



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU							DATE 06-20-2014								
API # 4238338545 00	24 HRS PROG 0.0 (ft)		TMD 109.0 (ft)		TD TVD 109.0 (ft)		REPT NO 1								
RIG PATTERSON 173		FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 0.00 (days)	DOL 0.38 (days)								
WB KO DATE	WELL SPUD DATE	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / GLENN WILLIAMS		ENGINEER ROY ALAN DE NAPOLI		PBTMD								
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO								
AFE # 11-13-0422-DH  DESCRIPTION:		AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500		DAILY COSTS DHC: 82,590 DCC: CWC: Others: TOTAL: 82,590		CUMULATIVE COSTS DHC: 82,590 DCC: CWC: Others: TOTAL: 82,590									
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)		BHA HRS OF SERVICE									
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)			LAST CASING	NEXT CASING 20.000 in @ 109.0 ft										
CURRENT OPERATIONS: CONTINUE RIGGING UP ON UNIVERSITY 2505 #2 HU															
24 HR SUMMARY: R/D ON UNIVERSITY 2505 #1 HM, SKID RIG FORWARD TO THE UNIVESSITY 2505 # 2 HU, AND BEGIN RIG UP															
24 HR FORECAST: FINISH RIGGING UP AND PREPAIR TO SPUD WELL															
OPERATION SUMMARY															
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY								
0:00	6:00	6.00	R-MOB-DEMOB	RU_RD	PP		CONTINUE RIGGING DOWN ON THE UNIVERSITY 2505 #1 HM AND PREPARE TO SKID THE RIG TO THE UNIVERSITY 2505 #2 HU. ( DIESEL TANKS AND LINES TO MUD PITS, BACK OF PITS, C-CAN, V-DOOR, AND CAT WALK, VAC SYSTEM . MOVE ALL GRATINGS AND CONES, ALL ELECTRICAL LINES								
6:00	8:00	2.00	R-MOB-DEMOB	RU_RD	PP		RIG DOWN GAS BUSTER, FINISH RIGGING DOWN ELECTRICAL LINES PULL GROUND RODS.								
8:00	15:00	7.00	R-MOB-DEMOB	RU_RD	PP		MOVE EQUIPMENT AND SKID RIG . HAD DIFFICULTY SKIDDING DUE TO MUDDY LOCATION.  SET AND LEVEL SUB @ 1500 HRS								
15:00	18:00	3.00	R-MOB-DEMOB	RU_RD	PP		SET AND LEVEL SUB @ 1500 HRS, WATER TANKS AND PUMPS SET @ 1645 HRS, SCR GENs AND GRASS HOPPER SET @ 1800HRS, RIG UP COOLING LINES, SET TRIP TANK , CHoke MANIFOLD AND HPU UNIT.								
18:00	22:30	4.50	R-MOB-DEMOB	RU_RD	PP		SET IN 3RD PARTY FUEL TANK, BOTTOM DOG HOUSE @ 1830. JUNK BOX, KOPOMY SUIT CASE, @ 1842 HRS, VFD AND C-CAN, SET PRE MIX AND BULK MUD TANKS.								
22:30	0:00	1.50	R-MOB-DEMOB		PP		RIG UP WITH CREWS , RUN ELECTRIC LINES FROM PITS, GRASS HOPPER, WATER TANKS, BOTTOM DOG HOUSE, ST-80, BUBLK MUD TANKS. AND WATRER TANKS .TRIP TANK, MUD HOPPER								
24.00 = Total Hours Today															
06:00 UPDATE															
0000-0600	0000-0600 RIG UP WITH CREWS , RUN ELECTRIC LINES FROM PITS, GRASS HOPPER, WATER TANKS, BOTTOM DOG HOUSE, ST-80, BUBLK MUD TANKS. AND WATRER TANKS .TRIP TANK, MUD HOPPER FILL PITS. HOOK UP PREMIX TANK, FLOW LINE TO RESURVE PIT, GAS BUSTER AND LINES, 4" ON CHOKe , 6" ON GAS BUSTER, AIR OUT MUD PUMPS.														



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU					DATE 06-20-2014			
API # 4238338545 00	24 HRS PROG 0.0 (ft)	TMD 109.0 (ft)	TD TVD 109.0 (ft)	REPT NO 1				
PERSONNEL DATA								
COMPANY AIP TOTAL ENERGY SERVICES PATTERSON		QTY 1 1 11	HRS 24.00 24.00 132.00	COMPANY HORIZON MUD BOS SOLUTIONS	QTY 1 2			
TOTAL PERSONNEL ON BOARD: 16 TOTAL HOURS ON BOARD: 228								
MATERIALS/CONSUMPTION								
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 479	ON HAND 2636	ITEM DIESEL, MUD	UNITS gal 0			
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-21-2014			
API # 4238338545 00	24 HRS PROG (ft)	TMD 109.0 (ft)	TD TVD 109.0 (ft)	REPT NO 2			
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS (days)			
WB KO DATE	WELL SPUD DATE	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / GLENN WILLIAMS	ENGINEER ROY ALAN DE NAPOLI			
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877			
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS DHC: 57,461 DCC: CWC: Others: TOTAL: 57,461	CUMULATIVE COSTS DHC: 140,550 DCC: CWC: Others: TOTAL: 140,550				
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 6/21/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)	LAST CASING	NEXT CASING 20.000 in @ 109.0 ft				
CURRENT OPERATIONS: SPUDDING WELL @ 108'							
24 HR SUMMARY: FINISH RIGGING UP, BUILD SPUD MUD FOR SWEEPS. WELD ON CONDUCTOR. LAY OUT BHA AND STRAP SAME.							
24 HR FORECAST: FINISH STRAPPING BHA, SUPD WELL AND DRILL TO 575' AS PER CSG TALLY . CIRC HOLE CLEAN POOH AND CMT SURFACE CSG.							
OPERATION SUMMARY							
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY
0:00	6:00	6.00	R-MOB-DEMOB	RU_RD	PP		0000-0600 RIG UP WITH CREWS , RUN ELECTRIC LINES FROM PITS, GRASS HOPPER, WATER TANKS, BOTTOM DOG HOUSE, ST-80, BULK MUD TANKS. AND WARNER TANKS .TRIP TANK, MUD HOPPER FILL PITS. HOOK UP PREMIX TANK, FLOW LINE TO RESERVE PIT, GAS BUSTER AND LINES, 4" ON CHoke, 6" ON GAS BUSTER, AIR OUT MUD PUMPS.
6:00	18:00	12.00	R-MOB-DEMOB	RU_RD	PP		FINISH RIGGING UP BACK YARD: BULK TANKS, SET TRASH PUMPS, FRACK TANKS AND LINES/ INSPECT DRAWWORKS AND REPAIR CHAIN LINKS ON SAME. WORK ON CRI AND CHANGING OUT SAVER SUB ON TDS.
18:00	21:00	3.00	R-MOB-DEMOB	RU_RD	PP		FINISH CHANGING SAVER SUB, RIG UP OVER FLOW LINES AND JET LINES ON MUD PITS, INSTALL SHAKER SCREENS,, WORK ON C.R.I. TEST MUD MUMPS TO 1000 PSI UP TO MANUAL I-BOP ON TDS. INSTALL MOUSE HOLE.  ACCEPT RIG ON DAY WORK.
21:00	0:00	3.00	S-DRL	RU_RD	PP		INSTALL CONDUCTOR PIPE AND CENTER UP , INSTALL FLOW LINE DRESSER SLEEVE. LOAD RACKS AND STRAP BHA.
24.00 = Total Hours Today							
06:00 UPDATE							
0000-0600	0000-0300 FINISH STRAPPING BHA, AND MOVE CSG TO DRILLER SIDE PIPE RACKS. 0300-0500 PICK UP 8" DC MAKE UP BIT SUB, SHOCK SUB W/ FLOAT AND BAFFLE PLATE, AND 17.25" IBS 0500-0600 P/U FIRST 2 DC'S & SPUD WELL @ 0600 HRS AND DRILL TO 0600 DEPTH 108'						
NOTE: CALLED TRRC WITH INTENT TO SPUD, SPOKE TO IJUANA OPERATOR #0065 @0315 HRS WAS TOLD TO CALL BACK WITH IN 8 HRS OF RUNNING CSG.							



