,879,190.45 E	879.44	7.58
2,447.78	84.25	110.91	1,555.96	-509.69	792.27 S	964.27 E	22,273,868.60 N	1,879,218.53 E	906.66	7.81
2,478.52	84.46	109.36	1,558.98	-506.66	802.80 S	992.99 E	22,273,858.07 N	1,879,247.24 E	934.57	5.08
2,508.28	85.34	106.12	1,561.63	-504.02	811.83 S	1,021.22 E	22,273,849.04 N	1,879,275.47 E	962.10	11.22
2,546.57	83.80	104.31	1,565.25	-500.39	821.83 S	1,058.00 E	22,273,839.03 N	1,879,312.25 E	998.09	6.18
2,577.84	84.23	101.70	1,568.51	-497.13	828.83 S	1,088.30 E	22,273,832.03 N	1,879,342.55 E	1,027.83	8.42
2,606.25	84.50	99.84	1,571.30	-494.34	834.11 S	1,116.08 E	22,273,826.75 N	1,879,370.33 E	1,055.17	6.60
2,637.09	84.61	98.43	1,574.23	-491.42	838.99 S	1,146.39 E	22,273,821.88 N	1,879,400.64 E	1,085.07	4.55
2,666.52	85.25	95.37	1,576.83	-488.81	842.51 S	1,175.48 E	22,273,818.36 N	1,879,429.74 E	1,113.85	10.57
2,696.57	85.06	92.72	1,579.37	-486.27	844.62 S	1,205.35 E	22,273,816.25 N	1,879,459.60 E	1,143.50	8.83
2,726.43	85.84	89.66	1,581.74	-483.91	845.24 S	1,235.10 E	22,273,815.63 N	1,879,489.36 E	1,173.13	10.52
2,756.09	86.50	87.97	1,583.72	-481.93	844.62 S	1,264.69 E	22,273,816.24 N	1,879,518.94 E	1,202.69	6.10
2,786.27	86.39	85.87	1,585.59	-480.05	843.01 S	1,294.77 E	22,273,817.86 N	1,879,549.02 E	1,232.81	6.98
2,815.86	87.09	82.89	1,587.27	-478.37	840.11 S	1,324.17 E	22,273,820.75 N	1,879,578.42 E	1,262.34	10.32
2,845.19	87.19	81.39	1,588.73	-476.91	836.11 S	1,353.19 E	22,273,824.76 N	1,879,607.44 E	1,291.57	5.10
2,875.80	87.30	77.72	1,590.21	-475.44	830.57 S	1,383.25 E	22,273,830.30 N	1,879,637.50 E	1,321.94	11.99
2,908.25	87.87	74.96	1,591.57	-474.07	822.91 S	1,414.75 E	22,273,837.95 N	1,879,669.00 E	1,353.90	8.68
2,935.25	87.96	73.07	1,592.56	-473.09	815.48 S	1,440.69 E	22,273,845.38 N	1,879,694.94 E	1,380.29	7.03
2,966.35	88.97	69.39	1,593.39	-472.26	805.48 S	1,470.12 E	22,273,855.39 N	1,879,724.37 E	1,410.35	12.27
2,996.28	89.33	67.20	1,593.83	-471.81	794.42 S	1,497.92 E	22,273,866.45 N	1,879,752.17 E	1,438.85	7.39
3,026.72	89.38	64.09	1,594.18	-471.47	781.86 S	1,525.65 E	22,273,879.00 N	1,879,779.90 E	1,467.39	10.22
3,055.66	89.55	64.55	1,594.44	-471.20	769.33 S	1,551.73 E	22,273,891.54 N	1,879,805.98 E	1,494.28	1.69
3,086.70	89.58	65.98	1,594.68	-470.97	756.34 S	1,579.91 E	22,273,904.52 N	1,879,834.17 E	1,523.31	4.61
3,116.03	89.69	65.52	1,594.86	-470.78	744.29 S	1,606.66 E	22,273,916.57 N	1,879,860.91 E	1,550.82	1.62
3,147.26	90.20	65.16	1,594.89	-470.75	731.26 S	1,635.04 E	22,273,929.60 N	1,879,889.29 E	1,580.05	1.99
3,176.98	89.48	65.19	1,594.98	-470.67	718.78 S	1,662.02 E	22,273,942.08 N	1,879,916.27 E	1,607.83	2.41
3,205.76	89.93	64.48	1,595.13	-470.52	706.55 S	1,688.06 E	22,273,954.32 N	1,879,942.31 E	1,634.66	2.92
3,238.34	90.18	64.96	1,595.09	-470.55	692.64 S	1,717.52 E	22,273,968.23 N	1,879,971.77 E	1,665.02	1.67
3,267.40	90.24	65.62	1,594.99	-470.66	680.49 S	1,743.92 E	22,273,980.38 N	1,879,998.18 E	1,692.21	2.28
3,296.96	89.71	65.74	1,595.00	-470.65	668.31 S	1,770.86 E	22,273,992.55 N	1,880,025.11 E	1,719.93	1.84
3,326.59	90.40	64.24	1,594.97	-470.68	655.79 S	1,797.71 E	22,274,005.08 N	1,880,051.96 E	1,747.58	5.57
3,355.69	90.18	65.14	1,594.82	-470.83	643.35 S	1,824.02 E	22,274,017.52 N	1,880,078.27 E	1,774.69	3.17
3,387.91	90.12	64.85	1,594.73	-470.91	629.73 S	1,853.21 E	22,274,031.14 N	1,880,107.46 E	1,804.77	0.92
3,416.88	90.30	64.12	1,594.62	-471.02	617.25 S	1,879.36 E	22,274,043.62 N	1,880,133.61 E	1,831.72	2.59
3,447.85	90.29	64.91	1,594.46	-471.18	603.92 S	1,907.31 E	22,274,056.94 N	1,880,161.56 E	1,860.54	2.54
3,477.38	89.81	65.42	1,594.44	-471.21	591.52 S	1,934.11 E	22,274,069.35 N	1,880,188.36 E	1,888.14	2.37
3,508.15	89.53	64.98	1,594.61	-471.03	578.61 S	1,962.04 E	22,274,082.26 N	1,880,216.30 E	1,916.90	1.70
3,535.51	90.40	64.80	1,594.63	-471.02	567.00 S	1,986.82 E	22,274,093.87 N	1,880,241.07 E	1,942.43	3.23
3,566.16	90.20	65.90	1,594.47	-471.18	554.22 S	2,014.67 E	22,274,106.65 N	1,880,268.92 E	1,971.10	3.64
3,595.72	90.07	66.03	1,594.40	-471.25	542.18 S	2,041.67 E	22,274,118.68 N	1,880,295.92 E	1,998.87	0.61
3,625.87	89.85	65.24	1,594.42	-471.23	529.74 S	2,069.13 E	22,274,131.12 N	1,880,323.38 E	2,027.14	2.73

