

API 42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS														
Report Summary																												
Well Spud 10/14/2014		TD Date	RR Date	Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913		Target Line 7833' TVD @ 0' VS w/90.19° Inc and 1.19° Azimuth			Drilling AFE 2,105,200		Daily Field Est (Cost) 49,786		Cum Field Est (Cost) 2,996,470													
Status at Report Time CLEANING MUD PITS																												
Operations Summary WAIT ON CEMENT , TIH ,DRESS CEMENT TOP , CIRC , POOH TO SHOE , TRANSFER MUD OUT OF TANKS, CLEAN MUD TANKS								Planned Operations FINISH CLEANING MUD TANKS , FILL W/ OIL BASE MUD ,TIH -7044' ,DISPLACE HOLE W/ OBM , POOH																				
15' SOUTH / 18' WEST 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																												
Start MD (ftKB) 7,044			End MD (ftKB) 12,100			Depth Progress (ft)		Drilling Time (hr)			Avg ROP (ft/hr)			Time Since LTI (days) 1,208		Time Since RI (days) 1,208												
Daily Time Log																												
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity		NPT												
05:00	08:30	3.50	12,100	12,100	HANG OFF BLOCK. SLIP AND CUT DRILL LINE. SERVICE TOPDRIVE.						PILOT	PLUG	PILOT	CUT SLIP & DRILL LINE														
08:30	13:00	4.50	12,100	12,100	WAIT ON CEMENT AT SHOE.						PILOT	PLUG	PILOT	WAIT ON CEMENT														
13:00	13:30	0.50	12,100	12,100	TRIP IN HOLE (TAGGED CEMENT AT 6875)						PILOT	PLUG	PILOT	TRIPS														
13:30	16:00	2.50	12,100	7,044	DRILL CEMENT FROM 6875 TO 7044 (AT 6980, CEMENT BECAME FIRM. DRILLED TO 7044, AND STOPPED TOPDRIVE. PUT 50K ON BIT WHILE PUMPING, AND DID NOT WASH OFF.						PILOT	PLUG	PILOT	REAMING														
16:00	16:30	0.50	7,044	7,044	CIRCULATE BOTTOMS UP.						PILOT	PLUG	PILOT	COND MUD & CIRC														
16:30	17:00	0.50	7,044	7,044	TRIP OUT OF HOLE TO SHOE						PILOT	PLUG	PILOT	TRIPS														
17:00	18:00	1.00	7,044	7,044	TRANSFER WATER BASE MUD TO FRAC TANKS						PILOT	PLUG	PILOT	LUBRICATE RIG														
18:00	05:00	11.00	7,044	7,044	CLEAN MUD TANKS						PILOT	PLUG	PILOT	LUBRICATE RIG														
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		
7,044				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	SMITH		TBRS613PX		PDC																							
8 3/4	SMITH		FHI21		INSERT		-----		7,044																			
Current BHA Components																												
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread										
8		DRILL PIPE										5		182		5,746.50												
8		HWDP										5		18		544.36		IF										
8		XO SUB										6 1/2		1		1.74												
8		DRILL COLLAR - PONY										6 1/2		3		92.20		XH										
8		BIT SUB												1		4.40		IF										
Mud Reports																												
Time 23:59		Type WATER BASE		Depth (ftKB) 7,044		Density (lb/gal) 9.65		Vis (s/qt) 51		PV Calc (cP) 18.0		YP Calc (lb/100ft²) 18		Vis 3rpm 7		Vis 6rpm 8		LGS (%) 3.7		LCM (lb/bbl)		Chlor (mg/L) 61,000		Oil Water Ratio 9.5/90.5				
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) 737.7			Daily Mud Field Est (Cost) 1,352.98			Cum Mud Field Est (Cost) 130,763.92				
Wellbore Design																												
Casing Description						Run Date			OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)									
CONDUCTOR						10/12/2014			20		94.00		J-55		WELDED		110.0		76.00									
SURFACE						10/15/2014			13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05									
INTERMEDIATE						11/3/2014			9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01									
PLANNED PRODUCTION									5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00									
Survey Data																												
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)												
11,523		1.50		227.70		11,514		279.97		-174.12		219.85		0.66		0.00												
11,617		1.50		223.20		11,608		279.81		-175.85		218.10		0.13		0.00												
11,712		1.50		222.90		11,703		279.76		-177.66		216.40		0.01		0.00												
11,806		1.80		221.50		11,797		279.74		-179.67		214.58		0.32		0.32												
11,900		1.80		216.50		11,891		279.88		-181.96		212.73		0.17		0.00												
11,994		1.60		216.20		11,985		280.14		-184.21		211.07		0.21		-0.21												
12,056		1.60		219.40		12,047		280.25		-185.58		210.01		0.14		0.00												
12,100		1.60		219.40		12,091		280.30		-186.53		209.23		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								1,182																				
YATES								1,861			1,887			1,886.1														
SEVEN RIVERS								2,007			2,030			2,028.4														
QUEEN								2,411			2,443			2,440.1														
GRAYBURG								3,084			3,104			3,100.0														
SAN ANDRES								3,389			3,402			3,397.2														
SPRABERRY UPPER								6,131			6,110			6,102.0														
SPRABERRY LOWER								6,704			6,687			6,679.0														
JO-MILL SAND								7,001			6,990			6,981.9														
DEAN								7,523			7,508			7,499.9														
WOLFCAMP A								7,693			7,678			7,669.9														
WOLFCAMP B								8,053			8,044			8,035.8														
WOLFCAMP C								8,396			8,403			8,394.8														
WOLFCAMP D								8,806			8,806			8,797.8														
CISCO								9,611			9,622			9,613.6														
CLINE								9,808			9,836			9,827.6														
STRAWN								10,093			10,124			10,115.6														
ATOKA								10,396			10,469			10,460.5														
BARNETT								10,581			10,680			10,671.5														
WOODFORD								10,714			10,818			10,809.5														
DEVONIAN								10,791			10,880			10,871.5														
ELLENBURGER								11,445			11,520			11,511.3														



UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date	11/20/2014
Report #	32
Projected Days	26
Drilling Days	22
Current Depth	7,044
Depth Progress	0
Planned VS	7,145
Current VS	272
AFE #	DV02062
Total AFE	8,572,000

API 42383392030000		Surface Legal Location			Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS					
Report Summary																				
Well Spud 10/14/2014		TD Date	RR Date	Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913		Target Line 7833' TVD @ 0' VS w/90.19° Inc and 1.19° Azimuth			Drilling AFE 2,105,200		Daily Field Est (Cost) 55,920		Cum Field Est (Cost) 3,054,785					
Status at Report Time TIH @ 3450'																				
Operations Summary CLEANED MUD TANKS, TIH, DISPLACE HOLE WITH OIL BASE MUD, TOOHP, PICK UP KICK OFF BHA, TIH								Planned Operations FINISH TIH, KICK OFF CEMENT PLUG, TOOHP, PICK UP CURVE BHA, TIH, BUILD CURVE												
15' SOUTH / 18' WEST 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																				
Start MD (ftKB) 7,044			End MD (ftKB) 7,044			Depth Progress (ft) 0		Drilling Time (hr)			Avg ROP (ft/hr)		Time Since LTI (days) 1,209		Time Since RI (days) 1,209					
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	7,044	7,044	CLEAN MUD TANKS						PILOT	PLUG	PILOT							
12:00	15:30	3.50	7,044	7,044	TRANSFER OIL BASE MUD TO MUD TANKS						PILOT	PLUG	PILOT							
15:30	16:00	0.50	7,044	7,044	TRIP IN HOLE TO BOTTOM						PILOT	PLUG	PILOT	TRIPS						
16:00	20:00	4.00	7,044	7,044	DISPLACE HOLE WITH OIL BASE MUD						PILOT	PLUG	PILOT	COND MUD & CIRC						
20:00	00:30	4.50	7,044	7,044	PUMP SLUG AND TOOHP						PILOT	PLUG	PILOT	TRIPS						
00:30	03:00	2.50	7,044	7,044	BREAK BIT, PICK UP KICK OFF BHA						PILOT	PLUG	PILOT	P/U & L/D BHA						
03:00	05:00	2.00	7,044	7,044	TRIPPING IN HOLE @ 3450'						PILOT	PLUG	PILOT	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	SMITH		TBRS613PX		PDC	-----		12,100	12,100											
8 3/4	SMITH		FHI21		INSERT	-----		7,044	7,044											
Current BHA Components																				
BHA No		Item Description					Make		Model		OD (in)		Jts		Length (ft)		Top Thread			
9		HWDP									5		18		544.00		IF			
9		DRILL COLLAR - FLEX NON MAG									6 1/2		1		29.98		XH			
9		MWD - DIR & LOGGING					ARCHER		POSITIVE PULSE		1 7/8		1		0.00		XH			
9		NMDC									6 1/2		1		31.06		XH			
9		UBHO SUB									6 1/2		1		3.11		XH			
9		MUD MOTOR					ARCHER		6757850		6 3/4		1		24.50		XH			
Mud Reports																				
Time 11:59	Type OIL BASE		Depth (ftKB) 7,044		Density (lb/gal) 9.00		Vis (s/qt) 61	PV Calc (cP) 14.0	YP Calc (lbf/100ft²) 8		Vis 3rpm 3	Vis 6rpm 4	LGS (%) 1.7		LCM (lb/bbl)		Chlor (mg/L) 88,000	Oil Water Ratio 67.6/32.4		
Electric Stab (V) 120.0		X Lime (lb/bbl) 0.8		HTHP Filtrate (mL/30min) 11.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 15.6		Cum Mud Lost to Hole (bbl) 753.3		Daily Mud Field Est (Cost) 7,809.08		Cum Mud Field Est (Cost) 138,783.69				
Wellbore Design																				
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)			
CONDUCTOR					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00			
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05			
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.0			
PLANNED PRODUCTION							5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00			
Survey Data																				
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)				
11,523		1.50		227.70		11,514		279.97		-174.12		219.85		0.66		0.00				
11,617		1.50		223.20		11,608		279.81		-175.85		218.10		0.13		0.00				
11,712		1.50		222.90		11,703		279.76		-177.66		216.40		0.01		0.00				
11,806		1.80		221.50		11,797		279.74		-179.67		214.58		0.32		0.32				
11,900		1.80		216.50		11,891		279.88		-181.96		212.73		0.17		0.00				
11,994		1.60		216.20		11,985		280.14		-184.21		211.07		0.21		-0.21				
12,056		1.60		219.40		12,047		280.25		-185.58		210.01		0.14		0.00				
12,100		1.60		219.40		12,091		280.30		-186.53		209.23		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								1,182												
YATES								1,861			1,887			1,886.1						
SEVEN RIVERS								2,007			2,030			2,028.4						
QUEEN								2,411			2,443			2,440.1						
GRAYBURG								3,084			3,104			3,100.0						
SAN ANDRES								3,389			3,402			3,397.2						
SPRABERRY UPPER								6,131			6,110			6,102.0						
SPRABERRY LOWER								6,704			6,687			6,679.0						
JO-MILL SAND								7,001			6,990			6,981.9						
DEAN								7,523			7,508			7,499.9						
WOLFCAMP A								7,693			7,678			7,669.9						
WOLFCAMP B								8,053			8,044			8,035.8						
WOLFCAMP C								8,396			8,403			8,394.8						
WOLFCAMP D								8,806			8,806			8,797.8						
CISCO								9,611			9,622			9,613.6						
CLINE								9,808			9,836			9,827.6						
STRAWN								10,093			10,124			10,115.6						
ATOKA								10,396			10,469			10,460.5						
BARNETT								10,581			10,680			10,671.5						
WOODFORD								10,714			10,818			10,809.5						
DEVONIAN								10,791			10,880			10,871.5						
ELLENBURGER								11,445			11,520			11,511.3						



UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date	11/21/2014
Report #	33
Projected Days	26
Drilling Days	23
Current Depth	7,168
Depth Progress	124
Planned VS	7,145
Current VS	272
AFE #	DV02062
Total AFE	8,572,000