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-21-2014				
API # 4238338545 00	24 HRS PROG (ft)	TMD 109.0 (ft)	TD TVD 109.0 (ft)	REPT NO 2				
PERSONNEL DATA								
COMPANY AIP HORIZON MUD PATTERSON		QTY 1 1 11	HRS 24.00 24.00 132.00	COMPANY TOTAL ENERGY SERVICES BOS SOLUTIONS	QTY 1 2	HRS 24.00 24.00		
					TOTAL PERSONNEL ON BOARD: 16 TOTAL HOURS ON BOARD: 228			
MATERIALS/CONSUMPTION								
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 413	ON HAND 9346	ITEM DIESEL, MUD	UNITS gal	USAGE 0	ON HAND 198	
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-22-2014			
API # 4238338545 00	24 HRS PROG 306.0 (ft)	TMD 415.0 (ft)	TD TVD 415.0 (ft)	REPT NO 3			
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 0.77 (days)			
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE RAYMOND DUNLAP / GLENN WILLIAMS	SUPERVISOR 1 ROY ALAN DE NAPOLI	PBTMD			
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877			
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS DHC: 39,031 DCC: CWC: Others: TOTAL: 39,031	CUMULATIVE COSTS DHC: 178,623 DCC: CWC: Others: TOTAL: 178,623				
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)	BHA HRS OF SERVICE		
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)		LAST CASING 20.000 in @ 108.0 ft	NEXT CASING 13.375 in @ 550.0 ft			
CURRENT OPERATIONS: WORKING ON TDS ELECTRICAL PROBLEM.							
24 HR SUMMARY: P/U BHA, AND SPUD @ 0530 HRS. DRILL F/108' T/ 206', WELD CRACK ON CONDUCTOR PIPE LEAKING INTO CELLER, DRILL F/108' T/ 206', C/O BAD DP AND X/O'S C/O TDS DIES, TAKE SURVEY, DRLG T/415'.							
24 HR FORECAST: CONT T/ DRILL TO TD @ 575'. POOH. R/U AND RUN 13 3/8" SUFACE CSG. CMT SAME . INSTALL "A" SECTION WELL HEAD AND N/U BOPE							
OPERATION SUMMARY							
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY
0:00	3:00	3.00	S-DRL	RU_RD	PP		0000-0300 FINISH STRAPPING BHA, AND MOVE CSG TO DRILLER SIDE PIPE RACKS. 0300-0500 PICK UP 8" DC MAKE UP BIT SUB, SHOCK SUB W/ FLOAT AND BAFFLE PLATE, AND 17.25" IBS 0500-0600 P/U FIRST 2 DC'S & SPUD WELL @ 0600 HRS AND DRILL TO 0600 DEPTH 108'
3:00	5:30	2.50	S-DRL	TRIP	PP		0300-0500 PICK UP 8" DC MAKE UP BIT SUB, SHOCK SUB W/ FLOAT AND BAFFLE PLATE, AND 17.25" IBS. P/U FIRST 2 DC'S & SPUD WELL @ 0530 HRS AND DRILL TO DEPTH 108'
5:30	5:30	0.00	S-DRL	M_SPUD	PP		SPUD WELL @ 0500 HRS
5:30	11:30	6.00	S-DRL	DRLG	PP		DRILL F/108' T/ 206'
11:30	12:30	1.00	S-DRL	WOO	PN	CS	WELD CRACK ON CONDUCTOR PIPE LEAKING FLUID INTO CELLER
12:30	13:30	1.00	S-DRL	DRLG	PP		DRILL F/108' T/ 267'
13:30	14:00	0.50	S-DRL	WOO	PN	CS	WELD CRACK ON CONDUCTOR PIPE LEAKING FLUID INTO CELLER
14:00	15:30	1.50	S-DRL	RIGSER	PN	DP	REPLACE JOINT OF DP, AND CROSSOVERS 6 5/8 REG X 4.5 XH AND 4.5 XH TO 4.5 IF.
15:30	16:30	1.00	S-DRL	DRLG	PP		DRILL F/267' T/ 297'
16:30	17:30	1.00	S-DRL	RIGSER	PP		PERFORM RIG SURVEY , C/O DIES ON TOP DRIVE UNABLE TO BREAK CONNECTION
17:30	20:00	2.50	S-DRL	DRLG	PP		AFTER CHANGING OUT TOP DRIVE GRABBER DIES STILL UNABLE TO BREAK CONNECTION W/ 60,000LBS TORQUE, HAD WELDER HEAT UP CONNECTION TO BREAK OUT.
20:00	21:00	1.00	S-DRL	DEVSUR	PP		PULLED UP TO. 237' RUN WIRE LINE SURVEY @ 237' 1.29° NOTE: MISS SHOT SURVEYS
21:00	0:00	3.00	S-DRL	DRLG	PP		DRLG F/297' T/575' TD SURFACE SECTION.
24.00 = Total Hours Today							
06:00 UPDATE							
0000-0600	0000-0030 DRLG FM 415' TO 446' 0030-0430 DOWN TIME S.C.R HOUSE GIVING GROUND FAULT ALARMS, TROUBLE SHOT AND FOUND PIG TAIL SHORTED ON TRACTION MOTOR ON TDS. ELECTRICIAN IN ROUTE. 0430-0600 ELECTRITION ARRIVED @ 0430- HOURS. MAKING REPAIRS TO TDS.						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 06-22-2014					
API # 4238338545 00		24 HRS PROG 306.0 (ft)		TMD 415.0 (ft)		TD TVD 415.0 (ft)		REPT NO 3					
BIT DATA													
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R			
1 / 1	17.500	Hughes		DP605S	7036975	10x15		108.00 / 06-22-2014		-----			
BIT OPERATIONS													
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP		
1/1	/24.0	/110	657.21	700	115	11.00	306.0	27.8	11.00	306.0	27.8		
MOTOR OUTPUT													
RPV:	ROTARY CURRENT: 110				TOTAL RPM: 110								
LCM:					MUD TYPE:								
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)
BHA	1	JAR S/N	PP	DAILY COST	0	CUM COST	0	%OIL			% H2O		1
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS			BHA LENGTH		
(kip)		91.0 (kip)		90.0 (kip)		90.0 (kip)		(ft-lbf)			593.09 (ft)		
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE		
Drill Collar		6.5" DC				12	357.54	6.500	2.375			4-1/2 XH	
Crossover Sub		XO SUB				1	3.10	8.000	2.375			4-1/2 XH	
Drill Collar		8" DC				6	176.98	6.250	2.875			4-1/2 XH	
Integral Blade Stabilizer		17 1/2" IBS				1	8.00	8.000	3.000	8.750		6-5/8" Reg	
Drill Collar		8" DC				1	30.01	8.000	2.875			6-5/8" Reg	
Shock Sub		SHOCK SUB				1	13.68	8.000	2.750			6-5/8" Reg	
Bit Sub		BIT SUB				1	1.98	8.750	2.875			6-5/8" Reg	
PDC Bit		PDC BIT				1	1.80	17.500				7-5/8" Reg	
MUD PUMPS/HYDRAULICS				SPP: 700 (psi) AV(DP): AV(DC): HP: 0.183 (hp/in <sup>2</sup> )		SPR							
STROKE	SPM	LINER	FLOW RATE			SPM			PPSR				
# 1	12.00	77.00	6.000			322.3							
# 2	12.00	80.00	6.000			334.9							
PERSONNEL DATA													
COMPANY			QTY	HRS	COMPANY				QTY	HRS			
HORIZON MUD			1	24.00	AIP				1	24.00			
TOTAL ENERGY SERVICES			1	24.00	BOS SOLUTIONS				2	24.00			
PATTERSON			11	132.00									
										TOTAL PERSONNEL ON BOARD: 16			
										TOTAL HOURS ON BOARD: 228			
MATERIALS/CONSUMPTION													
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND						
DIESEL, RIG FUEL	gal	479	8867	DIESEL, MUD	gal	0	198						



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-22-2014
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API # 4238338545 00	24 HRS PROG 306.0 (ft)	TMD 415.0 (ft)	TD TVD 415.0 (ft)	REPT NO 3
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## SAFETY DRILLS

RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL

## INCIDENT REPORT

INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.
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## Daily Drilling Report