End of Well Report for AA Pad, AA16

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)		
3,656.61	89.40	65.14	1,594.62	-471.02	516.84 S	2,097.04 E	22,274,144.02 N	1,880,351.29 E	2,055.88	1.49
3,685.97	89.64	65.23	1,594.87	-470.78	504.52 S	2,123.69 E	22,274,156.34 N	1,880,377.94 E	2,083.32	0.88
3,715.57	89.57	64.18	1,595.07	-470.58	491.87 S	2,150.44 E	22,274,168.99 N	1,880,404.69 E	2,110.89	3.56
3,747.36	89.90	64.41	1,595.22	-470.43	478.08 S	2,179.09 E	22,274,182.78 N	1,880,433.34 E	2,140.43	1.26
3,777.77	89.76	64.59	1,595.31	-470.33	464.99 S	2,206.54 E	22,274,195.87 N	1,880,460.79 E	2,168.73	0.76
3,807.40	89.49	63.96	1,595.50	-470.14	452.13 S	2,233.23 E	22,274,208.73 N	1,880,487.48 E	2,196.25	2.31
3,838.37	89.67	64.33	1,595.73	-469.91	438.62 S	2,261.10 E	22,274,222.24 N	1,880,515.35 E	2,224.99	1.30
3,865.93	89.97	64.83	1,595.82	-469.83	426.79 S	2,285.99 E	22,274,234.07 N	1,880,540.24 E	2,250.65	2.14
3,896.31	90.22	65.07	1,595.77	-469.88	413.93 S	2,313.51 E	22,274,246.93 N	1,880,567.76 E	2,279.00	1.14
3,926.69	89.90	65.12	1,595.73	-469.91	401.14 S	2,341.06 E	22,274,259.73 N	1,880,595.32 E	2,307.38	1.08
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	2,342.49	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	2,369.77	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	2,399.36	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	2,427.96	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	2,454.75	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	2,481.45	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	2,511.56	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	2,538.47	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	2,566.73	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	2,594.97	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	2,622.19	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	2,650.59	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	2,677.94	2.32
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
Bit Projection										
5,401.59	89.41	62.42	1,597.94	-467.70	228.26 N	3,674.83 E	22,274,889.12 N	1,881,929.08 E	3,681.80	4.05

