



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 10/30/2014
Report # 13
Projected Days 19
Drilling Days 7
Current Depth 5,003
Depth Progress 263
Planned VS 0
Current VS
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS				
Report Summary																		
Well Spud 10/14/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line			Drilling AFE 2,048,600		Daily Field Est (Cost) 79,201		Cum Field Est (Cost) 763,613	
Status at Report Time TIH																		
Operations Summary SLIDE/ROTATE DRILL VERTICAL HOLE FROM 4670' – 5003' 333' AT 37 FPH, CIRC TO CLEAN HOLE, CHECK FLOW WELL FLOWING SHUT IN WELL & MONITOR PRSSURE NO PRESSURE ON CHOKE PANEL OPEN WELL, CIRC & RAISE MUD WEIGHT TO 9.0 PPG SHUT DOWN PUMP & CHECK FLOW WELL NOT FLOWING, PUMP SLUG, TOO H, WORK BHA, TIH LS 4930', MD, 1.58° INC, 238.41° AZM, 4929.87' TVD, 1..68 VS, .62° DLS PTB: 4987' MD, 4986.85' TVD, 1.58° INC, 238.41° AZM, 2.51 VS , -2.51' E/W & 6.20' N/S										Planned Operations TIH, DRILL 12 1/4" VERTICAL HOLE.								
Start MD (ftKB) 4,740		End MD (ftKB) 5,003		Depth Progress (ft) 263		Drilling Time (hr) 3.00		Avg ROP (ft/hr) 87.7		Time Since LTI (days) 1,154		Time Since RI (days) 1,499						
Daily Time Log																		
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT			
05:00	14:00	9.00	4,670	5,003	ROTATE/SLIDE DRILL FROM 4670' - 5003', 333' AT 37 FPH, ROTATE DRILL: 112' IN 1.5 HOURS, 74.66 FPH AVERAGE ROP SLIDE DRILL: 221' IN 7.5 HOURS, 29.46 FPH AVERAGE ROP 83.33% ROTATE, 16.66% SLIDE. FULL REETURNS					INT	DIR	DRILL	DRILL W/ MUD					
14:00	19:00	5.00	5,003	5,003	CIRC BOTTOMS UP SHAKERS CLEAN, SHUT DOWN MUD PUMPS CHECK FLOW WELL FLOWING GAIN 39 IN TRIP TANK SHUT IN WELL & MONITOR PRSSURE NO PRESSURE ON CHOKE PANEL OPEN WELL CIRC & RAISE MUD WEIGHT TO 9.0 PPG SHUT DOWN PUMP & CHECK FLOW WELL NOT FLOWING, PUMP SLUG.					INT	DIR	DRILL	COND MUD & CIRC					
19:00	00:00	5.00	5,003	5,003	TOOH F/5003' TO BHA.					INT	DIR	DRILL	TRIPS					
00:00	04:30	4.50	5,003	5,003	PICK UP LEAM 8" MOTOR, 7/8, 4.0, FXD @ 1.75, W/11 1/2" NB STAB, 0.16 RPG, 7751XD-025, MAKE UP CAPROCK, 12 1/4", 616-YR9, 40225					INT	DIR	DRILL	DIRECTIONAL WORK					
04:30	05:00	0.50	5,003	5,003	TIH F/BHA TO 450'					INT	DIR	DRILL	TRIPS					
Drilling Parameters																		
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq					
4,740	4,798	1.00	0.00	58.0		450	16	633	2,170.0	55	160	155	7,000					
4,798	4,838	0.00	1.50	26.7	90	400	16	633	2,170.0	0	160	155	0					
4,838	4,892	0.50	0.00	108.0		450	16	633	2,300.0	55	160	155	8,000					
4,892	5,003	0.00	0.00		90	400	16	633	2,170.0	0	160	155	0					
Bit Information																		
Size (in)	Make	Model	Type	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)				
12 1/4	HALLIBURTON	MM65DC	PDC	1-1-WT-S-1-1-WT-DMF	635	5,003	4,368.00	62.50	69.9	54.00	8.50	74.7	28	157				
12 1/4		616-YR9	PDC	-----														
Current BHA Components																		
BHA No	Item Description					Make	Model	OD (in)	Jts	Length (ft)		Top Thread						
3	DRILL PIPE					ENSIGN DRILLING		5	133	4,173.51		IF						
3	HWDP					ENSIGN DRILLING		5	18	547.09		IF						
3	XO SUB					ENSIGN DRILLING		6 1/2	1	2.20		IF						
3	DRILL COLLAR					ENSIGN DRILLING		6 1/2	3	85.77		NC 46						
3	XO SUB					ENSIGN DRILLING		8	1	4.00		NC 46						
3	DRILL COLLAR					ENSIGN DRILLING		8	3	91.65		NC 56						
3	XO SUB					LEAM		8	1	2.58		NC 56						
3	NMDC					LEAM		8	1	30.49		REG						
3	NMDC					LEAM		8	1	30.81		REG						
3	UBHO SUB					LEAM		8	1	2.41		REG						
3	FLOAT SUB					LEAM		7 3/4	1	2.72		REG						
3	MOTOR WITH STABILIZER					LEAM	XD	8	1	28.27		REG						
Mud Reports																		
Time 08:30	Type OIL BASE	Depth (ftKB) 4,858	Density (lb/gal) 8.90	Vis (s/qt) 53	PV Calc (cP) 11.0	YP Calc (lbf/100ft²) 5	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 4.3	LCM (lb/bbl)	Chlor (mg/L) 45,000	Oil Water Ratio 73.9/26.1						
Electric Stab (V) 402.0	X Lime (lb/bbl) 3.6	HTHP Filtrate (mL/30min) 4.2	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl) 55.0	Cum Mud Lost to Hole (bbl) 110.0	Daily Mud Field Est (Cost) 18,031.70		Cum Mud Field Est (Cost) 84,436.66									
Time 18:30	Type OIL BASE	Depth (ftKB) 5,003	Density (lb/gal) 8.90	Vis (s/qt) 51	PV Calc (cP) 12.0	YP Calc (lbf/100ft²) 4	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 4.8	LCM (lb/bbl)	Chlor (mg/L) 20,000	Oil Water Ratio 73.9/26.1						
Electric Stab (V) 420.0	X Lime (lb/bbl) 3.0	HTHP Filtrate (mL/30min) 4.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl) 110.0	Cum Mud Lost to Hole (bbl) 110.0	Daily Mud Field Est (Cost) 18,031.70		Cum Mud Field Est (Cost) 84,436.66									
Wellbore Design																		
Casing Description				Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)								
CONDUCTOR				11/13/2013	20	94.00	J-55	WELDED	110.0	80.00								
SURFACE				11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	604.97								
INTERMEDIATE				10/29/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,404.82								
PLANNED PRODUCTION									18,236.0									
Survey Data																		
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)										
4,080	0.18	116.07	4,080	12.30	-0.15	12.30	0.20	0.00										
4,174	0.09	50.33	4,174	12.49	-0.17	12.49	0.18	-0.10										
4,268	0.35	43.82	4,268	12.74	0.09	12.75	0.28	0.28										
4,363	0.26	26.60	4,363	13.03	0.49	13.05	0.13	-0.09										
4,457	0.18	19.39	4,457	13.17	0.82	13.19	0.09	-0.09										
4,552	0.18	239.12	4,552	13.09	0.89	13.11	0.36	0.00										
4,646	0.70	228.39	4,646	12.54	0.43	12.56	0.56	0.55										
4,741	1.06	251.25	4,741	11.29	-0.24	11.29	0.52	0.38										
Mud Logging Information																		
Lithology and Shows CUR LITHOLOGY @ 5003: 40% LS, 40% SH, 20% SILTSTONE GRAYBURG @ 3078', SAN ANDRES @ 3389'								Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)						
Geological Data																		
Formation Name					Prog Top TVD (ftKB)			Drill Top MD (ftKB)			Drill Top (TVD) (ftKB)							
SALADO					1,164													
YATES					1,856													
SEVEN RIVERS					1,992													
QUEEN					2,408													
GRAYBURG					3,078			3,078			3,077.9							
SAN ANDRES					3,389			3,389			3,388.9							
SPRABERRY UPPER					6,131													
SPRABERRY LOWER					6,704													
JO-MILL SAND					6,976													
DEAN					7,486													
WOLFCAMP-A (WFMP_A)					7,658													
WOLFCAMP-B (WFMP_B)					8,032													

AMERICAN ENERGY - PERMIAN BASIN LLC

Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date	10/31/2014
Report #	14
Projected Days	19
Drilling Days	8
Current Depth	5,870
Depth Progress	867
Planned VS	0
Current VS	
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/14/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line		Drilling AFE 2,048,600		Daily Field Est (Cost) 79,354		Cum Field Est (Cost) 842,967													
Status at Report Time DRILL 12 1/4" HOLE @ 5870'																													
Operations Summary TIH, WASH & REAM 4909'-5003', DRILL VERTICAL HOLE FROM 5003' – 5870' 867" AT 43.35 FPH LS 5778', MD, 9.50° INC, 261.79° AZM, 5771.19' TVD, 18.35 VS, 0.28° DLS PTB: 5830' MD, 5822.47' TVD, 9.50° INC, 261.79° AZM, 19.57 VS , -89.93° E/W & -18.35° N/S BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID)										Planned Operations DRILL 12 1/4" VERTICAL HOLE.																			
Start MD (ftKB)		5,003		End MD (ftKB)		5,870		Depth Progress (ft) 867		Drilling Time (hr) 18.00		Avg ROP (ft/hr) 48.2		Time Since LTI (days) 1,155		Time Since RI (days) 1,500													
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments				Hole Section		Interval		Category		Activity		NPT							
05:00		10:30		5.50		5,003		5,003		T.I.H F/ 450' TO 3,659', INSTALL ROTATING HEAD, T.I.H. TO 4,913'				INT		DIR		DRILL		TRIPS									
10:30		11:00		0.50		5,003		5,003		WASH 90' TO BOTTOM, NO FILL				INT		DIR		DRILL		REAMING									
11:00		05:00		18.00		5,003		5,870		ROTATE/SLIDE DRILL FROM 5003' - 5870', 867" AT 48.16 FPH, ROTATE DRILL: 596' IN 7.5 HOURS, 79.47 FPH AVERAGE ROP SLIDE DRILL: 271' IN 10.5 HOURS, 25.81 FPH AVERAGE ROP 41.66% ROTATE, 58.33% SLIDE. FULL REETURNS				INT		DIR		DRILL		DRILL W/ MUD									
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
5,003		5,003										0		5		633		2,100.0		55		165		155		0			
5,003		5,040		0.00		1.50		24.7		270		420		16		633		2,465.0				165		155		0			
5,040		5,074		0.50		0.00		68.0				450		27		633		2,570.0		55		165		155		11,000			
5,074		5,124		0.00		2.00		25.0		270		445		27		633		2,400.0				165		155		0			
5,124		5,168		0.50		0.00		88.0				445		27		633		2,400.0		55		185		175		9,000			
5,168		5,198		0.00		1.50		20.0		290		400		27		633		2,400.0				190		185		0			
5,198		5,357		2.00		0.00		79.5				450		27		633		2,540.0		55		190		185		10,000			
5,357		5,383		0.00		1.00		26.0		320		250		15		633		2,240.0				190		185		0			
5,383		5,546		2.00		0.00		81.5				440		20		633		2,500.0		50		190		185		13,000			
5,546		5,575		0.00		1.00		29.0		0		250		10		633		2,270.0				190		185		0			
5,575		5,641		1.00		0.00		66.0				500		30		633		2,450.0		55		190		185		15,000			
5,641		5,670		0.00		1.50		19.3		0		350		15		633		2,280.0				190		185		0			
5,670		5,736		0.50		0.00		132.0				470		20		633		2,490.0		55		190		185		15,000			
5,736		5,766		0.00		1.00		30.0		60		500		20		633		2,630.0				190		185		0			
5,766		5,830		1.00		0.00		64.0				450		20		633		2,605.0		55		190		185		15,000			
5,830		5,870		0.00		1.00		40.0		30		450		20		633		2,370.0				190		185		0			
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
12 1/4		HALLIBURTON		MM65DC		PDC		1-1-WT-S-1-1-WT-DMF		635		5,003		4,368.00		62.50		69.9		54.00		8.50		74.7		28		157	
12 1/4				616-YR9		PDC		-----		5,003		5,870		867.00		18.00		48.2		7.50		10.50		79.5		30		157	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
3		DRILL PIPE						ENSIGN DRILLING				5		160		5,040.51		IF											
3		HWDP						ENSIGN DRILLING				5		18		547.09		IF											
3		XO SUB						ENSIGN DRILLING				6 1/2		1		2.20		IF											
3		DRILL COLLAR						ENSIGN DRILLING				6 1/2		3		85.77		NC 46											
3		XO SUB						ENSIGN DRILLING				8		1		4.00		NC 46											
3		DRILL COLLAR						ENSIGN DRILLING				8		3		91.65		NC 56											
3		XO SUB						LEAM				8		1		2.58		NC 56											
3		NMDC						LEAM				8		1		30.49		REG											
3		NMDC						LEAM				8		1		30.81		REG											
3		UBHO SUB						LEAM				8		1		2.41		REG											
3		FLOAT SUB						LEAM				7 3/4		1		2.72		REG											
3		MOTOR WITH STABILIZER						LEAM		XD		8		1		28.27		REG											
Mud Reports																													
Time 15:30		Type OIL BASE		Depth (ftKB) 5,134		Density (lb/gal) 9.00		Vis (s/qt) 49		PV Calc (cP) 9.0		YP Calc (lb/100ft²) 3		Vis 3rpm 1		Vis 6rpm 2		LGS (%) 5.0		LCM (lb/bbl)		Chlor (mg/L) 33,000		Oil Water Ratio 76/24					
Electric Stab (V) 539.0		X Lime (lb/bbl) 2.1		HTHP Filtrate (mL/30min) 4.2		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 110.0		Daily Mud Field Est (Cost) 7,749.64		Cum Mud Field Est (Cost) 92,186.30													
Time 21:00		Type OIL BASE		Depth (ftKB) 5,484		Density (lb/gal) 9.00		Vis (s/qt) 51		PV Calc (cP) 11.0		YP Calc (lb/100ft²) 2		Vis 3rpm 2		Vis 6rpm 3		LGS (%) 5.7		LCM (lb/bbl)		Chlor (mg/L) 40,000		Oil Water Ratio 76.9/23.1					
Electric Stab (V) 548.0		X Lime (lb/bbl) 3.6		HTHP Filtrate (mL/30min) 4.0		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 110.0		Daily Mud Field Est (Cost) 7,749.64		Cum Mud Field Est (Cost) 92,186.30													
Wellbore Design																													
Casing Description				Run Date				OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR				11/13/2013				20		94.00		J-55		WELDED		110.0		80.00											
SURFACE				11/15/2013				13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		604.97											
INTERMEDIATE				10/29/2014				9 5/8		40.00		J-55		LT&C		6,402.8		6,404.82											
PLANNED PRODUCTION																18,236.0													
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
5,022		2.37		252.12		5,022		-3.92		-2.93		4.64		0.99		0.86													
5,116		4.04		252.65		5,116		1.31		-4.52		-0.37		1.78		1.78													
5,211		6.33		260.21		5,210		9.88		-6.40		-8.72		2.51		2.41													
5,305		6.86		262.14		5,304		20.65		-8.05		-19.39		0.61		0.56													
5,400		7.65		262.32		5,398		32.62		-9.67		-31.28		0.83		0.83													
5,494		8.44		260.91		5,491		45.74		-11.60		-44.29		0.87		0.84													
5,589		9.32		261.97		5,585		60.38		-13.78		-58.79		0.94		0.93													
5,684		9.76		261.44		5,679		76.08		-16.05		-74.37		0.47		0.46													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 5730: 25% LS 70% SH 5% SILTST GRAYBURG @ 3078', SAN ANDRES @ 3389'										Max Trip Gas (units) 210		Avg Drill Gas (units)		Max Drill Gas (units)															
LAST 24 HOURS: LS, SH, SLTST																													
Geological Data																													
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)													
SALADO								1,164																					
YATES								1,856																					
SEVEN RIVERS								1,992																					
QUEEN								2,408																					
GRAYBURG								3,078								3,078													
SAN ANDRES								3,389								3,389													



UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	10/31/2014
Report #	14
Projected Days	19
Drilling Days	8
Current Depth	5,870
Depth Progress	867
Planned VS	0
Current VS	
AFE #	DV02164
Total AFE	8,033,600

Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SPRABERRY UPPER	6,131		
SPRABERRY LOWER	6,704		
JO-MILL SAND	6,976		
DEAN	7,486		
WOLFCAMP-A (WFMP_A)	7,658		
WOLFCAMP-B (WFMP_B)	8,032		



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/1/2014
Report # 15
Projected Days 19
Drilling Days 9
Current Depth 6,412
Depth Progress 542
Planned VS 0
Current VS
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS			
Report Summary																	
Well Spud 10/14/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line		Drilling AFE 2,048,600		Daily Field Est (Cost) 132,784		Cum Field Est (Cost) 976,866	
Status at Report Time R/U CASING 9 5/8" CASING TOOLS																	
Operations Summary DRILL VERTICAL HOLE FROM 5870' – 6412' 542' AT 45.17 FPH, CIRC, TOO, R/U LAY DOWN TRUCK, LAY DOWN BHA, R/U CASING CREW. LS 6360', MD, 5.98° INC, 270.23° AZM, 6348.27' TVD, 20.87 VS, 2.64° DLS PTB: 6412' MD, 6399.99' TVD, 5.98° INC, 270.23° AZM, 20.85 VS , -20.85° E/W & -168.94' N/S BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID)										Planned Operations RUN 9 5/8" CASING & CEMENT 9 5/8" CASING							
Start MD (ftKB) 5,870				End MD (ftKB) 6,412		Depth Progress (ft) 542		Drilling Time (hr) 12.00		Avg ROP (ft/hr) 45.2		Time Since LTI (days) 1,156			Time Since RI (days) 1,501		
Daily Time Log																	
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT		
05:00	17:00	12.00	5,870	6,412	ROTATE/SLIDE DRILL FROM 5870' - 6412', 542' AT 45.17 FPH, ROTATE DRILL: 401' IN 7 HOURS, 57.29 FPH AVERAGE ROP SLIDE DRILL: 141' IN 5 HOURS, 28.2 FPH AVERAGE ROP 58% ROTATE, 42% SLIDE. FULL REETURNS					INT	DIR	DRILL	DRILL W/ MUD				
17:00	18:00	1.00	6,412	6,412	CIRC BOTTOMS UP & PUMPING 2 HIGH VIS SWEEPS SHAKERS CLEAN, CHECK FLOW WELL NOT FLOWING, PUMP SLUG.					INT	DIR	DRILL	COND MUD & CIRC				
18:00	22:00	4.00	6,412	6,412	TOOH 6412' - 830', PULL ROT. HEAD.					INT	DIR	DRILL	TRIPS				
22:00	22:30	0.50	6,412	6,412	HAILED SAFETY MEETING WITH RIG CREW & PREMIER LAYDOWN CREW ON R/U LAYDOWN MACHINE & LAYING DOWN HWDP, 6.5" DC, 8" D/C, DIR. TOOLS.					INT	DIR	DRILL	SAFETY MEETING				
22:30	03:30	5.00	6,412	6,412	LAYDOWN HWDP, 6.5" DC, 8" D/C, DIR. TOOLS, BREAK 12 1/4" DIT.					INT	DIR	DRILL	P/U & L/D BHA				
03:30	04:30	1.00	6,412	6,412	PULL TRIPNIPPLE, WEARBUSHING					INT	DIR	DRILL	NIPPLE UP B.O.P./WELLHEAD				
04:30	05:00	0.50	6,412	6,412	HAILED SAFETY MEETING WITH RIG CREW & PREMIER CASING CREW ON R/U CASING TOOLS.					INT	DIR	DRILL	SAFETY MEETING				
Drilling Parameters																	
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq				
5,870	5,924	0.50	0.00	108.0		450	20	633	2,370.0	55	190	185	12,000				
5,924	5,974	0.00	1.50	33.3	50	240	20	633	2,370.0		190	185	0				
5,974	6,019	0.50	0.00	90.0		450	20	633	2,370.0	55	190	185	12,000				
6,019	6,074	0.00	1.50	36.7	40	225	20	633	2,370.0		190	185	0				
6,074	6,113	0.50	0.00	78.0		450	20	633	2,370.0	55	190	185	12,000				
6,113	6,137	0.00	1.50	16.0	10	270	20	633	2,370.0		190	185	0				
6,137	6,302	2.50	0.00	66.0		450	20	633	2,370.0	50	190	185	12,000				
6,302	6,314	0.00	0.50	24.0	90	375	20	633	2,370.0		190	185	0				
6,314	6,412	3.00	0.00	32.7		450	20	633	2,370.0	50	190	185	12,000				
Bit Information																	
Size (in)	Make	Model	Type	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)			
12 1/4	HALLIBURTON	MM65DC	PDC	1-1-WT-S-X-1-WT-DMF	635	5,003	4,368.00	62.50	69.9	54.00	8.50	74.7	28	157			
12 1/4		616-YR9	PDC	0-1-NO-S-X-1-WT-TD	5,003	6,412	1,409.00	30.00	47.0	14.50	15.50	68.8	30	157			
Current BHA Components																	
BHA No	Item Description				Make	Model	OD (in)	Jts	Length (ft)	Top Thread							
3	DRILL PIPE				ENSIGN DRILLING		5	178	5,582.51	IF							
3	HWDP				ENSIGN DRILLING		5	18	547.09	IF							
3	XO SUB				ENSIGN DRILLING		6 1/2	1	2.20	IF							
3	DRILL COLLAR				ENSIGN DRILLING		6 1/2	3	85.77	NC 46							
3	XO SUB				ENSIGN DRILLING		8	1	4.00	NC 46							
3	DRILL COLLAR				ENSIGN DRILLING		8	3	91.65	NC 56							
3	XO SUB				LEAM		8	1	2.58	NC 56							
3	NMDC				LEAM		8	1	30.49	REG							
3	NMDC				LEAM		8	1	30.81	REG							
3	UBHO SUB				LEAM		8	1	2.41	REG							
3	FLOAT SUB				LEAM		7 3/4	1	2.72	REG							
3	MOTOR WITH STABILIZER				LEAM	XD	8	1	28.27	REG							
Mud Reports																	
Time 09:00	Type OIL BASE	Depth (ftKB) 5,484	Density (lb/gal) 9.00	Vis (s/qt) 51	PV Calc (cP) 10.0	YP Calc (lbf/100ft²) 2	Vis 3rpm 1	Vis 6rpm 2	LGS (%) 2.9	LCM (lb/bbl)	Chlor (mg/L) 48,000	Oil Water Ratio 78.3/21.7					
Electric Stab (V) 598.0	X Lime (lb/bbl) 4.1	HTHP Filtrate (mL/30min) 3.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 110.0	Daily Mud Field Est (Cost) 16,058.79	Cum Mud Field Est (Cost) 108,245.09									
Time 16:30	Type OIL BASE	Depth (ftKB) 6,412	Density (lb/gal) 9.00	Vis (s/qt) 48	PV Calc (cP) 10.0	YP Calc (lbf/100ft²) 2	Vis 3rpm 1	Vis 6rpm 2	LGS (%) 3.0	LCM (lb/bbl)	Chlor (mg/L) 46,000	Oil Water Ratio 78.3/21.7					
Electric Stab (V) 602.0	X Lime (lb/bbl) 4.1	HTHP Filtrate (mL/30min) 3.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 110.0	Daily Mud Field Est (Cost) 16,058.79	Cum Mud Field Est (Cost) 108,245.09									
Wellbore Design																	
Casing Description				Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)							
CONDUCTOR				11/13/2013	20	94.00	J-55	WELDED	110.0	80.00							
SURFACE				11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	604.97							
INTERMEDIATE				11/1/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,404.82							
PLANNED PRODUCTION									18,236.0								
Survey Data																	
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)								
5,022		2.37	252.12	5,022	-3.92	-2.93	4.64	0.99	0.86								
5,116		4.04	252.65	5,116	1.31	-4.52	-0.37	1.78	1.78								
5,211		6.33	260.21	5,210	9.88	-6.40	-8.72	2.51	2.41								
5,305		6.86	262.14	5,304	20.65	-8.05	-19.39	0.61	0.56								
5,400		7.65	262.32	5,398	32.62	-9.67	-31.28	0.83	0.83								
5,494		8.44	260.91	5,491	45.74	-11.60	-44.29	0.87	0.84								
5,589		9.32	261.97	5,585	60.38	-13.78	-58.79	0.94	0.93								
5,684		9.76	261.44	5,679	76.08	-16.05	-74.37	0.47	0.46								
Mud Logging Information																	
Lithology and Shows								Max Trip Gas (units)	Avg Drill Gas (units)	Max Drill Gas (units)							
Geological Data																	
Formation Name						Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)									
SALADO						1,164											
YATES						1,856											
SEVEN RIVERS						1,992											
QUEEN						2,408											
GRAYBURG						3,078	3,078	3,077.9									
SAN ANDRES						3,389	3,389	3,388.9									
SPRABERRY UPPER						6,131											
SPRABERRY LOWER						6,704											



AMERICAN ENERGY - PERMIAN BASIN LLC

Daily Drilling Partner Report

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/1/2014
Report #	15
Projected Days	19
Drilling Days	9
Current Depth	6,412
Depth Progress	542
Planned VS	0
Current VS	
AFE #	DV02164
Total AFE	8,033,600

Geological Data

Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
JO-MILL SAND	6,976		
DEAN	7,486		
WOLFCAMP-A (WFMP_A)	7,658		
WOLFCAMP-B (WFMP_B)	8,032		



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/2/2014
Report # 16
Projected Days 19
Drilling Days 10
Current Depth 6,412
Depth Progress 0
Planned VS 0
Current VS 0
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000	Longitude -101.5913972000	Orig KB El... 2,694.00	RKB (ft) 30.00	County REAGAN	State TEXAS					
Report Summary														
Well Spud 10/14/2013	TD Date	RR Date	Target Formation WOLFCAMP-B	Prop TD (ftKB) 18,236	Target Line			Drilling AFE 2,048,600	Daily Field Est (Cost) 452,565	Cum Field Est (Cost) 1,429,432				
Status at Report Time PICK UP DIR. TOOLS														
Operations Summary RUN 58 JTS 9 5/8" 40# L-80 LT&C, 89 JTS 9 5/8" 40# J-55 LT&C (SHOE @ 6403',FLOAT COLLAR @ 6357') RIG UP CEMENTERS, PUMP 9 5/8" CEMENT, DISPLACE CASING, SET PACK OFF, PICK UP DIR. TOOLS. LEAD CEMENT TOP @ 2700' TAIL CEMENT TOP @ 5400'					Planned Operations TIH, DRILL 8 3/4" CURVE									
BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID))														
Start MD (ftKB) 6,412		End MD (ftKB) 6,412		Depth Progress (ft) 0		Drilling Time (hr)		Avg ROP (ft/hr)	Time Since LTI (days) 1,157	Time Since RI (days) 1,502				
Daily Time Log														
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments			Hole Section	Interval	Category	Activity	NPT		
05:00	19:00	14.00	6,412	6,412	M/U WEATHERFORD FLOAT SHOE, 1 CASING JOINT & FLOAT COLLAR, CHECK FLOAT (FLOAT GOOD), RUN 18 JTS 9 5/8" 40# L-80 LT&C, HOLE STOP DISPLACEING INSTALL CIRC SWEDGE & FILLED PIPE GOT MINIMAL RETURNS, RUN 15 JTS 9 5/8" 40# L-80 LT&C HOLE STOP DISPLACEING INSTALL CIRC SWEDGE & FILLED PIPE GOT NO RETURNS, RUN 25 JTS 9 5/8" 40# L-80 LT&C & 45 JTS 9 5/8" 40# J-55 LT&C STOP INSTALL CIRC SWEDGE FILLED PIPE HAD (200 PSI) WORK CASING UP & DOWN ATTEMPT TO REGAIN CIRC NO RETURNS PRESSURE FELL OFF TO 30 PSI RUN 44 JTS 9 5/8" 40# J-55 LT&C PICK UP 1 JTS 9 5/8" 40# J-55 LT&C TAG @ 6412' LAY DOWN TAG JT, PICK UP LANDING JT & CASING HANGER, LANDED CASING IN WELLHEAD. (SHOE @ 6403',FLOAT COLLAR @ 6357')			INT	DIR	CSG/CEMENT NT	RUN CASING			
19:00	20:00	1.00	6,412	6,412	RIG DOWN CASING TOOLS.			INT	DIR	CSG/CEMENT NT	RUN CASING			
20:00	20:30	0.50	6,412	6,412	HILD SFETY MEETING WITH RIG CREW, CEMENTER			INT	DIR	CSG/CEMENT NT	SAFETY MEETING			
20:30	21:00	0.50	6,412	6,412	RIG UP CEMENT HEAD, FILL CASING @ 50 SPM FOR 1282 STKS (CAUGHT 38 PSI @ 850 STKS) WHILE RIGGING UP CEMENT.			INT	DIR	CSG/CEMENT NT	COND MUD & CIRC			
21:00	02:00	5.00	6,412	6,412	TEST LINES TO 3000 PSI,PUMP 9 5/8" CEMENT JOB, PUMP 50 BBL LCM SPACER,PUMP 10 BBL FRESH WATER SPACER, LEAD= 630 SACKS (362 BBLS) PREMIUM PLUS W/4% PLEXCRETE STE, 3% CAS-1, 1% CAC12, 5# GILSONITE, 1/4# CELLOFLAKE, 1/4% SUOERSWEEP, 11.20 PPG, YIELD 3.23, TAIL= 275 SACKS (70 BBLS) UNIVSERAL PREMIUM MAXLIFE W/ 0.7% CAS-1, 0.3% CFL-2, 5# GILSONITE, 1/4# CELLOFLAKE, 1/4% SUOERSWEEP, 13.40 PPG, YIELD 1.44, 6 BBL/MIN PUMP RATE, SHUT DOWN WASH UP, DROP TOP PLUG, STSTART DISPLACEMENT @ 6 BBL/MIN PUMP RATE FOR 450 BBLS @ 500 PSI, SLOW RATE TO 3 BBLS/MIN FOR LAST 32 BBLS LAND TOP PLUG @ 482 BBLS, 1000 PSI HILD FOR 5 MIN, RELEASE PSI 2 BBLS BACK TO TRUCK, FLOAT HILD, RIG DOWN CEMENTERS. LEAD CEMENT TOP @ 2700' TAIL CEMENT TOP @ 5400'			INT	DIR	CSG/CEMENT NT	RUN CEMENT			
02:00	03:00	1.00	6,412	6,412	DAYLIGHT SAVINGS TIME			INT	DIR	CSG/CEMENT NT				
03:00	05:00	2.00	6,412	6,412	DRAIN STACK, INSTALL PACK OFF & TEST TO 5000 PSI (TEST GOOD), LAY DOWN LANDING JT, PICK UP JT OF DRILL PIPE & INSTALL WEARBUSHING, TRIPNIPPLE			INT	DIR	CSG/CEMENT NT	NIPPLE UP B.O.P./WELLHEAD			
05:00	06:00	1.00	6,412	6,412	LAY OUT BHA ON RACKS			INT	DIR	CSG/CEMENT NT	DIRECTIONAL WORK			
Drilling Parameters														
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq	
Bit Information														
Size (in)	Make	Model	Type	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)
12 1/4	HALLIBURTON	MM65DC	PDC	1-1-WT-S-X-1-WT-DMF	635	5,003	4,368.00	62.50	69.9	54.00	8.50	74.7	28	157
12 1/4		616-YR9	PDC	0-1-NO-S-X-1-WT-TD	5,003	6,412	1,409.00	30.00	47.0	14.50	15.50	68.8	30	157
Current BHA Components														
BHA No	Item Description				Make	Model	OD (in)	Jts	Length (ft)	Top Thread				
3	DRILL PIPE				ENSIGN DRILLING		5	178	5,582.51	IF				
3	HWDP				ENSIGN DRILLING		5	18	547.09	IF				
3	XO SUB				ENSIGN DRILLING		6 1/2	1	2.20	IF				
3	DRILL COLLAR				ENSIGN DRILLING		6 1/2	3	85.77	NC 46				
3	XO SUB				ENSIGN DRILLING		8	1	4.00	NC 46				
3	DRILL COLLAR				ENSIGN DRILLING		8	3	91.65	NC 56				
3	XO SUB				LEAM		8	1	2.58	NC 56				
3	NMDC				LEAM		8	1	30.49	REG				
3	NMDC				LEAM		8	1	30.81	REG				
3	UBHO SUB				LEAM		8	1	2.41	REG				
3	FLOAT SUB				LEAM		7 3/4	1	2.72	REG				
3	MOTOR WITH STABILIZER				LEAM	XD	8	1	28.27	REG				
Mud Reports														
Time 13:00	Type OIL BASE	Depth (ftKB) 6,412	Density (lb/gal) 9.20	Vis (s/qt) 60	PV Calc (cP) 11.0	YP Calc (lb/100ft²) 4	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 1.5	LCM (lb/bbl) 293,428.10	Chlor (mg/L) 46,000	Oil Water Ratio 78.3/21.7		
Electric Stab (V) 598.0		X Lime (lb/bbl) 4.1	HTHP Filtrate (mL/30min) 3.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl) 472.0	Cum Mud Lost to Hole (bbl) 582.0		Daily Mud Field Est (Cost) 293,428.10		Cum Mud Field Est (Cost) 401,673.19			
Time 19:00	Type OIL BASE	Depth (ftKB) 6,412	Density (lb/gal) 9.00	Vis (s/qt) 52	PV Calc (cP) 11.0	YP Calc (lb/100ft²) 2	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 3.0	LCM (lb/bbl) 293,428.10	Chlor (mg/L) 46,000	Oil Water Ratio 78.3/21.7		
Electric Stab (V) 598.0		X Lime (lb/bbl) 4.1	HTHP Filtrate (mL/30min) 3.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl) 1338.0	Cum Mud Lost to Hole (bbl) 1920.0		Daily Mud Field Est (Cost) 293,428.10		Cum Mud Field Est (Cost) 401,673.19			
Wellbore Design														
Casing Description				Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)				
CONDUCTOR				11/13/2013	20	94.00	J-55	WELDED	110.0	80.00				
SURFACE				11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	604.97				
INTERMEDIATE				11/1/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,404.82				
PLANNED PRODUCTION									18,236.0					
Survey Data														
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)					
5,778		9.50	261.79	5,771	91.53	-18.34	-89.93	0.28	-0.28					
5,872		9.58	265.31	5,864	107.10	-20.09	-105.40	0.63	0.09					
5,967		8.53	265.13	5,958	122.04	-21.33	-120.30	1.11	-1.11					
6,061		6.68	266.01	6,051	134.46	-22.31	-132.70	1.97	-1.97					
6,156		5.63	274.10	6,145	144.55	-22.36	-142.86	1.43	-1.11					
6,250		5.72	274.80	6,239	153.65	-21.64	-152.13	0.12	0.10					
6,345		6.16	273.57	6,333	163.28	-20.92	-161.94	0.48	0.46					
6,360		5.98	270.23	6,348	164.85	-20.87	-163.52	2.64	-1.20					