<b>WELLBORE NAME</b> UNIVERSITY 2505 2HU								<b>DATE</b>
								06-23-2014
<b>API #</b> 4238338545 00		<b>24 HRS PROG</b> 120.0 (ft)		<b>TMD</b> 535.0 (ft)		<b>TD TVD</b> 534.9 (ft)		<b>REPT NO</b> 4
<b>RIG</b> PATTERSON 173		<b>FIELD NAME</b> SPRABERRY		<b>AUTH TMD</b> 15,550.00 (ft)	<b>PLANNED DOW</b> 22.00 (days)		<b>DFS</b> 1.77 (days)	<b>DOL</b> 3.38 (days)
<b>WB KO DATE</b> 06-22-2014 05:30	<b>WELL SPUD DATE</b> 06-22-2014 05:30	<b>RIG RELEASE</b>	<b>SUPERVISOR 1</b> RAYMOND DUNLAP / GLENN WILLIAMS			<b>ENGINEER</b> ROY ALAN DE NAPOLI	<b>PBTMD</b>	
<b>REGION</b> PERMIAN		<b>DISTRICT</b> GARDEN CITY - TX CZ		<b>STATE / PROV</b> TEXAS		<b>COUNTY / PARISH</b> REAGAN	<b>RIG PHONE NO</b> 432-242-3877	<b>RIG FAX NO</b>
<b>AFE # 11-13-0422-DH</b>		<b>AFE COSTS</b>			<b>DAILY COSTS</b>		<b>CUMULATIVE COSTS</b>	
<b>DESCRIPTION:</b>		DHC: 2,595,500  DCC:  CWC:  Others:  TOTAL: 2,595,500			DHC: 195,760  DCC:  CWC:  Others:  TOTAL: 195,760		DHC: 374,383  DCC:  CWC:  Others:  TOTAL: 374,383	
<b>DEFAULT DATUM / ELEVATION</b> RKB/RT / 2,647.6 (ft)		<b>LAST SAFETY MEETING</b> 6/23/2014	<b>BLOCK</b>		<b>OCSG#</b>	<b>TARGET FORMATION</b> WOLFCAMP (HORIZONTAL)		<b>BHA HRS OF SERVICE</b>
<b>LAST SURVEY</b>		<b>LAST CSG SHOE TEST (EMW)</b>			<b>LAST CASING</b> 20.000 in @ 108.0 ft	<b>NEXT CASING</b> 13.375 in @ 550.0 ft		
<b>CURRENT OPERATIONS:</b> LAYING OUT WAITING ON EXPRESS CSG AND LAYDOWN CREWS.								
<b>24 HR SUMMARY:</b> DRLG FM 415' TO 446' DOWN TIME DUE TO SHORT IN TDS. REMOVE & REPLACE MAN-RIDER PER PATTERSON SAFETY MAN & DRILLING SUPER. ROTATE F/446' T/535", CIRC, HOLE CLEAN, RUN WL SURVEY. POOH. DROP 8" DC IN HOLE.								
<b>24 HR FORECAST:</b> FISH OUT 8" DRILL COLLAR. R/U AND RUN 13 3/8" SURFACE CSG AND CMT SAME CUT OFF AND INSTALL WELLHEAD AND N/U TEST BOPE.								
<b>OPERATION SUMMARY</b>								
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY	
0:00	0:30	0.50	S-DRL	DRLG	PP		DRLG FM 415' TO 446'	
0:30	4:30	4.00	S-DRL	WOO	PN	EF	DOWN TIME S.C.R HOUSE GIVING GROUND FAULT ALARMS, TROUBLE SHOT AND FOUND PIG TAIL SHORTED ON TRACTION MOTOR ON TDS. ELECTRICIAN IN ROUTE.	
4:30	12:30	8.00	S-DRL	WOO	PN	EF	ELECTRITION ARRIVED @ 0430- HOURS. MAKING REPAIRS TO TDS.	
12:30	14:30	2.00	S-DRL	WOO	PN	EF	REMOVE & REPLACE MAN-RIDER PER PATTERSON SAFETY MAN & DRILLING SUPER.	
14:30	15:00	0.50	S-DRL	DRLG	PP		ROTATE F/446' T/475'	
15:00	16:00	1.00	S-DRL	RIGSER	PN	TD	SERVICE TOP DRIVE AFTER REPAIRS	
16:00	18:00	2.00	S-DRL	DRLG	PP		ROTATE F/475' T/535'	
18:00	19:00	1.00	S-DRL	CIRC	PP		CIRCULATE AND PUMP SWEEPS	
19:00	20:00	1.00	S-DRL	DEVSUR	PP		TOOK WIRE LINE SURVEY. MIS SHOT ON FIRST RUN. SECOND RUN .67 DEGREE	
20:00	23:00	3.00	S-DRL	TRIP	PP		POOH L/D IBS. DROPPED STAND OF 8" DRILL COLLARS DOWN HOLE.  WHEN CREW L/D IBS THEY MADE THE 8" DC BACK UP ( BACKING OUT OF THE LIFT SUB) PULLED OUT OF THE SLIPS TO RACK STAND DERRICKMAN SAW THE SUB WHEN IT REACHED THE MONKEY BOARD HE MOTION TO SLACK BACK OFF AND TO TIGHTEN SUB WHEN BACK TO 20' ABOVE FLOOR DC PARTED FROM LIFT SUB AND FELL DOWN HOLE.  FISH ASSY: 8" DC 30.41 8" DC 29.75 8" DC 30.01 SHOCK SUB 13.68 BIT SUB 1.98 17.5' BIT 1.80 TOTAL LENGTH 107.63'	
23:00	0:00	1.00	S-DRL	WOO	PN	FS	CONTACT SCHLUMBERGER FISHING TOOL WOT	
24.00 = Total Hours Today								



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-23-2014
API # 4238338545 00	24 HRS PROG 120.0 (ft)	TMD 535.0 (ft)	TD TVD 534.9 (ft)	REPT NO 4

## 06:00 UPDATE

0000-0600 0000-0130 WAS GOING TO ATTEMPT TO FISH USING 6 5/8' REG SUB ON DRILL PIPE. PATTERSON WILL NOT ALLOW DUE TO WAITING ON TECHNITION TO INSPECT TORQUE GAUGES ON TONGS AND ST-80.  
 0130-0300 TONG TORQUE GAUGE INSPECTOR ARRIVED ON LOCATION AT 0130 AND INSPECTION FOUND DRILLER SIDE TONG GAUGE TO BE BAD.  
 0300-0430 PICK UP 6 5/8 REG X 4 1/2" XH, 4 1/2" XH X 4 1/5 IF CROSS OVERS AND TRIP IN HOLE WITH 5" DRILL PIPE TAG FISH @ 430' LATCH ON FISH AND BREAK CIRCULATION.  
 0430-0600 POOH WITH FISH.

DOWN TIME DUE TO FISHING F/2330-0500 HRS

## BIT DATA

BIT / RUN	BIT SIZE (in)	MANUFACTURER	TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R
1 / 1	17.500	Hughes	DP605S	7036975	10x15	108.00 / 06-22-2014	-----

## BIT OPERATIONS

BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP
1/1	/25.0	/110	703.26	835	132	3.00	120.0	40.0	14.00	426.0	30.4

## MOTOR OUTPUT

RPV:	ROTARY CURRENT: 110	TOTAL RPM: 110											
LCM:	MUD PROPERTIES	MUD TYPE: Freshwater Gel											
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)
28.00	2.00/2	2/3		/10.38			9.00/0.10	0.10/0.10	500	240			10.38
Density (ppg)	8.60		PP	DAILY COST	0	CUM COST	0	%OIL		% H2O			93.70

BHA	1	JAR S/N		BHA / HOLE CONDITIONS	JAR HRS		BIT	1
BHA WT BELOW JARS		STRING WT UP		STRING WT DN	STRING WT ROT	TORQUE/UNITS	BHA LENGTH	
(kip)		92.0 (kip)		90.0 (kip)	91.0 (kip)	(ft-lbf)	593.09 (ft)	

COMPONENT TYPE	ITEM DESCRIPTION	NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE
Drill Collar	6.5" DC	12	357.54	6.500	2.375		4-1/2 XH
Crossover Sub	XO SUB	1	3.10	8.000	2.375		4-1/2 XH
Drill Collar	8" DC	6	176.98	6.250	2.875		4-1/2 XH
Integral Blade Stabilizer	17 1/2" IBS	1	8.00	8.000	3.000	8.750	6-5/8" Reg
Drill Collar	8" DC	1	30.01	8.000	2.875		6-5/8" Reg
Shock Sub	SHOCK SUB	1	13.68	8.000	2.750		6-5/8" Reg
Bit Sub	BIT SUB	1	1.98	8.750	2.875		6-5/8" Reg
PDC Bit	PDC BIT	1	1.80	17.500			7-5/8" Reg

## SURVEY

TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)
NORMAL	530.0	0.67	0.00	529.9	7.69	0.00	7.69	0.21

MUD PUMPS/HYDRAULICS				SPP: 835 (psi) AV(DP): AV(DC): HP: 0.224 (hp/in <sup>2</sup> )	SPR		
STROKE	SPM	LINER	FLOW RATE		SPM		PPSR
# 1	12.00	84.00	6.000		351.6		
# 2	12.00	84.00	6.000		351.6		



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-23-2014
API # 4238338545 00	24 HRS PROG 120.0 (ft)	TMD 535.0 (ft)	TD TVD 534.9 (ft)	REPT NO 4
PERSONNEL DATA				
COMPANY TOTAL ENERGY SERVICES HORIZON MUD PATTERSON		QTY 1 1 11	HRS 24.00 24.00 132.00	COMPANY AIP BOS SOLUTIONS
TOTAL PERSONNEL ON BOARD: 16 TOTAL HOURS ON BOARD: 228				
MATERIALS/CONSUMPTION				
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 719	ON HAND 8148	
SAFETY DRILLS				
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST
INCIDENT REPORT				
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.		