API 42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																											
Well Spud 10/14/2014		TD Date		RR Date		Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913		Target Line 7833' TVD @ 0' VS w/90.19° Inc and 1.19° Azimuth		Drilling AFE 2,105,200		Daily Field Est (Cost) 72,603		Cum Field Est (Cost) 3,125,352											
Status at Report Time																											
TESTING BOPS																											
Operations Summary FINISH TIH -7,044" ,KICK OFF PLUG TO 7168', 124', PROJ. INC AT BIT 9°, AZM 319°, CIR B/U ,PUMP SLUG, TOOHO , LAY DOWN KICK OFF ASSEMBLY, PULL WEAR BUSHING, START TESTING BOPS										Planned Operations TEST BOPS, PICK UP CURVE ASSY, TIH, BUILD CURVE																	
15' SOUTH / 18' WEST 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																											
Start MD (ftKB)		7,044		End MD (ftKB)		7,168		Depth Progress (ft)		124		Drilling Time (hr)		11.00		Avg ROP (ft/hr) 11.3		Time Since LTI (days) 1,210		Time Since RI (days) 1,210							
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	7,044	7,044	TRIP IN HOLE TO 7020							PILOT	PLUG	PILOT	TRIPS												
08:00	09:00	1.00	7,044	7,044	REAM TO BOTTOM AND ORIENT TOOL FACE FOR SIDE TRACK							PILOT	PLUG	PILOT	REAMING												
09:00	15:30	6.50	7,044	7,120	SLIDE DRILL FROM 7044 TO 7120 @ 11.7 FPH. 100% SLIDE FULL RETURNS							PILOT	PLUG	PILOT	DRILL W/ MUD												
15:30	16:30	1.00	7,120	7,120	TROUBLSHOOT MWD. CHANGE OUT TRANSDUCER AND WIRE							PILOT	PLUG	PILOT	3rd PARTY EQUIPMENT REPAIR		Yes										
16:30	20:00	3.50	7,120	7,158	SLIDE DRILL FROM 7120 TO 7158 @ 10.8 FPH. 100% SLIDE FULL RETURNS							PILOT	PLUG	PILOT	DRILL W/ MUD												
20:00	21:00	1.00	7,158	7,168	ROTATE DRILL FROM 7158 TO 7168 @ 10.0 FPH. 100% ROT FULL RETURNS							PILOT	PLUG	PILOT	DRILL W/ MUD												
21:00	23:00	2.00	7,168	7,168	CIRC. BOTTOMS UP							PILOT	PLUG	PILOT	COND MUD & CIRC												
23:00	03:30	4.50	7,168	7,168	POOH							PILOT	PLUG	PILOT	TRIPS												
03:30	04:30	1.00	7,168	7,168	LAY DOWN SIDE TRACK BHA							PILOT	PLUG	PILOT	P/U & L/D BHA												
04:30	05:00	0.50	7,168	7,168	RIG UP BOP TESTERS, TESTING BOPS							PILOT	PLUG	PILOT	TEST B.O.P												
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	
7,044		7,120		0.00		6.50		11.7		340		100		12		460		1,400.0		0		210		210		0	
7,120		7,158		0.00		2.50		15.2		340		150		12		460		1,400.0		0		210		210		0	
7,158		7,168		2.00		0.00		5.0		0		100		10		460		1,400.0		25		210		210		4,000	
NPT																											
Problem Type DOWNHOLE EQUIPMENT				Problem Sub Type MWD				Description LOST COMMUNICATION				Start Date 11/20/2014		End Date 11/20/2014		Dur (hr) 1.00		Failed Item 1 7/8in MWD - DIR & LOGGING		Accountable Party ARCHER DIRECTIONAL DRILLING 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	SMITH		FHI21		INSERT		1-1-NO-A-1-0-NO-TD				7,044	7,168	124.00	11.00	11.3	2.00	9.00	5.0	12	154							
8 3/4	HALLIBURTON		MD55DC		PDC																						
Current BHA Components																											
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread									
9		HWDP						ARCHER		POSITIVE PULSE		5		18		544.00		IF									
9		DRILL COLLAR - FLEX NON MAG										6 1/2		1		29.98		XH									
9		MWD - DIR & LOGGING										1 7/8		1		0.00		XH									
9		NMDC										6 1/2		1		31.06		XH									
9		UBHO SUB										6 1/2		1		3.11		XH									
9		MUD MOTOR						ARCHER		6757850		6 3/4		1		24.50		XH									
Mud Reports																											
Time 11:09	Type OIL BASE	Depth (ftKB) 7,086	Density (lb/gal) 9.00	Vis (s/qt) 63	PV Calc (cP) 14.0	YP Calc (lbf/100ft²) 9	Vis 3rpm 3	Vis 6rpm 5	LGS (%) 1.2	LCM (lb/bbl)	Chlor (mg/L) 88,000	Oil Water Ratio 67.4/32.6															
Electric Stab (V) 125.0		X Lime (lb/bbl) 1.3		HTHP Filtrate (mL/30min) 11.0		HTHP FC (1/32") 1		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 15.6		Cum Mud Lost to Hole (bbl) 768.9		Daily Mud Field Est (Cost) 2,688.39		Cum Mud Field Est (Cost) 141,472.07											
Wellbore Design																											
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)										
CONDUCTOR					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00										
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05										
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01										
PLANNED PRODUCTION							5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00										
Survey Data																											
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)											
11,523		1.50		227.70		11,514		279.97		-174.12		219.85		0.66		0.00											
11,617		1.50		223.20		11,608		279.81		-175.85		218.10		0.13		0.00											
11,712		1.50		222.90		11,703		279.76		-177.66		216.40		0.01		0.00											
11,806		1.80		221.50		11,797		279.74		-179.67		214.58		0.32		0.32											
11,900		1.80		216.50		11,891		279.88		-181.96		212.73		0.17		0.00											
11,994		1.60		216.20		11,985		280.14		-184.21		211.07		0.21		-0.21											
12,056		1.60		219.40		12,047		280.25		-185.58		210.01		0.14		0.00											
12,100		1.60		219.40		12,091		280.30		-186.53		209.23		0.00		0.00											
Mud Logging Information																											
Lithology and Shows 10% LIME STONE, 30% SAND STONE, 50% SHALE, 10% CEMENT										Max Trip Gas (units) 55		Avg Drill Gas (units) 30		Max Drill Gas (units)													
Geological Data																											
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)				Drill Top (TVD) (ftKB)													
SALADO								1,182																			
YATES								1,861		1,887				1,886.1													
SEVEN RIVERS								2,007		2,030				2,028.4													
QUEEN								2,411		2,443				2,440.1													
GRAYBURG								3,084		3,104				3,100.0													
SAN ANDRES								3,389		3,402				3,397.2													
SPRABERRY UPPER								6,131		6,110				6,102.0													
SPRABERRY LOWER								6,704		6,687				6,679.0													
JO-MILL SAND								7,001		6,990				6,981.9													
DEAN								7,523		7,508				7,499.9													
WOLFCAMP A								7,693		7,678				7,669.9													
WOLFCAMP B								8,053		8,044				8,035.8													
WOLFCAMP C								8,396		8,403				8,394.8													
WOLFCAMP D								8,806		8,806				8,797.8													
CISCO								9,611		9,622				9,613.6													
CLINE								9,808		9,836				9,827.6													



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Report Date 11/21/2014
Report # 33
Projected Days 26
Drilling Days 23
Current Depth 7,168
Depth Progress 124
Planned VS 7,145
Current VS 272
AFE # DV02062
Total AFE 8,572,000

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
STRAWN	10,093	10,124	10,115.6
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3

42383392030000			Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS														
Report Summary																													
Well Spud (ft)KB 10/14/2014		TD Date		RR Date		Target Formation WOLFCAMP A		Prop TD (ft)KB 14,913		Target Line 8006.97' TVD @ 0° VS w/90.15° Inc and 1.19° Azm				Drilling AFE 2,105,200		Daily Field Est (Cost) 123,155		Cum Field Est (Cost) 3,250,787											
Status at Report Time DRILLING CURVE @ / 7,650'																													
Operations Summary FINISH TESTING BOPS , M/U CURVE ASSY , TIH ,DRILL CURVE F/ 7,168'-7,650										Planned Operations CONTINUE DRILLING THE CURVE TO LANDING POINT																			
1' LOW / 17' RIGHTT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																													
Start MD (ft)KB 7,168				End MD (ft)KB 7,650				Depth Progress (ft) 482		Drilling Time (hr) 13.00		Avg ROP (ft/hr) 37.1		Time Since LTI (days) 1,211		Time Since RI (days) 1,211													
Daily Time Log																													
Start Time		End Time		Dur (hr)		Start Depth (ft)KB		End Depth (ft)KB		Comments				Hole Section		Interval		Category		Activity		NPT							
05:00		07:30		2.50		7,168		7,168		TESTED VALVES AND RAMS TO 250 LOW AND 5000 HIGH. TESTED ANNULAR TO 250 LOW AND 3500 HIGH. RIGGED DOWN TESTER				PROD		CURVE		DRILL		TEST B.O.P									
07:30		08:00		0.50		7,168		7,168		INSTALL WEAR BUSHING AND CLOSE CASING VALVES.				PROD		CURVE		DRILL		NIPPLE UP B.O.P./WELLHEAD									
08:00		10:00		2.00		7,168		7,168		SCRIBE MOTOR, INSTALL MWD, AND SURFACE TEST. MAKE UP BIT.				PROD		CURVE		DRILL		DIRECTIONAL WORK									
10:00		14:00		4.00		7,168		7,168		TRIP IN HOLE FILLING PIPE EVERY 30 STANDS				PROD		CURVE		DRILL		TRIPS									
14:00		15:00		1.00		7,168		7,205		ROTATE DRILL FROM 7168 TO 7205, 37' AT 37 FPH				PROD		CURVE		DRILL		DRILL W/ MUD									
										100% ROTATE FULL RETURNS																			
15:00		17:00		2.00		7,205		7,205		CIRCULATE AND WAIT ON WELL PLAN				PROD		CURVE		DRILL		DIRECTIONAL WORK									
17:00		21:00		4.00		7,205		7,420		ROTATE DRILL FROM 7,205' TO 7,420' 215 AT 54 FPH				PROD		CURVE		DRILL		DRILL W/ MUD									
										100% ROTATE FULL RETURNS																			
21:00		05:00		8.00		7,420		7,650		SLIDE DRILL FROM 7,420' TO 7,650' 230' AT 29FPH				PROD		CURVE		DRILL		DRILL W/ MUD									
										100% SLIDE FULL RETURNS																			
Drilling Parameters																													
Start Depth (ft)KB		End Depth (ft)KB		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			
7,168		7,205		1.00		0.00		37.0				200		18		377		2,000.0		40		210		210		4,000			
7,205		7,420		4.00		0.00		53.7				350		20		377		2,450.0		40		210		210		4,000			
7,420		7,650		0.00		8.00		28.8		340		350		20		377		2,450.0		0		210		210		0			
Bit Information																													
Size (in)		Make		Model		Typ		Dull Out		Depth In (ft)KB		Depth Out (ft)KB		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		1-1-NO-A-1-0-NO-TD		7,044		7,168		124.00		11.00		11.3		2.00		9.00		5.0		12		154	
8 3/4		HALLIBURTON		MD55DC		PDC		-----		7,168		7,650		482.00		13.00		37.1		5.00		8.00		50.4		20		145	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
10		DRILL COLLAR - FLEX NON MAG						ARCHER		POSITIVE PULSE		6 1/2		1		29.98		XH											
10		MWD - DIR & LOGGING										1 7/8		1		0.00		XH											
10		NMDC										6 1/2		1		31.06		XH											
10		UBHO SUB						ARCHER		6757850		6 1/2		1		3.11		XH											
10		MUD MOTOR										6 3/4		1		26.30		XH											
Mud Reports																													
Time 13:21		Type OIL BASE		Depth (ft)KB 7,155		Density (lb/gal) 9.00		Vis (s/qt) 60		PV Calc (cP) 13.0		YP Calc (lbf/100ft²) 10		Vis 3rpm 4		Vis 6rpm 5		LGS (%) 1.4		LCM (lb/bbl) 88,000		Chlor (mg/L) 67.4		Oil Water Ratio 32.6					
Electric Stab (V) 180.0		X Lime (lb/bbl) 1.3		HTHP Filtrate (mL/30min) 10.0		HTHP FC (1/32") 1		T HTHP (°F) 250.0		Mud Lost to Hole (bbl)		Cum Mud Lost to Hole (bbl) 768.9		Daily Mud Field Est (Cost) 3,879.11		Cum Mud Field Est (Cost) 145,351.18													
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ft)KB		Length (ft)											
CONDUCTOR						10/12/2014		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05											
INTERMEDIATE						11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01											
PLANNED PRODUCTION								5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00											
Survey Data																													
MD (ft)KB		Incl (°)		Azim (°)		TVD (ft)KB		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
11,523		1.50		227.70		11,514		279.97		-174.12		219.85		0.66		0.00													
11,617		1.50		223.20		11,608		279.81		-175.85		218.10		0.13		0.00													
11,712		1.50		222.90		11,703		279.76		-177.66		216.40		0.01		0.00													
11,806		1.80		221.50		11,797		279.74		-179.67		214.58		0.32		0.32													
11,900		1.80		216.50		11,891		279.88		-181.96		212.73		0.17		0.00													
11,994		1.60		216.20		11,985		280.14		-184.21		211.07		0.21		-0.21													
12,056		1.60		219.40		12,047		280.25		-185.58		210.01		0.14		0.00													
12,100		1.60		219.40		12,091		280.30		-186.53		209.23		0.00		0.00													
7,206		7.50		324.40		7,197		298.12		253.90		-184.15		1.12		1.06													
7,300		6.20		325.90		7,291		308.84		263.09		-190.57		1.40		-1.38													
7,395		6.20		325.90		7,385		318.69		271.58		-196.32		0.00		0.00													
7,426		4.70		330.10		7,416		321.54		274.07		-197.90		5.00		-4.84													
7,458		6.60		4.90		7,448		324.51		277.04		-198.39		11.97		5.94													
7,489		9.00		7.70		7,479		328.35		281.22		-197.91		7.84		7.74													
7,521		12.00		4.70		7,510		333.68		287.02		-197.31		9.53		9.38													
7,583		17.70		0.00		7,570		348.61		302.88		-196.78		9.39		9.19													
Mud Logging Information																													
Lithology and Shows 60% SILT STONE, 40% SHALE										Max Trip Gas (units)			Avg Drill Gas (units) 94			Max Drill Gas (units) 192													
Geological Data																													
Formation Name								Prog Top TVD (ft)KB				Drill Top MD (ft)KB				Drill Top (TVD) (ft)KB													
SALADO								1,182																					
YATES								1,861				1,887				1,886.1													
SEVEN RIVERS								2,007				2,030				2,028.4													
QUEEN								2,411				2,443				2,440.1													
GRAYBURG								3,084				3,104				3,100.0													
SAN ANDRES								3,389				3,402				3,397.2													
SPRABERRY UPPER								6,131				6,110				6,102.0													
SPRABERRY LOWER								6,704				6,687				6,679.0													
JO-MILL SAND								7,001				6,990				6,981.9													
DEAN								7,523				7,508				7,499.9													
WOLFCAMP A								7,693				7,678				7,669.9													
WOLFCAMP B								8,053				8,044				8,035.8													
WOLFCAMP C								8,396				8,403				8,394.8													
WOLFCAMP D								8,806				8,806				8,797.8													
CISCO								9,611				9,622				9,613.6													