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/2/2014
Report # 16
Projected Days 19
Drilling Days 10
Current Depth 6,412
Depth Progress 0
Planned VS 0
Current VS
AFE # DV02164
Total AFE 8,033,600

Mud Logging Information			
Lithology and Shows		Max Trip Gas (units)	Max Drill Gas (units)
Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131		
SPRABERRY LOWER	6,704		
JO-MILL SAND	6,976		
DEAN	7,486		
WOLFCAMP-A (WFMP_A)	7,658		
WOLFCAMP-B (WFMP_B)	8,032		

AMERICAN ENERGY - PERMIAN BASIN LLC

Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/3/2014
Report #	17
Projected Days	19
Drilling Days	11
Current Depth	7,575
Depth Progress	1,163
Planned VS	0
Current VS	
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/14/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line		Drilling AFE 2,048,600		Daily Field Est (Cost) 286,558		Cum Field Est (Cost) 1,460,785													
Status at Report Time DRILL 8 3/4" HOLE @ 7575'																													
Operations Summary PICK UP BHA, SERVICE TOP DRIVE & RIG, TIH, PICK UP 5" DRILL PIPE, DRILL CEMENT & FLOAT COLLAR TO 6375', TEST CASING T/1500 PSI FOR 30 MINUTES (TEST GOOD) DRILL OUT REMAINDER OF CEMENT & SHOE TRACK T/6412', RELOG GAMA FROM 6349' - 6412' @ 126 FPH, SLIDE/ROTATE DRILL VERTICAL HOLE FROM 6412' - 7537' 1125' AT 87 FPH, SLIDE/ROTATE DRILL BUILDING CURVE FROM 7537' - 7575' 38' AT 19 FPH										Planned Operations DRILL 8 3/4" VERTICAL HOLE.																			
LS 7500', MD, 4.04° INC, 274.98° AZM, 7484.99' TVD, 10.02 VS, .97° DLS PTB: 7550' MD, 7534.87' TVD, 4.04° INC, 274.98° AZM, 9.72 VS , -9.72' E/W & -247.35' N/S BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID)																													
Start MD (ftKB)		6,412		End MD (ftKB)		7,575		Depth Progress (ft)		1,163		Drilling Time (hr)		15.00		Avg ROP (ft/hr) 77.5		Time Since LTI (days) 1,158		Time Since RI (days) 1,503									
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments				Hole Section		Interval		Category		Activity		NPT							
05:00		06:30		1.50		6,412		6,412		PICK UP LEAM 6 3/4" MOTOR, 7/8, 5.0, FXD @ 2.25, W/SLICK SLEEVE, 0.26 RPG, 6751 1165, TEST MTR & MWD (TEST GOOD), MAKE UP HALLIBURTON, 8 3/4", MMD55DM, S# 12549007				INT		DIR		CSG/CEMENT NT		DIRECTIONAL WORK									
06:30		07:00		0.50		6,412		6,412		SERVICE TOP DRIVE & RIG.				INT		DIR		CSG/CEMENT NT		LUBRICATE RIG									
07:00		10:30		3.50		6,412		6,412		TIH 99' - 5662" (FILL PIPE EVERY 30 SANDS) PULL TRIP NIPPLE, INSTALL ROT HEAD				INT		DIR		CSG/CEMENT NT		TRIPS									
10:30		12:30		2.00		6,412		6,412		PICK UP 5" DRILL PIPE OFF RACKS RUN 5756' - 6345' TAG CMT, FILL PIPE @ 6345'				INT		DIR		CSG/CEMENT NT		TRIPS									
12:30		13:30		1.00		6,412		6,412		DRILL CEMENT & FLOAT COLLAR TO 6375'. TEST CASING T/1500 PSI FOR 30 MINUTES (TEST GOOD) DRILL OUT REMAINDER OF CEMENT & SHOE TRACK T/6412'				INT		DIR		CSG/CEMENT NT		REAMING									
13:30		14:00		0.50		6,412		6,412		RELOG GAMA FROM 6349' - 6412' @ 126 FPH.				INT		DIR		CSG/CEMENT NT		DIRECTIONAL WORK									
14:00		03:00		13.00		6,412		7,537		ROTATE/SLIDE DRILL FROM 6412' - 7537', 1125' AT 87 FPH, ROTATE DRILL: 1030' IN 9.5 HOURS, 108 FPH AVERAGE ROP SLIDE DRILL: 95' IN 3.5 HOURS, 27 FPH AVERAGE ROP 73% ROTATE, 27% SLIDE. FULL REETURNS				PROD		DIR		DRILL		DRILL W/ MUD									
03:00		05:00		2.00		7,537		7,575		ROTATE/SLIDE DRILL FROM 7537' - 7575', 38' AT 19 FPH, ROTATE DRILL: 0' IN 0 HOURS, 0 FPH AVERAGE ROP SLIDE DRILL: 38' IN 2 HOURS, 19 FPH AVERAGE ROP % ROTATE, 100% SLIDE. FULL REETURNS				PROD		CURVE		DRILL		DRILL W/ MUD									
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wrt (1000lbf)		SO Str Wrt (1000lbf)		Drill Tq			
6,412		6,412												5		400		1,500.0		25									
6,412		6,511		1.00		0.00		99.0				475		28		550		2,717.0		30		185		175		6,000			
6,511		6,519		0.00		0.50		16.0		60		230		20		550		2,400.0		0		185		175		0			
6,519		6,700		2.00		0.00		90.5				450		28		550		2,630.0		30		185		175		6,000			
6,700		6,710		0.00		0.50		20.0		315		320		17		550		2,525.0		0		185		175		0			
6,710		6,795		0.50		0.00		170.0				450		30		550		2,765.0		30		185		175		6,000			
6,795		6,810		0.00		0.50		30.0		330		250		14		550		2,480.0		0		185		175		0			
6,810		6,890		0.50		0.00		160.0				450		30		550		2,655.0		30		185		175		6,000			
6,890		6,905		0.00		0.50		30.0		270		200		10		550		2,290.0		0		185		175		0			
6,905		6,984		0.50		0.00		158.0				400		21		550		2,595.0		30		185		175		6,000			
6,984		7,004		0.00		0.50		40.0		270		200		10		550		2,515.0		0		185		175		0			
7,004		7,268		2.50		0.00		105.6				450		22		550		2,700.0		30		185		175		6,000			
7,268		7,279		0.00		0.50		22.0		270		250		10		550		2,435.0		0		185		175		0			
7,279		7,279		0.50		0.00		164.0				415		20		550		2,690.0		30		185		175		6,000			
7,361		7,376		0.00		0.50		30.0		230		250		12		550		2,450.0		0		185		175		0			
7,376		7,537		2.00		0.00		80.5				400		20		550		2,650.0		30		185		175		6,000			
7,537		7,575		0.00		2.00		19.0		180		200		15		550		2,434.0		0		185		175		0			
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
12 1/4				616-YR9		PDC		0-1-NO-S-X-1-WT-TD		5,003		6,412		1,409.00		30.00		47.0		14.50		15.50		68.8		30		157	
8 3/4		HALLIBURTON		MMD55DM		PDC		-----		6,412		7,575		1,163.00		15.00		77.5		9.50		5.50		108.5		30		173	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
4		DRILL PIPE						ENSIGN DRILLING				5		200		6,313.24		IF											
4		XO SUB						LEAM				6 3/4		1		3.61		NC 56											
4		NMDC						LEAM				6 3/4		1		31.15		REG											
4		NMDC						LEAM				6 5/16		1		31.32		REG											
4		UBHO SUB						LEAM				6 1/2		1		2.30		REG											
4		FLOAT SUB										6 5/8		1		3.30		REG											
4		MOTOR WITH STABILIZER						LEAM		XD		6 3/4		1		26.08		REG											
Mud Reports																													
Time 00:30		Type OIL BASE		Depth (ftKB) 6,412		Density (lb/gal) 9.00		Vis (s/qt) 85		PV Calc (cP) 17.0		YP Calc (lb/100ft²) 5		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 2.8		LCM (lb/bbl)		Chlor (mg/L) 37,000		Oil Water Ratio 65.6/34.4					
Electric Stab (V) 391.0		X Lime (lb/bbl) 2.3		HTHP Filtrate (mL/30min) 14.0		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 218,219.80		Cum Mud Field Est (Cost) 336,609.89													
Time 13:30		OIL BASE		Depth (ftKB) 6,412		Density (lb/gal) 9.10		Vis (s/qt) 85		PV Calc (cP) 17.0		YP Calc (lb/100ft²) 5		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 2.0		LCM (lb/bbl)		Chlor (mg/L) 37,000		Oil Water Ratio 65.6/34.4					
Electric Stab (V) 391.0		X Lime (lb/bbl) 4.1		HTHP Filtrate (mL/30min) 14.0		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 218,219.80		Cum Mud Field Est (Cost) 336,609.89													
Time 01:30		OIL BASE		Depth (ftKB) 7,002		Density (lb/gal) 9.00		Vis (s/qt) 70		PV Calc (cP) 16.0		YP Calc (lb/100ft²) 4		Vis 3rpm 2		Vis 6rpm 3		LGS (%) 1.7		LCM (lb/bbl)		Chlor (mg/L) 27,000		Oil Water Ratio 65.6/34.4					
Electric Stab (V) 343.0		X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 12.0		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 218,219.80		Cum Mud Field Est (Cost) 336,609.89													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		80.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		604.97											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,404.82											
PLANNED PRODUCTION																18,236.0													
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
6,839		2.55		296.60		6,826		194.16		-23.35		-193.37		1.47		0.47													
6,934		3.43		290.45		6,921		198.63		-21.41		-197.92		0.98		0.93													
7,028		6.24		289.74		7,015		205.96		-18.70		-205.36		2.99		2.99													



UNIVERSITY 09 0817H

Report Date	11/3/2014
Report #	17
Projected Days	19
Drilling Days	11
Current Depth	7,575
Depth Progress	1,163
Planned VS	0
Current VS	
AFE #	DV02164
Total AFE	8,033,600

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)
7,123	5.28	285.00	7,109	214.91	-15.83	-214.44	1.13	-1.01
7,218	4.22	279.55	7,204	222.51	-14.11	-222.11	1.21	-1.12
7,311	4.48	286.75	7,297	229.29	-12.50	-228.97	0.65	0.28
7,406	4.92	277.96	7,391	236.80	-10.87	-236.55	0.89	0.46
7,500	4.04	274.98	7,485	244.05	-10.02	-243.84	0.97	-0.94

<p>Lithology and Shows</p> <p>CUR LITHOLOGY @ 7545: 5% DOLOMITIC LS 20% SS 70% SH 5% SILTST GRAYBURG @ 3078', SAN ANDRES @ 3389'</p> <p>UPPER SPRABERRY @ 6030' LOWER SPRABERRY @ 6704' JO-MILL SAND @ 6976' DEAN @ 7486</p> <p>LAST 24 HOURS: LS, SH, SILTST, SS</p>	<p>Max Trip Gas (units)</p>	<p>Avg Drill Gas (units)</p>	<p>Max Drill Gas (units)</p>
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Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658		
WOLFCAMP-B (WFMP_B)	8,032		

AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/4/2014
Report #	18
Projected Days	19
Drilling Days	9
Current Depth	7,993
Depth Progress	418
Planned VS	0
Current VS	
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18				Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line 8169		Drilling AFE 2,048,600		Daily Field Est (Cost) 78,793		Cum Field Est (Cost) 1,543,479													
Status at Report Time TOOH @ 3000'																													
Operations Summary SLIDE/ROTATE DRILL BUILDING CURVE FROM 7575' – 7895' 320' AT 45.72 FPH, CIRC, TOOH, WAIT ON ORDERS, PLAN CHANGE NEW TARGET LINE 8169' A CHANGE OF 23', TIH, SLIDE/ROTATE DRILL BUILDING CURVE FROM 7895' – 7993' 98' AT 21.8 FPH, CRIC, TOOH. LS 7940', MD, 28.14° INC, 216.62° AZM, 7901.17' TVD, 102.91 VS, 8.99° DLS PTB: 77991' MD, 7945.21' TVD, 32.39° INC, 214.70° AZM, 123.80 VS , 5.6' BELOW, 4.8' RIGHT. BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID)										Planned Operations TOOH, WORK BHA, TIH, DRILL 8 3/4" CURVE																			
Start MD (ftKB)		7,575		End MD (ftKB)		7,993		Depth Progress (ft)		418		Drilling Time (hr)		11.50		Avg ROP (ft/hr)		36.3		Time Since LTI (days)		1,159		Time Since RI (days)		1,504			
Daily Time Log																													
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments							Hole Section	Interval	Category	Activity		NPT												
05:00	12:00	7.00	7,575	7,895	ROTATE/SLIDE DRILL FROM 7575' - 7895', 320' AT 45.72 FPH, ROTATE DRILL: 0' IN 0 HOURS, 0 FPH AVERAGE ROP SLIDE DRILL: 320' IN 7 HOURS, 45.72 FPH AVERAGE ROP 0% ROTATE, 100% SLIDE. FULL REETURNS							PROD	CURVE	DRILL	DRILL W/ MUD														
12:00	12:30	0.50	7,895	7,895	CIRC BOTTTOMS UP SHAKERS CLEAN, CHECK FLOW WELL NOT FLOWING, PUMP SLUG.							PROD	CURVE	DRILL	COND MUD & CIRC		Yes												
12:30	16:00	3.50	7,895	7,895	TOOH F/7895' - 1982', DUE TO RATES							PROD	CURVE	DRILL	TRIPS		Yes												
16:00	17:30	1.50	7,895	7,895	WAIT ON ORDERS, PLAN CHANGE NEW TARGET LINE 8169' A CHANGE OF 23'							PROD	CURVE	DRILL	DIRECTIONAL WORK		Yes												
17:30	20:30	3.00	7,895	7,895	TIH F/1982' - 7895'							PROD	CURVE	DRILL	TRIPS		Yes												
20:30	01:00	4.50	7,895	7,993	ROTATE/SLIDE DRILL FROM 7895' - 7993', 98' AT 21.8 FPH, ROTATE DRILL: 0' IN 0 HOURS, 0 FPH AVERAGE ROP SLIDE DRILL: 98' IN 4.5 HOURS, 21.8 FPH AVERAGE ROP 0% ROTATE, 100% SLIDE. FULL REETURNS							PROD	CURVE	DRILL	DRILL W/ MUD														
01:00	02:00	1.00	7,993	7,993	CIRC BOTTTOMS UP SHAKERS CLEAN, CHECK FLOW WELL NOT FLOWING, PUMP SLUG.							PROD	CURVE	DRILL	COND MUD & CIRC		Yes												
02:00	05:00	3.00	7,993	7,993	TOOH F/7993' - 3000', DUE TO RATES							PROD	CURVE	DRILL	TRIPS		Yes												
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wrt (1000lbf)		SO Str Wrt (1000lbf)		Drill Tq			
7,575		7,895		0.00		7.00		45.7		310		425		19		550		2,545.0		0		185		175		0			
7,895		7,993		0.00		4.50		21.8		322		275		15		350		1,402.0		0		185		175		0			
NPT																													
Problem Type DOWNHOLE EQUIPMENT				Problem Sub Type MOTOR/DIRECTIONAL				Description				Start Date 11/3/2014		End Date 11/3/2014		Dur (hr) 8.50		Failed Item 6 3/4in MOTOR WITH STABILIZER		Accountable Party LEAM DRILLING SYSTEMS, LLC									
Problem Type DOWNHOLE EQUIPMENT				Problem Sub Type MOTOR/DIRECTIONAL				Description				Start Date 11/4/2014		End Date 11/4/2014		Dur (hr) 4.00		Failed Item 6 3/4in MOTOR WITH STABILIZER		Accountable Party LEAM DRILLING SYSTEMS, LLC									
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
12 1/4				616-YR9		PDC		0-1-NO-S-X-1-WT-TD		5.003		6.412		1,409.00		30.00		47.0		14.50		15.50		68.8		30		157	
8 3/4		HALLIBURTON		MMD55DM		PDC		-----		6.412		7.993		1,581.00		26.50		59.7		9.50		17.00		108.5		30		173	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
4		DRILL PIPE						ENSIGN DRILLING				5		238		7,476.24		IF											
4		XO SUB						LEAM				6 3/4		1		3.61		NC 56											
4		NMDC						LEAM				6 3/4		1		31.15		REG											
4		NMDC						LEAM				6 5/16		1		31.32		REG											
4		UBHO SUB						LEAM				6 1/2		1		2.30		REG											
4		FLOAT SUB						LEAM				6 5/8		1		3.30		REG											
4		MOTOR WITH STABILIZER						LEAM		XD		6 3/4		1		26.08		REG											
Mud Reports																													
Time 01:00		Type OIL BASE		Depth (ftKB) 7,898		Density (lb/gal) 9.00		Vis (s/qt) 58		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 4		Vis 3rpm 2		Vis 6rpm 3		LGS (%) 2.5		LCM (lb/bbl)		Chlor (mg/L) 35,000		Oil Water Ratio 69.9/30.1					
Electric Stab (V) 396.0		X Lime (lb/bbl) 3.1		HTHP Filtrate (mL/30min) 10.0		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 13,039.02		Cum Mud Field Est (Cost) 349,648.91													
Time 10:00		Type OIL BASE		Depth (ftKB) 7,781		Density (lb/gal) 9.00		Vis (s/qt) 58		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 4		Vis 3rpm 2		Vis 6rpm 3		LGS (%) 2.5		LCM (lb/bbl)		Chlor (mg/L) 33,000		Oil Water Ratio 69.9/30.1					
Electric Stab (V) 358.0		X Lime (lb/bbl) 3.4		HTHP Filtrate (mL/30min) 10.0		HTHP FC (1/32") 2		T HTHP (°F) 260.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 13,039.02		Cum Mud Field Est (Cost) 349,648.91													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		80.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		604.97											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,372.82											
PLANNED PRODUCTION																18,236.0													
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
7,720		19.08		222.59		7,700		273.32		-34.90		-275.29		6.22		5.97													
7,752		20.84		221.54		7,730		282.70		-43.01		-282.60		5.61		5.50													
7,783		23.39		220.31		7,759		292.61		-51.83		-290.24		8.36		8.23													
7,815		25.59		219.61		7,788		303.75		-62.00		-298.76		6.93		6.88													
7,847		25.59		222.24		7,817		315.48		-72.44		-307.81		3.55		0.00													
7,878		23.30		221.89		7,845		326.50		-81.97		-316.40		7.40		-7.39													
7,909		25.41		217.85		7,873		337.21		-91.78		-324.58		8.67		6.81													
7,940		28.14		216.62		7,901		348.56		-102.90		-333.02		8.99		8.81													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 7993: 25% LS 65% SH 10% SILTST GRAYBURG @ 3078' SAN ANDRES @ 3389' UPPER SPRABERRY @ 6030' LOWER SPRABERRY @ 6704' JO-MILL SAND @ 6976' DEAN @ 7486										Max Trip Gas (units)			Avg Drill Gas (units)			Max Drill Gas (units)													
LAST 24 HOURS: LS, SH, SILTST																													
Geological Data																													
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)													
SALADO								1,164																					
YATES								1,856																					



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/4/2014
Report # 18
Projected Days 19
Drilling Days 9
Current Depth 7,993
Depth Progress 418
Planned VS 0
Current VS
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658		
WOLFCAMP-B (WFMP_B)	8,032		



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/5/2014
Report # 19
Projected Days 19
Drilling Days 10
Current Depth 8,209
Depth Progress 216
Planned VS 0
Current VS 219
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18			Latitude 31.2874333000	Longitude -101.5913972000	Orig KB El... 2,694.00	RKB (ft) 30.00	County REAGAN		State TEXAS				
Report Summary															
Well Spud 10/15/2013	TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236	Target Line #2 TL:8,169' TVD @ 0' VS W/89.86° INC			Drilling AFE 2,048,600	Daily Field Est (Cost) 152,575		Cum Field Est (Cost) 1,687,603			
Status at Report Time DRILL 8 3/4" CURVE @ 8209'															
Operations Summary TOOH, WORK BHA, TIH, WASH FORM 7937' - 7993'; SLIDE/ROTATE DRILL BUILDING CURVE FROM 7993' – 8209' 216' AT 19.64 FPH						Planned Operations DRILL 8 3/4" CURVE									
LS 8127', MD, 45.55° INC, 200.80° AZM, 8053.88' TVD, 197.14 VS, 15.06° DLS PTB: 8179' MD, 8087.82' TVD, 52.90° INC, 198.50° AZM, 234.21 VS , 27' BELOW, 14.7' RIGHT.															
BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL UNIVERSITY 09 0818H (SKID)															
Start MD (ftKB) 7,993		End MD (ftKB) 8,209		Depth Progress (ft) 216		Drilling Time (hr) 11.00		Avg ROP (ft/hr) 19.6		Time Since LTI (days) 1,160		Time Since RI (days) 1,505			
Daily Time Log															
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments				Hole Section	Interval	Category	Activity	NPT		
05:00	06:30	1.50	7,993	7,993	TOOH F/3000' - BHA', DUE TO RATES				PROD	CURVE	DRILL	TRIPS	Yes		
06:30	12:00	5.50	7,993	7,993	LAY DOWN LEAM 6 3/4" MOTOR, 7/8, 5.0, FXD @ 2.25, W/SLICK SLEEVE, 0.26 RPG, 6751 1165, HALLIBURTON, 8 3/4", MMD55DM, S# 12549007, PICK UP LEAM 6 3/4" MOTOR, 7/8, 5.0, ADJ @ 2.60, W/SLICK SLEEVE 0.26 RPG, 6751XD-1140 TEST MTR & MWD (TEST GOOD), MAKE UP SMITH, 8 3/4", FHI 21 ODBPS, S# RD5296.				PROD	CURVE	DRILL	DIRECTIONAL WORK	Yes		
12:00	17:00	5.00	7,993	7,993	TIH F/BHA - 7932'				PROD	CURVE	DRILL	TRIPS	Yes		
17:00	18:00	1.00	7,993	7,993	WASH F/7937' TO 7993'; NO FILL				PROD	CURVE	DRILL	REAMING	Yes		
18:00	05:00	11.00	7,993	8,209	ROTATE/SLIDE DRILL FROM 7993' - 8209', 216' AT 19.64 FPH, ROTATE DRILL: 0' IN 0 HOURS, 0 FPH AVERAGE ROP SLIDE DRILL: 216' IN 11 HOURS, 19.64 FPH AVERAGE ROP 0% ROTATE, 100% SLIDE. FULL REETURNS				PROD	CURVE	DRILL	DRILL W/ MUD			
Drilling Parameters															
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq		
7,993	7,993						5	450	1,287.0	0	200	170	0		
7,993	8,083	0.00	4.50	20.0	330	300	40	450	2,130.0	0	200	170	0		
8,083	8,209	0.00	6.50	19.4	330	200	45	350	1,270.0	0	200	170	0		
Bit Information															
Size (in)	Make	Model	Type	Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)
8 3/4	HALLIBURTON	MMD55DM	PDC	1-1-WT-A-X-0-WT-BHA		6,412	7,993	1,581.00	26.50	59.7	9.50	17.00	108.5	30	173
8 3/4	SMITH	FHI21 ODBPS	INSERT	-----		7,993	8,209	216.00	11.00	19.6		11.00		45	117
Current BHA Components															
BHA No	Item Description				Make	Model	OD (in)		Jts	Length (ft)		Top Thread			
5	DRILL PIPE				ENSIGN DRILLING		5		258	8,114.24		IF			
5	NMDC				LEAM		6 3/4		1	31.15		REG			
5	NMDC				LEAM		6 5/16		1	31.32		REG			
5	UBHO SUB				LEAM		6 1/2		1	2.30		REG			
5	FLOAT SUB				LEAM		6 5/8		1	3.30		REG			
5	MUD MOTOR - BENT HOUSING				LEAM	XD	6 3/4		1	25.69		REG			
Mud Reports															
Time 00:30	Type OIL BASE	Depth (ftKB) 8,058	Density (lb/gal) 9.00	Vis (s/qt) 65	PV Calc (cP) 12.0	YP Calc (lbf/100ft²) 5	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 2.3	LCM (lb/bbl) 28,000	Chlor (mg/L) 28,000	Oil Water Ratio 72/28			
Electric Stab (V) 384.0	X Lime (lb/bbl) 3.1	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 11,332.11		Cum Mud Field Est (Cost) 352,529.48					
Wellbore Design															
Casing Description			Run Date		OD (in)	Wt (lb/ft)	Grade		Conn		Set Depth (ftKB)	Length (ft)			
CONDUCTOR			11/13/2013		20	94.00	J-55		WELDED		110.0	80.00			
SURFACE			11/15/2013		13 3/8	54.50	J-55		BUTTRESS THREAD		635.0	604.97			
INTERMEDIATE			11/1/2014		9 5/8	40.00	J-55		LT&C		6,402.8	6,372.82			
PLANNED PRODUCTION											18,236.0				
Survey Data															
MD (ftKB)		Incl (°)		Azim (°)		TVD (ftKB)	VS (ft)	NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)	
7,909		25.41		217.85		7,873	330.52	-91.78		-324.58		8.67		6.81	
7,940		28.14		216.62		7,901	343.12	-102.90		-333.02		8.99		8.81	
7,971		28.84		216.27		7,928	356.38	-114.80		-341.81		2.32		2.26	
8,002		31.48		211.52		7,955	370.01	-127.73		-350.47		11.47		8.52	
8,033		34.47		206.42		7,981	384.01	-142.49		-358.60		13.15		9.65	
8,065		36.93		203.61		8,007	398.78	-159.42		-366.48		9.24		7.69	
8,096		40.98		202.20		8,031	413.74	-177.37		-374.06		13.37		13.06	
8,127		45.55		200.80		8,054	429.72	-197.13		-381.83		15.06		14.74	
Mud Logging Information															
Lithology and Shows CUR LITHOLOGY @ 8130: 20% LS 70% SH 5% SILTST GRAYBURG @ 3078', SAN ANDRES @ 3389' UPPER SPRABERRY @ 6030' LOWER SPRABERRY @ 6704' JO-MILL SAND @ 6976' DEAN @ 7486								Max Trip Gas (units) 300		Avg Drill Gas (units) 385		Max Drill Gas (units) 543			
LAST 24 HOURS: LS, SH, SLTST															
Geological Data															
Formation Name						Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)					
SALADO						1,164									
YATES						1,856									
SEVEN RIVERS						1,992									
QUEEN						2,408									
GRAYBURG						3,078		3,078		3,077.9					
SAN ANDRES						3,389		3,389		3,388.9					
SPRABERRY UPPER						6,131		6,030		6,020.1					
SPRABERRY LOWER						6,704		6,704		6,691.2					
JO-MILL SAND						6,976		6,976		6,962.9					
DEAN						7,486		7,486		7,471.0					
WOLFCAMP-A (WFMP_A)						7,658									
WOLFCAMP-B (WFMP_B)						8,032									