End of Well Report for AA Pad, AA16

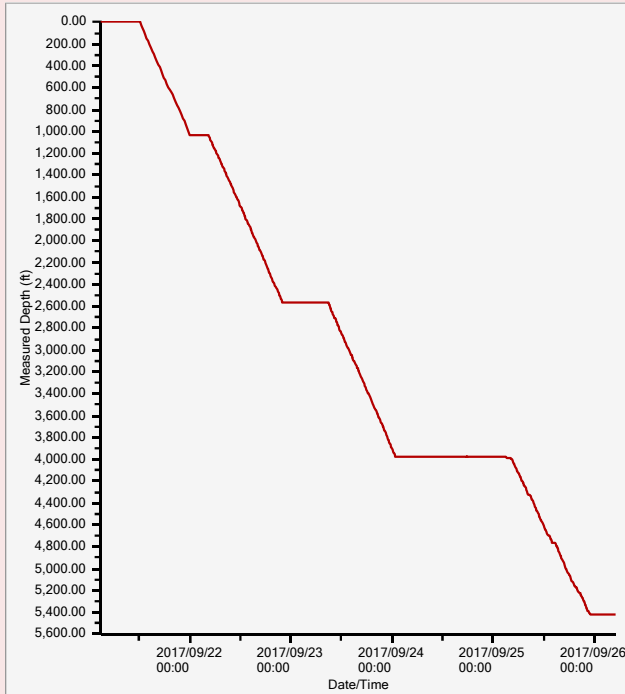
Survey Data										
Survey Depth (ft)	Incl. (°)	(Grid) Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	Local Coordinates		Map Coordinates		Vertical Section (ft)	Dogleg Rate (°/100ft)
					Northings (ft)	Eastings (ft)	Northings (ft)	Eastings (ft)		
5,423.25	89.41	62.42	1,598.16	-467.48	238.28 N	3,694.02 E	22,274,899.15 N	1,881,948.27 E	3,701.64	0.00

Run Discussion(s)

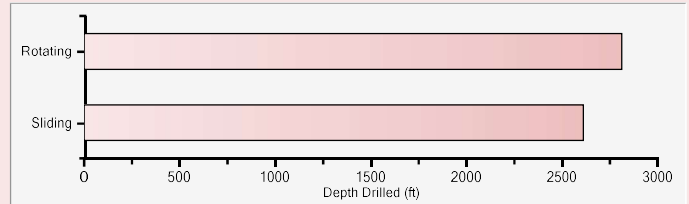
Run #4 - Drilled ahead rotating until we could get good signal. Tried various parameters with the pump rate: WOB and rotary speed to try and get ROP to improve. ROP would mostly stay at 4-6m/hr. despite the different parameters. When sliding, it was difficult due to stick-slip even when oscillating the 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 ratier 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.