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Report Date 11/22/2014
Report # 34
Projected Days 26
Drilling Days 24
Current Depth 7,650
Depth Progress 482
Planned VS 7,145
Current VS -118
AFE # DV02062
Total AFE 7,295,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.6
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3



AMERICAN ENERGY
PARTNERS

AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/23/2014
Report # 35
Projected Days 26
Drilling Days 25
Current Depth 8,380
Depth Progress 730
Planned VS 7,145
Current VS 410
AFE # DV02062
Total AFE 7,295,600

API 42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS													
Report Summary																											
Well Spud 10/14/2014		TD Date	RR Date	Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913		Target Line 7998 KBTVD at 0 VS with 90.15 Inc				Drilling AFE 2,105,200		Daily Field Est (Cost) 68,180		Cum Field Est (Cost) 3,318,967											
Status at Report Time DRILLING CURVE @ 8,380'																											
Operations Summary DRILL CURVE F/ 7,650'- 8,380'								Planned Operations CONTINUE DRILLING THE CURVE TO LANDING POINT																			
6' HIGH / 3' RIGHT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																											
Start MD (ftKB) 7,650			End MD (ftKB) 8,380			Depth Progress (ft) 730		Drilling Time (hr) 24.00		Avg ROP (ft/hr) 30.4		Time Since LTI (days) 1,212		Time Since RI (days) 1,212													
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	7,650	8,380	SLIDE DRILL FROM 7,650' TO 8,380' 730' AT 30.4FPH 100% SLIDE FULL RETURNS						PROD	CURVE	DRILL	DRILL W/ MUD													
Drilling Parameters																											
Start Depth (ftKB) 7,650		End Depth (ftKB) 8,380		Rot Time (hr) 0.00		Slide Time (hr) 24.00		Int ROP (ft/hr) 30.4		TFO (°) 350		dP (SPP) (psi) 400		WOB (1000lbf) 20		Q Rate (gpm/cfm) 500		SPP (psi) 2,200.0		RPM (rpm) 0		PU Str Wt (1000lbf) 210		SO Str Wt (1000lbf) 210		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	SMITH		FHI21		INSERT		1-1-NO-A-1-0-NO-TD		7,044	7,168	124.00	11.00	11.3	2.00	9.00	5.0	12	154									
8 3/4	HALLIBURTON		MD55DC		PDC		-----		7,168	8,380	1,212.00	37.00	32.8	5.00	32.00	50.4	20	146									
Current BHA Components																											
BHA No		Item Description					Make		Model		OD (in)		Jts		Length (ft)		Top Thread										
10		DRILL COLLAR - FLEX NON MAG					ARCHER		POSITIVE PULSE		6 1/2		1		29.98		XH										
10		MWD - DIR & LOGGING									1 7/8		1		0.00		XH										
10		NMDC									6 1/2		1		31.06		XH										
10		UBHO SUB					ARCHER		6757850		6 1/2		1		3.11		XH										
10		MUD MOTOR									6 3/4		1		26.30		XH										
Mud Reports																											
Time 23:55	Type OIL BASE		Depth (ftKB) 7,850		Density (lb/gal) 9.20		Vis (s/qt) 56		PV Calc (cP) 18.0		YP Calc (lbf/100ft²) 17		Vis 3rpm 6	Vis 6rpm 7	LGS (%) 1.4	LCM (lb/bbl) 88,000		Chlor (mg/L) 63.8/36.2		Oil Water Ratio 63.8/36.2							
Electric Stab (V) 225.0		X Lime (lb/bbl) 1.6		HTHP Filtrate (mL/30min) 8.0		HTHP FC (1/32") 2		T HTHP (°F) 250.0		Mud Lost to Hole (bbl) 768.9		Cum Mud Lost to Hole (bbl) 768.9		Daily Mud Field Est (Cost) 6,969.99		Cum Mud Field Est (Cost) 152,321.16											
Wellbore Design																											
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)										
CONDUCTOR					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00										
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05										
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01										
PLANNED PRODUCTION							5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00										
Survey Data																											
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)											
11,523		1.50		227.70		11,514		279.43		-173.34		219.78		0.66		0.00											
11,617		1.50		223.20		11,608		279.27		-175.06		218.03		0.13		0.00											
11,712		1.50		222.90		11,703		279.21		-176.88		216.33		0.01		0.00											
11,806		1.80		221.50		11,797		279.18		-178.89		214.51		0.32		0.32											
11,900		1.80		216.50		11,891		279.32		-181.18		212.66		0.17		0.00											
11,994		1.60		216.20		11,985		279.57		-183.43		211.01		0.21		-0.21											
12,056		1.60		219.40		12,047		279.69		-184.79		209.94		0.14		0.00											
12,100		1.60		219.40		12,091		279.73		-185.74		209.16		0.00		0.00											
8,086		66.90		351.40		7,934		182.49		201.77		94.23		14.40		14.06											
8,117		71.10		351.80		7,945		211.42		230.40		90.01		13.60		13.55											
8,148		72.70		351.70		7,955		240.87		259.56		85.78		5.17		5.16											
8,180		74.30		352.20		7,964		271.53		289.94		81.48		5.22		5.00											
8,211		77.30		352.30		7,971		301.56		319.71		77.43		9.68		9.68											
8,243		79.40		352.00		7,978		332.88		350.76		73.15		6.63		6.56											
8,273		81.10		351.80		7,983		362.43		380.03		68.99		5.70		5.67											
8,304		82.40		352.00		7,987		393.09		410.40		64.66		4.24		4.19											
Mud Logging Information																											
Lithology and Shows 100% SHALE										Max Trip Gas (units)		Avg Drill Gas (units) 218		Max Drill Gas (units) 250													
Geological Data																											
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)															
SALADO								1,182																			
YATES								1,861		1,887		1,886.1															
SEVEN RIVERS								2,007		2,030		2,028.4															
QUEEN								2,411		2,443		2,440.1															
GRAYBURG								3,084		3,104		3,100.0															
SAN ANDRES								3,389		3,402		3,397.2															
SPRABERRY UPPER								6,131		6,110		6,102.0															
SPRABERRY LOWER								6,704		6,687		6,678.9															
JO-MILL SAND								7,001		6,990		6,981.9															
DEAN								7,523		7,508		7,499.9															
WOLFCAMP A								7,693		7,678		7,669.9															
WOLFCAMP B								8,053		8,044		8,035.8															
WOLFCAMP C								8,396		8,403		8,394.8															
WOLFCAMP D								8,806		8,806		8,797.7															
CISCO								9,611		9,622		9,613.6															
CLINE								9,808		9,836		9,827.6															
STRAWN								10,093		10,124		10,115.5															
ATOKA								10,396		10,469		10,460.5															
BARNETT								10,581		10,680		10,671.5															
WOODFORD								10,714		10,818		10,809.5															
DEVONIAN								10,791		10,880		10,871.5															
ELLENBURGER								11,445		11,520		11,511.3															



AMERICAN ENERGY
PARTNERS

AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/24/2014
Report # 36
Projected Days 26
Drilling Days 26
Current Depth 9,516
Depth Progress 1,136
Planned VS 7,145
Current VS 1,469
AFE # DV02062
Total AFE 7,295.600