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/6/2014
Report # 20
Projected Days 19
Drilling Days 11
Current Depth 8,412
Depth Progress 203
Planned VS 10,322
Current VS 396
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000	Longitude -101.5913972000	Orig KB El... 2,694.00	RKB (ft) 30.00	County REAGAN	State TEXAS						
Report Summary															
Well Spud 10/15/2013	TD Date	RR Date	Target Formation WOLFCAMP-B	Prop TD (ftKB) 18,236	Target Line #2 TL:8,169' TVD @ 0' VS W/89.86° INC		Drilling AFE 2,048,600	Daily Field Est (Cost) 68,680	Cum Field Est (Cost) 1,861,055						
Status at Report Time TIH @ 3000'															
Operations Summary SLIDE/ROTATE DRILL BUILDING CURVE FROM 8209' – 8412' 203' AT 20.3 FPH, CIRC, TOO H, WORK BHA, SERVICE TOP DRIVE & RIG, TIH LS 8362', MD, 79.76° INC, 184.98° AZM, 8161.07' TVD, 396.18 VS, 20.84° DLS PTB: 8412' MD, 8165.74' TVD, 89.51° INC, 181.23° AZM, 445.82 VS , 22' BELOW, 22' RIGHT. BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID))					Planned Operations TIH, DRILL LATERAL TO TD @ +/- 18,236'										
Start MD (ftKB) 8,209		End MD (ftKB) 8,412		Depth Progress (ft) 203		Drilling Time (hr) 10.00		Avg ROP (ft/hr) 20.3							
						Time Since LTI (days) 1,161		Time Since RI (days) 1,506							
Daily Time Log															
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments		Hole Section	Interval	Category	Activity	NPT				
05:00	15:00	10.00	8,209	8,412	ROTATE/SLIDE DRILL FROM 8209' - 8412', 203' AT 20.3 FPH, ROTATE DRILL: 0' IN 0 HOURS, 0 FPH AVERAGE ROP SLIDE DRILL: 203' IN 10 HOURS, 20.3 FPH AVERAGE ROP 0% ROTATE, 100% SLIDE. FULL RETURNS		PROD	CURVE	DRILL	DRILL W/ MUD					
15:00	18:00	3.00	8,412	8,412	PERFORMED CLEAN UP CYCLE PUMPING 2 HIGH VIS SWEEPS 1ST BOTTOMS UP: 20% SHAKER SCREEN COVERAGE 2ND BOTTOMS UP: SHAKERS CLEAN CONTINUOUS 0 RPM'S, 586 GPM'S (PUMP SLUG)		PROD	LAT	DRILL	COND MUD & CIRC					
18:00	23:00	5.00	8,412	8,412	TOOH F/8412' - BHA		PROD	LAT	DRILL	TRIPS					
23:00	02:00	3.00	8,412	8,412	LAY DOWN LEAM 6 3/4" MOTOR, 7/8, 5.0, ADJ @ 2.60, W/SLICK SLEEVE 0.26 RPG, 6751XD -1140, SMITH, 8 3/4", FHI 21 ODBPS, S# RD5296, PICK UP LEAM 6 3/4" MOTOR, 7/8, 5.0, FXD @ 1.75, W/SLICK SLEEVE 0.288 RPG, 6751XD-1169, TEST MTR & MWD (TEST GOOD), MAKE UP SMITH, 8 3/4", MDSI516MHPXG, S# JJ9957		PROD	LAT	DRILL	DIRECTIONAL WORK					
02:00	02:30	0.50	8,412	8,412	SERVICE TOP DRIVE & RIG		PROD	LAT	DRILL	LUBRICATE RIG					
02:30	05:00	2.50	8,412	8,412	TIH F/BHA - 3000'		PROD	LAT	DRILL	TRIPS					
Drilling Parameters															
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq		
8,209	8,318	0.00	5.50	19.8	315	250	50	350	1,430.0	0	200	170	0		
8,318	8,335	0.00	0.50	34.0	315	250	57	415	1,560.0	0	200	170	0		
8,335	8,353	0.00	1.00	18.0	315	175	57	459	1,950.0	0	200	170	0		
8,353	8,412	0.00	3.00	19.7	315	175	57	350	1,350.0	0	200	170	0		
Bit Information															
Size (in)	Make	Model	Typ	Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)
8 3/4	SMITH	FHI21 ODBPS	INSERT	1-2-WT-C-2-0-LT-BHA		7,993	8,412	419.00	21.00	20.0		21.00		57	120
8 3/4	SMITH	MDSI516MHPX G	PDC	-----											
Current BHA Components															
BHA No	Item Description				Make	Model	OD (in)	Jts	Length (ft)	Top Thread					
6	DRILL PIPE				ENSIGN DRILLING		5	264	8,320.00	IF					
6	NMDC				LEAM		6 3/4	1	29.89	REG					
6	NMDC				LEAM		6 5/16	1	31.32	REG					
6	UBHO SUB				LEAM		6 1/2	1	2.30	REG					
6	FLOAT SUB				LEAM		6 5/8	1	3.30	REG					
6	MUD MOTOR				LEAM	XD	6 3/4	1	24.19	REG					
Mud Reports															
Time 10:00	Type OIL BASE	Depth (ftKB) 8,316	Density (lb/gal) 9.00	Vis (s/qt) 58	PV Calc (cP) 11.0	YP Calc (lb/100ft²) 3	Vis 3rpm 1	Vis 6rpm 2	LGS (%) 0.0	LCM (lb/bbl)	Chlor (mg/L) 26,000	Oil Water Ratio 74.5/25.5			
Electric Stab (V) 424.0		X Lime (lb/bbl) 3.0	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl) 1301.0	Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 7,583.02		Cum Mud Field Est (Cost) 346,183.11				
Time 03:00	Type OIL BASE	Depth (ftKB) 8,412	Density (lb/gal) 9.00	Vis (s/qt) 57	PV Calc (cP) 11.0	YP Calc (lb/100ft²) 3	Vis 3rpm 1	Vis 6rpm 2	LGS (%) 0.0	LCM (lb/bbl)	Chlor (mg/L) 26,000	Oil Water Ratio 74.5/25.5			
Electric Stab (V) 418.0		X Lime (lb/bbl) 3.0	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 260.0	Mud Lost to Hole (bbl) 1301.0	Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 7,583.02		Cum Mud Field Est (Cost) 346,183.11				
Wellbore Design															
Casing Description				Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)					
CONDUCTOR				11/13/2013	20	94.00	J-55	WELDED	110.0	80.00					
SURFACE				11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	604.97					
INTERMEDIATE				11/1/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,372.82					
PLANNED PRODUCTION									18,236.0						
Survey Data															
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)							
8,159	49.77	200.27	8,075	435.36	-219.28	-390.12	13.24	13.19							
8,191	54.43	197.11	8,095	457.51	-243.20	-398.19	16.51	14.56							
8,222	58.92	195.00	8,112	479.65	-268.08	-405.34	15.56	14.48							
8,253	63.84	193.41	8,127	502.45	-294.46	-412.01	16.50	15.87							
8,285	68.94	191.48	8,140	526.50	-323.08	-418.31	16.87	15.94							
8,316	72.81	189.02	8,150	549.87	-351.89	-423.52	14.56	12.48							
8,348	77.03	186.03	8,158	573.62	-382.52	-427.55	15.98	13.19							
8,362	79.76	184.98	8,161	583.85	-396.16	-428.87	20.84	19.50							
Mud Logging Information															
Lithology and Shows CUR LITHOLOGY @ 8412: 10% LS 85% SH 5% SILTST GRAYBURG @ 3078', SAN ANDRES @ 3389' UPPER SPRABERRY @ 6030' LOWER SPRABERRY @ 6704' JO-MILL SAND @ 6976' DEAN @ 7486							Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)				
LAST 24 HOURS: LS, SH, SLTST															
Geological Data															
Formation Name					Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)						
SALADO					1,164										
YATES					1,856										
SEVEN RIVERS					1,992										
QUEEN					2,408										
GRAYBURG					3,078		3,078		3,077.9						
SAN ANDRES					3,389		3,389		3,388.9						
SPRABERRY UPPER					6,131		6,030		6,020.1						
SPRABERRY LOWER					6,704		6,704		6,691.2						
JO-MILL SAND					6,976		6,976		6,962.9						



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/6/2014
Report #	20
Projected Days	19
Drilling Days	11
Current Depth	8,412
Depth Progress	203
Planned VS	10,322
Current VS	396
AFE #	DV02164
Total AFE	8,033,600

Geological Data

Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/7/2014
Report # 21
Projected Days 19
Drilling Days 12
Current Depth 10,098
Depth Progress 1,686
Planned VS 10,322
Current VS 1,957
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS				
Report Summary																		
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #2 TL:8,169' TVD @ 0' VS W/89.86° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 77,957		Cum Field Est (Cost) 1,950,108	
Status at Report Time DRILL LATERAL @ 10,098'																		
Operations Summary TIH, RELOG WITH GAMMA FROM 8352' - 8412' @ 120 FPH, SLIDE/ROTATE DRILL LATERAL FROM 8412' - 10,098' 1686' AT 86.46 FPH										Planned Operations DRILL LATERAL TO TD @ +/- 18,236'								
LS 9924', MD, 90.22° INC, 179.70° AZM, 8168.92' TVD, 1956.57 VS, 1.61" DLS PTB: 9972' MD, 8168.74' TVD, 90.22° INC, 179.70° AZM, 2004.57 VS , 4.9' ABOVE, OTL.																		
BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)																		
Start MD (ftKB) 8,412			End MD (ftKB) 10,098			Depth Progress (ft) 1,686			Drilling Time (hr) 19.50			Avg ROP (ft/hr) 86.5			Time Since LTI (days) 1,162		Time Since RI (days) 1,507	
Daily Time Log																		
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity		NPT		
05:00	09:00	4.00	8,412	8,412	TIH F/3000 - 8352'						PROD	LAT	DRILL	TRIPS				
					PULL TRIP NIPPLE, INSTALL ROT HEAD													
09:00	09:30	0.50	8,412	8,412	RELOG WITH GAMMA FROM 8352' - 8412' @ 120 FPH						PROD	LAT	DRILL	DIRECTIONAL WORK				
09:30	05:00	19.50	8,412	10,098	ROTATE/SLIDE DRILL FROM 8412' - 10098', 1686' AT 86.5 FPH, ROTATE DRILL: 1392' IN 13 HOURS, 107.1 FPH AVERAGE ROP SLIDE DRILL: 294' IN 6.5 HOURS, 45.23 FPH AVERAGE ROP 67% ROTATE, 33% SLIDE. FULL RETURNS						PROD	LAT	DRILL	DRILL W/ MUD				
Drilling Parameters																		
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)		TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq				
8,412	8,459	1.00	0.00	47.0			500	20	538	2,260.0	30	205	185	6,000				
8,459	8,491	0.00	1.00	32.0		330	225	26	362	1,260.0	0	205	185	0				
8,491	8,586	1.00	0.00	95.0			500	25	538	2,600.0	80	205	185	10,000				
8,586	8,607	0.00	0.50	42.0		180	150	35	538	1,985.0	0	205	185	0				
8,607	8,707	1.50	0.00	66.7			440	25	538	2,570.0	80	205	185	10,000				
8,707	8,737	0.00	0.50	60.0		160	275	35	538	2,172.0	0	205	185	0				
8,737	8,799	0.50	0.00	124.0			460	20	586	2,927.0	80	205	185	8,000				
8,799	8,823	0.00	0.50	48.0		180	275	35	586	2,740.0	0	205	185	0				
8,823	8,952	1.00	0.00	129.0			400	15	586	2,950.0	80	205	185	8,000				
8,952	8,974	0.00	0.50	44.0		120	275	35	586	2,715.0	0	205	185	0				
8,974	9,318	3.00	0.00	114.7			400	20	594	2,900.0	100	205	185	9,000				
9,318	9,338	0.00	0.50	40.0		90	300	16	594	2,820.0	0	205	185	0				
9,338	9,410	0.50	0.00	144.0			400	22	594	2,900.0	100	205	185	8,000				
9,410	9,435	0.00	0.50	50.0		120	400	26	594	2,830.0	0	205	185	0				
9,435	9,501	0.50	0.00	132.0			475	26	594	2,950.0	100	205	185	10,000				
9,501	9,531	0.00	0.50	60.0		150	350	20	594	2,890.0	0	205	185	0				
9,531	9,782	2.00	0.00	125.5			400	22	594	2,920.0	100	205	185	10,000				
9,782	9,812	0.00	0.50	60.0		120	300	24	594	2,830.0	0	205	185	0				
9,812	9,877	0.50	0.00	130.0			470	25	594	3,000.0	100	205	185	10,000				
9,877	9,902	0.00	0.50	50.0		180	350	33	594	2,870.0	0	205	185	0				
9,902	10,063	1.50	0.00	107.3			450	27	594	3,000.0	100	210	175	9,000				
10,063	10,098	0.00	1.00	35.0		124	450	33	594	2,781.0	0	210	175	9,000				
Bit Information																		
Size (in)	Make	Model	Type	Dull Out			Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)		
8 3/4	SMITH	FHI21 ODBPS	INSERT	1-2-WT-C-2-0-LT-BHA			7,993	8,412	419.00	21.00	20.0		21.00		57	120		
8 3/4	SMITH	MDSI516MHPX G	PDC	-----			8,412	10,098	1,686.00	19.50	86.5	13.00	6.50	107.1	35	271		
Current BHA Components																		
BHA No	Item Description					Make	Model	OD (in)	Jts	Length (ft)	Top Thread							
6	DRILL PIPE					ENSIGN DRILLING		5	318	10,006.00	IF							
6	NMDC					LEAM		6 3/4	1	29.89	REG							
6	NMDC					LEAM		6 5/16	1	31.32	REG							
6	UBHO SUB					LEAM		6 1/2	1	2.30	REG							
6	FLOAT SUB					LEAM		6 5/8	1	3.30	REG							
6	MUD MOTOR					LEAM	XD	6 3/4	1	24.19	REG							
Mud Reports																		
Time 15:00	Type OIL BASE	Depth (ftKB) 8,412	Density (lb/gal) 9.05	Vis (s/qt) 59	PV Calc (cP) 12.0	YP Calc (lb/100ft²) 3	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 3.7	LCM (lb/bbl) 27,500	Chlor (mg/L) 75/25	Oil Water Ratio						
Electric Stab (V) 406.0	X Lime (lb/bbl) 2.7	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 1301.0	Cum Mud Lost to Hole (bbl) 1301.0	Daily Mud Field Est (Cost) 5,003.76	Cum Mud Field Est (Cost) 351,186.88										
Time 03:00	Type OIL BASE	Depth (ftKB) 9,332	Density (lb/gal) 9.00	Vis (s/qt) 51	PV Calc (cP) 11.0	YP Calc (lb/100ft²) 4	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 5.9	LCM (lb/bbl) 31,000	Chlor (mg/L) 76.9/23.1	Oil Water Ratio						
Electric Stab (V) 429.0	X Lime (lb/bbl) 2.6	HTHP Filtrate (mL/30min) 6.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 1301.0	Cum Mud Lost to Hole (bbl) 1301.0	Daily Mud Field Est (Cost) 5,003.76	Cum Mud Field Est (Cost) 351,186.88										
Wellbore Design																		
Casing Description				Run Date		OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)							
CONDUCTOR				11/13/2013		20	94.00	J-55	WELDED	110.0	80.00							
SURFACE				11/15/2013		13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	604.97							
INTERMEDIATE				11/1/2014		9 5/8	40.00	J-55	LT&C	6,402.8	6,372.82							
PLANNED PRODUCTION										18,236.0								
Survey Data																		
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)		
9,362		90.48		178.30		8,168		1,394.80		-1,394.80		-399.21		1.34		0.09		
9,453		90.57		179.00		8,167		1,485.77		-1,485.77		-397.06		0.78		0.10		
9,548		87.49		180.58		8,168		1,580.74		-1,580.74		-396.71		3.64		-3.24		
9,642		88.29		180.76		8,172		1,674.67		-1,674.67		-397.81		0.87		0.85		
9,734		90.75		182.34		8,173		1,766.63		-1,766.63		-400.30		3.18		2.67		
9,829		91.71		179.35		8,171		1,861.58		-1,861.58		-401.70		3.30		1.01		
9,924		90.22		179.70		8,169		1,956.56		-1,956.56		-400.91		1.61		-1.57		
10,018		92.42		179.53		8,167		2,050.53		-2,050.53		-400.28		2.35		2.34		
Mud Logging Information																		
Lithology and Shows CUR LITHOLOGY @ 9332' 5% LS 95% SH									Max Trip Gas (units)		Avg Drill Gas (units)			Max Drill Gas (units)				
LAST 24 HOURS: LS, SH																		
Geological Data																		
Formation Name							Prog Top TVD (ftKB)			Drill Top MD (ftKB)			Drill Top (TVD) (ftKB)					
SALADO							1,164											
YATES							1,856											



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/7/2014
Report # 21
Projected Days 19
Drilling Days 12
Current Depth 10,098
Depth Progress 1,686
Planned VS 10,322
Current VS 1,957
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/8/2014
Report # 22
Projected Days 19
Drilling Days 13
Current Depth 12,589
Depth Progress 2,491
Planned VS 10,322
Current VS 4,484
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS			
Report Summary																	
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #2 TL:8,169' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 74,775		Cum Field Est (Cost) 2,024,883	
Status at Report Time DRILL LATERAL @ 12,589'																	
Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 10,098' – 12,589' 2491' AT 103.8 FPH LS 12452', MD, 90.13° INC, 179.53° AZM, 8172.57' TVD, 4483.67 VS, 2.04° DLS PTB: 12500' MD, 8172.46' TVD, 90.13° INC, 179.53° AZM, 4531.67 VS , 7.4' ABOVE, 1.8' RIGHT. BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)								Planned Operations DRILL LATERAL TO TD @ +/- 18,236'									
Start MD (ftKB) 10,098		End MD (ftKB) 12,589		Depth Progress (ft) 2,491		Drilling Time (hr) 24.00		Avg ROP (ft/hr) 103.8		Time Since LTI (days) 1,163		Time Since RI (days) 1,508					
Daily Time Log																	
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity	NPT		
05:00	05:00	24.00	10,098	12,589	ROTATE/SLIDE DRILL FROM 10,098' - 12,589', 2491' AT 103.8 FPH, ROTATE DRILL: 2156' IN 18 HOURS, 119.8 FPH AVERAGE ROP SLIDE DRILL: 335' IN 6 HOURS, 55.8 FPH AVERAGE ROP 75% ROTATE, 25% SLIDE. FULL RETURNS						PROD	LAT	DRILL	DRILL W/ MUD			
Drilling Parameters																	
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq				
10,098	10,349	1.50	0.00	167.3		450	15	594	3,010.0	100	210	175	8,000				
10,349	10,376	0.00	0.50	54.0	180	150	21	594	2,915.0	0	210	175	0				
10,376	10,632	2.00	0.00	128.0		500	18	594	3,140.0	100	210	175	10,000				
10,632	10,667	0.00	0.50	70.0	160	200	25	594	2,915.0	0	210	175	0				
10,667	10,821	1.00	0.00	154.0		420	20	594	3,115.0	100	210	175	8,000				
10,821	10,846	0.00	0.50	50.0	170	300	32	594	3,015.0	0	210	175	0				
10,846	11,105	2.00	0.00	129.5		500	25	594	3,195.0	100	210	175	10,000				
11,105	11,145	0.00	1.00	40.0	170	300	30	594	3,025.0	0	210	175	0				
11,145	11,478	2.50	0.00	133.2		450	15	594	3,070.0	100	210	175	8,000				
11,478	11,503	0.00	0.50	50.0	180	160	28	594	2,360.0	0	210	175	0				
11,503	11,847	3.00	0.00	114.7		430	22	594	3,200.0	100	210	175	10,000				
11,847	11,883	0.00	1.00	36.0	150	250	22	594	3,000.0	0	210	175	0				
11,883	11,940	0.50	0.00	114.0		480	27	594	3,270.0	100	210	175	12,000				
11,940	11,981	0.00	0.50	82.0	135	340	25	594	3,200.0	0	210	175	0				
11,981	12,033	0.50	0.00	104.0		400	16	594	3,270.0	100	210	175	10,000				
12,033	12,068	0.00	0.50	70.0	180	400	31	594	3,240.0	0	210	175	0				
12,068	12,405	3.50	0.00	96.3		500	28	594	3,350.0	80	235	165	12,000				
12,405	12,441	0.00	0.50	72.0	180	350	39	594	3,220.0	0	235	165	0				
12,441	12,500	0.50	0.00	118.0		400	20	594	3,300.0	80	235	165	12,000				
12,500	12,535	0.00	0.50	70.0	180	400	34	594	3,240.0	0	235	165	0				
12,535	12,589	0.00	1.00	54.0		450	20	594	3,300.0	0	235	165	12,000				
Bit Information																	
Size (in)	Make		Model	Typ	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)		
8 3/4	SMITH		FHI21 ODBPS	INSERT	1-2-WT-C-2-0-LT-BHA	7,993	8,412	419.00	21.00	20.0		21.00	116.5	57	120		
8 3/4	SMITH		MDSI516MHPX G	PDC	-----	8,412	12,589	4,177.00	43.50	96.0	30.00	13.50	116.5	39	271		
Current BHA Components																	
BHA No	Item Description					Make	Model	OD (in)	Jts	Length (ft)	Top Thread						
6	DRILL PIPE					ENSIGN DRILLING		5	397	12,497.00	IF						
6	NMDC					LEAM		6 3/4	1	29.89	REG						
6	NMDC					LEAM		6 5/16	1	31.32	REG						
6	UBHO SUB					LEAM		6 1/2	1	2.30	REG						
6	FLOAT SUB					LEAM		6 5/8	1	3.30	REG						
6	MUD MOTOR					LEAM	XD	6 3/4	1	24.19	REG						
Mud Reports																	
Time 15:00	Type OIL BASE		Depth (ftKB) 10,636	Density (lb/gal) 9.00	Vis (s/qt) 49	PV Calc (cP) 12.0	YP Calc (lb/100ft²) 3	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 8.0	LCM (lb/bbl) 28,000	Chlor (mg/L) 77.8/22.2	Oil Water Ratio				
Electric Stab (V) 621.0	X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 6.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 1301.0	Cum Mud Lost to Hole (bbl) 1301.0	Daily Mud Field Est (Cost) 8,967.26	Cum Mud Field Est (Cost) 360,154.14								
Time 03:00	Type OIL BASE		Depth (ftKB) 11,877	Density (lb/gal) 9.00	Vis (s/qt) 48	PV Calc (cP) 12.0	YP Calc (lb/100ft²) 2	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 7.5	LCM (lb/bbl) 29,500	Chlor (mg/L) 78.9/21.1	Oil Water Ratio				
Electric Stab (V) 709.0	X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 1301.0	Cum Mud Lost to Hole (bbl) 1301.0	Daily Mud Field Est (Cost) 8,967.26	Cum Mud Field Est (Cost) 360,154.14								
Wellbore Design																	
Casing Description					Run Date		OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)		Length (ft)				
CONDUCTOR					11/13/2013		20	94.00	J-55	WELDED	110.0		80.00				
SURFACE					11/15/2013		13 3/8	54.50	J-55	BUTTRESS THREAD	635.0		604.97				
INTERMEDIATE					11/1/2014		9 5/8	40.00	J-55	LT&C	6,402.8		6,372.82				
PLANNED PRODUCTION											18,236.0						
Survey Data																	
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)	
11,799		91.10		177.77		8,176		3,830.88		-3,830.88		-374.43		1.39		1.34	
11,892		91.45		178.47		8,173		3,923.80		-3,923.80		-371.38		0.84		0.38	
11,985		90.31		180.05		8,172		4,016.78		-4,016.78		-370.18		2.09		-1.23	
12,077		87.76		181.29		8,174		4,108.75		-4,108.75		-371.25		3.08		-2.77	
12,170		89.69		180.29		8,176		4,201.71		-4,201.71		-372.54		2.34		2.08	
12,262		90.31		180.58		8,176		4,293.71		-4,293.71		-373.23		0.74		0.67	
12,357		91.63		180.76		8,174		4,388.69		-4,388.69		-374.34		1.40		1.39	
12,452		90.13		179.53		8,173		4,483.67		-4,483.67		-374.58		2.04		-1.58	
Mud Logging Information																	
Lithology and Shows CUR LITHOLOGY @ 12,330' 10% LS 90% SH									Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)				
LAST 24 HOURS: LS, SH																	
Geological Data																	
Formation Name							Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)						
SALADO							1,164										
YATES							1,856										
SEVEN RIVERS							1,992										
QUEEN							2,408										
GRAYBURG							3,078				3,078		3,077.9				
SAN ANDRES							3,389				3,389		3,388.9				
SPRABERRY UPPER							6,131				6,030		6,020.1				
SPRABERRY LOWER							6,704				6,704		6,691.2				



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/8/2014
Report # 22
Projected Days 19
Drilling Days 13
Current Depth 12,589
Depth Progress 2,491
Planned VS 10,322
Current VS 4,484
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/9/2014
Report # 23
Projected Days 19
Drilling Days 14
Current Depth 13,935
Depth Progress 1,346
Planned VS 10,322
Current VS 5,879
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS					
Report Summary																			
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #2 TL:8,169' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 90,952		Cum Field Est (Cost) 2,104,734			
Status at Report Time DRILL LATERAL @ 13,935'																			
Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 12,589' – 13,620' 1031' AT 89.7 FPH, SERVICE RIG & TOP DRIVE, SLIDE/ROTATE DRILL LATERAL FROM 13,620' – 13,817' 197' AT 30.3 FPH, CIRC HOLE CLEAN, SLIDE/ROTATE DRILL LATERAL FROM 13,817' – 13,935' 118' AT 26.2 FPH LS 13,848', MD, 88.46° INC, 181.46° AZM, 8173.66' TVD, 5879.09 VS, 1.07° DLS PTB: 13,896' MD, 8174.95' TVD, 88.46° INC, 181.46° AZM, 5927.05 VS , 9.7' ABOVE, 17' RIGHT. BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)								Planned Operations DRILL LATERAL TO TD @ +/- 18,236'											
Start MD (ftKB) 12,589			End MD (ftKB) 13,935			Depth Progress (ft) 1,346		Drilling Time (hr) 22.50		Avg ROP (ft/hr) 59.8		Time Since LTI (days) 1,164		Time Since RI (days) 1,509					
Daily Time Log																			
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity	NPT					
05:00	16:30		12,589	13,620	ROTATE/SLIDE DRILL FROM 12,589' - 13,620', 1031' AT 89.7 FPH, ROTATE DRILL: 864' IN 7 HOURS, 123.4 FPH AVERAGE ROP SLIDE DRILL: 167' IN 4.5 HOURS, 37.1 FPH AVERAGE ROP 61% ROTATE, 39% SLIDE. FULL RETURNS					PROD		LAT	DRILL	DRILL W/ MUD					
16:30	17:00	0.50	13,620	13,620	SERVICE RIG & TOP DRIVE					PROD		LAT	DRILL	LUBRICATE RIG					
17:00	23:30	6.50	13,620	13,804	ROTATE/SLIDE DRILL FROM 13,620' - 13,817', 197' AT 30.3 FPH, ROTATE DRILL: 103' IN 1 HOURS, 103 FPH AVERAGE ROP SLIDE DRILL: 94' IN 5.5 HOURS, 17.1 FPH AVERAGE ROP 15% ROTATE, 85% SLIDE. FULL RETURNS					PROD		LAT	DRILL	DRILL W/ MUD					
23:30	00:30	1.00	13,804	13,804	CIRC HOLE CLEAN PUMP SWEEP TO HELP WITH SLIDEING.					PROD		LAT	DRILL	COND MUD & CIRC					
00:30	05:00	4.50	13,804	13,935	ROTATE/SLIDE DRILL FROM 13,817' - 13,935', 118' AT 26.2 FPH, ROTATE DRILL: 60' IN .5 HOURS, 120 FPH AVERAGE ROP SLIDE DRILL: 58' IN 4 HOURS, 14.5 FPH AVERAGE ROP 11% ROTATE, 89% SLIDE. FULL RETURNS					PROD		LAT	DRILL	DRILL W/ MUD					
Drilling Parameters																			
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)		WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)		RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq		
12,589		12,688		0.50	0.00	198.0		500		27	594	3,360.0		80	235	165	12,000		
12,688		12,723		0.00	1.00	35.0	180	285		35	594	3,220.0		0	235	165	0		
12,723		12,876		1.50	0.00	102.0		500		25	594	3,490.0		85	235	165	13,000		
12,876		12,898		0.00	0.50	44.0	180	125		35	489	2,250.0		0	235	165	0		
12,898		12,971		0.50	0.00	146.0		500		22	594	3,450.0		85	235	165	13,000		
12,971		13,006		0.00	1.00	35.0	170	250		38	594	3,315.0		0	235	165	0		
13,006		13,065		0.50	0.00	118.0		400		22	594	3,400.0		85	235	165	10,000		
13,065		13,100		0.00	1.00	35.0	180	230		33	594	3,290.0		0	235	165	0		
13,100		13,255		1.00	0.00	155.0		425		24	594	3,560.0		85	235	165	11,000		
13,255		13,295		0.00	1.00	40.0	0	250		38	594	3,346.0		0	240	175	0		
13,295		13,620		3.00	0.00	108.3		500		24	594	3,596.0		85	240	170	13,000		
13,620		13,665		0.00	1.00	45.0	0	230		50	594	3,280.0		0	240	170	0		
13,665		13,712		0.50	0.00	94.0		430		26	594	3,500.0		85	240	170	12,000		
13,712		13,748		0.00	3.00	12.0	0	130		30	594	3,350.0		0	240	170	0		
13,748		13,804		0.50	0.00	112.0		450		28	594	3,500.0		100	240	170	12,000		
13,804		13,817		0.00	1.50	8.7	0	100		30	594	3,500.0		0	240	170	0		
13,817		13,835		0.00	1.00	18.0	0	100		30	594	3,500.0		0	240	170	0		
13,835		13,895		0.50	0.00	120.0		190		26	594	3,150.0		100	240	170	12,000		
13,895		13,935		0.00	3.00	13.3	0	190		15	594	3,020.0		0	240	170	0		
Bit Information																			
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)	
8 3/4	SMITH		FHI21 ODBPS		INSERT		1-2-WT-C-2-0-LT-BHA		7,993	8,412	419.00	21.00	20.0		21.00		57	120	
8 3/4	SMITH		MDSI516MHPX G		PDC		-----		8,412	13,935	5,523.00	66.00	83.7	38.50	27.50	117.4	50	271	
Current BHA Components																			
BHA No		Item Description					Make		Model		OD (in)		Jts	Length (ft)		Top Thread			
6		DRILL PIPE					ENSIGN DRILLING				5		440	13,843.00		IF			
6		NMDC					LEAM				6 3/4		1	29.89		IF			
6		NMDC					LEAM				6 5/16		1	31.32		IF			
6		UBHO SUB					LEAM				6 1/2		1	2.30		IF			
6		FLOAT SUB					LEAM				6 5/8		1	3.30		IF			
6		MUD MOTOR					LEAM		XD			6 3/4		1	24.19		IF		
Mud Reports																			
Time 15:00	Type OIL BASE		Depth (ftKB) 13,000		Density (lb/gal) 9.15		Vis (s/qt) 49	PV Calc (cP) 11.0		YP Calc (lb/100ft²) 3		Vis 3rpm 2	Vis 6rpm 3	LGS (%) 7.7		LCM (lb/bbl)		Chlor (mg/L) 29,000	Oil Water Ratio 79.9/20.1
Electric Stab (V) 691.0		X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 6,955.17		Cum Mud Field Est (Cost) 344,571.86			
Time 03:00	Type OIL BASE		Depth (ftKB) 13,802		Density (lb/gal) 9.20		Vis (s/qt) 49	PV Calc (cP) 12.0		YP Calc (lb/100ft²) 2		Vis 3rpm 2	Vis 6rpm 3	LGS (%) 6.5		LCM (lb/bbl)		Chlor (mg/L) 29,000	Oil Water Ratio 77.8/22.2
Electric Stab (V) 729.0		X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 6,955.17		Cum Mud Field Est (Cost) 344,571.86			
Wellbore Design																			
Casing Description					Run Date			OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)	
CONDUCTOR					11/13/2013			20		94.00		J-55		WELDED		110.0		80.00	
SURFACE					11/15/2013			13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		604.97	
INTERMEDIATE					11/1/2014			9 5/8		40.00		J-55		LT&C		6,402.8		6,372.82	
PLANNED PRODUCTION																18,236.0			
Survey Data																			
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)			
13,207		90.84		180.23		8,173		5,238.48		-5,238.48		-363.73		3.08		2.32			
13,298		87.49		180.05		8,175		5,329.46		-5,329.46		-363.96		3.69		-3.68			
13,389		88.37		180.05		8,178		5,420.40		-5,420.40		-364.04		0.97		0.97			
13,481		90.31		180.23		8,179		5,512.39		-5,512.39		-364.26		2.12		2.11			
13,572		92.07		181.81		8,177		5,603.35		-5,603.35		-365.88		2.60		1.93			
13,664		92.42		182.34		8,173		5,695.22		-5,695.22		-369.21		0.69		0.38			
13,756		89.43		181.64		8,172		5,787.14		-5,787.14		-372.40		3.34		-3.25			
13,848		88.46		181.46		8,174		5,879.09		-5,879.09		-374.89		1.07		-1.05			
Mud Logging Information																			
Lithology and Shows CUR LITHOLOGY @ 13,920' 10% LS 90% SH										Max Trip Gas (units)			Avg Drill Gas (units) 634			Max Drill Gas (units) 1,313			
LAST 24 HOURS: LS, SH																			