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU							DATE 06-24-2014								
API # 4238338545 00	24 HRS PROG (ft)		TMD 535.0 (ft)		TD TVD 534.9 (ft)		REPT NO 5								
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)		DFS 2.77 (days)	DOL 4.38 (days)								
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / GLENN WILLIAMS		ENGINEER ROY ALAN DE NAPOLI	PBTMD									
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO								
AFE # 11-13-0422-DH  DESCRIPTION:		AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500		DAILY COSTS DHC: 104,794 DCC: CWC: Others: TOTAL: 104,794		CUMULATIVE COSTS DHC: 485,115 DCC: CWC: Others: TOTAL: 485,115									
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)		BHA HRS OF SERVICE									
LAST SURVEY MD 530.0 (ft) INC 0.67° AZM 0.00°	LAST CSG SHOE TEST (EMW)			LAST CASING 20.000 in @ 108.0 ft	NEXT CASING 13.375 in @ 550.0 ft										
CURRENT OPERATIONS: NIPPOING UP CHOKES AND KILL LINES, TEST BOPE.															
24 HR SUMMARY: MAKE RIG REPAIRS TO TONG GAUGES, FISH DC FROM WELL. R/U AND RUN SURFACE CSG. CMT CSG, CUT OFF CONDUCTOR															
24 HR FORECAST: INSTALL WELL HEAD N/U BOPE TEST BOPE, P/U BHA AND TIH TO DRILL INTERMEDIATE HOLE SECTION															
OPERATION SUMMARY															
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY								
0:00	1:30	1.50	S-DRL	WOO	PN	FM	MADE ATTEMPT ATTEMPT TO FISH USING 6 5/8' REG SUB ON DRILL PIPE. PATTERSON WILL NOT ALLOW DUE TO WAITING ON TECHNITION TO INSPECT TORQUE GAUGES ON TONGS AND ST-80.								
1:30	3:00	1.50	S-DRL	WOO	PN	FM	TONG TORQUE GAUGE INSPECTOR ARRIVED ON LOCATION AT 0130 AND INSPECTION FOUND DRILLER SIDE TONG GAUGE TO BE BAD.								
3:00	4:30	1.50	S-DRL	RIH	PN	FM	PICK UP 6 5/8 REG X 4 1/2" XH, 4 1/2" XH X 4 1/5 IF CROSS OVERS AND TRIP IN HOLE WITH 5" DRILL PIPE TAG FISH @ 430' LATCH ON FISH AND BREAK CIRCULATION.								
4:30	6:00	1.50	S-DRL	TRIP	PN	FM	POOH WITH FISH								
6:00	7:00	1.00	S-DRL	TRIP	PP		LAY OUT 8" DC BIT & SHOCK SUB								
7:00	9:30	2.50	S-DRL	SFTY	PP		HOLD SAFETY MEETING & R/U CASING CREW								
9:30	10:30	1.00	S-DRL	RIGSER	PP		RIG SERVICE								
10:30	14:30	4.00	S-CSG	R_PCSG	PP		RUN 13 3/8" CASING AS FOLLOWS:TEXAS PATTERN SHOE @ .60, 1-FLOAT JOINT @42.10, NON-ROTATING FLOAT COLLAR @ 1.40 & 12 JNTS @ 494.83 TOTAL RUN =538.23								
14:30	16:30	2.00	S-CMT	CMTPRI	PP		SWAP LINES TO CREST TEST LINES T/ 1500 PSI OK, PUMP 10 BBL WATER SPACER, 550 SXS/ 132 BBLS CLASS C CaCl 2% @ 14.8 PPG 1.35 YIELD W/ADDITIONS, DISPLACED W/ 78 BBLS OF FRESH WATER, RETURNED 12 BBLS / 50 sks OF CMT T/ SURFACE, BUMPED PLUG @ 800 PSI W/PARTIAL RETURNS PLUG DOWN @16:30 PM ON 6-24-2014, FLOATS HELD								
16:30	20:30	4.00	S-CMT	WOC	PP		WOC FLUSH STACK JET PITS. REMOVE DRESSER SLEEVE FROM FLOW LINE.								
20:30	23:30	3.00	S-NUP	RU_RD	PP		CUT OFF CONDUCTOR AND MAKE ROUGH CUT ON 13 3/8" CSG. SET WELL HEAD AND TEST VOID TO 1000 PSI 10 MIN GOOD TEST.								
23:30	0:00	0.50	S-NUP	RU_RD	PP		INSTALL SPACER SPOOLS.								
24.00 = Total Hours Today															
06:00 UPDATE															
0000-0600	0000-0100 ATTEMPT TO RAISE STACK AND STACK WEIGHT WAS PULLING GEN POLE TRUCK ACROSS LOCATION DUE TO BEING WET MUDDY LOCATION. REMOVE V DOOR AND MOVE CAT WALK TO HAVE DIRECT PULL WITH GEN TRUCK. 0100-0200 RAISE BOP STACK WITH ASSISTANCE OF GEN POLE TRUCK. 0200-0530 N/U BOPE AND ASSOCIATED EQUIPMENT														



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 06-24-2014		
API # 4238338545 00		24 HRS PROG (ft)		TMD 535.0 (ft)			TD TVD 534.9 (ft)			REPT NO 5				
BIT DATA														
BIT / RUN		BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R			
1 / 1		17.500	Hughes		DP605S	7036975	10x15		108.00 / 06-22-2014		0-0-NO-A-X-I-NO-TD			
LCM:		MUD PROPERTIES										MUD TYPE: Freshwater Gel		
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)	
28.00	2.00/2	2/3		/10.18			9.00/0.10	0.10/0.10	500	240			10.18	
Density (ppg)	8.60		PP	DAILY COST	0	CUM COST	0	%OIL			% H2O		93.80	
BHA	1	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT				
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH				
(kip)		(kip)		(kip)		(kip)		(ft-lbf)		593.09 (ft)				
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE		CONN TYPE		
Drill Collar		6.5" DC				12	357.54	6.500	2.375			4-1/2 XH		
Crossover Sub		XO SUB				1	3.10	8.000	2.375			4-1/2 XH		
Drill Collar		8" DC				6	176.98	6.250	2.875			4-1/2 XH		
Integral Blade Stabilizer		17 1/2" IBS				1	8.00	8.000	3.000	8.750		6-5/8" Reg		
Drill Collar		8" DC				1	30.01	8.000	2.875			6-5/8" Reg		
Shock Sub		SHOCK SUB				1	13.68	8.000	2.750			6-5/8" Reg		
Bit Sub		BIT SUB				1	1.98	8.750	2.875			6-5/8" Reg		
PDC Bit		PDC BIT				1	1.80	17.500					7-5/8" Reg	
CASING														
S/T	DESCRIPTION			SIZE		WEIGHT		GRADE		SETTING DEPTH				
00	SURFACE			13.375		48.00		H-40		535.0				
PERSONNEL DATA														
COMPANY			QTY	HRS	COMPANY				QTY	HRS				
AIP			1	24.00	TOTAL ENERGY SERVICES				1	24.00				
HORIZON MUD			1	24.00	BOS SOLUTIONS				2	24.00				
MS DIRECTIONAL			2	24.00	PATTERSON				11	132.00				
TOTAL PERSONNEL ON BOARD: 18														
TOTAL HOURS ON BOARD: 252														
MATERIALS/CONSUMPTION														
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND							
DIESEL, RIG FUEL	gal	719	7429	DIESEL, MUD	gal	0	198							
SAFETY DRILLS														
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST		NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL		ABND. DRILL				
INCIDENT REPORT														
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.												