42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS				
Report Summary																		
Well Spud 10/14/2014		TD Date	RR Date	Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913		Target Line 7999 KBTV D at 0 VS with 90.46 Inc				Drilling AFE 2,105,200		Daily Field Est (Cost) 58,675		Cum Field Est (Cost) 3,376,592		
Status at Report Time POOH @5,500'																		
Operations Summary DRILL LARERAL F/ 8380'- 9,516' , CIRC , POOH								Planned Operations FINISH POOH , CHANGE BHA , TIH , CONTINUE DRILLING LATERAL TO PROJECTED TD @ 14,913'										
1' LOW / 10' LEFT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																		
Start MD (ftKB) 8,380			End MD (ftKB) 9,516			Depth Progress (ft) 1,136		Drilling Time (hr) 20.00		Avg ROP (ft/hr) 56.8		Time Since LTI (days) 1,213		Time Since RI (days) 1,213				
Daily Time Log																		
Start Time	End Time	Dur (hr)	Start Depth (ftKB)	End Depth (ftKB)	Comments						Hole Section	Interval	Category	Activity	NPT			
05:00	01:00	20.00	8,380	9,516	ROTATE/SLIDE DRILL FROM 8,380 TO 9,516, 1,242' AT 62 FPH ROTATE DRILL: 1,031' IN 12.5 HOURS, 83 FPH AVERAFGE ROP SLIDE DRILL: 211' IN 7.5 HOURS, 28' FPH AVERAGE ROP 83% ROTATE, 17% SLIDE FULL RETURNS						PROD	LAT	DRILL	DRILL W/ MUD				
01:00	02:30	1.50	9,516	9,516	CIRC. B/U (CHECK FLOW) PUMP SLUG , (MOTOR FAILURE)						PROD	LAT	DRILL	COND MUD & CIRC	Yes			
02:30	05:00	2.50	9,516	9,516	POOH TO CHANGE OUT MUD MOTOR						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	
8,380		8,476		0.00	1.50	64.0		300		20	500	2,400.0		0	220	210	10,000	
8,476		8,488		0.00	0.50	24.0	240	200		12	502	2,300.0		0	220	210	0	
8,488		8,539		1.00	0.00	51.0		300		20	588	2,400.0		60	220	210	10,000	
8,539		8,554		0.00	1.00	15.0	195	300		20	588	2,400.0		0	220	210	0	
8,554		8,696		2.50	0.00	56.8		300		20	588	2,400.0		60	220	210	10,000	
8,696		8,710		0.00	0.50	28.0	195	300		20	588	2,400.0		0	220	210	0	
8,710		8,759		0.50	0.00	98.0		450		25	588	2,400.0		60	220	210	10,000	
8,759		8,774		0.00	0.50	30.0	190	450		20	588	2,400.0		0	220	210	0	
8,774		8,800		0.50	0.00	52.0		450		25	540	2,400.0		60	220	210	10,000	
8,800		8,815		0.00	0.50	30.0	190	250		20	540	2,400.0		0	220	210	0	
8,815		8,947		1.50	0.00	88.0		400		25	540	2,400.0		60	220	210	10,000	
8,947		8,965		0.00	0.50	36.0	90	250		20	540	2,400.0		0	220	210	0	
8,965		9,043		1.00	0.00	78.0		400		25	540	2,400.0		60	220	210	10,000	
9,043		9,074		0.00	1.00	31.0	90	300		20	540	2,600.0		0	220	210	0	
9,074		9,091		0.50	0.00	34.0		200		25	540	2,750.0		60	220	200	11,000	
9,091		9,106		0.00	0.50	30.0	120	150		12	540	2,700.0		0	220	200	0	
9,106		9,232		1.00	0.00	126.0		350		23	540	3,200.0		60	220	190	11	
9,232		9,247		0.00	0.50	30.0	180	250		25	540	3,150.0		0	220	200	0	
9,247		9,326		1.00	0.00	79.0		400		23	540	3,350.0		60	220	200	12,000	
9,326		9,358		0.00	1.00	32.0	180	200		15	540	3,100.0		0	220	200	0	
9,358		9,421		0.50	0.00	126.0		350		20	540	3,250.0		60	220	200	13,000	
9,421		9,436		0.00	1.00	15.0	90	250		24	540	3,150.0		0	220	200	0	
9,436		9,516		1.00	0.00	80.0		400		15	540	3,400.0		60	220	200	11,000	
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	INSERT	1-1-NO-A-1-0-NO-TD		7,044	7,168	124.00	11.00	11.3	2.00	9.00	5.0	12	154		
8 3/4	HALLIBURTON		MD55DC	PDC	-----		7,168	9,516	2,348.00	57.00	41.2	16.00	41.00	68.4	25	230		
Current BHA Components																		
BHA No		Item Description				Make		Model		OD (in)		Jts	Length (ft)		Top Thread			
10		DRILL COLLAR - FLEX NON MAG				ARCHER		POSITIVE PULSE		6 1/2		1	29.98		XH			
10		MWD - DIR & LOGGING								1 7/8		1	0.00		XH			
10		NMDC								6 1/2		1	31.06		XH			
10		UBHO SUB				ARCHER		6757850		6 1/2		1	3.11		XH			
10		MUD MOTOR								6 3/4		1	26.30		XH			
Mud Reports																		
Time 23:55	Type OIL BASE		Depth (ftKB) 8,710		Density (lb/gal) 9.40		Vis (s/qt) 58	PV Calc (cP) 11.0	YP Calc (lb/100ft²) 19	Vis 3rpm 6	Vis 6rpm 7	LGS (%) 0.2	LCM (lb/bbl) 1,674.49		Chlor (mg/L) 88,000	Oil Water Ratio 65.2/34.8		
Electric Stab (V) 275.0	X Lime (lb/bbl) 1.4		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) 768.9		Daily Mud Field Est (Cost) 1,674.49		Cum Mud Field Est (Cost) 153,995.65				
Wellbore Design																		
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)	
CONDUCTOR					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00	
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05	
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01	
PLANNED PRODUCTION							5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00	
Survey Data																		
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)		
11,523		1.50		227.70		11,514		-173.34		-173.34		219.78		0.66		0.00		
11,617		1.50		223.20		11,608		-175.06		-175.06		218.03		0.13		0.00		
11,712		1.50		222.90		11,703		-176.88		-176.88		216.33		0.01		0.00		
11,806		1.80		221.50		11,797		-178.89		-178.89		214.51		0.32		0.32		
11,900		1.80		216.50		11,891		-181.18		-181.18		212.66		0.17		0.00		
11,994		1.60		216.20		11,985		-183.43		-183.43		211.01		0.21		-0.21		
12,056		1.60		219.40		12,047		-184.79		-184.79		209.94		0.14		0.00		
12,100		1.60		219.40		12,091		-185.74		-185.74		209.16		0.00		0.00		
8,618		89.30		350.60		7,991		719.90		719.90		20.87		1.91		-1.91		
8,713		91.20		351.60		7,991		813.75		813.75		6.18		2.26		2.00		
8,808		89.20		349.80		7,990		907.49		907.49		-9.17		2.83		-2.11		
8,902		90.90		350.60		7,990		1,000.12		1,000.12		-25.17		2.00		1.81		
8,997		92.80		351.00		7,987		1,093.84		1,093.84		-40.35		2.04		2.00		
9,091		90.30		354.10		7,985		1,186.99		1,186.99		-52.53		4.24		-2.66		
9,186		90.50		355.60		7,984		1,281.61		1,281.61		-61.06		1.59		0.21		
9,280		88.70		355.60		7,985		1,375.32		1,375.32		-68.27		1.91		-1.91		
Mud Logging Information																		
Lithology and Shows 100% SHALE										Max Trip Gas (units)		Avg Drill Gas (units)		175		Max Drill Gas (units) 684		
Geological Data																		
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)						
SALADO								1,182										
YATES								1,861		1,887		1,886.1						
SEVEN RIVERS								2,007		2,030		2,028.4						



AMERICAN ENERGY - PERMIAN BASIN LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Report Date 11/24/2014
Report # 36
Projected Days 26
Drilling Days 26
Current Depth 9,516
Depth Progress 1,136
Planned VS 7,145
Current VS 1,469
AFE # DV02062
Total AFE 7,295,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
QUEEN	2,411	2,443	2,440.1
GRAYBURG	3,084	3,104	3,100.0
SAN ANDRES	3,389	3,402	3,397.2
SPRABERRY UPPER	6,131	6,110	6,102.0
SPRABERRY LOWER	6,704	6,687	6,678.9
JO-MILL SAND	7,001	6,990	6,981.9
DEAN	7,523	7,508	7,499.9
WOLFCAMP A	7,693	7,678	7,669.9
WOLFCAMP B	8,053	8,044	8,035.8
WOLFCAMP C	8,396	8,403	8,394.8
WOLFCAMP D	8,806	8,806	8,797.7
CISCO	9,611	9,622	9,613.6
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.5
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/25/2014
Report # 37
Projected Days 26
Drilling Days 27
Current Depth 10,054
Depth Progress 538
Planned VS 7,145
Current VS 2,086
AFE # DV02062
Total AFE 7,295.600

API 42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS					
Report Summary																			
Well Spud 10/14/2014		TD Date	RR Date	Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913		Target Line 7997 KBTVD at 0 VS with 90.18 Inc				Drilling AFE 2,105,200		Daily Field Est (Cost) 88,619		Cum Field Est (Cost) 3,465,210			
Status at Report Time DRILLING LATERAL @ 10,054'																			
Operations Summary FINISH TIH TO BOTTOM @ 9516', DRILL LATERAL F/ 9516'- 10,054' RECIEVED TARGET CHANGE @ 22:50 HRS LAST SURVEY: DEPTH 9945 INC- 89.6 AZ- 0.4 TVD- 7985.04 VS- 2038.83 4' HIGH / 4' RIGHT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID								Planned Operations CONTINUE DRILLING LATERAL TO PROJECTED TD @ 14,913'											
Start MD (ftKB) 9,516			End MD (ftKB) 10,054			Depth Progress (ft) 538		Drilling Time (hr) 11.00		Avg ROP (ft/hr) 48.9		Time Since LTI (days) 1,214		Time Since RI (days) 1,214					
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	9,516	9,516	TRIP OUT OF HOLE DUE TO MOTOR FAILURE (HOLE TOOK CORRECT FILL)					PROD	LAT	DRILL	TRIPS		Yes				
09:00	10:00	1.00	9,516	9,516	DRAIN MOTOR, BREAK BIT, AND LAY OUT MOTOR AND MWD. (BIT HAD 1 CHIPPED CUTTER AND 1 JET WAS PLUGGED WITH RUBBER FROM CV JOINT BOOT).					PROD	LAT	DRILL	DIRECTIONAL WORK		Yes				
10:00	10:30	0.50	9,516	9,516	CLEAN OIL BASE MUD OFF OF RIG FLOOR					PROD	LAT	DRILL	TRIPS		Yes				
10:30	13:00	2.50	9,516	9,516	PICK UP AND SCRIBE MOTOR. PICK UP MWD, MAKE UP BIT, AND SURFACE TEST MWD					PROD	LAT	DRILL	DIRECTIONAL WORK		Yes				
13:00	18:00	5.00	9,516	9,516	TRIP IN HOLE WITH LATERAL ASSEMBLY FILLING PIPE EVERY 30 STANDS					PROD	LAT	DRILL	TRIPS		Yes				
18:00	05:00	11.00	9,516	10,054	ROTATE/SLIDE DRILL FROM 9,516 TO 10,054, 538' AT 48.9 FPH ROTATE DRILL: 487' IN 7.5 HOURS, 64.9 FPH AVERAFGE ROP SLIDE DRILL: 51' IN 3.5 HOURS, 14.6' FPH AVERAGE ROP 90% ROTATE, 10% 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	
9,516		9,520		0.50	0.00	8.0		100		5	544		2,700.0		20	220	200	11,000	
9,520		9,551		0.00	1.00	31.0	90	250		24	544		2,850.0			220	200		
9,551		9,709		2.00	0.00	79.0		450		23	544		3,150.0		60	220	200	16,000	
9,709		9,719		0.00	1.00	10.0	0	200		19	544		2,900.0			220	200		
9,719		9,850		1.50	0.00	87.3		450		23	544		3,150.0		60	220	200	16,000	
9,850		9,866		0.00	1.00	16.0	0	200		19	544		2,900.0			220	200		
9,866		9,897		1.00	0.00	31.0		450		23	544		3,150.0		60	220	200	16,000	
9,897		9,918		0.00	0.50	42.0	0	200		19	544		2,900.0			220	200		
9,918		10,054		2.50	0.00	54.4		450		23	544		3,150.0		60	220	200	16,000	
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		MD55DC	PDC	1-0-BT-N-X-0-BT-DMF		7,168	9,516	2,348.00	57.00	41.2	16.00	41.00	68.4	25	230			
8 3/4	SMITH		MDSi516	PDC	-----		9,516	10,054	538.00	11.00	48.9	7.50	3.50	61.3	24	212			
Current BHA Components																			
BHA No		Item Description				Make		Model		OD (in)		Jts	Length (ft)		Top Thread				
11		DRILL COLLAR - FLEX NON MAG				ARCHER		POSITIVE PULSE		6 1/2		1	29.98		XH				
11		MWD - DIR & LOGGING								1 7/8		1	0.00		XH				
11		NMDC								6 1/2		1	31.06		XH				
11		UBHO SUB								6 1/2		1	3.11		XH				
11		STABILIZER - NON MAG				ARCHER		6757850		6 1/2			5.54		XH				
11		MUD MOTOR								6 3/4		1	25.32		XH				
Mud Reports																			
Time 22:35	Type OIL BASE		Depth (ftKB) 9,785		Density (lb/gal) 9.40		Vis (s/qt) 57	PV Calc (cP) 18.0		YP Calc (lbf/100ft²) 21		Vis 3rpm 6	Vis 6rpm 8	LGS (%) 0.4	LCM (lb/bbl)	Chlor (mg/L) 80,000	Oil Water Ratio 63/37		
Electric Stab (V) 275.0		X Lime (lb/bbl) 1.3		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) 768.9		Daily Mud Field Est (Cost) 1,674.49		Cum Mud Field Est (Cost) 155,670.13			
Wellbore Design																			
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)		
CONDUCTOR					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00		
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05		
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01		
PLANNED PRODUCTION							5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00		
Survey Data																			
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)			
11,523		1.50		227.70		11,514		-173.34		-173.34		219.78		0.66		0.00			
11,617		1.50		223.20		11,608		-175.06		-175.06		218.03		0.13		0.00			
11,712		1.50		222.90		11,703		-176.88		-176.88		216.33		0.01		0.00			
11,806		1.80		221.50		11,797		-178.89		-178.89		214.51		0.32		0.32			
11,900		1.80		216.50		11,891		-181.18		-181.18		212.66		0.17		0.00			
11,994		1.60		216.20		11,985		-183.43		-183.43		211.01		0.21		-0.21			
12,056		1.60		219.40		12,047		-184.79		-184.79		209.94		0.14		0.00			
12,100		1.60		219.40		12,091		-185.74		-185.74		209.16		0.00		0.00			
9,375		90.00		358.70		7,986		1,470.18		1,470.18		-72.99		3.54		1.37			
9,470		90.20		359.30		7,986		1,565.17		1,565.17		-74.65		0.67		0.21			
9,568		88.40		2.90		7,987		1,663.12		1,663.12		-72.77		4.11		-1.84			
9,662		88.70		2.80		7,989		1,756.98		1,756.98		-68.10		0.34		0.32			
9,756		91.60		5.00		7,989		1,850.74		1,850.74		-61.71		3.87		3.09			
9,851		91.80		4.40		7,986		1,945.38		1,945.38		-53.93		0.67		0.21			
9,945		89.60		0.40		7,985		2,039.27		2,039.27		-49.99		4.86		-2.34			
10,054		89.40		1.00		7,986		2,148.26		2,148.26		-48.66		0.58		-0.18			
Mud Logging Information																			
Lithology and Shows 100% SHALE										Max Trip Gas (units)		Avg Drill Gas (units) 323		Max Drill Gas (units) 526					
Geological Data																			
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)							
SALADO								1,182											
YATES								1,861		1,887		1,886.1							
SEVEN RIVERS								2,007		2,030		2,028.4							
QUEEN								2,411		2,443		2,440.1							
GRAYBURG								3,084		3,104		3,100.0							
SAN ANDRES								3,389		3,402		3,397.2							
SPRABERRY UPPER								6,131		6,110		6,102.0							
SPRABERRY LOWER								6,704		6,687		6,678.9							
JO-MILL SAND								7,001		6,990		6,981.9							
DEAN								7,523		7,508		7,499.9							