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/9/2014
Report # 23
Projected Days 19
Drilling Days 14
Current Depth 13,935
Depth Progress 1,346
Planned VS 10,322
Current VS 5,879
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/10/2014
Report # 24
Projected Days 19
Drilling Days 15
Current Depth 15,102
Depth Progress 1,167
Planned VS 10,322
Current VS 7,003
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS										
Report Summary																								
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #2 TL:8,169' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 99,179		Cum Field Est (Cost) 2,158,115								
Status at Report Time DRILL LATERAL @ 15,102'																								
Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 13,935' – 15,102' 1167' AT 48.6 FPH LS 14,973', MD, 90.66° INC, 174.78° AZM, 8179.79' TVD, 7003.07 VS, 1.94° DLS PTB: 15,021' MD, 8179.23' TVD, 90.66° INC, 174.78° AZM, 7050.87 VS , 6.4' ABOVE, 5.7' RIGHT. BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)								Planned Operations DRILL LATERAL TO TD @ +/- 18,236'																
Start MD (ftKB) 13,935		End MD (ftKB) 15,102		Depth Progress (ft) 1,167		Drilling Time (hr) 24.00		Avg ROP (ft/hr) 48.6		Time Since LTI (days) 1,165		Time Since RI (days) 1,510												
Daily Time Log																								
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity		NPT								
05:00	05:00	24.00	13,935	15,102	ROTATE/SLIDE DRILL FROM 13,935' - 15,102', 1167' AT 48.6 FPH, ROTATE DRILL: 908' IN 8.5 HOURS, 106.8 FPH AVERAGE ROP SLIDE DRILL: 259' IN 15.5 HOURS, 16.7 FPH AVERAGE ROP 35% ROTATE, 65% SLIDE. FULL RETURNS						PROD	LAT	DRILL	DRILL W/ MUD										
Drilling Parameters																								
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)		WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq						
13,935		14,079		1.00	0.00	144.0		375		26	594	3,480.0		95		240	170	11,000						
14,079		14,109		0.00	1.50	20.0	35	150		22	594	3,231.0		0		240	170	0						
14,109		14,171		0.50	0.00	124.0		300		10	594	3,535.0		85		240	170	10,000						
14,171		14,207		0.00	2.00	18.0	160	150		35	594	3,360.0		0		240	170	0						
14,207		14,361		1.50	0.00	102.7		300		20	594	3,635.0		95		240	125	12,000						
14,361		14,386		0.00	2.50	10.0	160	150		40	594	3,295.0		0		240	125	0						
14,386		14,550		1.50	0.00	109.3		300		15	594	3,470.0		95		240	125	10,000						
14,550		14,580		0.00	1.50	20.0	180	150		35	594	2,790.0		0		240	125	0						
14,580		14,739		1.50	0.00	106.0		475		15	594	3,460.0		95		240	125	10,000						
14,739		14,764		0.00	1.50	16.7	180	300		56	594	3,050.0		0		240	125	0						
14,764		14,802		0.50	0.00	76.0		300		15	594	3,150.0		95		240	125	10,000						
14,802		14,830		0.00	1.50	18.7	180	50		22	536	2,830.0		0		240	125	0						
14,830		14,973		1.50	0.00	95.3		350		15	536	3,000.0		95		240	125	10,000						
14,973		15,021		0.00	2.50	19.2	180	150		15	536	2,780.0		0		240	125	0						
15,021		15,065		0.50	0.00	88.0		350		15	536	3,000.0		95		240	125	10,000						
15,065		15,102		0.00	2.50	14.8	140	150		15	536	2,780.0		0		240	125	0						
Bit Information																								
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)						
8 3/4	SMITH		FHI21 ODBPS		INSERT		1-2-WT-C-2-0-LT-BHA		7,993	8,412	419.00	21.00	20.0		21.00		57	120						
8 3/4	SMITH		MDSI516MHPX G		PDC		-----		8,412	15,102	6,690.00	90.00	74.3	47.00	43.00	115.5	56	271						
Current BHA Components																								
BHA No		Item Description					Make		Model		OD (in)		Jts		Length (ft)		Top Thread							
6		DRILL PIPE					ENSIGN DRILLING				5		477		15,010.00		IF							
6		NMDC					LEAM				6 3/4		1		29.89		IF							
6		NMDC					LEAM				6 5/16		1		31.32		IF							
6		UBHO SUB					LEAM				6 1/2		1		2.30		IF							
6		FLOAT SUB					LEAM				6 5/8		1		3.30		IF							
6		MUD MOTOR					LEAM		XD		6 3/4		1		24.19		IF							
Mud Reports																								
Time 15:00	Type OIL BASE		Depth (ftKB) 14,188		Density (lb/gal) 9.20		Vis (s/qt) 51		PV Calc (cP) 12.0		YP Calc (lb/100ft²) 5		Vis 3rpm 2		Vis 6rpm 3		LGS (%) 6.3		LCM (lb/bbl) 33,000		Chlor (mg/L) 78.9		Oil Water Ratio 21.1	
Electric Stab (V) 648.0		X Lime (lb/bbl) 2.5		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 1301.0		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 27,075.40		Cum Mud Field Est (Cost) 342,849.42								
Time 03:00	Type OIL BASE		Depth (ftKB) 14,764		Density (lb/gal) 9.20		Vis (s/qt) 52		PV Calc (cP) 13.0		YP Calc (lb/100ft²) 5		Vis 3rpm 2		Vis 6rpm 3		LGS (%) 8.4		LCM (lb/bbl) 31,000		Chlor (mg/L) 78.7		Oil Water Ratio 21.3	
Electric Stab (V) 640.0		X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 1301.0		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 27,075.40		Cum Mud Field Est (Cost) 342,849.42								
Wellbore Design																								
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)							
CONDUCTOR					11/13/2013		20		94.00		J-55		WELDED		110.0		80.00							
SURFACE					11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		604.97							
INTERMEDIATE					11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,372.82							
PLANNED PRODUCTION															18,236.0									
Survey Data																								
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)								
14,313		90.84		179.00		8,178		6,343.96		-6,343.96		-369.85		2.42		2.23								
14,407		88.81		178.65		8,179		6,437.93		-6,437.93		-367.92		2.19		-2.16								
14,502		90.92		178.30		8,179		6,532.89		-6,532.89		-365.39		2.25		2.22								
14,597		89.43		177.07		8,179		6,627.81		-6,627.81		-361.56		2.03		-1.57								
14,691		91.45		179.00		8,178		6,721.74		-6,721.74		-358.33		2.97		2.15								
14,785		88.72		176.36		8,178		6,815.65		-6,815.65		-354.53		4.04		-2.90								
14,880		89.08		175.66		8,180		6,910.40		-6,910.40		-347.92		0.83		0.38								
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70								
Mud Logging Information																								
Lithology and Shows CUR LITHOLOGY @ 14,910' 10% LS 90% SH										Max Trip Gas (units)		Avg Drill Gas (units) 1,023		Max Drill Gas (units) 1,203										
LAST 24 HOURS: LS, SH																								
Geological Data																								
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)												
SALADO								1,164																
YATES								1,856																
SEVEN RIVERS								1,992																
QUEEN								2,408																
GRAYBURG								3,078		3,078		3,077.9												
SAN ANDRES								3,389		3,389		3,388.9												
SPRABERRY UPPER								6,131		6,030		6,020.1												
SPRABERRY LOWER								6,704		6,704		6,691.2												
JO-MILL SAND								6,976		6,976		6,962.9												
DEAN								7,486		7,486		7,471.0												
WOLFCAMP-A (WFMP_A)								7,658		7,660		7,642.9												
WOLFCAMP-B (WFMP_B)								8,032		8,032		7,980.4												

AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/11/2014
Report #	25
Projected Days	19
Drilling Days	16
Current Depth	15,680
Depth Progress	578
Planned VS	10,322
Current VS	7,661
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		County REAGAN		State TEXAS			
Report Summary															
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #3 TL:8,157' TVD @ 0' VS W/89.73° INC		Drilling AFE 2,048,600		Daily Field Est (Cost) 84,814		Cum Field Est (Cost) 2,208,409	
Status at Report Time BACK REAM OUT OF HOLE @ 15,300'															
Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 15,102' – 15,680' 578' AT 50.3 FPH, CIRC TO CLEAN HOLE, BACK REAM FROM 15,680' TO 15,300'								Planned Operations DRILL LATERAL TO TD @ +/- 18,236'							
LS 15,632', MD, 90.84° INC, 177.77° AZM, 8181.91' TVD, 7661.21 VS, 2.81° DLS PTB: 15,680' MD, 8181.21' TVD, 90.84° INC, 177.77° AZM, 7709.17 VS , 1.6' ABOVE, 1.8' RIGHT.															
BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)															
Start MD (ftKB)		End MD (ftKB)		Depth Progress (ft)		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days)		Time Since RI (days)			
15,102		15,680		578		11.50		50.3		1,166		1,511			
Daily Time Log															
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments				Hole Section	Interval	Category	Activity		NPT	
05:00	16:30	11.50	15,102	15,680	ROTATE/SLIDE DRILL FROM 15,102' - 15680', 578' AT 50.3 FPH, ROTATE DRILL: 452' IN 5.5 HOURS, 82.2 FPH AVERAGE ROP SLIDE DRILL: 126' IN 6 HOURS, 21 FPH AVERAGE ROP 42% ROTATE, 52% SLIDE. FULL RETURNS				PROD	LAT	DRILL	DRILL W/ MUD			
16:30	02:30	10.00	15,680	15,680	CIRC TO CLEAN HOLE UNLOADING QUARTER SIZE CUTTINGS PUMP 4 40 BBLs 100 VIS SWEEPS, RAISE MUD WT. FROM 9.2 PPG TO 9.4 PPG HOLE STEEL UNLOADING QUARTER SIZE CUTTINGS. (WORK PIPE UP & DOWN) HOLE PANICKING OFF.				PROD	LAT	DRILL	COND MUD & CIRC			
02:30	05:00	2.50	15,680	15,680	BACK REAM OUT OF HOLE FROM 15,680' TO 15,300'				PROD	LAT	DRILL	REAMING			
Drilling Parameters															
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq		
15,102	15,210	1.50	0.00	72.0		430	15	536	3,695.0	95	240	125	10,000		
15,210	15,240	0.00	1.00	30.0	130	150	50	536	2,990.0	0	240	125	0		
15,240	15,399	1.50	0.00	106.0		350	15	536	3,785.0	95	240	125	10,000		
15,399	15,429	0.00	1.50	20.0	130	140	55	536	2,980.0	0	240	125	0		
15,429	15,492	1.00	0.00	63.0		350	20	536	3,780.0	95	240	125	10,000		
15,492	15,525	0.00	2.00	16.5	120	140	28	536	2,795.0	0	240	125	0		
15,525	15,586	0.50	0.00	122.0		475	15	536	3,645.0	95	240	125	10,000		
15,586	15,619	0.00	1.50	22.0	90	230	51	536	2,890.0	0	240	125	0		
15,619	15,680	1.00	0.00	61.0		450	15	536	3,415.0	95	240	125	11,000		
Bit Information															
Size (in)	Make	Model	Type	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)	
8 3/4	SMITH	FH121 ODBPS	INSERT	1-2-WT-C-2-0-LT-BHA	7,993	8,412	419.00	21.00	20.0		21.00	57	120		
8 3/4	SMITH	MDSI516MHPX G	PDC	-----	8,412	15,680	7,268.00	101.50	71.6	52.50	49.00	112.0	56	271	
Current BHA Components															
BHA No	Item Description				Make	Model	OD (in)	Jts	Length (ft)	Top Thread					
6	DRILL PIPE				ENSIGN DRILLING		5	495	15,588.00	IF					
6	NMDC				LEAM		6 3/4	1	29.89	IF					
6	NMDC				LEAM		6 5/16	1	31.32	IF					
6	UBHO SUB				LEAM		6 1/2	1	2.30	IF					
6	FLOAT SUB				LEAM		6 5/8	1	3.30	IF					
6	MUD MOTOR				LEAM	XD	6 3/4	1	24.19	IF					
Mud Reports															
Time 15:00	Type OIL BASE	Depth (ftKB) 15,426	Density (lb/gal) 9.20	Vis (s/qt) 54	PV Calc (cP) 13.0	YP Calc (lb/100ft²) 5	Vis 3rpm 2	Vis 6rpm 3	LGS (%) 6.3	LCM (lb/bbl) 1301.0	Chlor (mg/L) 29,500	Oil Water Ratio 78.9/21.1			
Electric Stab (V) 681.0	X Lime (lb/bbl) 2.9	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 1301.0	Daily Mud Field Est (Cost) 13,832.55	Cum Mud Field Est (Cost) 322,162.20							
Time 03:00	Type OIL BASE	Depth (ftKB) 15,680	Density (lb/gal) 9.20	Vis (s/qt) 55	PV Calc (cP) 14.0	YP Calc (lb/100ft²) 8	Vis 3rpm 4	Vis 6rpm 5	LGS (%) 8.5	LCM (lb/bbl) 1301.0	Chlor (mg/L) 33,000	Oil Water Ratio 77.5/22.5			
Electric Stab (V) 742.0	X Lime (lb/bbl) 3.1	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 1301.0	Daily Mud Field Est (Cost) 13,832.55	Cum Mud Field Est (Cost) 322,162.20							
Wellbore Design															
Casing Description				Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)					
CONDUCTOR				11/13/2013	20	94.00	J-55	WELDED	110.0	76.00					
SURFACE				11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	601.67					
INTERMEDIATE				11/1/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,369.52					
PRODUCTION				11/13/2014	5 1/2	17.00	P-110	LT&C	18,236.0	18,761.58					
Survey Data															
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)							
14,973	90.66	174.78	8,180	7,003.07	-7,003.07	-340.17	1.94	1.70							
15,067	89.16	176.89	8,180	7,096.82	-7,096.82	-333.34	2.75	-1.60							
15,162	90.22	177.59	8,180	7,191.70	-7,191.70	-328.77	1.34	1.12							
15,256	89.25	179.18	8,181	7,285.66	-7,285.66	-326.12	1.98	-1.03							
15,351	90.92	178.30	8,181	7,380.63	-7,380.63	-324.03	1.99	1.76							
15,444	89.69	176.71	8,180	7,473.54	-7,473.54	-319.98	2.16	-1.32							
15,538	88.72	176.19	8,182	7,567.35	-7,567.35	-314.16	1.17	-1.03							
15,632	90.84	177.77	8,182	7,661.21	-7,661.21	-309.21	2.81	2.26							
Mud Logging Information															
Lithology and Shows CUR LITHOLOGY @ 15,680' 10% LS 90% SH								Max Trip Gas (units)		Avg Drill Gas (units) 221		Max Drill Gas (units) 1,282			
LAST 24 HOURS: LS, SH															
Geological Data															
Formation Name						Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)					
SALADO						1,164									
YATES						1,856									
SEVEN RIVERS						1,992									
QUEEN						2,408									
GRAYBURG						3,078		3,078		3,077.9					
SAN ANDRES						3,389		3,389		3,388.9					
SPRABERRY UPPER						6,131		6,030		6,020.1					
SPRABERRY LOWER						6,704		6,704		6,691.2					
JO-MILL SAND						6,976		6,976		6,962.9					
DEAN						7,486		7,486		7,471.0					
WOLFCAMP-A (WFMP_A)						7,658		7,660		7,642.9					
WOLFCAMP-B (WFMP_B)						8,032		8,032		7,980.4					



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/12/2014
Report # 26
Projected Days 19
Drilling Days 17
Current Depth 15,680
Depth Progress 0
Planned VS 10,322
Current VS 7,661
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #3 TL:8,157' TVD @ 0' VS W/89.73° INC		Drilling AFE 2,048,600		Daily Field Est (Cost) 109,560		Cum Field Est (Cost) 2,427,213													
Status at Report Time WAIT ON FISHING TOOLS.																													
Operations Summary BACK REAM OUT OF HOLE FROM 15,300' TO 14,865', WORK STUCK PIPE @ 14,865', BACK REAM OUT OF HOLE FROM 14,865 - 14,735', TOO H 84 STANDS & 15' OF JOINT IT HAD BEN CUT IN HALF, LIFT IN HOLE 72 STANDS & A DOUBLE & 16' OF A JOINT, TOP OF FISH IS @ 7993' & INC OF 29.00°, WAIT ON FISHING TOOLS. (WHILE WAITING ON FISHING TOOL CUT & SLIP DRILL LINE)										Planned Operations DRILL LATERAL TO TD @ +/- 18,236'																			
BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)																													
Start MD (ftKB) 15,680		End MD (ftKB) 15,680		Depth Progress (ft) 0		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,167		Time Since RI (days) 1,512																	
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments		Hole Section		Interval		Category		Activity		NPT									
05:00		11:00		6.00		15,680		15,680		BACK REAM OUT OF HOLE FROM 15,300' TO 14,865'		PROD		LAT		DRILL		REAMING		Yes									
11:00		17:00		6.00		15,680		15,680		WORD STUCK PIPE @ 14,865', PIPE CAME FREE.		PROD		LAT		DRILL		FISHING		Yes									
17:00		18:00		1.00		15,680		15,680		BACK REAM OUT OF HOLE FROM 14,865' TO 14,735'		PROD		LAT		DRILL		REAMING		Yes									
18:00		01:00		7.00		15,680		15,680		TOOH 84 STANDS & 15' OF JOINT IT HAD BEN CUT IN HALF, LIFT IN HOLE 72 STANDS & A DOUBLE & 16' OF A JOINT, TOP OF FISH IS @ 7993' & INC OF 29.00°		PROD		LAT		DRILL		TRIPS		Yes									
01:00		05:00		4.00		15,680		15,680		WAIT ON FISHING TOOLS. (WHILE WAITING ON FISHING TOOL CUT & SLIP DRILL LINE)		PROD		LAT		DRILL		FISHING		Yes									
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
NPT																													
Problem Type OTHER				Problem Sub Type FISHING				Description				Start Date 11/11/2014		End Date 11/12/2014		Dur (hr) 24.00		Failed Item 5in DRILL PIPE		Accountable Party AMERICAN ENERGY PERMIAN BASIN									
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4		SMITH		FHI21 ODBPS		INSERT		1-2-WT-C-2-0-LT-BHA		7,993		8,412		419.00		21.00		20.0		21.00		21.00		112.0		57		120	
8 3/4		SMITH		MDSI516MHPX G		PDC		-----		8,412		15,680		7,268.00		101.50		71.6		52.50		49.00		112.0		56		271	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
6		DRILL PIPE						ENSIGN DRILLING				5		495		15,588.00		IF											
6		NMDC						LEAM				6 3/4		1		29.89		IF											
6		NMDC						LEAM				6 5/16		1		31.32		IF											
6		UBHO SUB						LEAM				6 1/2		1		2.30		IF											
6		FLOAT SUB						LEAM				6 5/8		1		3.30		IF											
6		MUD MOTOR						LEAM		XD		6 3/4		1		24.19		IF											
Mud Reports																													
Time 03:00		Type OIL BASE		Depth (ftKB) 15,680		Density (lb/gal) 9.65		Vis (s/qt) 66		PV Calc (cP) 14.0		YP Calc (lbf/100ft²) 8		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 5.2		LCM (lb/bbl)		Chlor (mg/L) 28,000		Oil Water Ratio 77.5/22.5					
Electric Stab (V) 631.0		X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 6.2		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 16,565.01		Cum Mud Field Est (Cost) 447,971.18													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION						11/13/2014		5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58											
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 15,680' 10% LS 90% SH										Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)															
LAST 24 HOURS: LS, SH																													
Geological Data																													
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)																	
SALADO								1,164																					
YATES								1,856																					
SEVEN RIVERS								1,992																					
QUEEN								2,408																					
GRAYBURG								3,078		3,078		3,077.9																	
SAN ANDRES								3,389		3,389		3,388.9																	
SPRABERRY UPPER								6,131		6,030		6,020.1																	
SPRABERRY LOWER								6,704		6,704		6,691.2																	
JO-MILL SAND								6,976		6,976		6,962.9																	
DEAN								7,486		7,486		7,471.0																	
WOLFCAMP-A (WFMP_A)								7,658		7,660		7,642.9																	
WOLFCAMP-B (WFMP_B)								8,032		8,032		7,980.4																	

AMERICAN ENERGY - PERMIAN BASIN LLC

Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/13/2014
Report #	27
Projected Days	19
Drilling Days	18
Current Depth	15,680
Depth Progress	0
Planned VS	10,322
Current VS	7,661
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS				
Report Summary																		
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #3 TL:8,157' TVD @ 0' VS W/89.73° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 55,583		Cum Field Est (Cost) 2,482,186			
Status at Report Time TOOH W/FISHING TOOLS																		
Operations Summary WAIT ON FISHING TOOLS, RIH W/FISHING TOOLS, LATCH ON FISH, RIG UP WIRELINE & RIH W/WIRELINE, PULL OUT OF HOLE.								Planned Operations TOOH, TIH W/FISHING TOOLS										
Start MD (ftKB) 15,680			End MD (ftKB) 15,680			Depth Progress (ft) 0		Drilling Time (hr)			Avg ROP (ft/hr)		Time Since LTI (days) 1,168		Time Since RI (days) 1,513			
Daily Time Log																		
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT			
05:00	12:00	7.00	15,680	15,680	WAIT ON FISHING TOOLS.					PROD	LAT	DRILL	FISHING		Yes			
12:00	17:30	5.50	15,680	15,680	MAKE UP FISHING TOOLS, TIH FROM FISHING TOOLS TO 7610'					PROD	LAT	DRILL	FISHING		Yes			
17:30	18:30	1.00	15,680	15,680	WASH DOWN FROM 7610' TO 7893' TOP OF FISH @ 7893' (PUMP 243 GPM @ 275 PSI)					PROD	LAT	DRILL	FISHING		Yes			
18:30	20:00	1.50	15,680	15,680	LATCH ON TO FISH SET DOWN ON FISH 30K & PULL UPON FISH TO 90K OVER HOLD FOR 15 MIN.					PROD	LAT	DRILL	FISHING		Yes			
20:00	02:30	6.50	15,680	15,680	RIG UP WIRELINE RIH W/GUAGE TOOL FROM 0' TO 8200' SHOLD TO BE CLEAN, PULL OUT OF HOLE TO C/O TOOLS PICK UP TRACTOR RIH FROM 0' TO 8185' TAG UP, PULL OUT OF HOLE, RIG DOWN WIRELINE.					PROD	LAT	DRILL	FISHING		Yes			
02:30	03:30	1.00	15,680	15,680	JAR DOWN 90K OVER & PULL UP 80K OVER, WHILE JAR ON FSIH OVERSHOT RELEASED FROM FISH.					PROD	LAT	DRILL	FISHING		Yes			
03:30	05:00	1.50	15,680	15,680	TOOH W/FISHING TOOLS					PROD	LAT	DRILL	FISHING		Yes			
Drilling Parameters																		
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)		WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq		
Bit Information																		
Size (in)	Make		Model		Typ	Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)	
8 3/4	SMITH		MDSI516MHPX G		PDC	----- -----		8,412	15,680	7,268.00	101.50	71.6	52.50	49.00	112.0	56	271	
Current BHA Components																		
BHA No	Item Description					Make		Model		OD (in)		Jts	Length (ft)		Top Thread			
7	DRILL PIPE									5		237	7,411.54					
7	XO SUB									6 1/4		1	1.79					
7	JARS									6 1/2		1	32.39					
7	XO SUB									6 3/8		1	1.23					
7	DRILL PIPE									5		14	439.83					
7	XO SUB									5 13/16		1	2.08					
7	OVERSHOT									8 1/8		1	4.14					
Mud Reports																		
Time 15:00	Type OIL BASE		Depth (ftKB) 15,680		Density (lb/gal) 9.70		Vis (s/qt) 69	PV Calc (cP) 14.0		YP Calc (lbf/100ft²) 8		Vis 3rpm 3	Vis 6rpm 4	LGS (%) 4.7	LCM (lb/bbl)	Chlor (mg/L) 28,500	Oil Water Ratio 78.7/21.3	
Electric Stab (V) 608.0	X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 1,145.00		Cum Mud Field Est (Cost) 449,116.18			
Time 03:00	Type OIL BASE		Depth (ftKB) 15,680		Density (lb/gal) 9.70		Vis (s/qt) 79	PV Calc (cP) 14.0		YP Calc (lbf/100ft²) 8		Vis 3rpm 3	Vis 6rpm 4	LGS (%) 4.8	LCM (lb/bbl)	Chlor (mg/L) 30,000	Oil Water Ratio 77.5/22.5	
Electric Stab (V) 549.0	X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 1301.0		Daily Mud Field Est (Cost) 1,145.00		Cum Mud Field Est (Cost) 449,116.18			
Wellbore Design																		
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)	
CONDUCTOR					11/13/2013		20		94.00		J-55		WELDED		110.0		76.00	
SURFACE					11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67	
INTERMEDIATE					11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52	
PRODUCTION					11/13/2014		5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58	
Survey Data																		
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)		
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70		
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60		
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12		
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03		
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76		
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32		
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03		
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26		
Mud Logging Information																		
Lithology and Shows										Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)				
Geological Data																		
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)						
SALADO								1,164										
YATES								1,856										
SEVEN RIVERS								1,992										
QUEEN								2,408										
GRAYBURG								3,078				3,077.9						
SAN ANDRES								3,389				3,388.9						
SPRABERRY UPPER								6,131				6,020.1						
SPRABERRY LOWER								6,704				6,691.2						
JO-MILL SAND								6,976				6,962.9						
DEAN								7,486				7,471.0						
WOLFCAMP-A (WFMP_A)								7,658				7,642.9						
WOLFCAMP-B (WFMP_B)								8,032				7,980.4						



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/14/2014
Report # 28
Projected Days 19
Drilling Days 19
Current Depth 15,680
Depth Progress 0
Planned VS 10,322
Current VS 43
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS										
Report Summary																								
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #4 TL:8,224' TVD @ 0' VS W/89.76° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 212,142		Cum Field Est (Cost) 2,695,469								
Status at Report Time TIH @ 6000'																								
Operations Summary TOOH, LAY DOWN FISHING TOOLS, RIG DOWN WIRELINE, WAIT ON DIR. TOOLS, WORK BHA, TIH.								Planned Operations DRILL SIDETRACK @ 7763'																
BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)																								
Start MD (ftKB) 15,680		End MD (ftKB) 15,680		Depth Progress (ft) 0		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,169		Time Since RI (days) 1,514												
Daily Time Log																								
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments				Hole Section	Interval	Category	Activity		NPT										
05:00	09:00	4.00	7,763	7,763	TOOH FROM 6003' TO FISHING TOOLS.				PROD	LAT	DRILL	FISHING		Yes										
09:00	10:30	1.50	7,763	7,763	LAY DOWN FISHING TOOLS.				PROD	LAT	DRILL	FISHING		Yes										
10:30	11:30	1.00	7,763	7,763	RIG DOWN WIRELINE.				PROD	LAT	DRILL	FISHING		Yes										
11:30	21:30	10.00	7,763	7,763	WAIT ON DIR. TOOLS.				PROD	LAT	DRILL	DIRECTIONAL WORK		Yes										
21:30	23:30	2.00	7,763	7,763	PICK UP LEAM 6 3/4" MOTOR, 7/8, 5.0 STG, FXD @ 2.25, W/8 1/2" NB STAB, 0.26 RPG, 6751XD-1061, TEST MTR & MWD (TEST GOOD), MAKE UP SMITH, 8 3/4", FHI21, S# RD5299				PROD	LAT	DRILL	DIRECTIONAL WORK												
23:30	05:00	5.50	7,763	7,763	TIH FROM 93' - 6000' PULL TRIP NIPPLE, INSTALL ROT. HEAD SLM IN HOLE.				PROD	LAT	DRILL	TRIPS												
Drilling Parameters																								
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq											
NPT																								
Problem Type OTHER			Problem Sub Type OTHER		Description			Start Date 11/13/2014		End Date 11/13/2014		Dur (hr) 9.00		Failed Item 6 3/4in MUD MOTOR		Accountable Party LEAM DRILLING SYSTEMS, LLC								
Bit Information																								
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)						
8 3/4							-----																	
8 3/4	SMITH		FHI21		INSERT		-----																	
Current BHA Components																								
BHA No		Item Description				Make		Model		OD (in)		Jts		Length (ft)		Top Thread								
8		DRILL PIPE				ENSIGN DRILLING				5		244		7,670.26		IF								
8		NMDC				LEAM				6 3/4		1		30.65		IF								
8		NMDC				LEAM				6 5/16		1		29.70		IF								
8		UBHO SUB				LEAM				6 1/2		1		2.45		IF								
8		FLOAT SUB				LEAM				6 5/8		1		3.31		IF								
8		MUD MOTOR				LEAM		XD		6 3/4		1		25.63		IF								
Mud Reports																								
Time 15:00	Type OIL BASE		Depth (ftKB) 15,680		Density (lb/gal) 9.70		Vis (s/qt) 81		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 8		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 4.8		LCM (lb/bbl)		Chlor (mg/L) 31,000		Oil Water Ratio 77.5/22.5	
Electric Stab (V) 508.0		X Lime (lb/bbl) 2.3		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 547.0		Cum Mud Lost to Hole (bbl) 1848.0		Daily Mud Field Est (Cost) 86,755.97		Cum Mud Field Est (Cost) 535,872.15								
Time 03:00	Type OIL BASE		Depth (ftKB) 15,680		Density (lb/gal) 9.70		Vis (s/qt) 83		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 8		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 3.8		LCM (lb/bbl)		Chlor (mg/L) 30,000		Oil Water Ratio 77.1/22.9	
Electric Stab (V) 549.0		X Lime (lb/bbl) 2.3		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 1848.0		Cum Mud Lost to Hole (bbl) 1848.0		Daily Mud Field Est (Cost) 86,755.97		Cum Mud Field Est (Cost) 535,872.15								
Wellbore Design																								
Casing Description				Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)								
CONDUCTOR				11/13/2013		20		94.00		J-55		WELDED		110.0		76.00								
SURFACE				11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67								
INTERMEDIATE				11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52								
PRODUCTION				11/13/2014		5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58								
Survey Data																								
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)								
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70								
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60								
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12								
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03								
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76								
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32								
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03								
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26								
Mud Logging Information																								
Lithology and Shows									Max Trip Gas (units)			Avg Drill Gas (units)			Max Drill Gas (units)									
Geological Data																								
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)			Drill Top (TVD) (ftKB)											
SALADO								1,164																
YATES								1,856																
SEVEN RIVERS								1,992																
QUEEN								2,408																
GRAYBURG								3,078		3,078			3,077.9											
SAN ANDRES								3,389		3,389			3,388.9											
SPRABERRY UPPER								6,131		6,030			6,020.1											
SPRABERRY LOWER								6,704		6,704			6,691.2											
JO-MILL SAND								6,976		6,976			6,962.9											
DEAN								7,486		7,486			7,471.0											
WOLFCAMP-A (WFMP_A)								7,658		7,660			7,642.9											
WOLFCAMP-B (WFMP_B)								8,032		8,032			7,980.4											