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU										DATE 06-25-2014			
API # 4238338545 00		24 HRS PROG (ft)		TMD 535.0 (ft)			TD TVD 534.9 (ft)			REPT NO 6			
RIG PATTERSON 173		FIELD NAME SPRABERRY			AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)		DFS 3.77 (days)	DOL 5.38 (days)				
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS			ENGINEER ROY ALAN DE NAPOLI			PBTMD				
REGION PERMIAN		DISTRICT GARDEN CITY - TX CZ			STATE / PROV TEXAS	COUNTY / PARISH REAGAN		RIG PHONE NO 432-242-3877	RIG FAX NO				
AFE # 11-13-0422-DH		AFE COSTS			DAILY COSTS			CUMULATIVE COSTS					
DESCRIPTION:		DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DHC: 60,862 DCC: CWC: Others: TOTAL: 60,862			DHC: 524,477 DCC: CWC: Others: TOTAL: 524,477					
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)		LAST SAFETY MEETING 6/25/2014	BLOCK		OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE				
LAST SURVEY MD 530.0 (ft) INC 0.67° AZM 0.00°		LAST CSG SHOE TEST (EMW)			LAST CASING 20.000 in @ 108.0 ft			NEXT CASING 13.375 in @ 550.0 ft					
CURRENT OPERATIONS: P/U DC'S & TAG FLOAT SHOE @ 493', DRILL FLOAT EQUIP													
24 HR SUMMARY: N/U BOP'S, TEST BOP'S T/250 LOW 3000 HIGH. HELD DRUG TEST ON LOCATION. TEST BOP'S AND ASSOCIATED EQUIPMENT. LAY OUT STRAP AND P/U DIRECTION ASSEMBLY.													
24 HR FORECAST: TIH TEST CSG DRILL OUT AND DRILL 12.25" INTERMEDIATE VERTICAL HOLE SECTION.													
OPERATION SUMMARY													
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY						
0:00	8:30	8.50	S-NUP	BOPS	PP		N/U BOPS & ALL RELATED EQUIPMENT, R/D SAME						
8:30	14:30	6.00	S-NUP	BOPS	PP		TEST BOP'S, CHOCK & ALL RELATED VALVES T/3000H, 250L						
14:30	15:30	1.00	S-NUP	BOPS	PP		PERFORM UA TEST WITH ALL PERSONNEL ON LOCATION						
15:30	19:00	3.50	S-NUP	BOPS	PP		TEST BOP'S, CHOCK & ALL RELATED VALVES T/3000H, 250L						
19:00	20:00	1.00	S-NUP	BOPS	PP		RIG DOWN TEST EQUIPMENT						
20:00	21:00	1.00	S-NUP	BOPS	PP		RIG UP FLAIR LINES OFF GAS BUSTER AND CHOKE MANIFOLD						
21:00	0:00	3.00	S-DRL	TRIP	PP		L/O DIRECTIONAL BHA ON RACKS AND STRAP DC'S TO BE PICKED UP .						
24.00 = Total Hours Today													
06:00 UPDATE													
0000-0600	0000-0230 P/U BHA FROM RACKS AND MAKE UP RUNNING IN THE HOLE. INSTALL MWD PROBE. SCRIBE MUD MOTOR TEST MWD TOOL AND MOTOR GOOD TEST 0230-0300 TEST CSG TO 500 PSI 30 MIN GOOD TEST 0300-0600 MAKE UP BIT AND TRIP IN HOLE TO 493' PICKING UP 6.5" DC'S FROM PIPE RACKS ON THE GROUND, DRILL FLOAT EQUIP												
BIT DATA													
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R					
2 / 1	12.250	Reed-Hycalog		SKHI716M -12	A197124	7x13	535.00 / 06-26-2014	-----					
LCM: MUD PROPERTIES MUD TYPE: Brine													
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)
29.00	2.00/2	2/3											
Density (ppg)		9.60		PP	DAILY COST	0	CUM COST	0	%OIL			% H2O	97.00



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU									DATE 06-25-2014	
API # 4238338545 00		24 HRS PROG (ft)		TMD 535.0 (ft)		TD TVD 534.9 (ft)			REPT NO 6	
BHA	2	JAR S/N		BHA / HOLE CONDITIONS			JAR HRS		BIT	
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		
(kip)		(kip)		(kip)		(kip)		(ft-lbf)		
COMPONENT TYPE		ITEM DESCRIPTION			NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE
PDC Bit		12.25" PDC			1	1.50	12.250			6-5/8" Reg
Bent Housing		MUD MOTOR			1	32.39	8.000			6-5/8" Reg
Integral Blade Stabilizer		12 1/8" IBS			1	8.10	8.000	2.875		6-5/8" Reg
MWD Tool		UBHO			1	3.49	7.875	3.000		6-5/8" Reg
Non-Mag Drill Collar		NMDC			2	59.65	8.125	2.875		6-5/8" Reg
Integral Blade Stabilizer		12 1/8" IBS			1	7.90	8.000	2.992		6-5/8" Reg
Drill Collar		8" DC			6	175.90	8.000	2.992		6-5/8" Reg
Crossover Sub		XO			1	3.10	7.750	2.500		4-1/2 XH
Drill Collar		6.5" DC			12	531.04	6.312	2.062		4-1/2 XH
Crossover Sub		XO			1	3.00	6.312	2.500		4-1/2 IF
CASING										
S/T	DESCRIPTION		SIZE		WEIGHT		GRADE		SETTING DEPTH	
00	SURFACE		13.375		48.00		H-40		535.0	
PERSONNEL DATA										
COMPANY		QTY	HRS	COMPANY				QTY	HRS	
TOTAL ENERGY SERVICES		1	24.00	HORIZON MUD				1	24.00	
EPI CONSULTING		1	24.00	BOS SOLUTIONS				2	24.00	
MS DIRECTIONAL		2	24.00	PATTERSON				11	132.00	
TOTAL PERSONNEL ON BOARD: 18										
TOTAL HOURS ON BOARD: 252										
MATERIALS/CONSUMPTION										
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND			
DIESEL, RIG FUEL	gal	480	6949	DIESEL, MUD	gal	0	198			
SAFETY DRILLS										
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL		
3000	06-25-2014 / 2000		06-25-2014	06-25-2014	07-09-2014					
INCIDENT REPORT										
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours. HELD RANDOM DRUG TEST ON LOCATION								