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Report Date 11/25/2014
Report # 37
Projected Days 26
Drilling Days 27
Current Depth 10,054
Depth Progress 538
Planned VS 7,145
Current VS 2,086
AFE # DV02062
Total AFE 7,295,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
WOLFCAMP A	7,693	7,678	7,669.9
WOLFCAMP B	8,053	8,044	8,035.8
WOLFCAMP C	8,396	8,403	8,394.8
WOLFCAMP D	8,806	8,806	8,797.7
CISCO	9,611	9,622	9,613.6
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.5
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3



AMERICAN ENERGY
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AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/26/2014
Report # 38
Projected Days 26
Drilling Days 28
Current Depth 11,350
Depth Progress 1,296
Planned VS 7,145
Current VS 3,356
AFE # DV02062
Total AFE 7,295,600

42383392030000			Surface Legal Location			Latitude 31.2796972000	Longitude -101.5964222000	Orig KB El... 2,701.00	RKB (ft) 30.00	County REAGAN	State TEXAS						
Report Summary																	
Well Spud 10/14/2014	TD Date	RR Date	Target Formation WOLFCAMP A		Prop TD (ftKB) 14,913	Target Line 8003 KBTVD at 0 VS with 90.40 Inc			Drilling AFE 2,105,200	Daily Field Est (Cost) 140,930	Cum Field Est (Cost) 3,606,141						
Status at Report Time DRILLING LATERAL @ 11,350'																	
Operations Summary DRILL LATERAL F/ 10054'- 11350'						Planned Operations CONTINUE DRILLING LATERAL TO PROJECTED TD @ 14,913'											
LAST SURVEY: DEPTH 11263 INC- 88.3 AZ- 0.7 TVD- 7976.91 VS- 3355.67 1' HIGH / 2 ' LEFT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																	
Start MD (ftKB) 10,054		End MD (ftKB) 11,350		Depth Progress (ft) 1,296		Drilling Time (hr) 23.50		Avg ROP (ft/hr) 55.1		Time Since LTI (days) 1,215		Time Since RI (days) 1,215					
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	10,054	10,745	ROTATE/SLIDE DRILL FROM 10054 TO 10745, 691' AT 69.1 FPH ROTATE DRILL: 636' IN 8 HOURS, 79 FPH AVERAGE ROP SLIDE DRILL: 55' IN 2 HOURS, 27.5 FPH AVERAGE ROP 92% ROTATE, 8% SLIDE FULL RETURNS				PROD	LAT	DRILL	DRILL W/ MUD					
15:00	15:30	0.50	10,745	10,745	SERVICE RIG				PROD	LAT	DRILL	LUBRICATE RIG					
15:30	05:00	13.50	10,745	11,350	ROTATE/SLIDE DRILL FROM 10745 TO 11350, 605' AT 49.8 FPH ROTATE DRILL: 530' IN 8 HOURS, 76 FPH AVERAGE ROP SLIDE DRILL: 75' IN 5 HOURS, 15 FPH AVERAGE ROP 87% ROTATE, 13% 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				
10,054	10,180	1.50	0.00	84.0		450	21	544	2,700.0	60	220	200	14,000				
10,180	10,200	0.00	0.50	40.0	180	350	26	544	2,700.0	0	220	200					
10,200	10,368	2.50	0.00	67.2		450	23	544	2,700.0	60	220	200	16,000				
10,368	10,378	0.00	0.50	20.0	90	350	35	544	2,700.0	0	220	200					
10,378	10,463	1.00	0.00	85.0		450	13	544	2,700.0	60	220	200	16,000				
10,463	10,478	0.00	0.50	30.0	20	350	28	544	2,700.0	0	220	200					
10,478	10,557	1.00	0.00	79.0		450	19	544	2,700.0	60	220	200	20,000				
10,557	10,567	0.00	0.50	20.0	360	350	40	544	2,700.0	0	220	200					
10,567	10,745	2.00	0.00	89.0		450	40	544	2,700.0	60	220	200	18,000				
10,745	10,839	1.00	0.00	94.0		450	40	544	2,700.0	60	220	200	16,000				
10,839	10,854	0.00	1.00	15.0	210	200	30	544	2,500.0	0	220	200					
10,854	10,933	1.50	0.00	52.7		450	25	544	2,900.0	60	220	200	16,000				
10,933	10,953	0.00	1.00	20.0	210	200	25	544	2,500.0	0	220	200					
10,953	11,028	1.00	0.00	75.0		450	25	544	2,900.0	60	220	180	16,000				
11,028	11,056	0.00	2.00	14.0	180	200	25	544	2,500.0	0	220	180					
11,056	11,216	2.50	0.00	64.0		450	25	544	2,900.0	60	220	180	16,000				
11,216	11,242	0.00	2.00	13.0	180	200	25	544	2,500.0	0	220	180					
11,242	11,350	1.50	0.00	72.0		450	25	544	2,500.0	60	220	180	16,000				
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		MD55DC	PDC	1-0-BT-N-X-0-BT-DMF	7,168	9,516	2,348.00	57.00	41.2	16.00	41.00	68.4	25	230		
8 3/4	SMITH		MDSi516	PDC	-----	9,516	11,350	1,834.00	34.50	53.2	23.00	11.50	70.1	40	212		
Current BHA Components																	
BHA No	Item Description					Make		Model	OD (in)		Jts	Length (ft)		Top Thread			
11	DRILL COLLAR - FLEX NON MAG					ARCHER		POSITIVE PULSE	6 1/2		1	29.98		XH			
11	MWLD - DIR & LOGGING								1 7/8		1	0.00		XH			
11	NMDC								6 1/2		1	31.06		XH			
11	UBHO SUB								6 1/2		1	3.11		XH			
11	STABILIZER - NON MAG								6 1/2		1	5.54		XH			
11	MUD MOTOR					ARCHER		6757850	6 3/4		1	25.32		XH			
Mud Reports																	
Time 11:55	Type OIL BASE		Depth (ftKB) 11,219	Density (lb/gal) 9.40	Vis (s/qt) 68	PV Calc (cP) 25.0	YP Calc (lb/100ft²) 20	Vis 3rpm 8	Vis 6rpm 9	LGS (%) 0.1	LCM (lb/bbl)	Chlor (mg/L) 79,000	Oil Water Ratio 63/37				
Electric Stab (V) 282.0		X Lime (lb/bbl) 1.2		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) 768.9		Daily Mud Field Est (Cost)		Cum Mud Field Est (Cost) 155,670.13	
Wellbore Design																	
Casing Description				Run Date		OD (in)	Wt (lb/ft)	Grade		Conn		Set Depth (ftKB)	Length (ft)				
CONDUCTOR				10/12/2014		20	94.00	J-55		WELDED		110.0	76.00				
SURFACE				10/15/2014		13 3/8	54.50	J-55		BUTTRESS THREAD		713.0	683.05				
INTERMEDIATE				11/3/2014		9 5/8	40.00	J-55		LT&C		6,400.0	6,367.01				
PLANNED PRODUCTION						5 1/2	17.00	P-110		LT&C		14,913.0	14,883.00				
Survey Data																	
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)	
11,523		1.50		227.70		11,514		-173.34		-173.34		219.78		0.66		0.00	
11,617		1.50		223.20		11,608		-175.06		-175.06		218.03		0.13		0.00	
11,712		1.50		222.90		11,703		-176.88		-176.88		216.33		0.01		0.00	
11,806		1.80		221.50		11,797		-178.89		-178.89		214.51		0.32		0.32	
11,900		1.80		216.50		11,891		-181.18		-181.18		212.66		0.17		0.00	
11,994		1.60		216.20		11,985		-183.43		-183.43		211.01		0.21		-0.21	
12,056		1.60		219.40		12,047		-184.79		-184.79		209.94		0.14		0.00	
12,100		1.60		219.40		12,091		-185.74		-185.74		209.16		0.00		0.00	
10,604		91.70		3.30		7,997		2,697.75		2,697.75		-50.25		3.28		2.66	
10,698		92.70		3.60		7,993		2,791.51		2,791.51		-44.60		1.11		1.06	
10,792		93.60		3.50		7,988		2,885.19		2,885.19		-38.79		0.96		0.96	
10,886		93.30		2.90		7,982		2,978.87		2,978.87		-33.55		0.71		-0.32	
10,981		92.50		2.40		7,978		3,073.65		3,073.65		-29.16		0.99		-0.84	
11,075		89.40		0.20		7,976		3,167.59		3,167.59		-27.03		4.04		-3.30	
11,169		90.60		0.70		7,976		3,261.59		3,261.59		-26.29		1.38		1.28	
11,263		88.30		0.70		7,977		3,355.57		3,355.57		-25.15		2.45		-2.45	
Mud Logging Information																	
Lithology and Shows 30% LIMESTONE 70% SHALE								Max Trip Gas (units)		Avg Drill Gas (units) 217		Max Drill Gas (units) 523					
Geological Data																	
Formation Name							Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)						
SALADO							1,182										
YATES							1,861		1,887		1,886.1						
SEVEN RIVERS							2,007		2,030		2,028.4						



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Report Date 11/26/2014
Report # 38
Projected Days 26
Drilling Days 28
Current Depth 11,350
Depth Progress 1,296
Planned VS 7,145
Current VS 3,356
AFE # DV02062
Total AFE 7,295,600