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/15/2014
Report # 29
Projected Days 19
Drilling Days 20
Current Depth 7,783
Depth Progress 20
Planned VS 10,322
Current VS 28
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #4 TL:8,224' TVD @ 0' VS W/89.76° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 1,395,981		Cum Field Est (Cost) 4,122,382												
Status at Report Time DRILL SIDETRACK @ 7783'																													
Operations Summary TIH, SERVICE RIG, TIH, BUILD 20' TROUGH FOR SIDE TRACK FROM 7743' - 7763', TIME SLD @ 1 INCH EVERY 5 MINUTES FROM 7763' - 7783'										Planned Operations DRILL SIDETRACK																			
BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)																													
Start MD (ftKB) 7,763		End MD (ftKB) 7,783		Depth Progress (ft) 20		Drilling Time (hr) 18.00		Avg ROP (ft/hr) 1.1		Time Since LTI (days) 1,170		Time Since RI (days) 1,515																	
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments			Hole Section		Interval		Category		Activity		NPT								
05:00		06:00		1.00		7,763		7,763		TIH FROM 6000' - 6272'			PROD		LAT		DRILL		TRIPS		Yes								
06:00		07:30		1.50		7,763		7,763		SERVICE RIG & TOP DRIVE, WORK ON #2 SCREEN SHAKER			PROD		LAT		DRILL		LUBRICATE RIG		Yes								
07:30		09:00		1.50		7,763		7,763		TIH FROM 6272' - 7743'			PROD		LAT		DRILL		TRIPS		Yes								
09:00		11:00		2.00		7,763		7,763		BUILD 20' TROUGH FOR SIDE TRACK FROM 7743' - 7763'			PROD		LAT		DRILL		DRILL W/ MUD		Yes								
11:00		05:00		18.00		7,763		7,783		TIME SLD @ 1 INCH EVERY 5 MINUTES FROM 7763' - 7783'			PROD		LAT		DRILL		DRILL W/ MUD		Yes								
Drilling Parameters																													
Start Depth (ftKB) 7,763		End Depth (ftKB) 7,783		Rot Time (hr) 0.00		Slide Time (hr) 18.00		Int ROP (ft/hr) 1.1		TFO (°) 130		dP (SPP) (psi) 20		WOB (1000lbf) 4		Q Rate (gpm/cfm) 415		SPP (psi) 1,360.0		RPM (rpm) 0		PU Str Wt (1000lbf) 160		SO Str Wt (1000lbf) 150		Drill Tq 0			
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4								-----																					
8 3/4		SMITH		FHI21		INSERT		-----		7,763		7,783		20.00		18.00		1.1				18.00				4		108	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
8		DRILL PIPE						ENSIGN DRILLING				5		244		7,690.26		IF											
8		NMDC						LEAM				6 3/4		1		30.65		IF											
8		NMDC						LEAM				6 5/16		1		29.70		IF											
8		MWD - DIRECTIONAL																											
8		UBHO SUB						LEAM				6 1/2		1		2.45		IF											
8		FLOAT SUB						LEAM				6 5/8		1		3.31		IF											
8		MUD MOTOR						LEAM		XD		6 3/4		1		25.63		IF											
Mud Reports																													
Time 05:00		Type OIL BASE		Depth (ftKB) 7,763		Density (lb/gal) 9.70		Vis (s/qt) 94		PV Calc (cP) 14.0		YP Calc (lbf/100ft²) 8		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 4.9		LCM (lb/bbl) 31,000		Chlor (mg/L) 77/23		Oil Water Ratio 77/23					
Electric Stab (V) 519.0		X Lime (lb/bbl) 2.3		HTHP Filtrate (mL/30min) 6.4		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 1848.0		Cum Mud Lost to Hole (bbl) 1848.0		Daily Mud Field Est (Cost) 8,918.86		Cum Mud Field Est (Cost) 544,791.01													
Time 03:00		Type OIL BASE		Depth (ftKB) 7,773		Density (lb/gal) 9.60		Vis (s/qt) 62		PV Calc (cP) 14.0		YP Calc (lbf/100ft²) 8		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 4.5		LCM (lb/bbl) 31,000		Chlor (mg/L) 77.7/22.3		Oil Water Ratio 77.7/22.3					
Electric Stab (V) 629.0		X Lime (lb/bbl) 2.9		HTHP Filtrate (mL/30min) 6.4		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 1848.0		Cum Mud Lost to Hole (bbl) 1848.0		Daily Mud Field Est (Cost) 8,918.86		Cum Mud Field Est (Cost) 544,791.01													
Wellbore Design																													
Casing Description				Run Date				OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR				11/13/2013				20		94.00		J-55		WELDED		110.0		76.00											
SURFACE				11/15/2013				13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE				11/1/2014				9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION				11/13/2014				5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58											
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
Mud Logging Information																													
Lithology and Shows										Max Trip Gas (units)			Avg Drill Gas (units)			Max Drill Gas (units)													
Geological Data																													
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)													
SALADO								1,164																					
YATES								1,856																					
SEVEN RIVERS								1,992																					
QUEEN								2,408																					
GRAYBURG								3,078				3,078				3,077.9													
SAN ANDRES								3,389				3,389				3,388.9													
SPRABERRY UPPER								6,131				6,030				6,020.1													
SPRABERRY LOWER								6,704				6,704				6,691.2													
JO-MILL SAND								6,976				6,976				6,962.9													
DEAN								7,486				7,486				7,471.0													
WOLFCAMP-A (WFMP_A)								7,658				7,660				7,642.9													
WOLFCAMP-B (WFMP_B)								8,032				8,032				7,980.4													
WOLFCAMP-A (WFMP_A)								7,658				7,660																	
WOLFCAMP-B (WFMP_B)								8,032				8,032																	



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/16/2014
Report # 30
Projected Days 19
Drilling Days 21
Current Depth 8,081
Depth Progress 298
Planned VS 10,322
Current VS 156
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000	Longitude -101.5913972000	Orig KB El... 2,694.00	RKB (ft) 30.00	County REAGAN	State TEXAS								
Report Summary																	
Well Spud 10/15/2013	TD Date	RR Date	Target Formation WOLFCAMP-B	Prop TD (ftKB) 18,236	Target Line #4 TL:8,224' TVD @ 0' VS W/89.76° INC		Drilling AFE 2,048,600	Daily Field Est (Cost) 91,393	Cum Field Est (Cost) 4,213,775								
Status at Report Time DRILL 8 3/4" CURVE @ 8081'																	
Operations Summary SLIDE/ROTATE DRILL BUILDING CURVE FROM 7783' – 8081' 298' AT 12.7 FPH LS 8000', MD, 39.04° INC, 191.83° AZM, 7946.15' TVD, 155.69 VS, 6.57° DLS PTB: 8049' MD, 7983.35' TVD, 42.17° INC, 192.00° AZM, 186.89 VS , 10' ABOVE, 17' LEFT. BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID)					Planned Operations DRILL 8 3/4" CURVE												
Start MD (ftKB) 7,783		End MD (ftKB) 8,081		Depth Progress (ft) 298		Drilling Time (hr) 23.50		Avg ROP (ft/hr) 12.7		Time Since LTI (days) 1,171		Time Since RI (days) 1,516					
Daily Time Log																	
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments			Hole Section	Interval	Category	Activity		NPT				
05:00	18:00	13.00	7,783	7,923	ROTATE/SLIDE DRILL FROM 7783' - 7923', 140' AT 10.8 FPH, ROTATE DRILL: 26' IN 3 HOURS, 8.7 FPH AVERAGE ROP SLIDE DRILL: 114' IN 10 HOURS, 11.4 FPH AVERAGE ROP 23% ROTATE, 77% SLIDE. FULL REETURNS			PROD	LAT	DRILL	DRILL W/ MUD		Yes				
18:00	18:30	0.50	7,923	7,923	RIG & TOP DRIVE SERVICE			PROD	LAT	DRILL	LUBRICATE RIG		Yes				
18:30	05:00	10.50	7,923	8,081	ROTATE/SLIDE DRILL FROM 7923' - 8081', 158' AT 15 FPH, ROTATE DRILL: 60' IN 3 HOURS, 20 FPH AVERAGE ROP SLIDE DRILL: 98' IN 7.5 HOURS, 13.1 FPH AVERAGE ROP 29% ROTATE, 71% SLIDE. FULL REETURNS			PROD	LAT	DRILL	DRILL W/ MUD		Yes				
Drilling Parameters																	
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq				
7,783	7,858	0.00	7.50	10.0	45	175	32	415	1,565.0	0	160	150	0				
7,858	7,863	1.00	0.00	5.0		60	19	415	1,470.0	25	160	150	2,500				
7,863	7,884	0.00	1.50	14.0	20	175	31	415	1,560.0	0	160	150	0				
7,884	7,894	1.00	0.00	10.0		75	28	415	1,550.0	25	160	150	2,500				
7,894	7,912	0.00	1.00	18.0	6	50	32	415	1,570.0	0	160	150	0				
7,912	7,923	1.00	0.00	11.0		50	29	415	1,500.0	25	160	150	2,500				
7,923	7,941	0.00	1.00	18.0	10	110	30	415	1,540.0	0	160	150	0				
7,941	7,955	1.00	0.00	14.0		150	32	415	1,630.0	25	160	150	4,000				
7,955	7,971	0.00	1.00	16.0	5	80	38	415	1,560.0	0	160	150	0				
7,971	7,986	0.50	0.00	30.0		130	38	415	1,630.0	25	160	150	4,000				
7,986	8,010	0.00	2.00	12.0	5	100	36	415	1,560.0	0	160	150	0				
8,010	8,018	0.50	0.00	16.0		80	40	415	1,600.0	25	160	150	4,000				
8,018	8,038	0.00	1.50	13.3	5	100	36	415	1,560.0	0	160	150	0				
8,038	8,049	0.50	0.00	22.0		40	38	415	1,650.0	25	160	150	4,000				
8,049	8,069	0.00	2.00	10.0	5	150	38	450	1,760.0	0	160	150	0				
8,069	8,081	0.50	0.00	24.0		150	38	450	1,760.0	25	160	150	4,000				
Bit Information																	
Size (in)	Make	Model	Type	Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)		
8 3/4				-----													
8 3/4	SMITH	FHI21	INSERT	-----		7,763	8,081	318.00	41.50	7.7	6.00	35.50	14.3	40	142		
Current BHA Components																	
BHA No	Item Description					Make	Model	OD (in)		Jts	Length (ft)		Top Thread				
8	DRILL PIPE					ENSIGN DRILLING		5		244	7,988.26		IF				
8	NMDC					LEAM		6 3/4		1	30.65		IF				
8	NMDC					LEAM		6 5/16		1	29.70		IF				
8	MWD - DIRECTIONAL																
8	UBHO SUB					LEAM		6 1/2		1	2.45		IF				
8	FLOAT SUB					LEAM		6 5/8		1	3.31		IF				
8	MUD MOTOR					LEAM	XD	6 3/4		1	25.63		IF				
Mud Reports																	
Time 15:00	Type OIL BASE	Depth (ftKB) 7,817	Density (lb/gal) 9.60	Vis (s/qt) 62	PV Calc (cP) 16.0	YP Calc (lb/100ft²) 3	Vis 3rpm 3	Vis 6rpm 4	LGS (%) 4.4	LCM (lb/bbl) 33,666.24	Chlor (mg/L) 32,000	Oil Water Ratio 78.4/21.6					
Electric Stab (V) 617.0		X Lime (lb/bbl) 2.7	HTHP Filtrate (mL/30min) 6.4	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 3	Cum Mud Lost to Hole (bbl) 1881.0		Daily Mud Field Est (Cost) 33,666.24		Cum Mud Field Est (Cost) 578,457.25						
Time 03:00	Type OIL BASE	Depth (ftKB) 7,964	Density (lb/gal) 9.60	Vis (s/qt) 65	PV Calc (cP) 14.0	YP Calc (lb/100ft²) 8	Vis 3rpm 3	Vis 6rpm 4	LGS (%) 5.6	LCM (lb/bbl) 33,666.24	Chlor (mg/L) 26,000	Oil Water Ratio 77.5/22.5					
Electric Stab (V) 659.0		X Lime (lb/bbl) 3.1	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 156.0	Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 33,666.24		Cum Mud Field Est (Cost) 578,457.25						
Wellbore Design																	
Casing Description				Run Date		OD (in)	Wt (lb/ft)	Grade		Conn	Set Depth (ftKB)	Length (ft)					
CONDUCTOR				11/13/2013		20	94.00	J-55		WELDED	110.0	76.00					
SURFACE				11/15/2013		13 3/8	54.50	J-55		BUTTRESS THREAD	635.0	601.67					
INTERMEDIATE				11/1/2014		9 5/8	40.00	J-55		LT&C	6,402.8	6,369.52					
PRODUCTION				11/13/2014		5 1/2	17.00	P-110		LT&C	18,236.0	18,761.58					
Survey Data																	
MD (ftKB)		Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)		DLS (°/100ft)		BUR (°/100ft)						
14,973		90.66	174.78	8,180	7,003.07	-7,003.07	-340.17		1.94		1.70						
15,067		89.16	176.89	8,180	7,096.82	-7,096.82	-333.34		2.75		-1.60						
15,162		90.22	177.59	8,180	7,191.70	-7,191.70	-328.77		1.34		1.12						
15,256		89.25	179.18	8,181	7,285.66	-7,285.66	-326.12		1.98		-1.03						
15,351		90.92	178.30	8,181	7,380.63	-7,380.63	-324.03		1.99		1.76						
15,444		89.69	176.71	8,180	7,473.54	-7,473.54	-319.98		2.16		-1.32						
15,538		88.72	176.19	8,182	7,567.35	-7,567.35	-314.16		1.17		-1.03						
15,632		90.84	177.77	8,182	7,661.21	-7,661.21	-309.21		2.81		2.26						
7,782		20.14	214.86	7,759	50.89	-50.89	-287.44		4.52		3.13						
7,814		22.34	205.54	7,789	60.90	-60.90	-293.21		12.57		6.88						
7,845		26.12	197.63	7,817	72.73	-72.73	-297.82		16.05		12.19						
7,877		29.63	194.82	7,845	87.09	-87.09	-301.98		11.71		10.97						
7,906		32.71	192.89	7,870	101.66	-101.66	-305.56		11.16		10.62						
7,937		34.91	192.01	7,896	118.51	-118.51	-309.28		7.27		7.10						
7,969		37.11	190.78	7,922	136.95	-136.95	-312.99		7.24		6.88						
Mud Logging Information																	
Lithology and Shows CUR LITHOLOGY @ 8020: 20% LS 75% SH 5% SILTST							Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)						
LAST 24 HOURS: LS, SH, SLTST																	



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/16/2014
Report # 30
Projected Days 19
Drilling Days 21
Current Depth 8,081
Depth Progress 298
Planned VS 10,322
Current VS 156
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,660	
WOLFCAMP-B (WFMP_B)	8,032	8,032	

42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #4 TL:8,224' TVD @ 0' VS W/89.76° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 68,839		Cum Field Est (Cost) 4,296,813												
Status at Report Time TOOH																													
Operations Summary SLIDE/ROTATE DRILL BUILDING CURVE FROM 8081' – 8331' 250' AT 21.7 FPH, SERVICE RIG, SLIDE/ROTATE DRILL BUILDING CURVE FROM 8331' – 8489' 158' AT 16.6 FPH, CIRC, TOOH LS 8440', MD, 75.80° INC, 183.39° AZM, 8178.23' TVD, 516.94 VS, 8.10° DLS PTB: 8489' MD, 8189.67' TVD, 77.20° INC, 183.08° AZM, 564.51 VS, 25.7' AHEAD, 18.8' LEFT. DLN: 4.22 MOTOR YIELD: 17.50 BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID)										Planned Operations TOOH, DRILL LATERAL TO TD @ +/- 18,236'																			
Start MD (ftKB) 8,081				End MD (ftKB) 8,489		Depth Progress (ft) 408		Drilling Time (hr) 21.00		Avg ROP (ft/hr) 19.4		Time Since LTI (days) 1,172		Time Since RI (days) 1,517															
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments			Hole Section		Interval		Category		Activity		NPT								
05:00		16:30		11.50		8,081		8,331		ROTATE/SLIDE DRILL FROM 8081' - 8331', 250' AT 21.7 FPH, ROTATE DRILL: 91' IN 4 HOURS, 22.8 FPH AVERAGE ROP SLIDE DRILL: 159' IN 7.5 HOURS, 21.2 FPH AVERAGE ROP 35% ROTATE, 65% SLIDE. FULL REETURNS			PROD		LAT		DRILL		DRILL W/ MUD		Yes								
16:30		17:00		0.50		8,331		8,331		SERVICE RIG & TOP DRIVE			PROD		LAT		DRILL		LUBRICATE RIG		Yes								
17:00		02:30		9.50		8,331		8,489		ROTATE/SLIDE DRILL FROM 8331' - 8489', 158' AT 16.6 FPH, ROTATE DRILL: 86' IN 5 HOURS, 17.2 FPH AVERAGE ROP SLIDE DRILL: 72' IN 4.5 HOURS, 16 FPH AVERAGE ROP 53% ROTATE, 47% SLIDE. FULL REETURNS			PROD		LAT		DRILL		DRILL W/ MUD		Yes								
02:30		04:30		2.00		8,489		8,489		PERFORMED CLEAN UP CYCLE PUMPING 2 HIGH VIS SWEEPS 1ST BOTTOMS UP: 50% SHAKER SCREEN COVERAGE TQ 5K - TQ 3K 2ND BOTTOMS UP: 20% SHAKER SCREEN COVERAGE TQ 3K - TQ 3K 3ND BOTTOMS UP: SHAKER SCREEN CLEAN CONTINUOUS 25 RPM'S, 536 GPM'S (PUMP SLUG)			PROD		LAT		DRILL		COND MUD & CIRC		Yes								
04:30		05:00		0.50		8,489		8,489		TOOH			PROD		LAT		DRILL		TRIPS		Yes								
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
8,081		8,096		0.00		1.00		15.0		0		145		40		450		1,800.0		0		160		150		0			
8,096		8,112		0.50		0.00		32.0				150		38		450		1,850.0		25		160		150		4,000			
8,112		8,129		0.00		0.50		34.0		30		150		31		450		1,800.0		0		160		150		0			
8,129		8,142		0.50		0.00		26.0				150		38		450		1,850.0		25		160		150		7,000			
8,142		8,166		0.00		1.00		24.0		30		200		35		450		1,830.0		0		160		150		0			
8,166		8,173		0.50		0.00		14.0				200		38		450		1,840.0		25		160		150		6,000			
8,173		8,201		0.00		1.00		28.0		30		160		35		450		1,800.0		0		160		150		0			
8,201		8,206		0.50		0.00		10.0				150		38		450		1,820.0		25		160		150		8,000			
8,206		8,224		0.00		1.00		18.0		20		200		41		450		1,800.0		0		160		150		0			
8,224		8,237		0.50		0.00		26.0				150		38		450		1,850.0		25		160		150		6,000			
8,237		8,255		0.00		1.00		18.0		20		150		41		450		1,800.0		0		160		150		0			
8,255		8,268		0.50		0.00		26.0				130		38		450		1,850.0		25		160		150		6,000			
8,268		8,287		0.00		1.00		19.0		15		200		41		450		1,850.0		0		160		150		0			
8,287		8,301		0.50		0.00		28.0				100		38		450		1,850.0		25		160		150		7,000			
8,301		8,321		0.00		1.00		20.0		15		120		41		450		1,750.0		0		160		150		0			
8,321		8,331		0.50		0.00		20.0				150		38		450		1,850.0		25		160		150		7,000			
8,331		8,347		0.00		1.50		10.7		0		70		40		450		1,800.0		0		160		150		0			
8,347		8,364		1.00		0.00		17.0				120		40		450		1,800.0		25		160		150		8,000			
8,364		8,379		0.00		1.00		15.0		15		175		40		450		1,800.0		0		160		150		0			
8,379		8,395		0.50		0.00		32.0				125		40		450		1,800.0		25		160		150		8,000			
8,395		8,415		0.00		1.00		20.0		20		190		40		450		1,800.0		0		160		150		0			
8,415		8,426		0.50		0.00		22.0				175		40		450		1,860.0		25		160		150		8,000			
8,426		8,435		0.00		0.50		18.0		20		180		40		450		1,860.0		0		160		150		0			
8,435		8,458		1.50		0.00		15.3				85		40		450		1,860.0		25		160		150		8,000			
8,458		8,470		0.00		0.50		24.0		20		200		40		450		1,860.0		0		160		150		0			
8,470		8,489		1.50		0.00		12.7				100		40		450		1,780.0		25		160		150		8,000			
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4								-----																					
8 3/4		SMITH		FHI21		INSERT		-----		7,763		8,489		726.00		62.50		11.6		15.00		47.50		17.5		41		142	
Current BHA Components																													
BHA No		Item Description								Make		Model		OD (in)		Jts		Length (ft)		Top Thread									
8		DRILL PIPE								ENSIGN DRILLING				5		244		8,396.26		IF									
8		NMDC								LEAM				6 3/4		1		30.65		IF									
8		NMDC								LEAM				6 5/16		1		29.70		IF									
8		MWD - DIRECTIONAL																											
8		UBHO SUB								LEAM				6 1/2		1		2.45		IF									
8		FLOAT SUB								LEAM				6 5/8		1		3.31		IF									
8		MUD MOTOR								LEAM		XD		6 3/4		1		25.63		IF									
Mud Reports																													
Time 15:00		Type OIL BASE		Depth (ftKB) 8,177		Density (lb/gal) 9.60		Vis (s/qt) 59		PV Calc (cP) 14.0		YP Calc (lbf/100ft²) 8		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 4.5		LCM (lb/bbl) 30,000		Chlor (mg/L) 77.7/22.3		Oil Water Ratio					
Electric Stab (V) 659.0		X Lime (lb/bbl) 3.0		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 2037.0		Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 4,899.11		Cum Mud Field Est (Cost) 583,356.36													
Time 03:00		Type OIL BASE		Depth (ftKB) 8,394		Density (lb/gal) 9.60		Vis (s/qt) 62		PV Calc (cP) 15.0		YP Calc (lbf/100ft²) 5		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 5.4		LCM (lb/bbl) 31,000		Chlor (mg/L) 78.7/21.3		Oil Water Ratio					
Electric Stab (V) 644.0		X Lime (lb/bbl) 3.2		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 2037.0		Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 4,899.11		Cum Mud Field Est (Cost) 583,356.36													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION						11/21/2014		5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58											
Survey Data																													
MD (ftKB)		Incl (°)		Azim (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													

Report Date	11/17/2014
Report #	31
Projected Days	19
Drilling Days	22
Current Depth	8,489
Depth Progress	408
Planned VS	10,322
Current VS	517
AFE #	DV02164
Total AFE	8,033,600



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/18/2014
Report # 32
Projected Days 19
Drilling Days 23
Current Depth 8,549
Depth Progress 60
Planned VS 10,322
Current VS 547
AFE # DV02164
Total AFE 8,033,600

42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS				
Report Summary																		
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #4 TL:8,224' TVD @ 0' VS W/89.76° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 96,778		Cum Field Est (Cost) 4,393,591	
Status at Report Time DRILL 8 3/4" CURVE @ 8549'																		
Operations Summary TOOH, WORK BHA, TIH, CUT & SLIP DRILL LINE, TIH, ORIENT TOOLS TO GOT IN SIDETRACK., TIH, RELOG GAMMA FROM 8428'-8489' AT 100 FPH, SLIDE/ROTATE DRILL BUILDING CURVE FROM 8489' - 8549' 60' AT 20 FPH LS 8471', MD, 76.94° INC, 183.75° AZM, 8185.53' TVD, 547.01 VS, 3.85° DLS PTB: 8524' MD, 8195.9' TVD, 8.50° INC, 183.98° AZM, 598.85 VS, 25.4' ABOVE, 18' LEFT. BIG RIG SPUD DATE(10/26/14 @ 08:30) NEXT WELL (UNIVERSITY 09 0818H (SKID))										Planned Operations DRILL LATERAL TO TD @ +/- 18,236'								
Start MD (ftKB) 8,489		End MD (ftKB) 8,549		Depth Progress (ft) 60		Drilling Time (hr) 3.00		Avg ROP (ft/hr) 20.0		Time Since LTI (days) 1,173		Time Since RI (days) 1,518						
Daily Time Log																		
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments				Hole Section	Interval	Category	Activity		NPT				
05:00	06:30	1.50	8,489	8,489	TOOH F/7160' - 6127'				PROD	LAT	DRILL	TRIPS		Yes				
06:30	07:00	0.50	8,489	8,489	PULL ROTATING HEAD & INSTALL TRIP NIPPLE				PROD	LAT	DRILL	TRIPS		Yes				
07:00	11:00	4.00	8,489	8,489	TOOH F/6127' TO BHA				PROD	LAT	DRILL	TRIPS		Yes				
11:00	13:00	2.00	8,489	8,489	LAY DOWN BIT, MM & FLEX MONEL				PROD	LAT	DRILL	P/U & L/D BHA		Yes				
13:00	14:30	1.50	8,489	8,489	PICK UP LEAM 6 3/4" MOTOR, 7/8, 5.0 STG, FXD @ 1.75, W/SLICK, 0.26 RPG, 6751XD-1195, TEST MTR & MWD (TEST GOOD), MAKE UP HALLIBURTON, 8 3/4", MM65D, S# 12303789				PROD	LAT	DRILL	P/U & L/D BHA		Yes				
14:30	16:30	2.00	8,489	8,489	TIH T/3586'				PROD	LAT	DRILL	TRIPS		Yes				
16:30	19:30	3.00	8,489	8,489	CUT & SLIP DRILL LINE				PROD	LAT	DRILL	CUT SLIP & DRILL LINE		Yes				
19:30	00:00	4.50	8,489	8,489	TIH T/7730' PULL TRIP NIPPLE & INSTALL ROT. HEAD				PROD	LAT	DRILL	TRIPS		Yes				
00:00	00:30	0.50	8,489	8,489	ORIENT TOOLS TO GOT IN SIDETRACK.				PROD	LAT	DRILL	DIRECTIONAL WORK						
00:30	01:30	1.00	8,489	8,489	TIH T/8428'				PROD	LAT	DRILL	TRIPS		Yes				
01:30	02:00	0.50	8,489	8,489	RELOG GAMMA FROM 8428'-8489' AT 100 FPH				PROD	LAT	DRILL	DIRECTIONAL WORK		Yes				
02:00	05:00	3.00	8,489	8,549	ROTATE/SLIDE DRILL FROM 8489' - 8549', 60' AT 20 FPH, ROTATE DRILL: 7' IN .5 HOURS, 14 FPH AVERAGE ROP SLIDE DRILL: 53' IN 2.5 HOURS, 21.2 FPH AVERAGE ROP 17% ROTATE, 83% SLIDE. FULL REETURNS				PROD	LAT	DRILL	DRILL W/ MUD		Yes				
Drilling Parameters																		
Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq					
8,489	8,489					0	5	450	1,775.0	0	195	175	0					
8,489	8,517	0.00	1.50	18.7	20	325	23	507	2,450.0	0	195	175	0					
8,517	8,524	0.50	0.00	14.0		400	23	507	2,450.0	35	195	175	9,000					
8,524	8,549	0.00	1.00	25.0	20	400	23	507	2,450.0	0	195	175	0					
Bit Information																		
Size (in)	Make	Model	Type	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)				
8 3/4	SMITH	FHI21	INSERT	1-3-WT-S-2-0-BT-BHA	7,763	8,489	726.00	62.50	11.6	15.00	47.50	17.5	41	142				
8 3/4	HALLIBURTON	MM65D	PDC	-----	8,489	8,549	60.00	3.00	20.0	0.50	2.50	14.0	23	181				
Current BHA Components																		
BHA No	Item Description				Make	Model	OD (in)	Jts	Length (ft)		Top Thread							
9	DRILL PIPE				ENSIGN DRILLING		5	269	8,453.22		IF							
9	NMDC				LEAM		6 5/8	1	29.88		IF							
9	NMDC				LEAM		6 5/8	1	29.70		IF							
9	MWD - DIRECTIONAL																	
9	UBHO SUB				LEAM		6 5/8	1	2.45		IF							
9	FLOAT SUB				LEAM		6 3/4	1	3.31		IF							
9	STABILIZER						6 3/4	1	5.31		IF							
9	MUD MOTOR				LEAM	XD	6 3/4	1	24.13		IF							
Mud Reports																		
Time 15:00	Type OIL BASE	Depth (ftKB) 8,489	Density (lb/gal) 9.65	Vis (s/qt) 69	PV Calc (cP) 15.0	YP Calc (lbf/100ft²) 5	Vis 3rpm 3	Vis 6rpm 4	LGS (%) 3.9	LCM (lb/bbl)	Chlor (mg/L) 31,000	Oil Water Ratio 79.3/20.7						
Electric Stab (V) 613.0	X Lime (lb/bbl) 3.2	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 14.0	Cum Mud Lost to Hole (bbl) 2037.0	Daily Mud Field Est (Cost) 3,007.74	Cum Mud Field Est (Cost) 586,364.10										
Time 03:00	Type OIL BASE	Depth (ftKB) 8,489	Density (lb/gal) 9.60	Vis (s/qt) 65	PV Calc (cP) 14.0	YP Calc (lbf/100ft²) 6	Vis 3rpm 3	Vis 6rpm 4	LGS (%) 3.4	LCM (lb/bbl)	Chlor (mg/L) 33,000	Oil Water Ratio 77.8/22.2						
Electric Stab (V) 613.0	X Lime (lb/bbl) 2.9	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 14.0	Cum Mud Lost to Hole (bbl) 2037.0	Daily Mud Field Est (Cost) 3,007.74	Cum Mud Field Est (Cost) 586,364.10										
Wellbore Design																		
Casing Description				Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)								
CONDUCTOR				11/13/2013	20	94.00	J-55	WELDED	110.0	76.00								
SURFACE				11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	601.67								
INTERMEDIATE				11/1/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,369.52								
PRODUCTION				11/22/2014	5 1/2	17.00	P-110	LT&C	18,236.0	18,761.58								
Survey Data																		
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)		
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70		
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60		
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12		
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03		
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76		
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32		
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03		
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26		
8,252		60.41		185.86		8,108		343.68		-343.68		-349.64		6.94		6.87		
8,283		63.05		185.50		8,123		370.85		-370.85		-352.34		8.58		8.52		
8,315		65.60		185.86		8,137		399.55		-399.55		-355.20		8.03		7.97		
8,346		68.06		185.68		8,149		427.90		-427.90		-358.06		7.95		7.94		
8,377		70.52		184.45		8,160		456.78		-456.78		-360.62		8.76		7.94		
8,409		73.34		183.92		8,170		487.12		-487.12		-362.84		8.95		8.81		
8,440		75.80		183.39		8,178		516.94		-516.94		-364.74		8.10		7.94		
8,471		76.94		183.75		8,186		547.01		-547.01		-366.62		3.85		3.68		
Mud Logging Information																		
Lithology and Shows CUR LITHOLOGY @ 8460: 10% LS 90% SH								Max Trip Gas (units) 1,742		Avg Drill Gas (units)		Max Drill Gas (units)						
LAST 24 HOURS: LS, SH, SLTST																		
Geological Data																		
Formation Name						Prog Top TVD (ftKB)			Drill Top MD (ftKB)			Drill Top (TVD) (ftKB)						
SALADO						1,164												



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/18/2014
Report # 32
Projected Days 19
Drilling Days 23
Current Depth 8,549
Depth Progress 60
Planned VS 10,322
Current VS 547
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,959	7,913.7
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/19/2014
Report # 33
Projected Days 19
Drilling Days 24
Current Depth 10,313
Depth Progress 1,764
Planned VS 10,322
Current VS 2,212
AFE # DV02164
Total AFE 8,033,600