End of Well Report for AA Pad, AA16

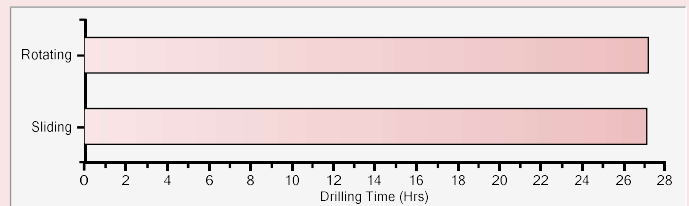
Time vs Depth



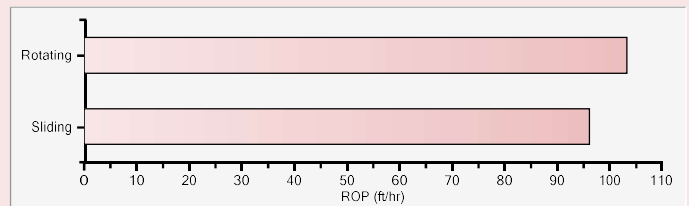
Depth Drilled



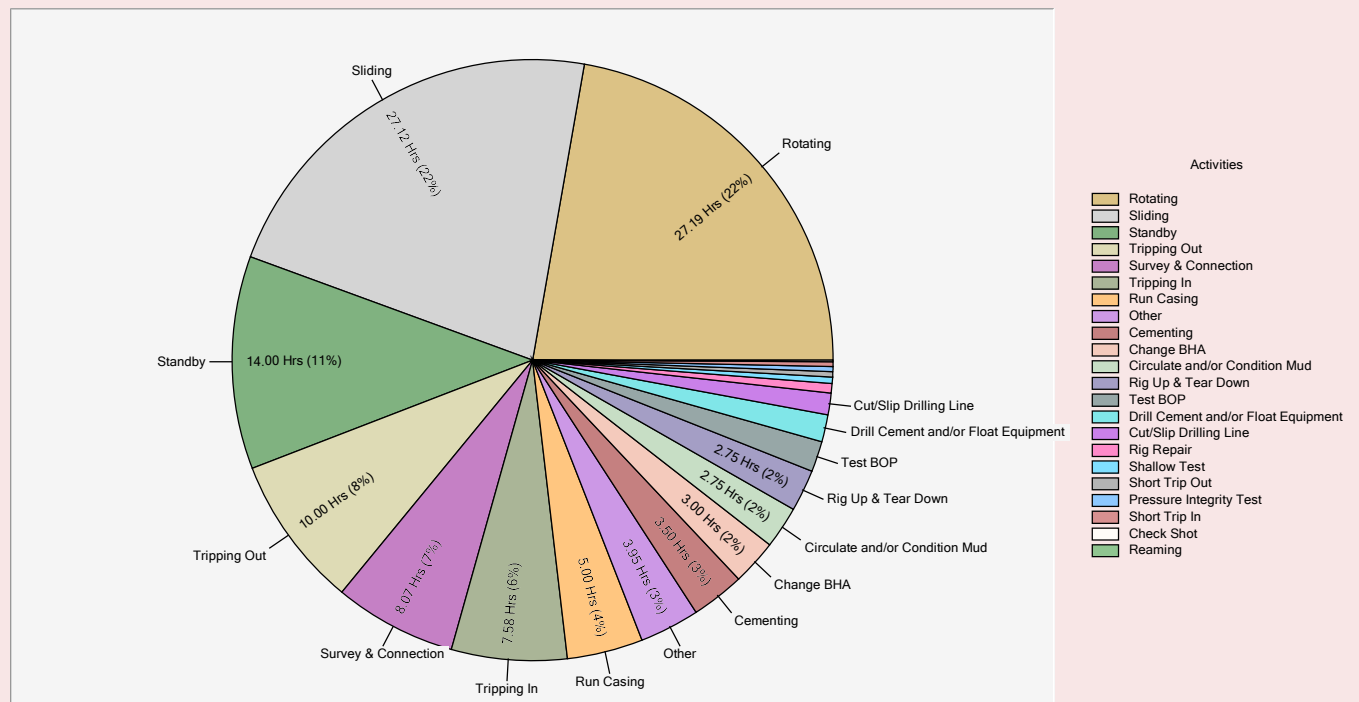
Drilling Time



Average Rate of Penetration



Activity



End of Well Report for AA Pad, AA16

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