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-26-2014							
API # 4238338545 00	24 HRS PROG 1,455.0 (ft)	TMD 1,990.0 (ft)	TD TVD 1,989.9 (ft)	REPT NO 7							
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 4.77 (days)	DOL 6.38 (days)						
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS	ENGINEER ROY ALAN DE NAPOLI	PBTMD						
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO						
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS DHC: 63,735 DCC: CWC: Others: TOTAL: 63,735	CUMULATIVE COSTS DHC: 588,212 DCC: CWC: Others: TOTAL: 588,212								
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 6/27/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)	BHA HRS OF SERVICE						
LAST SURVEY MD 2,384.0 (ft) INC 0.40° AZM 146.40°	LAST CSG SHOE TEST (EMW)		LAST CASING 13.375 in @ 535.0 ft	NEXT CASING 9.625 in @ 7,425.0 ft							
CURRENT OPERATIONS: DRLG INT @ 2590'											
24 HR SUMMARY: P/U BHA AND TIH, TEST CSG T/ 500 PS PASSED, DRILL OUT SHOE TRACK AND DRILL AHEAD TO MIDNIGHT DEPTH OF 1990'											
24 HR FORECAST: DRILL T/3200', DISPLACE HOLE WITH SPRAYBERRY MUD AND CONTINUE DRLG AHEAD INTERMEDIATE HOLE SECTION.											
OPERATION SUMMARY											
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY				
0:00	2:30	2.50	S-DRL	TRIPBHA	PP		M/U DIRECTIONAL BHA, SCRIBE & TEST				
2:30	3:00	0.50	S-CSG	TEST	PP		TEST CSG T/500 PSI = GOOD				
3:00	7:30	4.50	S-DRL	TRIPBHA	PP		P/U DC'S FROM CATWALK & TIH T/471' (TAG CMT @ 471')				
7:30	8:00	0.50	S-DRL	CIRC	PP		DISP HOLE W/ BRINE WATER				
8:00	10:00	2.00	S-DRL	DOCMT	PP		DRILL CMT & FLOAT EQUIP T/535'				
10:00	15:30	5.50	INT-DRL	DRLG	PP		DRILL F/535 - T/1145 (610' @ 110'/HR, GPM-650, WOB-25, RPM-80)				
15:30	16:30	1.00	INT-DRL	RIGSER	PP		RIG SERVICE				
16:30	0:00	7.50	INT-DRL	DRLG	PP		DRILL F/1145 - T/1990 (845' @ 112'/HR, GPM-650, WOB-25, RPM-70)				
24.00 = Total Hours Today											
06:00 UPDATE											
0000-0600 0000-0600 DRILL F/1990 - T/2590' (600" @ 100'/HR, GPM-650, WOB-25, RPM-70, LAST SURVEY @ 2384', .4 INC, 146.4 AZ)											
BIT DATA											
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R			
2 / 1	12.250	Reed-Hycalog		SKHI716M -12	A197124	7x13	535.00 / 06-26-2014	-----			
BIT OPERATIONS											
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP
2/1	/32.0	/80	686.52	2400	517	13.00	1,455.0	111.9	13.00	1,455.0	111.9
MOTOR OUTPUT											
RPV: 0.17rev/gal	ROTARY CURRENT: 70				TOTAL RPM: 187						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 06-26-2014					
API # 4238338545 00	24 HRS PROG 1,455.0 (ft)			TMD 1,990.0 (ft)			TD TVD 1,989.9 (ft)				REPT NO 7						
LCM: MUD PROPERTIES MUD TYPE: Brine																	
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)				
30.00	2.00/1	1/2		/12.30			10.00/0.10	0.10/0.20	149,000				5.96				
Density (ppg)	9.60		PP	DAILY COST	0	CUM COST	0	%OIL		% H2O			87.70				
BHA	2	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT			2				
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH							
(kip)		115.0 (kip)		115.0 (kip)		115.0 (kip)		(ft-lbf)		826.07 (ft)							
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE						
Crossover Sub		XO				1	3.00	6.312	2.500				4-1/2 IF				
Drill Collar		6.5" DC				12	531.04	6.312	2.062				4-1/2 XH				
Crossover Sub		XO				1	3.10	7.750	2.500				4-1/2 XH				
Drill Collar		8" DC				6	175.90	8.000	2.992				6-5/8" Reg				
Integral Blade Stabilizer		12 1/8" IBS				1	7.90	8.000	2.992				6-5/8" Reg				
Non-Mag Drill Collar		NMDC				2	59.65	8.125	2.875				6-5/8" Reg				
MWD Tool		UBHO				1	3.49	7.875	3.000				6-5/8" Reg				
Integral Blade Stabilizer		12 1/8" IBS				1	8.10	8.000	2.875				6-5/8" Reg				
Bent Housing		MUD MOTOR				1	32.39	8.000					6-5/8" Reg				
PDC Bit		12.25" PDC				1	1.50	12.250					6-5/8" Reg				
SURVEY																	
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	V.SECT (ft)	D.L (°/100ft)									
NORMAL	2,384.0	0.40	146.40	2,383.8	-4.36	-4.46	-4.36	0.12									
NORMAL	2,197.0	0.60	159.90	2,196.9	-2.90	-5.15	-2.90	0.07									
NORMAL	2,008.0	0.50	167.40	2,007.9	-1.17	-5.67	-1.17	0.18									
NORMAL	1,819.0	0.80	183.10	1,818.9	0.96	-5.78	0.96	0.12									
NORMAL	1,630.0	1.00	189.70	1,629.9	3.90	-5.43	3.90	0.26									
NORMAL	1,441.0	0.60	211.90	1,440.9	6.36	-4.63	6.36	0.28									
NORMAL	1,254.0	0.10	251.10	1,253.9	7.25	-3.96	7.25	0.03									
NORMAL	1,066.0	0.10	215.10	1,065.9	7.44	-3.71	7.44	0.33									
NORMAL	972.0	0.40	241.10	971.9	7.66	-3.38	7.66	0.28									
NORMAL	877.0	0.60	261.80	876.9	7.89	-2.59	7.89	0.11									
NORMAL	782.0	0.70	262.50	781.9	8.04	-1.53	8.04	0.28									
NORMAL	624.0	0.60	254.20	623.9	8.11	-0.47	8.11	1.08									
CASING																	
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH									
00	SURFACE			13.375	48.00		H-40	535.0									
MUD PUMPS/HYDRAULICS					SPP:	2400 (psi)	SPR										
# 1	STROKE 12.00	SPM 82.00	LINER 6.000	FLOW RATE 343.3	AV(DP):		SPM										
# 2	12.00	82.00	6.000	343.3	AV(DC):		PPSR										
HP:	1.756 (hp/in <sup>2</sup> )																



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-26-2014				
API # 4238338545 00	24 HRS PROG 1,455.0 (ft)	TMD 1,990.0 (ft)	TD TVD 1,989.9 (ft)	REPT NO 7				
PERSONNEL DATA								
COMPANY HORIZON MUD EPI CONSULTING BOS SOLUTIONS		QTY 1 1 2	HRS 24.00 24.00 24.00	COMPANY TOTAL ENERGY SERVICES MS DIRECTIONAL PATTERSON	QTY 1 2 11	HRS 24.00 24.00 132.00		
						TOTAL PERSONNEL ON BOARD: 18 TOTAL HOURS ON BOARD: 252		
MATERIALS/CONSUMPTION								
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 989	ON HAND 13,180	ITEM DIESEL, MUD	UNITS gal	USAGE 0	ON HAND 198	
SAFETY DRILLS								
RAMS (psi) 3000	ANNULARS (psi) 06-25-2014 / 2000	CASING 06-26-2014 / 500	LAST BOP FUNCTION 06-25-2014	LAST BOP PRESSURE TEST 06-25-2014	NEXT BOP PRESS TEST 07-09-2014	FIRE DRILL	H2S DRILL	ABND. DRILL
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU										DATE 06-27-2014							
API # 4238338545 00	24 HRS PROG 1,360.0 (ft)		TMD 3,350.0 (ft)			TD TVD 3,349.8 (ft)			REPT NO 8								
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)		DFS 5.77 (days)	DOL 7.38 (days)										
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS			ENGINEER ROY ALAN DE NAPOLI	PBTMD										
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO										
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 39,687 DCC: CWC: Others: TOTAL: 39,687			CUMULATIVE COSTS DHC: 627,899 DCC: CWC: Others: TOTAL: 627,899										
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 6/27/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE										
LAST SURVEY MD 3,512.0 (ft) INC 0.90° AZM 112.90°	LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft		NEXT CASING 9.625 in @ 7,425.0 ft											
CURRENT OPERATIONS: DRILLING AT 3805' LAST SURVEY @3512', .9 INC. 112.9 AZM																	
24 HR SUMMARY: DRLG F/1990' T/ 2685'. REPAIR PUMPS, DRLG 2685' T/3001' REPAIR MUD PUMPS. DRLG F/ 3001 T 3195' JET PITS AND DISPLACE BRINE WITH SPREYBERRY MUD. DRLG T/ 3550'																	
24 HR FORECAST: CONTINUE DRILLING 12.25" INTERMEDIATE HOLE SECTION.																	
OPERATION SUMMARY																	
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY										
0:00	7:00	7.00	INT-DRL	DRLG	PP		DRILL F/1990 - T/2685 (695' @ 82'/HR, WOB-30, GPM-680, RPM-45, DIFF-400/500)										
7:00	8:30	1.50	INT-DRL	CIRC	PN	MP	CIRC W/1 PUMP & C/O LINER & SWAB ON #2 PUMP										
8:30	12:00	3.50	INT-DRL	DRLG	PP		DRILL F/2685 - T/3001 (316' @ 90'/HR, WOB-30, GPM-680, RPM-45, DIFF-400/500)										
12:00	13:30	1.50	INT-DRL	CIRC	PN	MP	CIRC W/1 PUMP & C/O SWAB & SEAT IN #1PUMP										
13:30	16:30	3.00	INT-DRL	DRLG	PP		DRILL F/3001 - T/3195 (194' @ 194'/HR, WOB-30, GPM-680, RPM-45, DIFF-400/500)										
16:30	17:00	0.50	INT-DRL	CIRC	PP		CIRC BTMS UP										
17:00	21:30	4.50	INT-DRL	DPLACE	PP		JET AND CLEAN PITS FOR DISPLACEMENT, DISP HOLE W/SPRAYBERRY MUD										
21:30	0:00	2.50	INT-DRL	DRLG	PP		DRILL F/3001 - T/3350 (349' @ 139'/HR, WOB-30, GPM-580, RPM-45, DIFF-400/500)										
24.00 = Total Hours Today																	
06:00 UPDATE																	
0000-0600 0000-0600 DRILL F/3350 - T/3805 (455' @ 75'/HR, WOB-30, GPM-580, RPM-45, DIFF-400/500)																	
BIT DATA																	
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R									
2 / 1	12.250	Reed-Hycalog		SKHI716M -12	A197124	7x13	535.00 / 06-26-2014	-----									
BIT OPERATIONS																	
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP						
2/1	/35.0	/70	569.31	1900	312	15.50	1,360.0	100.7	28.50	2,815.0	98.8						
MOTOR OUTPUT																	
RPV: 0.17rev/gal			ROTARY CURRENT: 45			TOTAL RPM: 142											