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
QUEEN	2,411	2,443	2,440.1
GRAYBURG	3,084	3,104	3,100.0
SAN ANDRES	3,389	3,402	3,397.2
SPRABERRY UPPER	6,131	6,110	6,102.0
SPRABERRY LOWER	6,704	6,687	6,678.9
JO-MILL SAND	7,001	6,990	6,981.9
DEAN	7,523	7,508	7,499.9
WOLFCAMP A	7,693	7,678	7,669.9
WOLFCAMP B	8,053	8,044	8,035.8
WOLFCAMP C	8,396	8,403	8,394.8
WOLFCAMP D	8,806	8,806	8,797.7
CISCO	9,611	9,622	9,613.6
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.5
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/28/2014
Report # 40
Projected Days 26
Drilling Days 30
Current Depth 14,435
Depth Progress 1,605
Planned VS 7,145
Current VS 6,462
AFE # DV02062
Total AFE 7,295,600

42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS					
Report Summary																			
Well Spud 10/14/2014		TD Date	RR Date	Target Formation WOLFCAMP A2		Prop TD (ftKB) 14,913		Target Line 8000 KBTVD at 0 VS with 90.43 Inc				Drilling AFE 2,105,200		Daily Field Est (Cost) 70,552		Cum Field Est (Cost) 3,766,876			
Status at Report Time DRILLING LATERAL @ 14,435'																			
Operations Summary DRILL LATERAL F/ 12830'- 14435'								Planned Operations CONTINUE DRILLING LATERAL TO PROJECTED TD @ 14,913'											
LAST SURVEY: DEPTH 14,372' INC- 90.80 AZ- 5.10 TVD- 7956.76 VS- 6461.84 5' LOW / 13 ' RIGHT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																			
Start MD (ftKB) 12,830			End MD (ftKB) 14,435			Depth Progress (ft) 1,605		Drilling Time (hr) 24.00		Avg ROP (ft/hr) 66.9		Time Since LTI (days) 1,217		Time Since RI (days) 1,217					
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	12,830	14,435	ROTATE/SLIDE DRILL FROM 12830' TO 14435', 1605' AT 67 FPH ROTATE DRILL: 1518' IN 18.5 HOURS, 82 FPH AVERAGE ROP SLIDE DRILL: 89' IN 5.5 HOURS, 16 FPH AVERAGE ROP 95% ROTATE, 5% 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	
12,830		12,832		0.00	0.50	4.0	330	150		25	544	2,850.0		0		230	170		
12,832		12,943		1.50	0.00	74.0		450		22	544	3,350.0		80		230	170	18,000	
12,943		12,959		0.00	1.00	16.0	5	200		34	544	3,100.0		0		230	170		
12,959		13,037		1.00	0.00	78.0		450		20	544	3,350.0		80		230	170	17,000	
13,037		13,052		0.00	1.00	15.0	0	100		44	544	3,000.0		0		230	170		
13,052		13,131		1.00	0.00	79.0		450		21	544	3,350.0		80		230	170	21,000	
13,131		13,160		0.00	1.00	29.0	0	200		30	544	3,100.0		0		230	170		
13,160		13,382		3.00	0.00	74.0		450		23	544	3,350.0		80		230	170	19,000	
13,382		13,392		0.00	0.50	20.0	150	100		41	544	3,000.0		0		230	170		
13,392		14,418		12.00	0.00	85.5		450		20	544	3,350.0		80		240	160	20,000	
14,418		14,435		0.00	1.50	11.3	270	150		20	544	3,000.0		0		240	160		
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		MD55DC		PDC	1-0-BT-N-X-0-BT-DMF		7,168	9,516	2,348.00	57.00	41.2	16.00	41.00	68.4	25	230		
8 3/4	SMITH		MDSi516		PDC	-----		9,516	14,435	4,919.00	81.00	60.7	57.50	23.50	78.0	44	232		
Current BHA Components																			
BHA No		Item Description				Make		Model		OD (in)		Jts		Length (ft)		Top Thread			
11		DRILL COLLAR - FLEX NON MAG				ARCHER		POSITIVE PULSE		6 1/2		1		29.98		XH			
11		MWD - DIR & LOGGING								1 7/8		1		0.00		XH			
11		NMDC								6 1/2		1		31.06		XH			
11		UBHO SUB								6 1/2		1		3.11		XH			
11		STABILIZER - NON MAG				ARCHER		6757850		6 1/2		1		5.54		XH			
11		MUD MOTOR								6 3/4		1		25.32		XH			
Mud Reports																			
Time 23:20	Type OIL BASE		Depth (ftKB) 14,120		Density (lb/gal) 9.40		Vis (s/qt) 65	PV Calc (cP) 18.0		YP Calc (lb/100ft²) 24		Vis 3rpm 8	Vis 6rpm 9	LGS (%) 1.0	LCM (lb/bbl)	Chlor (mg/L) 75,000	Oil Water Ratio 62/38		
Electric Stab (V) 290.0		X Lime (lb/bbl) 1.7		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) 768.9		Daily Mud Field Est (Cost)		Cum Mud Field Est (Cost) 159,298.25			
Wellbore Design																			
Casing Description					Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)		
CONDUCTOR					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00		
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05		
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01		
PLANNED PRODUCTION							5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00		
PRODUCTION							5 1/2		17.00		P-110		LT&C		15,100.0		15,420.65		
Survey Data																			
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)			
11,523		1.50		227.70		11,514		-173.34		-173.34		219.78		0.66		0.00			
11,617		1.50		223.20		11,608		-175.06		-175.06		218.03		0.13		0.00			
11,712		1.50		222.90		11,703		-176.88		-176.88		216.33		0.01		0.00			
11,806		1.80		221.50		11,797		-178.89		-178.89		214.51		0.32		0.32			
11,900		1.80		216.50		11,891		-181.18		-181.18		212.66		0.17		0.00			
11,994		1.60		216.20		11,985		-183.43		-183.43		211.01		0.21		-0.21			
12,056		1.60		219.40		12,047		-184.79		-184.79		209.94		0.14		0.00			
12,100		1.60		219.40		12,091		-185.74		-185.74		209.16		0.00		0.00			
13,713		91.10		2.10		7,960		5,803.55		5,803.55		21.38		1.94		1.26			
13,808		90.10		1.60		7,959		5,898.49		5,898.49		24.45		1.18		-1.05			
13,902		90.40		2.50		7,959		5,992.43		5,992.43		27.81		1.01		0.32			
13,996		90.40		2.90		7,958		6,086.32		6,086.32		32.24		0.43		0.00			
14,089		89.80		2.70		7,958		6,179.21		6,179.21		36.78		0.68		-0.65			
14,183		90.70		3.90		7,957		6,273.05		6,273.05		42.19		1.60		0.96			
14,277		89.70		3.30		7,957		6,366.86		6,366.86		48.10		1.24		-1.06			
14,372		90.80		5.10		7,957		6,461.60		6,461.60		55.05		2.22		1.16			
Mud Logging Information																			
Lithology and Shows 100% SHALE										Max Trip Gas (units)		Avg Drill Gas (units) 445		Max Drill Gas (units) 680					
Geological Data																			
Formation Name								Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)							
SALADO								1,182											
YATES								1,861				1,887		1,886.1					
SEVEN RIVERS								2,007				2,030		2,028.4					
QUEEN								2,411				2,443		2,440.1					
GRAYBURG								3,084				3,104		3,100.0					
SAN ANDRES								3,389				3,402		3,397.2					
SPRABERRY UPPER								6,131				6,110		6,102.0					
SPRABERRY LOWER								6,704				6,687		6,678.9					
JO-MILL SAND								7,001				6,990		6,981.9					
DEAN								7,523				7,508		7,499.9					
WOLFCAMP A								7,693				7,678		7,669.9					
WOLFCAMP B								8,053				8,044		8,035.8					
WOLFCAMP C								8,396				8,403		8,394.8					
WOLFCAMP D								8,806				8,806		8,797.7					
CISCO								9,611				9,622		9,613.6					



Report Date	11/28/2014
Report #	40
Projected Days	26
Drilling Days	30
Current Depth	14,435
Depth Progress	1,605
Planned VS	7,145
Current VS	6,462
AFE #	DV02062
Total AFE	7,295,600

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.5
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/29/2014
Report # 41
Projected Days 26
Drilling Days 31
Current Depth 15,054
Depth Progress 619
Planned VS 7,145
Current VS 7,143
AFE # DV02062
Total AFE 7,295,600