API 42383384400000			Surface Legal Location Block 09 Section 18			Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #4 TL:8,224' TVD @ 0' VS W/89.76° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 87,199		Cum Field Est (Cost) 4,480,790											
Status at Report Time DRILL 8 3/4" LATERAL @ 10313'																													
Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 8549' – 8681' 132' AT 44 FPH, SERVICE RIG & TOP DRIVE, SLIDE/ROTATE DRILL LATERAL FROM 8681' – 10313' 1632' AT 79.6 FPH LS 10139°, MD, 89.34° INC, 179.70° AZM, 8232.50' TVD, 2211.96 VS, 1.20° DLS PTB: 10192' MD, 8233.11' TVD, 89.34° INC, 179.70° AZM, 2264.95 VS , 1.4' BELOW, 13.7' RIGHT. BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)										Planned Operations DRILL LATERAL TO TD @ +/- 18,236'																			
Start MD (ftKB) 8,549				End MD (ftKB) 10,313		Depth Progress (ft) 1,764		Drilling Time (hr) 23.50		Avg ROP (ft/hr) 75.1		Time Since LTI (days) 1,174			Time Since RI (days) 1,519														
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments				Hole Section		Interval		Category		Activity		NPT							
05:00		08:00		3.00		8,549		8,681		ROTATE/SLIDE DRILL FROM 8549' - 8681', 132' AT 44 FPH, ROTATE DRILL: 92' IN 2 HOURS, 46 FPH AVERAGE ROP SLIDE DRILL: 40 IN 1 HOURS, 40 FPH AVERAGE ROP 67% ROTATE, 33% SLIDE. FULL RETURNS				PROD		LAT		DRILL		DRILL W/ MUD									
08:00		08:30		0.50		8,681		8,681		SERVICE RIG & TOP DRIVE				PROD		LAT		DRILL		LUBRICATE RIG									
08:30		05:00		20.50		8,681		10,313		ROTATE/SLIDE DRILL FROM 8681' - 10313', 1632' AT 79.6 FPH, ROTATE DRILL: 1467' IN 16.5 HOURS, 88.9 FPH AVERAGE ROP SLIDE DRILL: 165 IN 4 HOURS, 41.3 FPH AVERAGE ROP 80% ROTATE, 20% SLIDE. FULL RETURNS				PROD		LAT		DRILL		DRILL W/ MUD									
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
8,549		8,587		1.00		0.00		38.0				330		10		507		2,400.0		40		195		175		8,000			
8,587		8,597		0.00		0.50		20.0		45		350		20		507		2,400.0		0		195		175		0			
8,597		8,618		0.50		0.00		42.0				350		18		507		2,400.0		40		195		175		8,000			
8,618		8,628		0.00		0.25		40.0		45		350		20		507		2,350.0		0		195		175		0			
8,628		8,650		0.25		0.00		88.0				325		18		507		2,350.0		40		195		175		8,000			
8,650		8,670		0.00		0.25		80.0		20		270		22		507		2,350.0		0		195		175		0			
8,670		8,681		0.25		0.00		44.0				300		18		507		2,400.0		40		195		175		8,000			
8,681		8,696		0.00		0.50		30.0		70		300		20		507		2,350.0		0		195		175		0			
8,696		8,870		3.50		0.00		49.7				450		15		507		2,400.0		40		195		175		9,000			
8,870		8,890		0.00		0.50		40.0		10		300		20		507		2,400.0		0		195		175		0			
8,890		9,059		1.50		0.00		112.7				450		20		507		2,530.0		80		195		175		12,000			
9,059		9,079		0.00		0.50		40.0		70		260		17		507		2,400.0		0		195		175		0			
9,079		9,248		2.00		0.00		84.5		70		500		19		507		2,550.0		80		195		175		12,000			
9,248		9,261		0.00		0.50		26.0		90		365		20		507		2,560.0		0		195		175		0			
9,261		9,641		4.00		0.00		95.0				475		18		507		2,560.0		80		195		175		12,000			
9,641		9,661		0.00		0.50		40.0		90		250		12		590		3,200.0		0		195		175		0			
9,661		9,720		0.50		0.00		118.0				475		17		590		3,380.0		80		195		175		12,000			
9,720		9,740		0.00		0.50		40.0		90		350		22		590		3,145.0		0		195		175		0			
9,740		10,003		2.00		0.00		131.5				700		18		590		3,604.0		100		195		175		14,000			
10,003		10,030		0.00		0.50		54.0		80		450		26		590		3,025.0		0		195		175		0			
10,030		10,283		3.00		0.00		84.3				550		12		590		3,425.0		100		195		175		14,000			
10,283		10,313		0.00		0.50		60.0		90		550		26		590		3,025.0		0		195		175		0			
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4		SMITH		FHI21		INSERT		1-3-WT-S-2-0-BT-BHA		7,763		8,489		726.00		62.50		11.6		15.00		47.50		17.5		41		142	
8 3/4		HALLIBURTON		MM65D		PDC		-----		8,489		10,313		1,824.00		26.50		68.8		19.00		7.50		82.4		26		246	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
9		DRILL PIPE						ENSIGN DRILLING				5		269		8,453.22		IF											
9		NMDC						LEAM				6 5/8		1		29.88		IF											
9		NMDC						LEAM				6 5/8		1		29.70		IF											
9		MWD - DIRECTIONAL																											
9		UBHO SUB						LEAM				6 5/8		1		2.45		IF											
9		FLOAT SUB						LEAM				6 3/4		1		3.31		IF											
9		STABILIZER						LEAM				6 3/4		1		5.31		IF											
9		MUD MOTOR						LEAM		XD		6 3/4		1		24.13		IF											
Mud Reports																													
Time 15:00		Type OIL BASE		Depth (ftKB) 8,683		Density (lb/gal) 9.55		Vis (s/qt) 59		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 7		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 5.8		LCM (lb/bbl)		Chlor (mg/L) 33,000		Oil Water Ratio 79/21					
Electric Stab (V) 670.0		X Lime (lb/bbl) 3.0		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 2037.0		Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 6,129.04		Cum Mud Field Est (Cost) 592,493.14											
Time 03:00		Type OIL BASE		Depth (ftKB) 9,639		Density (lb/gal) 9.70		Vis (s/qt) 54		PV Calc (cP) 13.0		YP Calc (lb/100ft²) 6		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 5.7		LCM (lb/bbl)		Chlor (mg/L) 31,000		Oil Water Ratio 79/21					
Electric Stab (V) 711.0		X Lime (lb/bbl) 2.7		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 2037.0		Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 6,129.04		Cum Mud Field Est (Cost) 592,493.14											
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION						11/22/2014		5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58											
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
9,479		90.13		181.81		8,226		1,552.24		-1,552.24		-376.20		1.89		0.37													
9,573		89.43		182.52		8,226		1,646.18		-1,646.18		-379.75		1.06		-0.74													
9,667		89.34		182.52		8,227		1,740.08		-1,740.08		-383.88		0.10		-0.10													
9,762		89.16		179.70		8,228		1,835.04		-1,835.04		-385.72		2.97		-0.19													
9,856		88.55		179.88		8,230		1,929.02		-1,929.02		-385.38		0.68		-0.65													
9,950		89.08		182.16		8,232		2,022.98		-2,022.98		-387.05		2.49		0.56													



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/19/2014
Report # 33
Projected Days 19
Drilling Days 24
Current Depth 10,313
Depth Progress 1,764
Planned VS 10,322
Current VS 2,212
AFE # DV02164
Total AFE 8,033,600

Survey Data								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)
10,044	90.48	179.70	8,232	2,116.96	-2,116.96	-388.58	3.01	1.49
10,139	89.34	179.70	8,232	2,211.96	-2,211.96	-388.08	1.20	-1.20

Mud Logging Information			
Lithology and Shows		Max Trip Gas (units)	Avg Drill Gas (units)
CUR LITHOLOGY @ 10201: 5% LS 95% SH			
LAST 24 HOURS: LS, SH, SLTST			

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,959	7,913.7
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/20/2014
Report # 34
Projected Days 19
Drilling Days 25
Current Depth 12,367
Depth Progress 2,054
Planned VS 10,322
Current VS
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																											
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #5 TL:8,225' TVD @ 0' VS W/89.83° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 295,608		Cum Field Est (Cost) 4,784,915									
Status at Report Time DRILL 8 3/4 LATERAL AT 12367																											
Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 10313' – 11420' 1107' AT 100.6 FPH, SERVICE RIG & TOP DRIVE, SLIDE/ROTATE DRILL LATERAL FROM 11420' – 12367' 947' AT 72.8 FPH LS 12281', MD, 92.68° INC, 178.82° AZM, 8244.52' TVD, 4289.52 VS, 2.9° DLS PTB: 12271' MD, 8242.04' TVD,92.68° INC, 178.82° AZM, 4342.45 VS , 6.8' BELOW, BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)										Planned Operations DRILL LATERAL TO TD @ +/- 18,236'																	
Start MD (ftKB) 10,313				End MD (ftKB) 12,367		Depth Progress (ft) 2,054		Drilling Time (hr) 23.50		Avg ROP (ft/hr) 87.4		Time Since LTI (days) 1,175		Time Since RI (days) 1,520													
Daily Time Log																											
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT												
05:00	16:30	11.50	10,313	11,420	ROTATE/SLIDE DRILL FROM 10313' - 11420', 1107' AT 96.3 FPH, ROTATE DRILL: 1047' IN 9.5 HOURS, 110.2 FPH AVERAGE ROP SLIDE DRILL: 60 IN 2 HOURS, 30.0 FPH AVERAGE ROP 83% ROTATE, 17% SLIDE. FULL RETURNS					PROD	LAT	DRILL	DRILL W/ MUD		Yes												
16:30	17:00	0.50	11,420	11,420	SERVICE RIG & TOP DRIVE					PROD	LAT	DRILL	LUBRICATE RIG		Yes												
17:00	05:00	12.00	11,420	12,367	ROTATE/SLIDE DRILL FROM 11420 - 12367', 947' AT 79 FPH, ROTATE DRILL: 822' IN 9 HOURS, 91.3 FPH AVERAGE ROP SLIDE DRILL: 125 IN 3 HOURS,41.6 FPH AVERAGE ROP 79% ROTATE, 21% SLIDE. FULL RETURNS					PROD	LAT	DRILL	DRILL W/ MUD		Yes												
Drilling Parameters																											
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq	
10,313		10,960		5.00		0.00		129.4				500		18		535		3,180.0		100		210		175		13,000	
10,960		10,980		0.00		0.50		40.0		90		260		25		535		2,800.0		0		210		175		0	
10,980		11,245		3.00		0.00		88.3				530		25		535		3,250.0		100		210		175		13,000	
11,245		11,265		0.00		1.00		20.0		45		200		15		535		2,730.0		0		210		175		0	
11,265		11,343		1.00		0.00		78.0				520		28		535		3,050.0		100		210		175		13,000	
11,343		11,363		0.00		0.50		40.0		0		260		18		535		2,800.0		0		210		175		0	
11,363		11,420		0.50		0.00		114.0				520		28		535		3,050.0		100		210		175		13,000	
11,420		11,430		0.50		0.00		20.0				480		28		535		3,030.0		100		210		175		13,000	
11,430		11,460		0.00		0.50		60.0		0		265		35		535		2,860.0		0		210		175			
11,460		11,530		1.00		0.00		70.0				450		17		535		3,000.0		100		210		175		13,000	
11,530		11,545		0.00		0.50		30.0		0		350		15		535		3,000.0		0		210		175			
11,545		11,893		3.00		0.00		116.0				450		23		535		3,200.0		100		210		175		13,000	
11,893		11,913		0.00		0.50		40.0		0		300		20		590		3,500.0		0		210		175			
11,913		12,083		2.00		0.00		85.0		0		350		15		590		3,650.0		100		210		175		13,000	
12,083		12,113		0.00		0.50		60.0		0		275		15		535		2,860.0		0		210		175			
12,113		12,178		0.50		0.00		130.0		0		350		15		535		3,100.0		100		210		175		13,000	
12,178		12,208		0.00		1.00		30.0		0		225		17		535		2,950.0		0		210		175			
12,208		12,367		2.00		0.00		79.5		0		325		12		535		3,100.0		100		210		175		14,000	
Bit Information																											
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)									
8 3/4	SMITH		FHI21		INSERT		1-3-WT-S-2-0-BT-BHA		7,763	8,489	726.00	62.50	11.6	15.00	47.50	17.5	41	142									
8 3/4	HALLIBURTON		MM65D		PDC		-----		8,489	12,367	3,878.00	50.00	77.6	37.50	12.50	91.6	35	246									
Current BHA Components																											
BHA No	Item Description						Make		Model		OD (in)		Jts	Length (ft)		Top Thread											
9	DRILL PIPE						ENSIGN DRILLING				5		269	8,453.22		IF											
9	NMDC						LEAM				6 5/8		1	29.88		IF											
9	NMDC						LEAM				6 5/8		1	29.70		IF											
9	MWD - DIRECTIONAL																										
9	UBHO SUB						LEAM				6 5/8		1	2.45		IF											
9	FLOAT SUB						LEAM				6 3/4		1	3.31		IF											
9	STABILIZER						LEAM				6 3/4		1	5.31		IF											
9	MUD MOTOR						LEAM		XD			6 3/4		1	24.13		IF										
Mud Reports																											
Time 15:00	Type OIL BASE		Depth (ftKB) 10,880		Density (lb/gal) 9.70		Vis (s/qt) 55		PV Calc (cP) 13.0		YP Calc (lb/100ft²) 6		Vis 3rpm 3		Vis 6rpm 4		LGS (%) 5.7		LCM (lb/bbl) 1,416.20		Chlor (mg/L) 31,000		Oil Water Ratio 78.5/21.5				
Electric Stab (V) 689.0		X Lime (lb/bbl) 2.6		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 14.0		Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 1,416.20		Cum Mud Field Est (Cost) 593,909.34											
Time 03:00	Type OIL BASE		Depth (ftKB) 11,513		Density (lb/gal) 9.70		Vis (s/qt) 54		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 6		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 4.8		LCM (lb/bbl) 1,416.20		Chlor (mg/L) 20,000		Oil Water Ratio 78.7/21.3				
Electric Stab (V) 760.0		X Lime (lb/bbl) 3,037.0		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 2037.0		Cum Mud Lost to Hole (bbl) 2037.0		Daily Mud Field Est (Cost) 1,416.20		Cum Mud Field Est (Cost) 593,909.34											
Wellbore Design																											
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)										
CONDUCTOR					11/13/2013		20		94.00		J-55		WELDED		110.0		76.00										
SURFACE					11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67										
INTERMEDIATE					11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52										
PRODUCTION					11/22/2014		5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58										
Survey Data																											
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)											
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70											
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60											
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12											
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03											
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76											
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32											
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03											
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26											
11,556		92.77		179.18		8,247		3,628.03		-3,628.03		-373.89		2.52		2.34											
11,651		92.07		179.18		8,243		3,722.94		-3,722.94		-372.53		0.74		-0.74											
11,746		90.92		179.00		8,240		3,817.89		-3,817.89		-371.03		1.23		-1.21											
11,840		88.37		178.30		8,241		3,911.86		-3,911.86		-368.81		2.81		-2.71											
11,935		91.28		178.82		8,241		4,006.81		-4,006.81		-366.42		3.11		3.06											
12,030		87.93		177.59		8,242		4,101.75		-4,101.75		-363.45		3.76		-3.53											
12,124		89.96		179.00		8,244		4,195.69		-4,195.69		-360.65		2.63		2.16											
12,218		92.68		178.82		8,241		4,289.63		-4,289.63		-358.87		2.90		2.89											



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/20/2014
Report # 34
Projected Days 19
Drilling Days 25
Current Depth 12,367
Depth Progress 2,054
Planned VS 10,322
Current VS
AFE # DV02164
Total AFE 8,033,600

Mud Logging Information

Lithology and Shows CUR LITHOLOGY @ 12120: 5% LS 95% SH	Max Trip Gas (units)	Avg Drill Gas (units)	Max Drill Gas (units)
LAST 24 HOURS: LS, SH,			

Geological Data

Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,959	7,913.7
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/21/2014
Report # 35
Projected Days 19
Drilling Days 26
Current Depth 13,405
Depth Progress 1,038
Planned VS 10,322
Current VS
AFE # DV02164
Total AFE 8,033,600

API 42383384400000	Surface Legal Location Block 09 Section 18	Latitude 31.2874333000	Longitude -101.5913972000	Orig KB El... 2,694.00	RKB (ft) 30.00	County REAGAN	State TEXAS
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Report Summary								
Well Spud 10/15/2013	TD Date	RR Date	Target Formation WOLFCAMP-B	Prop TD (ftKB) 18,236	Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC	Drilling AFE 2,048,600	Daily Field Est (Cost) 69,983	Cum Field Est (Cost) 4,854,898

Status at Report Time DRILL 8 3/4 LATERAL AT 13405

Operations Summary SLIDE/ROTATE DRILL LATERAL FROM 12461' - 13250' 789' AT83 FPH,PUMP HIGH VIS SWEEPAND WORK PIPE, SLIDE/ROTATE DRILL LATERAL FROM 13250 - 13321' 71' AT 47.3 FPH.CLEAN UP CYCLE,PUMPED 3 SWEEPS WORKING PIPE. SLIDE/ROTATE FROM 13321 - 13405. 84' AT 33.6FPH LS 13356', MD, 87.14° INC,183.22° AZM, 8253.21' TVD, 5426.41 VS, .27° DLS PTB: 13409' MD, 8255.86' TVD 87.14° INC, 183.22° AZM, 5479.26 VS , 12.1' BELOW, 27.1 R BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)	Planned Operations DRILL LATERAL TO TD @ +/- 18,236'
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Start MD (ftKB) 12,367	End MD (ftKB) 13,405	Depth Progress (ft) 1,038	Drilling Time (hr) 15.50	Avg ROP (ft/hr) 67.0	Time Since LTI (days) 1,176	Time Since RI (days) 1,521
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Daily Time Log										
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments	Hole Section	Interval	Category	Activity	NPT
05:00	14:30	9.50	12,367	13,250	ROTATE/SLIDE DRILL FROM 12367 - 13250 ', 883 ' AT 93 FPH, ROTATE DRILL: 843' IN 8 HOURS,105.3 FPH AVERAGE ROP SLIDE DRILL: 40 IN 1.5 HOURS,26.6 FPH AVERAGE ROP 86% ROTATE, 14% SLIDE. FULL RETURNS	PROD	LAT	DRILL	DRILL W/ MUD	Yes
14:30	16:00	1.50	13,250	13,250	CIRC AND WORK PIPE TO CLEAN HOLE, PUMP HIGH VIS SWEEPS	PROD	LAT	DRILL	COND MUD & CIRC	Yes
16:00	17:30	1.50	13,250	13,261	ROTATE/SLIDE DRILL FROM 13250 - 13312, 73' AT 47.3 FPH, ROTATE DRILL: 60' IN .5 HOUR,120 FPH AVERAGE ROP SLIDE DRILL: 11' IN 1 HOUR,11 FPH AVERAGE ROP 33% ROTATE, 67 % SLIDE. FULL RETURNS	PROD	LAT	DRILL	DRILL W/ MUD	
17:30	23:00	5.50	13,261	13,261	CLEAN UP CYCLE. MIX AND PUMP 2 HIGH VIS SWEEPS WHILE WORKING PIPE 94' INITIAL PU WT. 185 SO 175 TQ 7500. CIRC OUT LOTS OF FINES AND LARGE PICES OF BROKEN SHALE, HOLE SEEPING FLUID. MIX AND PUMP 10 PPB LCM HIGH VIS SWEEP, CIRC OUT ONLY FINES. FINAL PU WT 181 SO 175 TQ 6400	PROD	LAT	DRILL	COND MUD & CIRC	Yes
23:00	03:30	4.50	13,261	13,342	ROTATE/SLIDE DRILL FROM 13312 - 13405, 84' AT 33.6 FPH, ROTATE DRILL: 63' IN 1 HOUR,63 FPH AVERAGE ROP SLIDE DRILL: 30' IN 2.5 HOUR,12 FPH AVERAGE ROP 84% ROTATE,16 % SLIDE. FULL RETURNS	PROD	LAT	DRILL	DRILL W/ MUD	
03:30	05:00	1.50	13,342	13,342	CIRC AND CLEAN HOLE FOR TRIP	PROD	LAT	DRILL	COND MUD & CIRC	Yes

Start Depth (ftKB)	End Depth (ftKB)	Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq
12,367	13,135	8.00	0.00	96.0		500	25	535	3,150.0	100	225	185	14,000
13,135	13,155	0.00	0.50	40.0	0	500	25	535	3,100.0	0	225	185	
13,155	13,230	1.00	0.00	75.0		500	25	535	3,400.0	100	225	185	14,000
13,230	13,250	0.00	1.00	20.0		190	40	535	2,963.0	0	225	185	0
13,250	13,261	0.00	1.00	11.0		150	23	535	2,973.0	0	225	185	0
13,261	13,312	0.50	0.00	102.0		550	20	535	3,420.0	100	225	185	14,000
13,312	13,342	0.00	2.50	12.0		250	15	450	2,190.0	0	225	185	0
13,342	13,405	1.00	0.00	63.0		450	17	590	3,900.0	100	225	185	14,000

Size (in)	Make	Model	Typ	Dull Out	Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)
8 3/4	SMITH	FHI21	INSERT	1-3-WT-S-2-0-BT-BHA	7,763	8,489	726.00	62.50	11.6	15.00	47.50	17.5	41	142
8 3/4	HALLIBURTON	MM6SD	PDC	-----	8,489	13,405	4,916.00	65.50	75.1	48.00	17.50	91.5	40	246

BHA No	Item Description	Make	Model	OD (in)	Jts	Length (ft)	Top Thread
9	DRILL PIPE	ENSIGN DRILLING		5	423	13,313.30	IF
9	NMDC	LEAM		6 5/8	1	29.88	IF
9	NMDC	LEAM		6 5/8	1	29.70	IF
9	MWD - DIRECTIONAL						
9	UBHO SUB	LEAM		6 5/8	1	2.45	IF
9	FLOAT SUB	LEAM		6 3/4	1	3.31	IF
9	STABILIZER	LEAM		6 3/4	1	5.31	IF
9	MUD MOTOR	LEAM	XD	6 3/4	1	24.13	IF

Mud Reports												
Time 15:00	Type OIL BASE	Depth (ftKB) 13,236	Density (lb/gal) 9.70	Vis (s/qt) 55	PV Calc (cP) 16.0	YP Calc (lb/100ft²) 6	Vis 3rpm 4	Vis 6rpm 5	LGS (%) 7.8	LCM (lb/bbl)	Chlor (mg/L) 30,000	Oil Water Ratio 78.3/21.7
Electric Stab (V) 595.0	X Lime (lb/bbl) 2.9	HTHP Filtrate (mL/30min) 6.2	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 2037.0	Daily Mud Field Est (Cost) 7,538.23	Cum Mud Field Est (Cost) 601,447.57				
Time 03:00	Type OIL BASE	Depth (ftKB) 13,312	Density (lb/gal) 9.80	Vis (s/qt) 55	PV Calc (cP) 16.0	YP Calc (lb/100ft²) 6	Vis 3rpm 4	Vis 6rpm 5	LGS (%) 7.1	LCM (lb/bbl)	Chlor (mg/L) 30,000	Oil Water Ratio 78.3/21.7
Electric Stab (V) 614.0	X Lime (lb/bbl) 3.1	HTHP Filtrate (mL/30min) 6.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl)	Cum Mud Lost to Hole (bbl) 2037.0	Daily Mud Field Est (Cost) 7,538.23	Cum Mud Field Est (Cost) 601,447.57				

Wellbore Design							
Casing Description	Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)
CONDUCTOR	11/13/2013	20	94.00	J-55	WELDED	110.0	76.00
SURFACE	11/15/2013	13 3/8	54.50	J-55	BUTTRESS THREAD	635.0	601.67
INTERMEDIATE	11/1/2014	9 5/8	40.00	J-55	LT&C	6,402.8	6,369.52
PRODUCTION		5 1/2	17.00	P-110	LT&C	18,236.0	18,761.58

Survey Data								
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)
14,973	90.66	174.78	8,180	7,003.07	-7,003.07	-340.17	1.94	1.70
15,067	89.16	176.89	8,180	7,096.82	-7,096.82	-333.34	2.75	-1.60
15,162	90.22	177.59	8,180	7,191.70	-7,191.70	-328.77	1.34	1.12
15,256	89.25	179.18	8,181	7,285.66	-7,285.66	-326.12	1.98	-1.03
15,351	90.92	178.30	8,181	7,380.63	-7,380.63	-324.03	1.99	1.76
15,444	89.69	176.71	8,180	7,473.54	-7,473.54	-319.98	2.16	-1.32
15,538	88.72	176.19	8,182	7,567.35	-7,567.35	-314.16	1.17	-1.03
15,632	90.84	177.77	8,182	7,661.21	-7,661.21	-309.21	2.81	2.26
12,692	90.66	181.46	8,235	4,763.30	-4,763.30	-351.02	2.04	0.19
12,787	89.16	180.41	8,235	4,858.28	-4,858.28	-352.57	1.93	-1.58
12,881	89.43	182.16	8,236	4,952.24	-4,952.24	-354.68	1.88	0.29
12,976	88.37	181.81	8,238	5,047.17	-5,047.17	-357.97	1.18	-1.12
13,071	88.29	183.22	8,241	5,142.03	-5,142.03	-362.13	1.49	-0.08
13,165	87.49	182.16	8,244	5,235.86	-5,235.86	-366.54	1.41	-0.85
13,218	87.49	182.16	8,247	5,288.78	-5,288.78	-368.54	0.00	0.00
13,356	87.14	183.22	8,253	5,426.47	-5,426.47	-375.01	0.81	-0.25



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/21/2014
Report # 35
Projected Days 19
Drilling Days 26
Current Depth 13,405
Depth Progress 1,038
Planned VS 10,322
Current VS
AFE # DV02164
Total AFE 8,033,600

Mud Logging Information			
Lithology and Shows CUR LITHOLOGY @ 13405: 10% LS 95% SH	Max Trip Gas (units)	Avg Drill Gas (units)	Max Drill Gas (units)
LAST 24 HOURS: LS, SH,			
Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SALADO	1,164		
YATES	1,856		
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,959	7,913.7
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/22/2014
Report # 36
Projected Days 19
Drilling Days 27
Current Depth 13,405
Depth Progress 0
Planned VS 10,322
Current VS 5,226
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS										
Report Summary																								
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 119,645		Cum Field Est (Cost) 4,976,413								
Status at Report Time TEST BOPE																								
Operations Summary CLEAN UP CYCLE, HOLE SEEPING, PUMP 2 HIGH VIS 15 PPB LCM SWEEPS, SPOT 80 BBL LCM PILL IN HOLE, TRIP OUT TO SHOE, SPOT 80 BBL LCM PILL, TRIP OUT TO BIT.PULL MWD. TEST BOPE, CHOKE AND IBOP.								Planned Operations TEST BOPE, MAKE UP NEW BHA AND TRIP IN TO DRILL 8 3/4 LATERAL																
Start MD (ftKB) 13,405			End MD (ftKB) 13,405			Depth Progress (ft) 0		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,177		Time Since RI (days) 1,522										
Daily Time Log																								
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT									
05:00	10:00	5.00	13,408	13,408	CLEAN UP CYCLE. MIX AND PUMP 2 HIGH VIS SWEEPS WHILE WORKING PIPE 94' INITIAL PU WT. 185 SO 175 TQ 7800. CIRC OUT LOTS OF FINES AND LARGE PICES OF BROKEN SHALE, HOLE SEEPING FLUID. MIX AND PUMP 2/15 PPB LCM HIGH VIS SWEEP, CIRC OUT ONLY FINES. FINAL PU WT 180 SO 175 TQ 4000. SPOT 80 BBL/30 PPB LCM PILL ON BOTTOM					PROD	LAT	DRILL	COND MUD & CIRC		Yes									
10:00	18:30	8.50	13,408	13,408	PUMP SLUG AND TRIP OUT, HOLE SWABBING, PULL SLOW FROM 13408 - 11232, PULL UP TO 6794					PROD	LAT	DRILL	TRIPS		Yes									
18:30	20:00	1.50	13,408	13,408	SPOT 80 BBL LCM PILL MIX AND PUMP SLUG					PROD	LAT	DRILL	COND MUD & CIRC		Yes									
20:00	03:30	7.50	13,408	13,408	TRIP OUT, BREAK BIT,PULL MWD AND STAND BACK MOTOR AND MONELS					PROD	LAT	DRILL	TRIPS		Yes									
03:30	04:30	1.00	13,408	13,408	PULL WEAR BUSHING AND INSTALL TEST PLUG					PROD	LAT	DRILL	TEST B.O.P		Yes									
04:30	05:00	0.50	13,408	13,408	TEST BOPE, CHOKE 250 PSI LOW - 5000 PSI HIGH 10 MIN EACH TEST					PROD	LAT	DRILL	TEST B.O.P		Yes									
Drilling Parameters																								
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)	Slide Time (hr)	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)		WOB (1000lbf)	Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq					
Bit Information																								
Size (in)	Make		Model		Typ		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)						
8 3/4	HALLIBURTON		MM65D		PDC		2-6-WT-G--0-WT-PR		8,489	13,405	4,916.00	65.50	75.1	48.00	17.50	91.5	40	246						
8 3/4	SMITH		MDSI 613		PDC		-----																	
Current BHA Components																								
BHA No		Item Description					Make		Model		OD (in)		Jts		Length (ft)		Top Thread							
10		DRILL PIPE					ENSIGN DRILLING				5		423		13,313.30		IF							
10		NMDC					LEAM				6 5/8		1		29.88		IF							
10		NMDC					LEAM				6 5/8		1		29.70		IF							
10		MWD - DIRECTIONAL																						
10		UBHO SUB					LEAM				6 5/8		1		2.45		IF							
10		FLOAT SUB					LEAM				6 3/4		1		3.31		IF							
10		MUD MOTOR					LEAM		XD		6 3/4		1		24.37		IF							
Mud Reports																								
Time 15:00	Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 55		PV Calc (cP) 16.0		YP Calc (lb/100ft²) 6		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 7.1		LCM (lb/bbl)		Chlor (mg/L) 30,000		Oil Water Ratio 78.3/21.7	
Electric Stab (V) 614.0		X Lime (lb/bbl) 3.1		HTHP Filtrate (mL/30min) 6.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 2416.0		Daily Mud Field Est (Cost) 18,017.36		Cum Mud Field Est (Cost) 619,464.93								
Time 15:00	Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 55		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 8		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 6.9		LCM (lb/bbl)		Chlor (mg/L) 25,000		Oil Water Ratio 80.6/19.4	
Electric Stab (V) 645.0		X Lime (lb/bbl) 3.1		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 379.0		Cum Mud Lost to Hole (bbl) 2416.0		Daily Mud Field Est (Cost) 18,017.36		Cum Mud Field Est (Cost) 619,464.93								
Wellbore Design																								
Casing Description					Run Date			OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)						
CONDUCTOR					11/13/2013			20		94.00		J-55		WELDED		110.0		76.00						
SURFACE					11/15/2013			13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67						
INTERMEDIATE					11/1/2014			9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52						
PRODUCTION								5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58						
Survey Data																								
MD (ftKB)		Incl (°)		Azim (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)								
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70								
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60								
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12								
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03								
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76								
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32								
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03								
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26								
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19								
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58								
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29								
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12								
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08								
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85								
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00								
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25								
Mud Logging Information																								
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS LAST 24 HOURS: LS, SH,										Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)										
Geological Data																								
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)												
SALADO								1,164																
YATES								1,856																
SEVEN RIVERS								1,992																
QUEEN								2,408																
GRAYBURG								3,078		3,078		3,077.9												
SAN ANDRES								3,389		3,389		3,388.9												
SPRABERRY UPPER								6,131		6,030		6,020.1												
SPRABERRY LOWER								6,704		6,704		6,691.2												
JO-MILL SAND								6,976		6,976		6,962.9												
DEAN								7,486		7,486		7,471.0												
WOLFCAMP-A (WFMP_A)								7,658		7,660		7,642.9												
WOLFCAMP-B (WFMP_B)								8,032		8,032		7,980.4												
WOLFCAMP-A (WFMP_A)								7,658		7,959		7,913.7												
WOLFCAMP-B (WFMP_B)								8,032		8,120		8,031.7												



UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date	11/23/2014
Report #	37
Projected Days	19
Drilling Days	28
Current Depth	13,405
Depth Progress	
Planned VS	10,322
Current VS	5,226
AFE #	DV02164
Total AFE	8,033,600

42383384400000				Surface Legal Location Block 09 Section 18				Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS											
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B				Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 68,975		Cum Field Est (Cost) 5,045,388									
Status at Report Time TRIPING IN HOLE @ 6000'																													
Operations Summary TEST BOPE, REPAIRS TO BLIND RAMS, MAKE UP NEW BHA AND TRIP IN HOLE, RIG SERVICE, TRIP IN HOLE										Planned Operations TRIP IN TO SHOE, TEST MWD AND TRIP IN HOLE TO DRILL 8 3/4 LATERAL																			
Start MD (ftKB) 13,408				End MD (ftKB) 13,405				Depth Progress (ft)				Drilling Time (hr)				Avg ROP (ft/hr)				Time Since LTI (days) 1,178				Time Since RI (days) 1,523					
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments						Hole Section		Interval		Category		Activity				NPT			
05:00		11:00		6.00		13,408		13,408		TEST BOP'S, TEST RAMS, CHOKE MANIFOLD 5000 PSI HIGH, 250 PSI LOW, ANNULAR 3500 PSI HIGH, 250 PSI LOW, TOP DRIVE, STANDPIPE, MUD PUMP, 4000 PSI HIGH, 250 PSI LOW, BLIND RAMS FAILED						PROD		LAT		DRILL		TEST B.O.P				Yes			
11:00		18:00		7.00		13,408		13,408		CHANGE OUT BLIND RAM SEALS						PROD		LAT		DRILL		REPAIR RIG				Yes			
18:00		19:00		1.00		13,408		13,408		TEST BLIND RAMS TO 250 LOW AND 5000 HIGH, PULL TEST PLUG AND RIG DOWN TESTERS						PROD		LAT		DRILL		TEST B.O.P				Yes			
19:00		19:30		0.50		13,408		13,408		INSTALL WEAR BUSHING						PROD		LAT		DRILL		TEST B.O.P				Yes			
19:30		23:00		3.50		13,408		13,408		CHANGE OUT MUD MOTOR, INSTALL MWD AND SURFACE TEST MWD, MAKE UP BIT						PROD		LAT		DRILL		P/U & L/D BHA				Yes			
23:00		03:30		4.50		13,408		13,408		TRIP IN HOLE TO 5750', STRAP DP, FILL PIPE EVERY 30 STANDS						PROD		LAT		DRILL		TRIPS				Yes			
03:30		04:00		0.50		13,408		13,408		SERVICE RIG						PROD		LAT		DRILL		LUBRICATE RIG				Yes			
04:00		05:00		1.00		13,408		13,408		TRIP IN HOLE TO 6000'						PROD		LAT		DRILL		TRIPS				Yes			
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
13,408				0.00		0.00																							
Bit Information																													
Size (in)		Make		Model		Typ		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4		HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489		13,405		4,916.00		65.50		75.1		48.00		17.50		91.5		40		246	
8 3/4		SMITH		MDSI 613		PDC		-----		13,408																			
Current BHA Components																													
BHA No		Item Description								Make		Model		OD (in)		Jts		Length (ft)		Top Thread									
10		DRILL PIPE								ENSIGN DRILLING				5		423		13,313.30		IF									
10		NMDC								LEAM				6 5/8		1		29.88		IF									
10		NMDC								LEAM				6 5/8		1		29.70		IF									
10		MWD - DIRECTIONAL																											
10		UBHO SUB								LEAM				6 5/8		1		2.45		IF									
10		FLOAT SUB								LEAM				6 3/4		1		3.31		IF									
10		MUD MOTOR								LEAM		XD		6 3/4		1		24.37		IF									
Mud Reports																													
Time 03:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 60		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 9		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 6.9		LCM (lb/bbl)		Chlor (mg/L) 25,000		Oil Water Ratio 80.6/19.4					
Electric Stab (V) 634.0		X Lime (lb/bbl) 3.1		HTHP Filtrate (mL/30min) 10.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 2416.0		Daily Mud Field Est (Cost) 1,145.00		Cum Mud Field Est (Cost) 620,609.93													
Time 15:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 55		PV Calc (cP) 14.0		YP Calc (lb/100ft²) 8		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 6.9		LCM (lb/bbl)		Chlor (mg/L) 25,000		Oil Water Ratio 80.6/19.4					
Electric Stab (V) 642.0		X Lime (lb/bbl) 3.1		HTHP Filtrate (mL/30min) 10.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 2416.0		Daily Mud Field Est (Cost) 1,145.00		Cum Mud Field Est (Cost) 620,609.93													
Wellbore Design																													
Casing Description						Run Date				OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)									
CONDUCTOR						11/13/2013				20		94.00		J-55		WELDED		110.0		76.00									
SURFACE						11/15/2013				13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67									
INTERMEDIATE						11/1/2014				9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52									
PRODUCTION										5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58									
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19													
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58													
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29													
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12													
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08													
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85													
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00													
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS LAST 24 HOURS: LS, SH,												Max Trip Gas (units)				Avg Drill Gas (units)				Max Drill Gas (units)									
Geological Data																													
Formation Name										Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)											
SALADO										1,164																			
YATES										1,856																			
SEVEN RIVERS										1,992																			
QUEEN										2,408																			
GRAYBURG										3,078				3,078				3,077.9											
SAN ANDRES										3,389				3,389				3,388.9											
SPRABERRY UPPER										6,131				6,030				6,020.1											
SPRABERRY LOWER										6,704				6,704				6,691.2											
JO-MILL SAND										6,976				6,976				6,962.9											
DEAN										7,486				7,486				7,471.0											
WOLFCAMP-A (WFMP_A)										7,658				7,660				7,642.9											
WOLFCAMP-B (WFMP_B)										8,032				8,032				7,980.4											
WOLFCAMP-A (WFMP_A)										7,658				7,959				7,913.7											
WOLFCAMP-B (WFMP_B)										8,032				8,120				8,031.7											