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU										DATE 06-27-2014				
API # 4238338545 00	24 HRS PROG 1,360.0 (ft)		TMD 3,350.0 (ft)			TD TVD 3,349.8 (ft)			REPT NO 8					
LCM: MUD PROPERTIES MUD TYPE: Water-Based Mud														
VIS (s/qt) 36.00	PV/YP (cp) / (lbf/100ft <sup>2</sup> ) 7.00/18	GELS (lbf/100ft <sup>2</sup> ) 13/14	WL/HTHP (cc/30min) 1.0	FC/T.SOL (32nd") / (%) 9.60/0.70	OIL/WAT (%) 0.10/0.40	% SAND/MBT (%) /(lbm/bbl) 1700	pH/Pm 9.60/0.70	Pf/Mf (cc) 240	Cl (ppm) 0	Ca (ppm) 4.32	H2S (ppm) KCL (ppm) LGS (%) 96.80			
Density (ppg) 8.60	ECD (ppg) 8.79	PP	DAILY COST 0	CUM COST 0	%OIL %	% H2O %	BIT 2							
BHA 2	JAR S/N	BHA / HOLE CONDITIONS			JAR HRS	BIT 2								
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH 826.07 (ft)				
(kip) 153.0 (kip)		140.0 (kip)		150.0 (kip)		(ft-lbf) 826.07 (ft)								
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE			
Crossover Sub		XO				1	3.00	6.312	2.500		4-1/2 IF			
Drill Collar		6.5" DC				12	531.04	6.312	2.062		4-1/2 XH			
Crossover Sub		XO				1	3.10	7.750	2.500		4-1/2 XH			
Drill Collar		8" DC				6	175.90	8.000	2.992		6-5/8" Reg			
Integral Blade Stabilizer		12 1/8" IBS				1	7.90	8.000	2.992		6-5/8" Reg			
Non-Mag Drill Collar		NMDC				2	59.65	8.125	2.875		6-5/8" Reg			
MWD Tool		UBHO				1	3.49	7.875	3.000		6-5/8" Reg			
Integral Blade Stabilizer		12 1/8" IBS				1	8.10	8.000	2.875		6-5/8" Reg			
Bent Housing		MUD MOTOR				1	32.39	8.000						
PDC Bit		12.25" PDC				1	1.50	12.250						
SURVEY														
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	V.SECT (ft)	D.L (°/100ft)						
NORMAL	3,512.0	0.90	112.90	3,511.8	-11.13	2.68	-11.13	0.13						
NORMAL	3,325.0	0.70	122.30	3,324.8	-9.95	0.36	-9.95	0.12						
NORMAL	3,138.0	0.50	130.60	3,137.8	-8.81	-1.22	-8.81	0.02						
NORMAL	2,948.0	0.50	135.80	2,947.8	-7.67	-2.43	-7.67	0.06						
NORMAL	2,760.0	0.40	129.40	2,759.8	-6.67	-3.51	-6.67	0.05						
NORMAL	2,572.0	0.40	143.60	2,571.8	-5.72	-4.40	-5.72	0.01						
CASING														
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH						
00	SURFACE			13.375	48.00		H-40	535.0						
MUD PUMPS/HYDRAULICS				SPP: AV(DP): AV(DC): HP:	1900 (psi)	SPR								
STROKE	SPM	LINER	FLOW RATE			SPM	PPSR							
# 1	12.00	68.00	6.000	284.7										
# 2	12.00	68.00	6.000	284.7	0.879 (hp/in <sup>2</sup> )									
PERSONNEL DATA														
COMPANY			QTY	HRS	COMPANY				QTY	HRS				
TOTAL ENERGY SERVICES			1	24.00	EPI CONSULTING				1	24.00				
HORIZON MUD			1	24.00	BOS SOLUTIONS				2	24.00				
MS DIRECTIONAL			2	24.00	PATTERSON				11	132.00				
TOTAL PERSONNEL ON BOARD: 18														
TOTAL HOURS ON BOARD: 252														
MATERIALS/CONSUMPTION														
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND							
DIESEL, RIG FUEL	gal	1677	11,503	DIESEL, MUD	gal	0	198							



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-27-2014				
API # 4238338545 00	24 HRS PROG 1,360.0 (ft)	TMD 3,350.0 (ft)	TD TVD 3,349.8 (ft)	REPT NO 8				
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU										DATE 06-28-2014								
API # 4238338545 00	24 HRS PROG 1,388.0 (ft)		TMD 4,738.0 (ft)			TD TVD 4,737.6 (ft)			REPT NO 9									
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)		DFS 6.77 (days)	DOL 8.38 (days)											
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS			ENGINEER ROY ALAN DE NAPOLI	PBTMD											
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO											
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 47,582 DCC: CWC: Others: TOTAL: 47,582			CUMULATIVE COSTS DHC: 675,481 DCC: CWC: Others: TOTAL: 675,481											
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 6/28/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE											
LAST SURVEY MD 4,829.0 (ft) INC 0.90° AZM 70.00°	LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft		NEXT CASING 9.625 in @ 7,425.0 ft												
CURRENT OPERATIONS: DRILLNG @ 5060' (LAST SURVEY 4829', .9 INC. 70 AZM)																		
24 HR SUMMARY: DRLG F/3350 T/4738'.																		
24 HR FORECAST: CONTINUE DRILLING 12.25" INTERMEDIATE HOLE SECTION.																		
OPERATION SUMMARY																		
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY											
0:00	16:00	16.00	INT-DRL	DRLG	PP		DRILL F/3350 - T/4315 (965' @ 60'/HR, WOB-35, RPM-45, DIFF-450, GPM-580)											
16:00	17:00	1.00	INT-DRL	RIGSER	PP		RIG SERVICE											
17:00	0:00	7.00	INT-DRL	DRLG	PP		DRLG F/4315 - T/4738' (423' @ 60'/HR, WOB-32, RPM-45, DIFF-450, GPM-580)											
24.00 = Total Hours Today																		
06:00 UPDATE																		
0000-0600	0000-0600	DRLG F/4738 - T/5060' (322' @ 53/HR, WOB-32, RPM-45, DIFF-450, GPM-580)																
BIT DATA																		
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN		I-O-D-L-B-G-O-R									
2 / 1	12.250	Reed-Hycalog		SKHI716M -12	A197124	7x13	535.00 / 06-26-2014		-----									
BIT OPERATIONS																		
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP							
2/1	/32.0	/45	594.42	2100	356	23.00	1,388.0	60.3	51.50	4,203.0	81.6							
MOTOR OUTPUT																		
RPV: 0.17rev/gal	ROTARY CURRENT: 44			TOTAL RPM: 145														
LCM: 0.0	MUD PROPERTIES			MUD TYPE: Water-Based Mud														
VIS (s/qt)	PV/YP (cp) / (lbf/100ft²)	GELS (lbf/100ft²)	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)					
38.00	11.00/12	12/13	49.0/0.0	2.0/0.00	0.00/0.00	0.00/0.0	9.20/0.60	0.10/0.40	1900	240	0	0	4.31					
Density (ppg)	9.00	ECD (ppg)	9.17	DP (ppg)	0.00	DAILY COST	0	CUM COST	0	%OIL	0.00	% H2O	95.30					
BHA	2	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT	2							
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH								
(kip)		154.0 (kip)		151.0 (kip)		153.0 (kip)		(ft-lbf)		826.07 (ft)								