42383392030000		Surface Legal Location		Latitude 31.2796972000	Longitude -101.5964222000	Orig KB El... 2,701.00	RKB (ft) 30.00	County REAGAN	State TEXAS						
Report Summary															
Well Spud 10/14/2014	TD Date	RR Date	Target Formation WOLFCAMP A2	Prop TD (ftKB) 14,913	Target Line 8000 KBTVD at 0 VS with 90.43 Inc		Drilling AFE 2,105,200	Daily Field Est (Cost) 59,549	Cum Field Est (Cost) 3,842,260						
Status at Report Time TRIPPING OUT OF HOLE @ 2100'															
Operations Summary DRILL LATERAL F/ 14435'- 15054' TD. PUMP 2 HI- VIS SWEEPS 15 MIN APART, CIRCULATE HOLE CLEAN WHILE WORKING PIPE, 80 ROTARY, 502 GPM. LAST SURVEY: DEPTH 15,054', INC- 90.80, AZ- 358.60, TVD- 7954.61, VS- 7143.37 7' LOW / 5' LEFT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 AT 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID					Planned Operations TOOH, LAY DOWN BHA, PULL WEAR BUSHING, MAKE UP SHOE TRACK, TEST FLOATS, RUN 5 1/2" PRODUCTION CASING										
Start MD (ftKB) 14,435		End MD (ftKB) 15,054		Depth Progress (ft) 619		Drilling Time (hr) 8.50		Avg ROP (ft/hr) 72.8		Time Since LTI (days) 1,218		Time Since RI (days) 1,218			
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	14,435	14,985	ROTATE/SLIDE DRILL FROM 14435' TO 14985', 550' AT 69 FPH ROTATE DRILL: 534' IN 7 HOURS, 76 FPH AVERAGE ROP SLIDE DRILL: 16' IN 1 HOURS, 16 FPH AVERAGE ROP 97% ROTATE, 3% SLIDE FULL RETURNS				PROD	LAT	DRILL	DRILL W/ MUD			
13:00	13:30	0.50	14,985	14,985	SERVICE RIG AND TOP DRIVE				PROD	LAT	DRILL	LUBRICATE RIG			
13:30	14:00	0.50	14,985	15,054	ROTATE/SLIDE DRILL FROM 14985' TO 15054', 69' AT 138 FPH ROTATE DRILL: 69' IN 1/2 HOUR, 138 FPH AVERAGE ROP SLIDE DRILL: 0' IN 0 HOURS, 0 FPH AVERAGE ROP 100% ROTATE, 0% SLIDE FULL RETURNS 15054' TD				PROD	LAT	DRILL	DRILL W/ MUD			
14:00	20:00	6.00	15,054	15,054	PUMP 2 HI-VIS SWEEPS AND CIRCULATE, WORKING PIPE STARTED CLEAN UP CYCLE WITH 12000 TORQUE, 2900 SPP 1ST BOTTOMS UP 10000 TORQUE, 2900 SPP PUMPED A 3RD SWEEP 2ND BOTTOMS UP 9000 TORQUE, 2900 SPP 3RD BOTTOMS UP 8000 TORQUE, 2800 SPP				PROD	LAT	DRILL	COND MUD & CIRC			
20:00	20:30	0.50	15,054	15,054	FLOW CHECK (OK) PUMP SLUG				PROD	LAT	DRILL	COND MUD & CIRC			
20:30	05:00	8.50	15,054	15,054	TOOH.190K MAX PULL OFF BOTTOM, 218K MAX PULL F/ 8000' T/ 7600' IN CURVE, ROCKED MOTOR OVER, PULLED @ 175K TO 185K, HOLE TAKING PROPER FILL, BIT DEPTH 2100'				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		
14,435	14,450	0.00	0.50	30.0	270	150	30	544	3,000.0	0	240	160			
14,450	14,533	1.50	0.00	55.3		450	16	544	3,350.0	80	250	130	18,000		
14,533	14,549	0.00	1.00	16.0	270	200	25	502	3,100.0	0	250	130			
14,549	14,985	5.00	0.00	87.2		450	15	502	3,350.0	80	250	130	17,000		
14,985	15,054	0.50	0.00	138.0		450	19	502	3,350.0	80	250	130	19,000		
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	MD55DC	PDC	1-0-BT-N-X-0-BT-DMF		7,168	9,516	2,348.00	57.00	41.2	16.00	41.00	68.4	25	230
8 3/4	SMITH	MDSi516	PDC	-----		9,516	15,054	5,538.00	89.50	61.9	64.50	25.00	78.6	44	232
Current BHA Components															
BHA No	Item Description				Make	Model	OD (in)	Jts	Length (ft)	Top Thread					
11	DRILL COLLAR - FLEX NON MAG				ARCHER	POSITIVE PULSE	6 1/2	1	29.98	XH					
11	MWD - DIR & LOGGING						1 7/8	1	0.00	XH					
11	NMDC						6 1/2	1	31.06	XH					
11	UBHO SUB						6 1/2	1	3.11	XH					
11	STABILIZER - NON MAG						6 1/2	1	5.54	XH					
11	MUD MOTOR				ARCHER	6757850	6 3/4	1	25.32	XH					
Mud Reports															
Time 23:20	Type OIL BASE	Depth (ftKB) 15,054	Density (lb/gal) 9.40	Vis (s/qt) 68	PV Calc (cP) 18.0	YP Calc (lbf/100ft²) 25	Vis 3rpm 8	Vis 6rpm 9	LGS (%) 1.0	LCM (lb/bbl) 75,000	Chlor (mg/L) 62/38	Oil Water Ratio			
Electric Stab (V) 300.0	X Lime (lb/bbl) 1.7	HTHP Filtrate (mL/30min) 8.0	HTHP FC (1/32") 2	T HTHP (°F) 250.0	Mud Lost to Hole (bbl) 768.9	Cum Mud Lost to Hole (bbl) 1,575.00		Daily Mud Field Est (Cost) 1,575.00		Cum Mud Field Est (Cost) 164,979.65					
Wellbore Design															
Casing Description			Run Date	OD (in)	Wt (lb/ft)	Grade	Conn	Set Depth (ftKB)	Length (ft)						
CONDUCTOR			10/12/2014	20	94.00	J-55	WELDED	110.0	76.00						
SURFACE			10/15/2014	13 3/8	54.50	J-55	BUTTRESS THREAD	713.0	683.05						
INTERMEDIATE			11/3/2014	9 5/8	40.00	J-55	LT&C	6,400.0	6,367.01						
PLANNED PRODUCTION				5 1/2	17.00	P-110	LT&C	14,913.0	14,883.00						
PRODUCTION				5 1/2	17.00	P-110	LT&C	15,054.0	15,042.29						
Survey Data															
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BUR (°/100ft)							
11,523	1.50	227.70	11,514	-173.34	-173.34	219.78	0.66	0.00							
11,617	1.50	223.20	11,608	-175.06	-175.06	218.03	0.13	0.00							
11,712	1.50	222.90	11,703	-176.88	-176.88	216.33	0.01	0.00							
11,806	1.80	221.50	11,797	-178.89	-178.89	214.51	0.32	0.32							
11,900	1.80	216.50	11,891	-181.18	-181.18	212.66	0.17	0.00							
11,994	1.60	216.20	11,985	-183.43	-183.43	211.01	0.21	-0.21							
12,056	1.60	219.40	12,047	-184.79	-184.79	209.94	0.14	0.00							
12,100	1.60	219.40	12,091	-185.74	-185.74	209.16	0.00	0.00							
14,372	90.80	5.10	7,957	6,461.60	6,461.60	55.05	2.22	1.16							
14,466	90.00	1.80	7,956	6,555.41	6,555.41	60.71	3.61	-0.85							
14,560	90.70	0.40	7,956	6,649.39	6,649.39	62.51	1.67	0.74							
14,655	89.50	358.60	7,955	6,744.38	6,744.38	61.68	2.28	-1.26							
14,749	91.10	359.10	7,955	6,838.36	6,838.36	59.80	1.78	1.70							
14,844	89.40	357.30	7,954	6,933.30	6,933.30	56.81	2.61	-1.79							
14,938	89.90	358.50	7,955	7,027.24	7,027.24	53.37	1.38	0.53							
15,007	90.80	358.60	7,955	7,096.21	7,096.21	51.62	1.31	1.30							
Mud Logging Information															
Lithology and Shows 10% LIMESTONE 90% SHALE								Max Trip Gas (units)		Avg Drill Gas (units) 561		Max Drill Gas (units) 792			
Geological Data															
Formation Name					Prog Top TVD (ftKB)		Drill Top MD (ftKB)		Drill Top (TVD) (ftKB)						
SALADO					1,182										
YATES					1,861		1,887		1,886.1						
SEVEN RIVERS					2,007		2,030		2,028.4						
QUEEN					2,411		2,443		2,440.1						
GRAYBURG					3,084		3,104		3,100.0						



Report Date	11/29/2014
Report #	41
Projected Days	26
Drilling Days	31
Current Depth	15,054
Depth Progress	619
Planned VS	7,145
Current VS	7,143
AFE #	DV020622
Total AFE	7,295,600

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
SAN ANDRES	3,389	3,402	3,397.2
SPRABERRY UPPER	6,131	6,110	6,102.0
SPRABERRY LOWER	6,704	6,687	6,678.9
JO-MILL SAND	7,001	6,990	6,981.9
DEAN	7,523	7,508	7,499.9
WOLFCAMP A	7,693	7,678	7,669.9
WOLFCAMP B	8,053	8,044	8,035.8
WOLFCAMP C	8,396	8,403	8,394.8
WOLFCAMP D	8,806	8,806	8,797.7
CISCO	9,611	9,622	9,613.6
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.5
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3



AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date 11/30/2014
Report # 42
Projected Days 26
Drilling Days 32
Current Depth 15,054
Depth Progress 0
Planned VS 7,145
Current VS 7,143
AFE # DV02062
Total AFE 7,295.600

API 42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/14/2014		TD Date		RR Date		Target Formation WOLFCAMP A2		Prop TD (ftKB) 14,913		Target Line 8000 KBTVD at 0 VS with 90.43 Inc				Drilling AFE 2,105,200		Daily Field Est (Cost) 341,194		Cum Field Est (Cost) 4,183,454											
Status at Report Time RIGGING UP TO CIRCULATE CASING																													
Operations Summary TRIP OUT OF HOLE TO BHA, L/D BHA, RIG UP CASING CREW AND TORQUE TURN, HELD PJSM, RUN 5 1/2" PROD CASING:										Planned Operations CIRCULATE HOLE FOR CEMENT, CEMENT PRODUCTION CASING, WOC, INSTALL WELL HEAD, TEST SAME																			
LAST SURVEY: DEPTH 15054, INC-90.80, AZ-358.60, TVD-7954.61, VS-7143.37 7' LOW / 5' LEFT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 @ 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID																													
Start MD (ftKB) 15,054				End MD (ftKB) 15,054				Depth Progress (ft) 0				Drilling Time (hr)				Avg ROP (ft/hr)				Time Since LTI (days) 1,219				Time Since RI (days) 1,219					
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		15,054		15,054		TRIP OUT OF HOLE TO BHA						PROD		LAT		DRILL		TRIPS							
06:00		08:00		2.00		15,054		15,054		DRAIN MOTOR, BREAK OFF BIT, L/D DIRECTIONAL TOOLS.						PROD		LAT		DRILL		DIRECTIONAL WORK							
08:00		08:30		0.50		15,054		15,054		PULL WEAR BUSHING						PROD		LAT		DRILL		TRIPS							
08:30		09:00		0.50		15,054		15,054		CLEAN AND CLEAR RIG FLOOR						PROD		LAT		DRILL		SAFETY MEETING							
09:00		10:30		1.50		15,054		15,054		RIG DOWN 5" DP HANDLING TOOLS, RIG UP CASING CREW (NOTIFIED PAM @ TRRC ON 11/29/2014 @ 08:15 hrs)						PROD		PROD		CSG/CEMENT NT		RUN CASING							
10:30		11:00		0.50		15,054		15,054		HELD PJSM WITH PREMIERE CASING CREW, RIG CREW, TRICAN REP, TOOL PUSHER, TORQUE TURN REP AND CO REP.						PROD		PROD		CSG/CEMENT NT		SAFETY MEETING							
11:00		05:00		18.00		15,054		15,054		MAKE UP SHOE TRACK, RUN 5 1/2" PROD CASING TO TD @ 15,054'						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		MD55DC		PDC		1-0-BT-N-X-0-BT-DMF		7,168		9,516		2,348.00		57.00		41.2		16.00		41.00		68.4		25		230	
8 3/4		SMITH		MDSi516		PDC		1-0-CT-S-X-0-CT-TD		9,516		15,054		5,538.00		89.50		61.9		64.50		25.00		78.6		44		232	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
11		DRILL COLLAR - FLEX NON MAG						ARCHER		POSITIVE PULSE		6 1/2		1		29.98		XH											
11		MWD - DIR & LOGGING										1 7/8		1		0.00		XH											
11		NMDC										6 1/2		1		31.06		XH											
11		UBHO SUB										6 1/2		1		3.11		XH											
11		STABILIZER - NON MAG						ARCHER		6757850		6 1/2		1		5.54		XH											
11		MUD MOTOR										6 3/4		1		25.32		XH											
Mud Reports																													
Time 23:30		Type OIL BASE		Depth (ftKB) 15,054		Density (lb/gal) 9.40		Vis (s/qt) 68		PV Calc (cP) 18.0		YP Calc (lbf/100ft²) 25		Vis 3rpm 8		Vis 6rpm 9		LGS (%) 1.0		LCM (lb/bbl)		Chlor (mg/L) 75,000		Oil Water Ratio 62/38					
Electric Stab (V) 300.0		X Lime (lb/bbl) 1.7		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) 768.9		Daily Mud Field Est (Cost) 164,979.65				Cum Mud Field Est (Cost)											
Wellbore Design																													
Casing Description						Run Date		OD (in)		Wt (lb/ft)		Grade		Conn		Set Depth (ftKB)		Length (ft)											
CONDUCTOR						10/12/2014		20		94.00		J-55		WELDED		110.0		76.00											
SURFACE						10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05											
INTERMEDIATE						11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01											
PLANNED PRODUCTION								5 1/2		17.00		P-110		LT&C		14,913.0		14,883.00											
PRODUCTION								5 1/2		17.00		P-110		LT&C		15,054.0		15,042.29											
Survey Data																													
MD (ftKB)		Incl (°)		Azim (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
11,523		1.50		227.70		11,514		-173.34		-173.34		219.78		0.66		0.00													
11,617		1.50		223.20		11,608		-175.06		-175.06		218.03		0.13		0.00													
11,712		1.50		222.90		11,703		-176.88		-176.88		216.33		0.01		0.00													
11,806		1.80		221.50		11,797		-178.89		-178.89		214.51		0.32		0.32													
11,900		1.80		216.50		11,891		-181.18		-181.18		212.66		0.17		0.00													
11,994		1.60		216.20		11,985		-183.43		-183.43		211.01		0.21		-0.21													
12,056		1.60		219.40		12,047		-184.79		-184.79		209.94		0.14		0.00													
12,100		1.60		219.40		12,091		-185.74		-185.74		209.16		0.00		0.00													
14,372		90.80		5.10		7,957		6,461.60		6,461.60		55.05		2.22		1.16													
14,466		90.00		1.80		7,956		6,555.41		6,555.41		60.71		3.61		-0.85													
14,560		90.70		0.40		7,956		6,649.39		6,649.39		62.51		1.67		0.74													
14,655		89.50		358.60		7,955		6,744.38		6,744.38		61.68		2.28		-1.26													
14,749		91.10		359.10		7,955		6,838.36		6,838.36		59.80		1.78		1.70													
14,844		89.40		357.30		7,954		6,933.30		6,933.30		56.81		2.61		-1.79													
14,938		89.90		358.50		7,955		7,027.24		7,027.24		53.37		1.38		0.53													
15,007		90.80		358.60		7,955		7,096.21		7,096.21		51.62		1.31		1.30													
Mud Logging Information																													
Lithology and Shows 10% LIMESTONE 90% SHALE										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								1,182																					
YATES								1,861				1,887				1,886.1													
SEVEN RIVERS								2,007				2,030				2,028.4													
QUEEN								2,411				2,443				2,440.1													
GRAYBURG								3,084				3,104				3,100.0													
SAN ANDRES								3,389				3,402				3,397.2													
SPRABERRY UPPER								6,131				6,110				6,102.0													
SPRABERRY LOWER								6,704				6,687				6,678.9													
JO-MILL SAND								7,001				6,990				6,981.9													
DEAN								7,523				7,508				7,499.9													
WOLFCAMP A								7,693				7,678				7,669.9													
WOLFCAMP B								8,053				8,044				8,035.8													
WOLFCAMP C								8,396				8,403				8,394.8													
WOLFCAMP D								8,806				8,806				8,797.7													
CISCO								9,611				9,622				9,613.6													
CLINE								9,808				9,836				9,827.6													
STRAWN								10,093				10,124				10,115.5													
ATOKA								10,396				10,469				10,460.5													
BARNETT								10,581				10,680				10,671.5													