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/24/2014
Report # 38
Projected Days 19
Drilling Days 29
Current Depth 13,405
Depth Progress
Planned VS 10,322
Current VS 5,226
AFE # DV02164
Total AFE 8,033,600

42383384400000			Surface Legal Location Block 09 Section 18			Latitude 31.2874333000	Longitude -101.5913972000	Orig KB El... 2,694.00	RKB (ft) 30.00	County REAGAN	State TEXAS						
Report Summary																	
Well Spud 10/15/2013	TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236	Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC			Drilling AFE 2,048,600	Daily Field Est (Cost) 61,077	Cum Field Est (Cost) 5,106,290						
Status at Report Time TRIPPING IN HOLE AT 7900																	
Operations Summary TRIPPED IN TO 8204, CHECK SHOT SURVEY, LOST RETURNS, TRIPPED OUT TO 6506, ATTEMPTING TO BREAK CIRC. MIX AND PUMP LCM PILLS REGAINED CIRCULATION, STAGE PUMP RATE UP TO 539 GPM. STARTED IN HOLE, HAD TO WASH AND REAM FROM 6506 TO 7900						Planned Operations CONTINUE TO GO IN HOLE											
Start MD (ftKB) 13,408		End MD (ftKB) 13,405		Depth Progress (ft)		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,179	Time Since RI (days) 1,524						
Daily Time Log																	
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments				Hole Section	Interval	Category	Activity	NPT				
05:00	07:30	2.50	13,408	13,408	TRIP IN TO 8202 , SURVEY CHECK SHOT TO ENSURE IN NEW WELL BORE AND LOST CIRCULATION				PROD	LAT	DRILL	TRIPS	Yes				
07:30	12:00	4.50	13,408	13,408	PULL UP TO 7860 AND PUMP 3 BLB DOWN BACKSIDE TO FILL HOLE, ATTEMPT TO CIRC, PULL UP TO 7544 AND ATTEMPT TO CIRC, PULL UP TO 6506 AND ATTEMPT TO CIRC.				PROD	LAT	DRILL	TRIPS	Yes				
12:00	00:30	12.50	13,408	13,408	MIX AND PUMP 4 80 BBL LCM PILLS WITH 25 PPB LCM, REGAINED PARTIAL RETURNS (2 -3 %). MIX AND PUMP 40 BBL 25 PPB LCM PILL REGAINED FULL RETURNS @ 293 GPM, STAGED PUMP UP TO 493 GPM, HOLE TAKING FLUID. SLOW PUMP TO 267 GPM WITH FULL RETURNS. CIRC AND BUILD VOL AND CONDITION MUD TO 9.7+ .STAGE PUMP STROKES UP AT 5 SPM INTERVALS FROM 267 GPM TO 536 GPM WITH FULL RETURNS				PROD	LAT	DRILL	COND MUD & CIRC	Yes				
00:30	05:00	4.50	13,408	13,408	WASH AND REAM IN FROM 6706 TO7900 , WITH 539 GPM 30 RPM 4600 MAX TQ. TAKING WT. INTERMENTENLY WOULD NOT SLIDE IN WITH OUT PUMP ON. ORIENT TOOLFACE TO ENTER SIDETRACK				PROD	LAT	DRILL	REAMING	Yes				
Drilling Parameters																	
Start Depth (ftKB) 13,408	End Depth (ftKB)	Rot Time (hr) 0.00	Slide Time (hr) 0.00	Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)	WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)	RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq				
Bit Information																	
Size (in)	Make		Model	Type	Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)	
8 3/4	HALLIBURTON		MM65D	PDC	2-6-WT-G-X-0-WT-PR		8,489	13,405	4,916.00	65.50	75.1	48.00	17.50	91.5	40	246	
8 3/4	SMITH		MDSI 613	PDC	-----		13,408										
Current BHA Components																	
BHA No	Item Description				Make		Model		OD (in)		Jts	Length (ft)		Top Thread			
10	DRILL PIPE				ENSIGN DRILLING				5		423	13,313.30		IF			
10	NMDC				LEAM				6 5/8		1	29.88		IF			
10	NMDC				LEAM				6 5/8		1	29.70		IF			
10	MWD - DIRECTIONAL																
10	UBHO SUB				LEAM				6 5/8		1	2.45		IF			
10	FLOAT SUB				LEAM				6 3/4		1	3.31		IF			
10	MUD MOTOR				LEAM		XD			6 3/4	1	24.37		IF			
Mud Reports																	
Time 16:30	Type OIL BASE		Depth (ftKB) 13,408	Density (lb/gal) 9.80	Vis (s/qt) 60	PV Calc (cP) 15.0	YP Calc (lb/100ft²) 7	Vis 3rpm 4	Vis 6rpm 5	LGS (%) 7.8	LCM (lb/bbl) 28,000		Chlor (mg/L) 81.6	Oil Water Ratio 18.4			
Electric Stab (V) 602.0		X Lime (lb/bbl) 3.0	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 721.0	Cum Mud Lost to Hole (bbl) 3137.0		Daily Mud Field Est (Cost) 8,989.70		Cum Mud Field Est (Cost) 629,425.13						
Time 03:00	Type OIL BASE		Depth (ftKB) 13,408	Density (lb/gal) 9.75	Vis (s/qt) 65	PV Calc (cP) 15.0	YP Calc (lb/100ft²) 7	Vis 3rpm 4	Vis 6rpm 5	LGS (%) 7.1	LCM (lb/bbl) 32,000		Chlor (mg/L) 81.1	Oil Water Ratio 18.9			
Electric Stab (V) 614.0		X Lime (lb/bbl) 3.2	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 34.0	Cum Mud Lost to Hole (bbl) 3171.0		Daily Mud Field Est (Cost) 8,989.70		Cum Mud Field Est (Cost) 629,425.13						
Wellbore Design																	
Casing Description				Run Date		OD (in)	Wt (lb/ft)	Grade		Conn		Set Depth (ftKB)	Length (ft)				
CONDUCTOR				11/13/2013		20	94.00	J-55		WELDED		110.0	76.00				
SURFACE				11/15/2013		13 3/8	54.50	J-55		BUTTRESS THREAD		635.0	601.67				
INTERMEDIATE				11/1/2014		9 5/8	40.00	J-55		LT&C		6,402.8	6,369.52				
PRODUCTION						5 1/2	17.00	P-110		LT&C		18,236.0	18,761.58				
Survey Data																	
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)	
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70	
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60	
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12	
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03	
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76	
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32	
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03	
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26	
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19	
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58	
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29	
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12	
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08	
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85	
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00	
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25	
Mud Logging Information																	
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS								Max Trip Gas (units) 692		Avg Drill Gas (units)		Max Drill Gas (units)					
Geological Data																	
Formation Name						Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)							
SALADO						1,164											
YATES						1,856											
SEVEN RIVERS						1,992											
QUEEN						2,408											
GRAYBURG						3,078		3,078		3,077.9							
SAN ANDRES						3,389		3,389		3,388.9							
SPRABERRY UPPER						6,131		6,030		6,020.1							
SPRABERRY LOWER						6,704		6,704		6,691.2							
JO-MILL SAND						6,976		6,976		6,962.9							
DEAN						7,486		7,486		7,471.0							
WOLFCAMP-A (WFMP_A)						7,658		7,660		7,642.9							
WOLFCAMP-B (WFMP_B)						8,032		8,032		7,980.4							
WOLFCAMP-A (WFMP_A)						7,658		7,959		7,913.7							
WOLFCAMP-B (WFMP_B)						8,032		8,120		8,031.7							

AMERICAN ENERGY - PERMIAN BASIN LLC

Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date	11/25/2014
Report #	39
Projected Days	19
Drilling Days	30
Current Depth	13,405
Depth Progress	
Planned VS	10,322
Current VS	5,226
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS														
Report Summary																												
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC		Drilling AFE 2,048,600		Daily Field Est (Cost) 83,204		Cum Field Est (Cost) 5,189,390												
Status at Report Time WASH AND REAM @ 11601																												
Operations Summary TRIP INHOLE 8393 TO 11699, CIRC BOTTOMS UP EVERY 5 STANDS.WORK TIGHT SPOT 11699 - 11633,WASH & REAM 11699 - 11888 HOLE PACKING OFF UNABLE TO REAM DOWN. BACKREAM FROM 11888 - 11227 ,PACKING OFF AND TIGHT UP TO 11227. ABLE TO WORK STAND WITH NO ISSUES. PUMP 50 BBL 110 VIS SWEEP AND HOLE UNLOADED A LOT OF CUTTINGS, LARGEST THE SIZE OF A QUARTER. HAD TO RUN 3 SHAKERS TO HANDLE CUTTINGS. WASH AND REAM FROM 11227 - 11601 BRINGING MW TO 9.8 24 HR LOSSES 56 BBL. LOSSES TO DATE 3227 BBL										Planned Operations CONTINUE TO CLEAN OUT AND GO IN HOLE																		
Start MD (ftKB)		13,405		End MD (ftKB)		13,405		Depth Progress (ft)		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,180		Time Since RI (days) 1,525												
Daily Time Log																												
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT													
05:00	07:00	2.00	13,408	13,408	CIRC AND CONDITION MUD AT 8393					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
07:00	08:00	1.00	13,408	13,408	TRIP IN FROM 8393 - 8865					PROD	LAT	DRILL	TRIPS		Yes													
08:00	09:00	1.00	13,408		CIRC BOTTOMS UP AT 8865					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
09:00	09:30	0.50	13,408	13,408	TRIP IN FROM 8865 - 9338					PROD	LAT	DRILL	TRIPS		Yes													
09:30	10:00	0.50	13,408	13,408	CIRC BOTTOMS UP AT 9338					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
10:00	10:30	0.50	13,408	13,408	TRIP IN FROM 9338 - 9809					PROD	LAT	DRILL	TRIPS		Yes													
10:30	11:30	1.00	13,408	13,408	CIRC BOTTOMS UP AT 9809					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
11:30	12:00	0.50	13,408	13,408	TRIP IN FROM 9809 - 10471					PROD	LAT	DRILL	TRIPS		Yes													
12:00	13:00	1.00	13,408	13,408	CIRC BOTTOMS UP AT 10471					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
13:00	13:30	0.50	13,408	13,408	TRIP IN FROM 10471 - 11133					PROD	LAT	DRILL	TRIPS		Yes													
13:30	14:30	1.00	13,408	13,408	CIRC BOTTOMS UP AT 11133					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
14:30	15:00	0.50	13,408	13,408	TRIP IN FROM 11133 - 11699					PROD	LAT	DRILL	TRIPS		Yes													
15:00	17:00	2.00	13,408	13,408	WORK THRU TIGHT SPOT FROM 11633 - 11699 PUMPING STAND DOWN HOLE PACKING OFF					PROD	LAT	DRILL	TRIPS		Yes													
17:00	18:00	1.00	13,408	13,408	CIRC BOTTOMS UP AT11699					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
18:00	23:30	5.50	13,408	13,408	WASH AND REAM FROM 11699 - 11888 W/ 80 RPM 537 GPM STARTED PACKING OFF BACK REAM FROM 11888 - 11227 TIGHT SPOTS @ 11687,11676,11655,11635,11240. HOLE TRYING TO PACKOFF, CUTTINGS GETTING LARGER					PROD	LAT	DRILL	REAMING		Yes													
23:30	04:00	4.50	13,408	13,408	PUMP 50 BBL HIGH VIS SWEEP (110 VIS) HOLE UNLOADING BROKEN SHALE UP TO SIZE OF A QUARTER. HAD TO PUT 3 SHAKERS ON TO HANDLE CUTTINGS, CIRC TILL SHAKERS CLEAN					PROD	LAT	DRILL	COND MUD & CIRC		Yes													
04:00	05:00	1.00	13,408	13,408	WASH AND REAM FROM 11322 -11601					PROD	LAT	DRILL	REAMING		Yes													
Drilling Parameters																												
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq		
Bit Information																												
Size (in)	Make		Model		Typ		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4	HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489		13,405		4,916.00		65.50		75.1		48.00		17.50		91.5		40		246	
8 3/4	SMITH		MDSI 613		PDC		-----		13,408																			
Current BHA Components																												
BHA No		Item Description					Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
10		DRILL PIPE					ENSIGN DRILLING				5		423		13,313.30		IF											
10		NMDC					LEAM				6 5/8		1		29.88		IF											
10		NMDC					LEAM				6 5/8		1		29.70		IF											
10		MWD - DIRECTIONAL																										
10		UBHO SUB					LEAM				6 5/8		1		2.45		IF											
10		FLOAT SUB					LEAM				6 3/4		1		3.31		IF											
10		MUD MOTOR					LEAM		XD		6 3/4		1		24.37		IF											
Mud Reports																												
Time 15:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.75		Vis (s/qt) 66		PV Calc (cP) 15.0		YP Calc (lb/100ft²) 6		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 8.3		LCM (lb/bbl) 28,000		Chlor (mg/L) 81/19		Oil Water Ratio				
Electric Stab (V) 752.0		X Lime (lb/bbl) 3.8		HTHP Filtrate (mL/30min) 9.4		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 3171.0		Cum Mud Lost to Hole (bbl) 3171.0		Daily Mud Field Est (Cost) 24,906.65		Cum Mud Field Est (Cost) 654,227.08												
Time 03:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.75		Vis (s/qt) 63		PV Calc (cP) 15.0		YP Calc (lb/100ft²) 6		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 8.2		LCM (lb/bbl) 29,000		Chlor (mg/L) 81/19		Oil Water Ratio				
Electric Stab (V) 737.0		X Lime (lb/bbl) 3.6		HTHP Filtrate (mL/30min) 8.2		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 56.0		Cum Mud Lost to Hole (bbl) 3227.0		Daily Mud Field Est (Cost) 24,906.65		Cum Mud Field Est (Cost) 654,227.08												
Wellbore Design																												
Casing Description				Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)												
CONDUCTOR				11/13/2013		20		94.00		J-55		WELDED		110.0		76.00												
SURFACE				11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67												
INTERMEDIATE				11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52												
PRODUCTION						5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58												
Survey Data																												
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)												
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70												
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60												
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12												
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03												
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76												
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32												
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03												
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26												
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19												
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58												
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29												
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12												
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08												
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85												
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00												
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25												
Mud Logging Information																												
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS										Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)														
Geological Data																												
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)												
SALADO								1,164																				
YATES								1,856																				



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H
AEPB WELL NO. 19
ENSIGN 735

Report Date 11/25/2014
Report # 39
Projected Days 19
Drilling Days 30
Current Depth 13,405
Depth Progress
Planned VS 10,322
Current VS 5,226
AFE # DV02164
Total AFE 8,033,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SEVEN RIVERS	1,992		
QUEEN	2,408		
GRAYBURG	3,078	3,078	3,077.9
SAN ANDRES	3,389	3,389	3,388.9
SPRABERRY UPPER	6,131	6,030	6,020.1
SPRABERRY LOWER	6,704	6,704	6,691.2
JO-MILL SAND	6,976	6,976	6,962.9
DEAN	7,486	7,486	7,471.0
WOLFCAMP-A (WFMP_A)	7,658	7,660	7,642.9
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,959	7,913.7
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7

42383384400000			Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																												
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 69,487		Cum Field Est (Cost) 5,258,877										
Status at Report Time WASH AND REAM TO 12544																												
Operations Summary WASH AND REAM FROM 11601 - 12544 PUMPING HIGH VIS & LCM SWEEPS LAST SYRVEY 13356' 87.14°, 183.22 AZ, 8253 TVD, 5426 VS, 12.1' BELOW 27.1 R 24 HR LOSSES 78 BBL. LOSSES TO DATE 3305 BBL										Planned Operations CONTINUE TO CLEAN OUT AND GO IN HOLE																		
Start MD (ftKB)			End MD (ftKB)			Depth Progress (ft)			Drilling Time (hr)			Avg ROP (ft/hr)			Time Since LTI (days)			Time Since RI (days)										
13,408			13,408			0									1,181			1,526										
Daily Time Log																												
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity		NPT												
05:00	07:00	2.00	13,408	13,408	WASH AND REAM FROM 11601 - 11794						PROD	LAT	DRILL	REAMING		Yes												
07:00	09:00	2.00	13,408	13,408	PUMP AND CIRC OUT HIGH VIS SWEEP						PROD	LAT	DRILL	COND MUD & CIRC		Yes												
09:00	13:30	4.50	13,408	13,408	WASH AND REAM FROM 11794 - 12078						PROD	LAT	DRILL	REAMING		Yes												
13:30	15:00	1.50	13,408	13,408	PUMP AND CIRC OUT HIGH VIS SWEEP						PROD	LAT	DRILL	COND MUD & CIRC		Yes												
15:00	18:00	3.00	13,408	13,408	WASH AN REAM FROM 12078 - 12203						PROD	LAT	DRILL	REAMING		Yes												
18:00	19:00	1.00	13,408	13,408	CIRC BOTTOMS UP WORK TIGHT SPOT AT 12203						PROD	LAT	DRILL	COND MUD & CIRC		Yes												
19:00	23:00	4.00	13,408	13,408	WASH AND REAM FROM 12203 - 12267 TIGHT SPOTS AT 12216, 12229 HAD TO WORK THRU MANY TIMES, TRYING TO PACKOFF SEEPING INTREMENTLY HAD ISSUES WITH PASON UNIT FREEZING UP AND LOOSING COMMUNICATION, GOT ISSUES RESOLVED THRU PASON, HARD DRIVE OVERLOADED						PROD	LAT	DRILL	REAMING		Yes												
23:00	01:00	2.00	13,408	13,408	PUMP 30 BBL HIGH VIS SWEEP W/ 15 PPB LCM BROUGHT UP A LOT OF FINES NO LARGE PIECES						PROD	LAT	DRILL	COND MUD & CIRC		Yes												
01:00	05:00	4.00	13,408	13,408	WASH AND REAM FROM 12267 - 12544 0-6K WOB 6 - 8K TQ 537 GPM						PROD	LAT	DRILL	REAMING		Yes												
Drilling Parameters																												
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq		
13,408		13,408		0.00		0.00																190				8,000		
Bit Information																												
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4	HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489		13,408		4,919.00		65.50		75.1		48.00		17.50		91.6		40		246	
8 3/4	SMITH		MDSI 613		PDC		-----		13,408		13,408																	
Current BHA Components																												
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread										
10		DRILL PIPE						ENSIGN DRILLING				5		423		13,313.30		IF										
10		NMDC						LEAM				6 5/8		1		29.88		IF										
10		NMDC						LEAM				6 5/8		1		29.70		IF										
10		MWD - DIRECTIONAL																										
10		UBHO SUB						LEAM				6 5/8		1		2.45		IF										
10		FLOAT SUB						LEAM				6 3/4		1		3.31		IF										
10		MUD MOTOR						LEAM		XD		6 3/4		1		24.37		IF										
Mud Reports																												
Time 13:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 58		PV Calc (cP) 15.0		YP Calc (lb/100ft²) 10		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 7.8		LCM (lb/bbl) 21,200		Chlor (mg/L) 80.7/19.3		Oil Water Ratio 80.7/19.3				
Electric Slab (V) 737.0		X Lime (lb/bbl) 3.6		HTHP Filtrate (mL/30min) 4.6		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 53.0		Cum Mud Lost to Hole (bbl) 3280.0		Daily Mud Field Est (Cost) 9,669.21		Cum Mud Field Est (Cost) 663,896.29												
Time 00:30		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 60		PV Calc (cP) 15.0		YP Calc (lb/100ft²) 10		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 8.0		LCM (lb/bbl) 20,600		Chlor (mg/L) 80.5/19.5		Oil Water Ratio 80.5/19.5				
Electric Slab (V) 721.0		X Lime (lb/bbl) 3.5		HTHP Filtrate (mL/30min) 4.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 25.0		Cum Mud Lost to Hole (bbl) 3305.0		Daily Mud Field Est (Cost) 9,669.21		Cum Mud Field Est (Cost) 663,896.29												
Wellbore Design																												
Casing Description					Run Date			OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)										
CONDUCTOR					11/13/2013			20		94.00		J-55		WELDED		110.0		76.00										
SURFACE					11/15/2013			13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67										
INTERMEDIATE					11/1/2014			9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52										
PRODUCTION								5 1/2		17.00		P-110		LT&C		18,236.0		18,761.58										
Survey Data																												
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)												
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70												
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60												
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12												
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03												
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76												
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32												
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03												
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26												
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19												
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58												
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29												
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12												
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08												
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85												
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00												
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25												
Mud Logging Information																												
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS										Max Trip Gas (units)			Avg Drill Gas (units)			Max Drill Gas (units)												
Geological Data																												
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)												
SALADO								1,164																				
YATES								1,856																				
SEVEN RIVERS								1,992																				
QUEEN								2,408																				
GRAYBURG								3,078								3,078		3,077.9										
SAN ANDRES								3,389								3,389		3,388.9										
SPRABERRY UPPER								6,131								6,030		6,020.1										
SPRABERRY LOWER								6,704								6,704		6,691.2										
JO-MILL SAND								6,976								6,976		6,962.9										
DEAN								7,486								7,486		7,471.0										
WOLFCAMP-A (WFMP_A)								7,658								7,660		7,642.9										
WOLFCAMP-B (WFMP_B)								8,032								8,032		7,980.4										
WOLFCAMP-A (WFMP_A)								7,658								7,959		7,913.7										



UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date	11/26/2014
Report #	40
Projected Days	19
Drilling Days	31
Current Depth	13,408
Depth Progress	0
Planned VS	10,322
Current VS	5,426
AFE #	DV02164
Total AFE	8,033,600

Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/28/2014
Report # 42
Projected Days 19
Drilling Days 33
Current Depth 13,408
Depth Progress
Planned VS 10,322
Current VS 5,426
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 65,269		Cum Field Est (Cost) 5,413,570												
Status at Report Time TRIP OUT TO 9903																													
Operations Summary TRIP OUT FROM 13,309' - 11,663', REAMED TIGHT HOLE F/ 11,663' - 11,629', 11,534' - 11,489',11227 - 11133,10976 - 10944,10836 - 10800,10702 - 10680,10227 - 10200, 10065 - 10060, 9950 - 9945. LAST SYRVEY 13356' 87.14°, 183.22 AZ, 8253 TVD, 5426 VS, 12.1' BELOW 27.1 R 24 HR LOSSES 49 BBL. LOSSES TO DATE 3388 BBL BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)										Planned Operations CONTINUE TO TRIP OUT																			
Start MD (ftKB) 13,408				End MD (ftKB) 13,408		Depth Progress (ft)		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,183		Time Since RI (days) 1,528															
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments			Hole Section		Interval		Category		Activity		NPT								
05:00		09:30		4.50		13,408		13,408		CIRC HOLECLEAN,PULL 1 STAND TO 13309, PUMP SECOND HIGH VIS LCM SWEEP, CIRC 2 BOTTOMS UP ONLY FINES ACROSS SHAKERS			PROD		LAT		DRILL		COND MUD & CIRC		Yes								
09:30		16:30		7.00		13,408		13,408		TRIP OUT FROM 13,309' - 11,663', HIT TIGHT SPOT, COULD NOT WORK THROUGH, RIH TO 11,693', ESTABLISHED CIRC, BACK REAMED TIGHT HOLE F/ 11,663' - 11,629', (34') WORKED TIGHT SPOT WHILE CIRC BTMS UP, NO DRAG, POOH TO 11,534', HIT TIGHT SPOT, ESTABLISHED CIRC, BACK REAMED F/ 11,534' - 11,489', HOLE FREED UP,			PROD		LAT		DRILL		TRIPS		Yes								
16:30		17:00		0.50		13,408		13,408		RIG SERVICE, WORK ON TOP DRIVE HYDROLOGICS SYSTEM			PROD		LAT		DRILL		LUBRICATE RIG		Yes								
17:00		19:00		2.00		13,408		13,408		WORK ON TOP DRIVE HYDROLIC SYSTEM, NO LINK TILT AND GRABBER			PROD		LAT		DRILL		REPAIR RIG		Yes								
19:00		05:00		10.00		13,408		13,408		TRIP OUT FROM 14489 - 9903, WORK THRU TIGHT SPOTS PUMPING AND ROTATING 11227 - 11133,10976 - 10944,10836 - 10800,10702 - 10680,10227 - 10200, 10065 - 10060, 9950 - 9945.			PROD		LAT		DRILL		TRIPS		Yes								
Drilling Parameters																													
Start Depth (ftKB) 13,408		End Depth (ftKB)		Rot Time (hr) 0.00		Slide Time (hr) 0.00		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf) 200		SO Str Wt (1000lbf) 180		Drill Tq 8,000			
Bit Information																													
Size (in) 8 3/4		Make HALLIBURTON		Model MM65D		Type PDC		Dull Out 2-6-WT-G-X-0-WT-PR		Depth In (ftKB) 8,489		Depth Out (ftKB) 13,408		Depth Drilled This Job (ft) 4,919.00		Job Drill Hrs (hr) 65.50		Avg ROP (ft/hr) 75.1		Rot Time (hr) 48.00		Slide Time (hr) 17.50		Rot ROP (ft/hr) 91.6		WOB Max (1000lbf) 40		Max RPM (rpm) 246	
8 3/4		SMITH		MDSI 613		PDC		-----		13,408		13,408																	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
10		DRILL PIPE						ENSIGN DRILLING				5		423		13,313.30		IF											
10		NMDC						LEAM				6 5/8		1		29.88		IF											
10		NMDC						LEAM				6 5/8		1		29.70		IF											
10		MWD - DIRECTIONAL																											
10		UBHO SUB						LEAM				6 5/8		1		2.45		IF											
10		FLOAT SUB						LEAM				6 3/4		1		3.31		IF											
10		MUD MOTOR						LEAM		XD		6 3/4		1		24.37		IF											
Mud Reports																													
Time 18:00		Type OIL BASE		Depth (ftKB)		Density (lb/gal) 9.80		Vis (s/qt) 62		PV Calc (cP) 15.0		YP Calc (lb/100ft²) 10		Vis 3rpm 5		Vis 6rpm 6		LGS (%) 7.8		LCM (lb/bbl)		Chlor (mg/L) 21,000		Oil Water Ratio 81.6/18.4					
Electric Stab (V) 748.0		X Lime (lb/bbl) 3.4		HTHP Filtrate (mL/30min) 4.6		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 46.0		Cum Mud Lost to Hole (bbl) 3385.0		Daily Mud Field Est (Cost) 7,769.51		Cum Mud Field Est (Cost) 689,112.33													
Time 01:00		Type OIL BASE		Depth (ftKB)		Density (lb/gal) 9.80		Vis (s/qt) 62		PV Calc (cP) 16.0		YP Calc (lb/100ft²) 10		Vis 3rpm 5		Vis 6rpm 6		LGS (%) 7.9		LCM (lb/bbl)		Chlor (mg/L) 21,500		Oil Water Ratio 80.5/19.5					
Electric Stab (V) 737.0		X Lime (lb/bbl) 3.2		HTHP Filtrate (mL/30min) 4.2		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 3.0		Cum Mud Lost to Hole (bbl) 3388.0		Daily Mud Field Est (Cost) 7,769.51		Cum Mud Field Est (Cost) 689,112.33													
Wellbore Design																													
Casing Description				Run Date				OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR				11/13/2013				20		94.00		J-55		WELDED		110.0		76.00											
SURFACE				11/15/2013				13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE				11/1/2014				9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION								5 1/2		17.00		P-110		LT&C		13,408.0		13,424.93											
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19													
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58													
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29													
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12													
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08													
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85													
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00													
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS										Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)															
Geological Data																													
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)													
SALADO								1,164																					
YATES								1,856																					
SEVEN RIVERS								1,992																					
QUEEN								2,408																					
GRAYBURG								3,078				3,078				3,077.9													
SAN ANDRES								3,389				3,389				3,388.9													
SPRABERRY UPPER								6,131				6,030				6,020.1													
SPRABERRY LOWER								6,704				6,704				6,691.2													
JO-MILL SAND								6,976				6,976				6,962.9													
DEAN								7,486				7,486				7,471.0													
WOLFCAMP-A (WFMP_A)								7,658				7,660				7,642.9													
WOLFCAMP-B (WFMP_B)								8,032				8,032				7,980.4													
WOLFCAMP-A (WFMP_A)								7,658				7,959				7,913.7													
WOLFCAMP-B (WFMP_B)								8,032				8,120				8,031.7													