Report Date	11/30/2014
Report #	42
Projected Days	26
Drilling Days	32
Current Depth	15,054
Depth Progress	0
Planned VS	7,145
Current VS	7,143
AFE #	DV02062
Total AFE	7,295,600

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3

AMERICAN ENERGY - PERMIAN BASIN, LLC
Daily Drilling Partner Report

AMERICAN ENERGY
PARTNERS

UNIVERSITY 09 0804H

AEPB WELL NO. 22
ENSIGN 760

Report Date	12/1/2014
Report #	43
Projected Days	26
Drilling Days	33
Current Depth	15,054
Depth Progress	0
Planned VS	7,145
Current VS	7,143
AFE #	DV02062
Total AFE	7,295,600

42383392030000		Surface Legal Location		Latitude 31.2796972000		Longitude -101.5964222000		Orig KB El... 2,701.00		RKB (ft) 30.00		County REAGAN		State TEXAS															
Report Summary																													
Well Spud 10/29/2014		TD Date	RR Date 12/1/2014	Target Formation WOLFCAMP A2		Prop TD (ftKB) 14,913		Target Line 8000 KBTVD at 0 VS with 90.43 Inc				Drilling AFE 2,105,200		Daily Field Est (Cost) 203,775		Cum Field Est (Cost) 4,387,229													
Status at Report Time																													
RELEASE RIG AT 5:00AM ON 12/1/2014																													
Operations Summary RIG UP CIRCULATING SWEDGE, BUST FLOTATION COLLAR @ 2600 PSI, BLED AIR OUT OF CASING, CIRCULATE BOTTOMS UP, DROP WIPER PLUG, PUMP DOWN TO FC, BURST PLUG @ 1100 PSI, CIRCULATE 1 1/2 CASING VOLUMES, HELD PJSM WITH RIG CREW AND CEMENT CREW. CEMENT 5 1/2" PROD CASING, SPACER:100 BBLs FRESH WATER, LEAD CEMENT: 770 SKS (346 BBLs) UNIVERSAL MAXLITE, TAIL CEMENT: 1725 SKS (406 BBLs) PREMIUM 50/50 POZ, DISPLACEMENT: 14 BBLs OF SUGAR WATER AND 348 BBLs FRESH WATER, HAD FULL RETURNS WHILE CEMENTING, BUMPED PLUG ON TIME, BLED BACK 3 BBLs, FLOATS HELD, 125 BBLs OF CEMENT RETURNED TO SURFACE, TOP OF LEAD AT SURFACE, TOP OF TAIL AT 5380'. PREP TO NIPPLE DOWN, SET SLIPS, NIPPLE DOWN BOPS. WILL SKID 12/1/2014 @ 12:00 HRS WITH B&L TRUCKING CO, WILL SPUD 12/2/2014 @ 15:00 HRS LAST SURVEY: DEPTH 15054, INC-90.80, AZ-358.60, TVD-7954.61, VS-7143.37 7' LOW / 5' LEFT 1st WELL ON PAD BIG RIG SPUD DATE: 10/29/2014 @ 09:30 NEXT WELL: UNIVERSITY 09 0802H, SKID								Planned Operations SKID RIG FROM UNIVERSITY 09 # 0804H TO UNIVERSITY 09 # 0802H, RIG UP, NIPPLE UP BOPS, TEST SAME, MAKE UP TANGENT BHA, TIH, DRILL TANGENT																					
Start MD (ftKB) 15,054			End MD (ftKB) 15,054			Depth Progress (ft) 0		Drilling Time (hr)		Avg ROP (ft/hr)		Time Since LTI (days) 1,220			Time Since RI (days) 1,220														
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	15,054	15,054	RIG UP CIRCULATING SWEDGE, BUST FLOTATION COLLAR @ 2600 PSI, BLEED AIR OUT OF CASING, CIRCULATE BOTTOMS UP,						PROD	PROD	CSG/CEMENT NT	COND MUD & CIRC															
07:30	11:30	4.00	15,054	15,054	RIG UP CEMENT HEAD, DROP WIPER PLUG, PUMP DOWN TO FC, BURST PLUG @ 1100 PSI, CIRCULATE 1 1/2 CASING VOLUMES.						PROD	PROD	CSG/CEMENT NT	COND MUD & CIRC															
11:30	12:00	0.50	15,054	15,054	HELD PJSM WITH CEMENT CREW, RIG CREW, TRICAN, DAVIS LYNCH AND CO REP						PROD	PROD	CSG/CEMENT NT	SAFETY MEETING															
12:00	17:00	5.00	15,054	15,054	UNIVERSAL CEMENTING: PUMP 5.5in CEMENT JOB, PUMP 100 BBL TREATED FRESH WATER SPACER, 50 BBL OB MUD PUSH WITH 40 PPB STOP LOSS LCM, LEAD=770 SACKS (346 BBLs) UNIVERSAL MAXLITE, 11.3 PPG, TAIL=1725 SACKS (406 BBLs) PREMIUM 50/50POZ, 14.5 PPG, 3.5 BBL/MIN PUMP RATE, PUMP 14 BBL FRESH WATER SUGAR SPACER, INTO FINISHED DISPLACEMENT 348 BBL OF 8.33 WATER, BUMPED & RUPTURED 1 ST PLUG @ 2800PSI, PUMP 14 BBLs MORE LANDED 2ND PLUG @ 2300 PSI, SLOWED RATE FROM 6 TO 3.5 BBL/MIN, HOLD 2300 PSI FOR 5 MIN, BLEED OFF PSI, 3 BBL BACK, FLOATS HOLDING. ESTIMATED TOP OF LEAD AT 32', ESTIMATED TOP OF TAIL AT 5380'. 125 BBLs CEMENT BACK TO SURFACE, RIG DOWN CEMENTERS						PROD	PROD	CSG/CEMENT NT	RUN CEMENT															
17:00	18:30	1.50	15,054	15,054	RIG DOWN CEMENTERS						PROD	PROD	CSG/CEMENT NT																
18:30	21:00	2.50	15,054	15,054	READY STACK TO NIPPLE DOWN, REMOVE FLOW LINE, CHOKE LINE, REMOVE TURN BUCKLES						PROD	PROD	CSG/CEMENT NT	NIPPLE UP B.O.P./WELLHEAD															
21:00	23:30	2.50	15,054	15,054	LIFT STACK, SET SLIPS @ 130K, CUT CASING, LAY OUT SAME						PROD	PROD	CSG/CEMENT NT	NIPPLE UP B.O.P./WELLHEAD															
23:30	05:00	5.50	15,054	15,054	SET STACK DOWN, BREAK BOLTS, LAY OUT BOPS & SPACER SPOOL, INSTALL DSA & WELL CAP						PROD	PROD	CSG/CEMENT NT	NIPPLE UP B.O.P./WELLHEAD															
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		MD55DC		PDC		1-0-BT-N-X-0-BT-DMF		7,168		9,516		2,348.00		57.00		41.2		16.00		41.00		68.4		25		230	
8 3/4		SMITH		MDSi516		PDC		1-0-CT-S-X-0-CT-TD		9,516		15,054		5,538.00		89.50		61.9		64.50		25.00		78.6		44		232	
Current BHA Components																													
BHA No		Item Description						Make		Model		OD (in)		Jts		Length (ft)		Top Thread											
11		DRILL COLLAR - FLEX NON MAG						ARCHER		POSITIVE PULSE		6 1/2		1		29.98		XH											
11		MWD - DIR & LOGGING										1 7/8		1		0.00		XH											
11		NMDC										6 1/2		1		31.06		XH											
11		UBHO SUB										6 1/2		1		3.11		XH											
11		STABILIZER - NON MAG						ARCHER		6757850		6 1/2		1		5.54		XH											
11		MUD MOTOR										6 3/4		1		25.32		XH											
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					10/12/2014		20		94.00		J-55		WELDED		110.0		76.00												
SURFACE					10/15/2014		13 3/8		54.50		J-55		BUTTRESS THREAD		713.0		683.05												
INTERMEDIATE					11/3/2014		9 5/8		40.00		J-55		LT&C		6,400.0		6,367.01												
PRODUCTION					11/30/2014		5 1/2		17.00		P-110		LT&C		15,040.0		15,007.96												
Survey Data																													
MD (ftKB)		Incl (°)		Azm (°)		TVD (ftKB)		VS (ft)		NS (ft)		EW (ft)		DLS (°/100ft)		BUR (°/100ft)													
11,523		1.50		227.70		11,514		-173.34		-173.34		219.78		0.66		0.00													
11,617		1.50		223.20		11,608		-175.06		-175.06		218.03		0.13		0.00													
11,712		1.50		222.90		11,703		-176.88		-176.88		216.33		0.01		0.00													
11,806		1.80		221.50		11,797		-178.89		-178.89		214.51		0.32		0.32													
11,900		1.80		216.50		11,891		-181.18		-181.18		212.66		0.17		0.00													
11,994		1.60		216.20		11,985		-183.43		-183.43		211.01		0.21		-0.21													
12,056		1.60		219.40		12,047		-184.79		-184.79		209.94		0.14		0.00													
12,100		1.60		219.40		12,091		-185.74		-185.74		209.16		0.00		0.00													
14,466		90.00		1.80		7,956		6,555.41		6,555.41		60.71		3.61		-0.85													
14,560		90.70		0.40		7,956		6,649.39		6,649.39		62.51		1.67		0.74													
14,655		89.50		358.60		7,955		6,744.38		6,744.38		61.68		2.28		-1.26													
14,749		91.10		359.10		7,955		6,838.36		6,838.36		59.80		1.78		1.70													
14,844		89.40		357.30		7,954		6,933.30		6,933.30		56.81		2.61		-1.79													
14,938		89.90		358.50		7,955		7,027.24		7,027.24		53.37		1.38		0.53													
15,007		90.80		358.60		7,955		7,096.21		7,096.21		51.62		1.31		1.30													
15,054		90.80		358.60		7,954		7,143.19		7,143.19		50.48		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								1,182																					



Report Date	12/1/2014
Report #	43
Projected Days	26
Drilling Days	33
Current Depth	15,054
Depth Progress	0
Planned VS	7,145
Current VS	7,143
A/E #	DV02062
Total A/E	7,295,600

UNIVERSITY 09 0804H
AEPB WELL NO. 22
ENSIGN 760

Geological Data			
Formation Name	Prog Top TVD (ftKB)	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)
YATES	1,861	1,887	1,886.1
SEVEN RIVERS	2,007	2,030	2,028.4
QUEEN	2,411	2,443	2,440.1
GRAYBURG	3,084	3,104	3,100.0
SAN ANDRES	3,389	3,402	3,397.2
SPRABERRY UPPER	6,131	6,110	6,102.0
SPRABERRY LOWER	6,704	6,687	6,678.9
JO-MILL SAND	7,001	6,990	6,981.9
DEAN	7,523	7,508	7,499.9
WOLFCAMP A	7,693	7,678	7,669.9
WOLFCAMP B	8,053	8,044	8,035.8
WOLFCAMP C	8,396	8,403	8,394.8
WOLFCAMP D	8,806	8,806	8,797.7
CISCO	9,611	9,622	9,613.6
CLINE	9,808	9,836	9,827.6
STRAWN	10,093	10,124	10,115.5
ATOKA	10,396	10,469	10,460.5
BARNETT	10,581	10,680	10,671.5
WOODFORD	10,714	10,818	10,809.5
DEVONIAN	10,791	10,880	10,871.5
ELLENBURGER	11,445	11,520	11,511.3