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/29/2014
Report # 43
Projected Days 19
Drilling Days 34
Current Depth 13,408
Depth Progress
Planned VS 10,322
Current VS 5,479
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 700,299		Cum Field Est (Cost) 6,128,869												
Status at Report Time RUN 5.5" PRODUCTION CASING																													
Operations Summary TRIP OUT FROM 9903 - 9140 TIGHT SPOTS 9420,9349,9269,PUMP HIGH VIS LCM SWEEP, TRIP OUT 9140 - 7544, TIGHT SPOT@ 8322 WORK THRU WITH OUT PUMP PUMP SLUG AND TRIP OUT.LAY DOWN TOOLS AND RIG UP AND RUN 5.5" CASING TO 2000'										Planned Operations RUN AND CEMENT 5.5" PRODUCTION CASING																			
LAST SYRVEY 13356' 87.14°, 183.22 AZ, 8253 TVD, 5426 VS, 12.1' BELOW 27.1 R PROJ. @ 13408 87.14, 183.22 AZ, 8255.86 TVD, 5479.26 VS 24 HR LOSSES 23 BBL. LOSSES TO DATE 3411 BBL BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)																													
Start MD (ftKB) 13,408				End MD (ftKB) 13,408				Depth Progress (ft)				Drilling Time (hr)			Avg ROP (ft/hr)			Time Since LTI (days) 1,184		Time Since RI (days) 1,529									
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments				Hole Section		Interval		Category		Activity		NPT							
05:00		07:30		2.50		13,408		13,408		TRIP OUT FROM 9903 - 9140 TIGHT SPOTS 9420,9349,9269,				PROD		LAT		DRILL		TRIPS		Yes							
07:30		10:00		2.50		13,408		13,408		MIX AND PUMP HIGH VIS LCM SWEEP SHAKER SCREENS 30% COVERED NORMAL CIRC. SHAKERS COVERED 65 - 70 % AT BOTTOMS UP CLEANED UP IN APX. 20 MIN.				PROD		LAT		DRILL		COND MUD & CIRC		Yes							
10:00		12:30		2.50		13,408		13,408		TRIP OUT FROM 9140 - 7544, TIGHT SPOT@ 8322 WORK THRU WITH OUT PUMP				PROD		LAT		DRILL		TRIPS		Yes							
12:30		13:30		1.00		13,408		13,408		BUILD AND PUMP SLUG W/ LCM IN SLUG				PROD		LAT		DRILL		COND MUD & CIRC		Yes							
13:30		19:00		5.50		13,408		13,408		TRIP OUT OF HOLE TO DIRECTIONAL TOOLS				PROD		LAT		DRILL		TRIPS		Yes							
19:00		20:00		1.00		13,408		13,408		LAY DOWN DIRECTIONAL TOOLS				PROD		LAT		DRILL		P/U & L/D BHA		Yes							
20:00		01:00		5.00		13,408		13,408		PULL WEAR BUSHING,RIG DOWN IRON RUFFNECK, CLEAN RIG FLOOR,HOLD SAFETY MEETING WITH ALL PERSONEL, RIG UP TO RUN CASING				PROD		PROD		CSG/CEMENT NT		RUN CASING									
01:00		05:00		4.00		13,408		13,408		SAFETY MEETING , MAKE UP SHOE TRACK AND TEST FLOATS. RUN 5.5" CASING TO 2000'				PROD		PROD		CSG/CEMENT NT		RUN CASING									
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
Bit Information																													
Size (in)		Make		Model		Typ		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4		HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489		13,408		4,919.00		65.50		75.1		48.00		17.50		91.6		40		246	
8 3/4		SMITH		MDSI 613		PDC		1-5-BT-G--0-BT-TD		13,408		13,408																	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
10		DRILL PIPE						ENSIGN DRILLING				5		423		13,313.30		IF											
10		NMDC						LEAM				6 5/8		1		29.88		IF											
10		NMDC						LEAM				6 5/8		1		29.70		IF											
10		MWD - DIRECTIONAL																											
10		UBHO SUB						LEAM				6 5/8		1		2.45		IF											
10		FLOAT SUB						LEAM				6 3/4		1		3.31		IF											
10		MUD MOTOR						LEAM		XD		6 3/4		1		24.37		IF											
Mud Reports																													
Time 16:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 62		PV Calc (cP) 16.0		YP Calc (lbf/100ft²) 10		Vis 3rpm 5		Vis 6rpm 6		LGS (%) 7.9		LCM (lb/bbl)		Chlor (mg/L) 21,500		Oil Water Ratio 80.5/19.5					
Electric Stab (V) 762.0		X Lime (lb/bbl) 3.2		HTHP Filtrate (mL/30min) 4.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 23.0		Cum Mud Lost to Hole (bbl) 3388.0		Daily Mud Field Est (Cost) 5,791.34		Cum Mud Field Est (Cost) 694,903.67													
Time 01:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 62		PV Calc (cP) 16.0		YP Calc (lbf/100ft²) 10		Vis 3rpm 5		Vis 6rpm 6		LGS (%) 7.9		LCM (lb/bbl)		Chlor (mg/L) 32,000		Oil Water Ratio 80.5/19.5					
Electric Stab (V) 753.0		X Lime (lb/bbl) 3.1		HTHP Filtrate (mL/30min) 4.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 23.0		Cum Mud Lost to Hole (bbl) 3411.0		Daily Mud Field Est (Cost) 5,791.34		Cum Mud Field Est (Cost) 694,903.67													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION								5 1/2		17.00		P-110		LT&C		13,408.0		13,444.51											
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19													
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58													
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29													
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12													
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08													
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85													
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00													
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS										Max Trip Gas (units)			Avg Drill Gas (units)			Max Drill Gas (units)													
Geological Data																													
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)													
SALADO								1,164																					
YATES								1,856																					
SEVEN RIVERS								1,992																					
QUEEN								2,408																					
GRAYBURG								3,078				3,078				3,077.9													
SAN ANDRES								3,389								3,388.9													
SPRABERRY UPPER								6,131				6,030				6,020.1													
SPRABERRY LOWER								6,704				6,704				6,691.2													
JO-MILL SAND								6,976				6,976				6,962.9													
DEAN								7,486				7,486				7,471.0													
WOLFCAMP-A (WFMP_A)								7,658				7,660				7,642.9													

AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

**AEPB WELL NO. 19
ENSIGN 735**

Report Date	11/29/2014
Report #	43
Projected Days	19
Drilling Days	34
Current Depth	13,408
Depth Progress	
Planned VS	10,322
Current VS	5,479
AFE #	DV02164
Total AFE	8,033,600

Geological Data

Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
WOLFCAMP-B (WFMP_B)	8,032	8,032	7,980.4
WOLFCAMP-A (WFMP_A)	7,658	7,959	7,913.7
WOLFCAMP-B (WFMP_B)	8,032	8,120	8,031.7



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 11/30/2014
Report # 44
Projected Days 19
Drilling Days 35
Current Depth 13,408
Depth Progress
Planned VS 10,322
Current VS 5,479
AFE # DV02164
Total AFE 8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/15/2013		TD Date		RR Date		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC			Drilling AFE 2,048,600		Daily Field Est (Cost) 423,496		Cum Field Est (Cost) 6,552,364												
Status at Report Time RIG DOWN CEMENTERS																													
Operations Summary RAN 293 JTS 5.5 ' 17# P-110 LTC TO 13408, PULL UP TO 13395' NO ISSUES TO TAG BOTTOM. SHOE @ 13395, FC@ 13345,INIATION SUB@ 13229, RIG UP CMT HEAD AND BURST FLOAT DISK WITH 2150 PSI, DROP PLUG AND BUMP WITH 1850, RIG UP AND CEMENT W/740 SX LEAD CMT (1865 FT3-332 BL) @ 11.3 PPG TAIL WITH 1440 SX (1756FT3-312 BL) @ 14.5 PPG I. DROP PLUG AND DISPLACE CMT.WITH 310 BL WATER,BUMP PLUG WITH 2189 PSI FLOATS HELD. CIRC.70 BBL CMT TO SURFACE.. PD 04:30 11-30-14 LAST SYRVEY 13356' 87.14°, 183.22 AZ, 8253 TVD, 5426 VS, 12.1' BELOW 27.1 R PROJ. @ 13408 87.14, 183.22 AZ, 8255.86 TVD, 5479.26 VS 24 HR LOSSES 0 BBL. LOSSES TO DATE 3411 BBL BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID)										Planned Operations RIG DOWN CEMENTERS, SET SLIPS, CUT-OFF CASING, ND BOPE LAY DOWN DP IN MOUSE HOLE																			
Start MD (ftKB) 13,408				End MD (ftKB) 13,408		Depth Progress (ft)		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,185		Time Since RI (days) 1,530															
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ftKB)		End Depth (ftKB)		Comments			Hole Section		Interval		Category		Activity		NPT								
05:00		18:00		13.00		13,408		13,408		RAN 293 JTS 5.5 ' 17# P-110 LTC TO 13408, PULL UP TO 13395' NO ISSUES TO TAG BOTTOM. SHOE @ 13395, FC@ 13345,INIATION SUB@ 13229			PROD		PROD		CSG/CEMENT NT		RUN CASING										
18:00		22:30		4.50		13,408		13,408		RIG UP CEMENT HEAD AND FILL PIPE. PUMP @ 30 SPM AND BURST FLOTATION DISK WITH 2150 PSI, BLEED AIR OUT AND FILL CASING, CIRC 1 1/2 CASING VOLUMES AND DROP WIPER PLUG AND DISPLACE. BUMP PLUG W/1850 PSI, CIRC, MIX UP SPACER SAFETY MEETING WITH ALL PERSONEL			PROD		PROD		CSG/CEMENT NT		RUN CEMENT										
22:30		05:00		6.50		13,408		13,408		RIG UP UNIVERSAL CEMENTERS AND TEST PUMPS AND LINES TO 5000 PSI . PUMP 740 SX LEAD CMT (1865 FT3-332 BL) @ 11.3 PPG TAIL WITH 1440 SX (1756FT3-312 BL) @ 14.5 PPG I. DROP PLUG AND DISPLACE CMT.WITH 310 BL WATER,BUMP PLUG WITH 2189 PSI FLOATS HELD. CIRC.70 BBL CMT TO SURFACE			PROD		PROD		CSG/CEMENT NT		RUN CEMENT										
Drilling Parameters																													
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq			
Bit Information																													
Size (in)		Make		Model		Type		Dull Out		Depth In (ftKB)		Depth Out (ftKB)		Depth Drilled This Job (ft)		Job Drill Hrs (hr)		Avg ROP (ft/hr)		Rot Time (hr)		Slide Time (hr)		Rot ROP (ft/hr)		WOB Max (1000lbf)		Max RPM (rpm)	
8 3/4		HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489		13,408		4,919.00		65.50		75.1		48.00		17.50		91.6		40		246	
8 3/4		SMITH		MDSI 613		PDC		1-5-BT-G--0-BT-TD		13,408		13,408																	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
10		DRILL PIPE						ENSIGN DRILLING				5		423		13,313.30		IF											
10		NMDC						LEAM				6 5/8		1		29.88		IF											
10		NMDC						LEAM				6 5/8		1		29.70		IF											
10		MWD - DIRECTIONAL																											
10		UBHO SUB						LEAM				6 5/8		1		2.45		IF											
10		FLOAT SUB						LEAM				6 3/4		1		3.31		IF											
10		MUD MOTOR						LEAM		XD		6 3/4		1		24.37		IF											
Mud Reports																													
Time 01:00		Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.85		Vis (s/qt) 70		PV Calc (cP) 16.0		YP Calc (lbfi/100ft²) 12		Vis 3rpm 5		Vis 6rpm 6		LGS (%) 7.5		LCM (lb/bbl)		Chlor (mg/L) 33,000		Oil Water Ratio 80.5/19.5					
Electric Stab (V) 767.0		X Lime (lb/bbl) 3.4		HTHP Filtrate (mL/30min) 4.2		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 3411.0		Daily Mud Field Est (Cost) 1,145.00		Cum Mud Field Est (Cost) 696,048.67													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						11/13/2013		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						11/15/2013		13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67											
INTERMEDIATE						11/1/2014		9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52											
PRODUCTION						12/29/2014		5 1/2		17.00		P-110		LT&C		13,395.0		13,444.51											
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70													
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60													
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12													
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03													
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76													
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32													
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03													
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26													
12,692		90.66		181.46		8,235		4,763.30		-4,763.30		-351.02		2.04		0.19													
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58													
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.12													
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.29													
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08													
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85													
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00													
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25													
Mud Logging Information																													
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS										Max Trip Gas (units)		Avg Drill Gas (units)			Max Drill Gas (units)														
Geological Data																													
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)															
SALADO								1,164																					
YATES								1,856																					
SEVEN RIVERS								1,992																					
QUEEN								2,408																					
GRAYBURG								3,078						3,078		3,077.9													
SAN ANDRES								3,389						3,389		3,388.9													
SPRABERRY UPPER								6,131						6,030		6,020.1													
SPRABERRY LOWER								6,704						6,704		6,691.2													
JO-MILL SAND								6,976						6,976		6,962.9													
DEAN								7,486						7,486		7,471.0													
WOLFCAMP-A (WFMP_A)								7,658						7,660		7,642.9													
WOLFCAMP-B (WFMP_B)								8,032						8,032		7,980.4													
WOLFCAMP-A (WFMP_A)								7,658						7,959		7,913.7													
WOLFCAMP-B (WFMP_B)								8,032						8,120		8,031.7													



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date 12/1/2014
Report # 45
Projected Days 19
Drilling Days 36
Current Depth 13,408
Depth Progress
Planned VS 10,322
Current VS 5,479
AFE # DV02164
Total AFE 8,033,600

42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS						
Report Summary																				
Well Spud 10/15/2013		TD Date	RR Date	Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 162,038		Cum Field Est (Cost) 6,714,402				
Status at Report Time LAY DOWN DP IN MOUSE HOLE																				
Operations Summary RIG DOWN CEMENTERS, SET SLIPS,ND PU STACK, WRONG SLIPS, WAIT ON SLIPS AND RESET PROPER SLIPS W/ 140K ND AND SET OUT BOPE, RIG UP TO LAY DOWN DP IN MOUSE HOLE.RIG DOWN LAYDOWN MACHINE AND LAY DOWN DP IN V-DOOR. BIG RIG SPUD DATE: 10/26/14 @ 08:30 NEXT WELL: UNIVERSITY 09 0818H (SKID) 2M TO SKID RIG TOTAL MUD IN STORAGE 1805 BBL TOTAL LOSSES FOR WELL 2707 BBL								Planned Operations FINISH LAYING DOWN DP IN MOUSE HOLE, RELEASE RIG, RIG DOWN TO SKID.												
Start MD (ftKB) 13,408			End MD (ftKB) 13,408		Depth Progress (ft)		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,186			Time Since RI (days) 1,531						
Daily Time Log																				
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments					Hole Section	Interval	Category	Activity		NPT					
05:00	05:30	0.50	13,408	13,408	RIG DOWN UNIVERSAL CEMENTERS					PROD	PROD	CSG/CEMENT NT	RUN CEMENT							
05:30	20:00	14.50	13,408	13,408	SET SLIPS THRU STACK W/ 140K ,RIG UP BOP LIFT,NIPPLE DOWNBOP AND PICK UP STACK, OBSERVED THAT HAD SET THE WRONG SLIPS, WAIT ON CORRECT SLIPS, SET STACK DOWN AND BREAK BOLTS, LAY DOWN V-DOOR AND CATWALK RESET SLIPS WITH 140K,SET OUT BOPE AND INSTALL CAP.					PROD	PROD	CSG/CEMENT NT	NIPPLE UP B.O.P./WELLHEAD		Yes					
20:00	05:00	9.00	13,408	13,408	RIG UP CATWALK AND V-DOOR, RIG UP SPINNERS AND IRON RUFFNECK, RIG UP FRANKS STAND ALONE LAYDOWN POST AND LAYDOWN MACHINE AND LAY DOWN PIPE FROM DERRICK IN MOUSE HOLE. COULD NOT GET LAYDOWN POST TO WORK SAFELY,RIG DOWN LAYDOWN MACHINE AND LAY DOWN PIPE IN V-DOOR.					PROD	PROD	CSG/CEMENT NT	TRIPS							
Drilling Parameters																				
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)	TFO (°)	dP (SPP) (psi)		WOB (1000lbf)	Q Rate (gpm/cfm)	SPP (psi)		RPM (rpm)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drill Tq	
NPT																				
Problem Type SURFACE EQUIPMENT				Problem Sub Type WELLHEAD			Description			Start Date 11/30/2014		End Date 11/30/2014		Dur (hr) 2.50	Failed Item		Accountable Party WEIR OIL AND GAS			
Bit Information																				
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)		
8 3/4	HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489	13,408	4,919.00	65.50	75.1	48.00	17.50	91.6	40	246		
8 3/4	SMITH		MDSI 613		PDC		1-5-BT-G--0-BT-TD		13,408	13,408										
Current BHA Components																				
BHA No		Item Description					Make		Model		OD (in)		Jts	Length (ft)		Top Thread				
10		DRILL PIPE					ENSIGN DRILLING				5		423	13,313.30		IF				
10		NMDC					LEAM				6 5/8		1	29.88		IF				
10		NMDC					LEAM				6 5/8		1	29.70		IF				
10		MWD - DIRECTIONAL																		
10		UBHO SUB					LEAM				6 5/8		1	2.45		IF				
10		FLOAT SUB					LEAM				6 3/4		1	3.31		IF				
10		MUD MOTOR					LEAM		XD			6 3/4		1	24.37		IF			
Mud Reports																				
Time 05:15	Type OIL BASE		Depth (ftKB) 13,408		Density (lb/gal) 9.80		Vis (s/qt) 70		PV Calc (cP) 16.0		YP Calc (lb/100ft²) 12		Vis 3rpm 5	Vis 6rpm 6	LGS (%) 7.9	LCM (lb/bbl)		Chlor (mg/L) 33,000	Oil Water Ratio 80.5/19.5	
Electric Stab (V) 767.0		X Lime (lb/bbl) 3.4		HTHP Filtrate (mL/30min) 4.2		HTHP FC (1/32") 2		T HTHP (°F) 250.0	Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 3411.0		Daily Mud Field Est (Cost) 93,728.31		Cum Mud Field Est (Cost) 789,776.99					
Wellbore Design																				
Casing Description					Run Date			OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)		
CONDUCTOR					11/13/2013			20		94.00		J-55		WELDED		110.0		76.00		
SURFACE					11/15/2013			13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67		
INTERMEDIATE					11/1/2014			9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52		
PRODUCTION					12/29/2014			5 1/2		17.00		P-110		LT&C		13,395.0		13,365.05		
Survey Data																				
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)				
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70				
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60				
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12				
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03				
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76				
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32				
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03				
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26				
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58				
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29				
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12				
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08				
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85				
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00				
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25				
13,409		87.14		183.22		8,256		5,479.32		-5,479.32		-377.98		0.00		0.00				
Mud Logging Information																				
Lithology and Shows CUR LITHOLOGY @ 13408: 70% SHALE 30% LS										Max Trip Gas (units)		Avg Drill Gas (units)		Max Drill Gas (units)						
Geological Data																				
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)			Drill Top (TVD) (ftKB)							
SALADO								1,164												
YATES								1,856												
SEVEN RIVERS								1,992												
QUEEN								2,408												
GRAYBURG								3,078												
SAN ANDRES								3,389		3,078			3,077.9							
SPRABERRY UPPER								6,131		6,030			3,388.9							
SPRABERRY LOWER								6,704		6,704			6,020.1							
JO-MILL SAND								6,976		6,976			6,691.2							
DEAN								7,486		7,486			6,962.9							
WOLFCAMP-A (WFMP_A)								7,658		7,660			7,471.0							
WOLFCAMP-B (WFMP_B)								8,032		8,032			7,642.9							
WOLFCAMP-A (WFMP_A)								7,658		7,959			7,980.4							
WOLFCAMP-B (WFMP_B)								8,032		8,120			7,913.7							



AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0817H

AEPB WELL NO. 19
ENSIGN 735

Report Date	12/3/2014
Report #	47
Projected Days	19
Drilling Days	38
Current Depth	13,408
Depth Progress	
Planned VS	10,322
Current VS	
AFE #	DV02164
Total AFE	8,033,600

API 42383384400000		Surface Legal Location Block 09 Section 18		Latitude 31.2874333000		Longitude -101.5913972000		Orig KB El... 2,694.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																											
Well Spud 10/15/2013		TD Date	RR Date 12/2/2014		Target Formation WOLFCAMP-B		Prop TD (ftKB) 18,236		Target Line #6 TL:8,222' TVD @ 0' VS W/89.86° INC				Drilling AFE 2,048,600		Daily Field Est (Cost) 36,888		Cum Field Est (Cost) 7,161,205										
Status at Report Time RIG RELEASED																											
Operations Summary FINISH LAYING DOWN DRILL PIPE RELEASED RIG @ 13:00 12-2-14									Planned Operations RELEASED RIG SKID RIG TO UNIVERSITY 09 0818H ON 12-3-14 . 2M MOVING RIG																		
Start MD (ftKB) 13,408			End MD (ftKB) 13,408			Depth Progress (ft)		Drilling Time (hr)			Avg ROP (ft/hr)			Time Since LTI (days) 1,188			Time Since RI (days) 1,533										
Daily Time Log																											
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity		NPT											
05:00	13:00	8.00	13,408	13,408	LAY DOWN DRILL PIPE IN MOUSE HOLE						PROD	PROD	CSG/CEMENT	TRIPS													
Drilling Parameters																											
Start Depth (ftKB)		End Depth (ftKB)		Rot Time (hr)		Slide Time (hr)		Int ROP (ft/hr)		TFO (°)		dP (SPP) (psi)		WOB (1000lbf)		Q Rate (gpm/cfm)		SPP (psi)		RPM (rpm)		PU Str Wt (1000lbf)		SO Str Wt (1000lbf)		Drill Tq	
Bit Information																											
Size (in)	Make		Model		Type		Dull Out		Depth In (ftKB)	Depth Out (ftKB)	Depth Drilled This Job (ft)	Job Drill Hrs (hr)	Avg ROP (ft/hr)	Rot Time (hr)	Slide Time (hr)	Rot ROP (ft/hr)	WOB Max (1000lbf)	Max RPM (rpm)									
8 3/4	HALLIBURTON		MM65D		PDC		2-6-WT-G-X-0-WT-PR		8,489	13,408	4,919.00	65.50	75.1	48.00	17.50	91.6	40	246									
8 3/4	SMITH		MDSI 613		PDC		1-5-BT-G--0-BT-TD		13,408	13,408																	
Current BHA Components																											
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread									
10		DRILL PIPE						ENSIGN DRILLING				5		423		13,313.30		IF									
10		NMDC						LEAM				6 5/8		1		29.88		IF									
10		NMDC						LEAM				6 5/8		1		29.70		IF									
10		MWD - DIRECTIONAL																									
10		UBHO SUB						LEAM				6 5/8		1		2.45		IF									
10		FLOAT SUB						LEAM				6 3/4		1		3.31		IF									
10		MUD MOTOR						LEAM		XD		6 3/4		1		24.37		IF									
Mud Reports																											
Time	Type		Depth (ftKB)		Density (lb/gal)		Vis (s/qt)		PV Calc (cP)		YP Calc (lb/100ft²)		Vis 3rpm		Vis 6rpm		LGS (%)		LCM (lb/bbl)		Chlor (mg/L)		Oil Water Ratio				
Electric Stab (V)		X Lime (lb/bbl)		HTHP Filtrate (mL/30min)		HTHP FC (1/32")		T HTHP (°F)		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl)		Daily Mud Field Est (Cost)		Cum Mud Field Est (Cost)											
Wellbore Design																											
Casing Description					Run Date			OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)									
CONDUCTOR					11/13/2013			20		94.00		J-55		WELDED		110.0		76.00									
SURFACE					11/15/2013			13 3/8		54.50		J-55		BUTTRESS THREAD		635.0		601.67									
INTERMEDIATE					11/1/2014			9 5/8		40.00		J-55		LT&C		6,402.8		6,369.52									
PRODUCTION					12/29/2014			5 1/2		17.00		P-110		LT&C		13,395.0		13,365.05									
Survey Data																											
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)											
14,973		90.66		174.78		8,180		7,003.07		-7,003.07		-340.17		1.94		1.70											
15,067		89.16		176.89		8,180		7,096.82		-7,096.82		-333.34		2.75		-1.60											
15,162		90.22		177.59		8,180		7,191.70		-7,191.70		-328.77		1.34		1.12											
15,256		89.25		179.18		8,181		7,285.66		-7,285.66		-326.12		1.98		-1.03											
15,351		90.92		178.30		8,181		7,380.63		-7,380.63		-324.03		1.99		1.76											
15,444		89.69		176.71		8,180		7,473.54		-7,473.54		-319.98		2.16		-1.32											
15,538		88.72		176.19		8,182		7,567.35		-7,567.35		-314.16		1.17		-1.03											
15,632		90.84		177.77		8,182		7,661.21		-7,661.21		-309.21		2.81		2.26											
12,787		89.16		180.41		8,235		4,858.28		-4,858.28		-352.57		1.93		-1.58											
12,881		89.43		182.16		8,236		4,952.24		-4,952.24		-354.68		1.88		0.29											
12,976		88.37		181.81		8,238		5,047.17		-5,047.17		-357.97		1.18		-1.12											
13,071		88.29		183.22		8,241		5,142.03		-5,142.03		-362.13		1.49		-0.08											
13,165		87.49		182.16		8,244		5,235.86		-5,235.86		-366.54		1.41		-0.85											
13,218		87.49		182.16		8,247		5,288.78		-5,288.78		-368.54		0.00		0.00											
13,356		87.14		183.22		8,253		5,426.47		-5,426.47		-375.01		0.81		-0.25											
13,409		87.14		183.22		8,256		5,479.32		-5,479.32		-377.98		0.00		0.00											
Mud Logging Information																											
Lithology and Shows										Max Trip Gas (units)			Avg Drill Gas (units)			Max Drill Gas (units)											
Geological Data																											
Formation Name								Prog Top TVD (ftKB)				Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)											
SALADO								1,164																			
YATES								1,856																			
SEVEN RIVERS								1,992																			
QUEEN								2,408																			
GRAYBURG								3,078				3,078				3,077.9											
SAN ANDRES								3,389				3,389				3,388.9											
SPRABERRY UPPER								6,131				6,030				6,020.1											
SPRABERRY LOWER								6,704				6,704				6,691.2											
JO-MILL SAND								6,976				6,976				6,962.9											
DEAN								7,486				7,486				7,471.0											
WOLFCAMP-A (WFMP_A)								7,658				7,660				7,642.9											
WOLFCAMP-B (WFMP_B)								8,032				8,032				7,980.4											
WOLFCAMP-A (WFMP_A)								7,658				7,959				7,913.7											
WOLFCAMP-B (WFMP_B)								8,032				8,120				8,031.7											

**Enduring Resources II, LLC**

511 16th St - Suite 700
Denver, CO 80202
(303) 573-1222

Drilling Chronological
Regulatory

Well Name: UNIVERSITY 09 #0817H									
Field Name:	Lin (Wolfcamp)	S/T/R:	//	County, State:					
Operator:	American Energy - Permian Basin	Location Desc:			District:	Southern - ERPBU			
Project AFE:	DV02164	AFEs Associated:	/ / /						
Daily Summary									
Activity Date :	11/15/2013	Days From Spud :	0	Current Depth :	0 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	23	R/U ON 0817H, R/U BHA - ROTATE TO 216', SURVEY .5, ROTATE TO 276', FUEL PROBLEMS ON COMPRESSOR #1, ROTATE TO 426', SURVEY .5, ROTATE TO 486'			0	0	NIH	
Total:	24.00								
Daily Summary									
Activity Date :	11/16/2013	Days From Spud :	0	Current Depth :	0 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	23	MIRU ON HOLE# 0818H			0	0	NIH	
Total:	24.00								
Daily Summary									
Activity Date :	11/17/2013	Days From Spud :	0	Current Depth :	0 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	23	SAFETY MEETING SHIFT CHANGE WORK ON FUEL PRESSURE PROBLEM TO COMPRESSORS ROTATE FROM 486' TO 605' SWEEP HOLE SURVEY .5 TOOH BREAK BHA DOWN R/U TO RUN CASING RUN 6 JOINTS OF CASING 242.52' TROUBLE GETTING FLOAT TO THREAD SAFETY MEETING SHIFT CHANGE RUN 10 JOINTS OF CASING 600.59 START WASHING DOWN RIG SHUT DOWN TROUBLE SHOOT SHUT DOWN RELAY PUMP CEMENT 520SKS 16BBLs BACK TO SURFACE. RIG RELEASE			0	0	NIH	
Total:	24.00								

Well Name:UNIVERSITY 09 #0817H									
Field Name:	Lin (Wolfcamp)	S/T/R:	//	County,State:					
Operator:	American Energy - Permian Basin	Location Desc:			District:	Southern - ERPBU			
Daily Summary									
Activity Date :	10/22/2014	Days From Spud :	0	Current Depth :	635 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	01	RIG IDLE WAIT ON DAYLIGHT & TRUCKS RIG DOWN & MOVE TO UNIVERSITY 09 #0817H, MOVE RIG SUBS & CREW QUARTERS, SET MTR PACKAGE, R/U DIESEL TANKS, SET & ALIGN SUBS OVER CELLAR, MOUNT "A" LEGS, 95% MOVED, 80% SET, 40% RIGGED UP, 68 HRS FROM RIG RELEASE,EST SPUD 10/26/14,(50 MILES RIG MOVE)			635	635	1	
Total:	24.00								
Daily Summary									
Activity Date :	10/23/2014	Days From Spud :	0	Current Depth :	635 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	01	PJSM, RIG UP W/ 1 CRAWLER CRANE & 1 FORKLIFT, RIG UP BACK YARD, ASSEMBLING DERRICK, RAISE DERRICK @ 5:45 P.M., INSTALL FLOOR BEAMS, RIG UP FLOOR, 100% MOVED, 90% SET, 65% RIGGED UP, 92 HRS FROM RIG RELEASE,EST SPUD 10/26/14,(50 MILES RIG MOVE)			635	635	1	
Total:	24.00								
Daily Summary									
Activity Date :	10/24/2014	Days From Spud :	0	Current Depth :	635 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	01	PJSM, RIG UP W/ 1 CRAWLER CRANE & 1 FORKLIFT, RIG UP STAND PIPE, RIG UP TOP DRIVE & TRACK, PIN TRACK, RIG UP SERVICE LOOP, PULL WIRES TO RIG FLOOR, RIG UP FLOOR, INSALL SEPARATOR LINES, 100% MOVED, 100% SET, 85% RIGGED UP, 116 HRS FROM RIG RELEASE,EST SPUD 10/26/14,(50 MILES RIG MOVE)			635	635	1	
Total:	24.00								
Daily Summary									
Activity Date :	10/25/2014	Days From Spud :	0	Current Depth :	635 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	01	PJSM, RIG UP, WORK ON TOP DRIVE, NIPPLE UP BOP'S, TEST BOP'S, TEST RAMS, CHOKE MANIFOLD 5000 PSI HIGH, 250 PSI LOW, ANNULAR 3500 PSI HIGH, 250 PSI LOW, TOP DRIVE, STANDPIPE, MUD PUMP, 4000 PSI HIGH, 250 PSI LOW, FLOOR VALVES 3500 PSI HIGH, 250 PSI LOW.			635	635	1	
Total:	24.00								

Well Name: UNIVERSITY 09 #0817H									
Field Name:	Lin (Wolfcamp)	S/T/R:	//	County, State:					
Operator:	American Energy - Permian Basin	Location Desc:			District:	Southern - ERPBU			
Daily Summary									
Activity Date :	10/26/2014	Days From Spud :	0	Current Depth :	635 Ft	24 Hr. Footage Made :	0 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	01	FINISH TESTING BOP'S, INSTALL WEAR BUSHING, INSTALL EXTENSION & DRESSER SLEEVE ON FLOW LINE, INSTALL KATCH KAN, MOUSE HOLE, LAY OUT & STRAP BHA, TRANSFER OBM F/FRAK TANKS T/MUD TANKS WITH VAC TRUCK LTR PUMP WAS DOWN, PICK UP LEAM 8" MOTOR, 7/8, 4.0 STG, FXD @ 1.75, W/11 1/2" NB STAB, 0.16 RPG, 7751XD-024, TEST MTR & MWD (TEST GOOD), PICK UP & MAKE UP SECURITY, 12 1/4", MM65DC, 12504837, PICK UP DC, HWDP OFF RACKS & RUN IN HOLE.			635	635	1	
Total:	24.00								
Daily Summary									
Activity Date :	10/27/2014	Days From Spud :	0	Current Depth :	2100 Ft	24 Hr. Footage Made :	1465 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	02	PICK UP BHA, DRILL FLOAT EQUIPMENT, TEST CASING T/1000 PSI FOR 30 MINUTES (BLED 50 PSI, TEST GOOD), CLEAN OUT BOS SOLIDS CONTROL EQUIPMENT & CHANGE OUT SCREEN WASHER, DRILL 12 1/4" VERTICAL HOLE FROM 635' - 2100' 1465' AT 98 FPH.			635	2100	1	
Total:	24.00								
Daily Summary									
Activity Date :	10/28/2014	Days From Spud :	0	Current Depth :	3650 Ft	24 Hr. Footage Made :	1550 Ft		
Rig Company :				Rig Name:					
Formation :				Weather:					
Operations									
Start	Hrs	Code	Remarks			Start Depth	End Depth	Run	
6:00	24.00	02	DRILL 12 1/4" VERTICAL HOLE FROM 2100' - 3650' 1550' AT 69 FPH, CLEAN OUT BOS SOLIDS CONTROL EQUIPMENT & CHANGE OUT SCREEN WASHER, SERVICE TOP DRIVE & RIG.			2100	3650	1	
Total:	24.00								
Formation									
Formation Name	Current Well Top	Subsea Datum	Ref Well Top	Elec Top	Comments				