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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 06-28-2014
API # 4238338545 00	24 HRS PROG 1,388.0 (ft)	TMD 4,738.0 (ft)	TD TVD 4,737.6 (ft)			REPT NO 9		
COMPONENT TYPE	ITEM DESCRIPTION	NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE	
Crossover Sub	XO	1	3.00	6.312	2.500			4-1/2 IF
Drill Collar	6.5" DC	12	531.04	6.312	2.062			4-1/2 XH
Crossover Sub	XO	1	3.10	7.750	2.500			4-1/2 XH
Drill Collar	8" DC	6	175.90	8.000	2.992			6-5/8" Reg
Integral Blade Stabilizer	12 1/8" IBS	1	7.90	8.000	2.992			6-5/8" Reg
Non-Mag Drill Collar	NMDC	2	59.65	8.125	2.875			6-5/8" Reg
MWD Tool	UBHO	1	3.49	7.875	3.000			6-5/8" Reg
Integral Blade Stabilizer	12 1/8" IBS	1	8.10	8.000	2.875			6-5/8" Reg
Bent Housing	MUD MOTOR	1	32.39	8.000				6-5/8" Reg
PDC Bit	12.25" PDC	1	1.50	12.250				6-5/8" Reg
SURVEY								
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)
NORMAL	4,829.0	0.90	70.00	4,828.6	-4.81	23.06	-4.81	0.10
NORMAL	4,642.0	0.80	59.10	4,641.6	-5.98	20.55	-5.98	0.13
NORMAL	4,454.0	0.80	76.20	4,453.7	-6.97	18.15	-6.97	0.08
NORMAL	4,265.0	0.90	68.80	4,264.7	-7.82	15.49	-7.82	0.05
NORMAL	4,077.0	0.90	74.20	4,076.7	-8.76	12.69	-8.76	0.11
NORMAL	3,889.0	1.10	70.80	3,888.7	-9.75	9.57	-9.75	0.05
NORMAL	3,700.0	1.00	71.00	3,699.8	-10.89	6.29	-10.89	0.36
CASING								
S/T	DESCRIPTION			SIZE	WEIGHT	GRADE	SETTING DEPTH	
00	SURFACE			13.375	48.00	H-40	535.0	
MUD PUMPS/HYDRAULICS					SPP: 2100 (psi)	SPR		
	STROKE	SPM	LINER	FLOW RATE	AV(DP):	SPM	PPSR	
# 1	12.00	71.00	6.000	297.2	AV(DC):			
# 2	12.00	71.00	6.000	297.2	HP:	1.047 (hp/in <sup>2</sup> )		
PERSONNEL DATA								
COMPANY	QTY	HRS	COMPANY	QTY	HRS			
TOTAL ENERGY SERVICES	1	24.00	EPI CONSULTING	1	24.00			
HORIZON MUD	1	24.00	MS DIRECTIONAL	2	24.00			
BOS SOLUTIONS	2	24.00	PATTERSON	11	132.00			
TOTAL PERSONNEL ON BOARD: 18								TOTAL HOURS ON BOARD: 252
MATERIALS/CONSUMPTION								
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND	
DIESEL, RIG FUEL	gal	1678	9825	DIESEL, MUD	gal	0	198	
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION	No incidents reported in last 24 hours.					



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 06-29-2014														
API # 4238338545 00	24 HRS PROG 1,464.0 (ft)		TMD 6,202.0 (ft)			TD TVD 6,201.5 (ft)			REPT NO 10																	
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)		PLANNED DOW 22.00 (days)		DFS 7.77 (days)		DOL 9.38 (days)																	
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS			ENGINEER ROY ALAN DE NAPOLI			PBTMD																	
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN		RIG PHONE NO 432-242-3877		RIG FAX NO																	
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500				DAILY COSTS DHC: 64,384 DCC: CWC: Others: TOTAL: 64,384				CUMULATIVE COSTS DHC: 739,865 DCC: CWC: Others: TOTAL: 739,865																	
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 6/29/2014	BLOCK		OCSG#		TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE																	
LAST SURVEY MD 6,336.0 (ft) INC 0.70° AZM 94.20°	LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft			NEXT CASING 9.625 in @ 7,425.0 ft																			
CURRENT OPERATIONS: DRILLNG @ 6490' (LAST SURVEY 6336', .7 INC. 94.2 AZM)																										
24 HR SUMMARY: DRLG F/ 4738 T/6202																										
24 HR FORECAST: CONTINUE TO DRILL 12.25" INTERMEDIATE HOLE SECTION																										
OPERATION SUMMARY																										
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY																			
0:00	17:00	17.00	INT-DRL	DRLG	PP		DRILL F/ 4738 - T/5828 (1090' @ 64'/HR , WOB-35, GPM-580, RPM-45, DIFF-350/450)																			
17:00	18:00	1.00	INT-DRL	RIGSER	PP		RIG SERVICE																			
18:00	0:00	6.00	INT-DRL	DRLG	PP		DRILL F/ 5828 - T/6202 (374' @ 62'/HR , WOB-35, GPM-580, RPM-45, DIFF-350/450)																			
24.00 = Total Hours Today																										
06:00 UPDATE																										
0000-0600	0000-0200	DRLG F/6202 - T/6302' (100' @ 50'/HR, WOB-32, RPM-45, DIFF-450, GPM-580)																								
	0200-0230	CIRC AND GO THROUGH #2 PUMP																								
	0200-0600	DRLG F/6302 - T/6490' (188' @ 47'/HR, WOB-32, RPM-45, DIFF-450, GPM-580)																								
BIT DATA																										
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R																
2 / 1	12.250	Reed-Hycalog		SKHI716M -12	A197124	7x13		535.00 / 06-26-2014		-----																
BIT OPERATIONS																										
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP															
2/1	/36.0	/45	586.05	2200	346	23.00	1,464.0	63.7	75.00	5,667.0	75.6															
MOTOR OUTPUT																										
RPV: 0.17rev/gal	ROTARY CURRENT: 45				TOTAL RPM: 145																					
LCM: 0.0	MUD PROPERTIES				MUD TYPE: Water-Based Mud																					
VIS (s/qt)	PV/YP (cp) / (lbf/100ft²)	GELS (lbf/100ft²)	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)													
45.00	11.00/15	13/14	47.0/0.0	2.0/0.00	0.00/0.00	0.00/0.0	9.40/0.70	0.10/0.30	1500	320	0	0	4.93													
Density (ppg)	9.00	ECD (ppg)	9.18	PP (ppg)	0.00	DAILY COST	0	CUM COST	0	%OIL	0.00	% H2O	95.00													



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 06-29-2014																																																																																																														
API # 4238338545 00	24 HRS PROG 1,464.0 (ft)		TMD 6,202.0 (ft)		TD TVD 6,201.5 (ft)			REPT NO 10																																																																																																														
BHA	2	JAR S/N		BHA / HOLE CONDITIONS			JAR HRS																																																																																																															
BHA WT BELOW JARS		STRING WT UP 215.0 (kip)		STRING WT DN 200.0 (kip)	STRING WT ROT 205.0 (kip)	TORQUE/UNITS (ft-lbf)		BHA LENGTH 826.07 (ft)																																																																																																														
<table border="1"> <thead> <tr> <th>COMPONENT TYPE</th><th colspan="3">ITEM DESCRIPTION</th><th>NO JTS</th><th>LENGTH</th><th>O.D</th><th>I.D</th><th>CONN SIZE</th><th>CONN TYPE</th></tr> </thead> <tbody> <tr><td>Crossover Sub</td><td colspan="3">XO</td><td>1</td><td>3.00</td><td>6.312</td><td>2.500</td><td></td><td>4-1/2 IF</td></tr> <tr><td>Drill Collar</td><td colspan="3">6.5" DC</td><td>12</td><td>531.04</td><td>6.312</td><td>2.062</td><td></td><td>4-1/2 XH</td></tr> <tr><td>Crossover Sub</td><td colspan="3">XO</td><td>1</td><td>3.10</td><td>7.750</td><td>2.500</td><td></td><td>4-1/2 XH</td></tr> <tr><td>Drill Collar</td><td colspan="3">8" DC</td><td>6</td><td>175.90</td><td>8.000</td><td>2.992</td><td></td><td>6-5/8" Reg</td></tr> <tr><td>Integral Blade Stabilizer</td><td colspan="3">12 1/8" IBS</td><td>1</td><td>7.90</td><td>8.000</td><td>2.992</td><td></td><td>6-5/8" Reg</td></tr> <tr><td>Non-Mag Drill Collar</td><td colspan="3">NMDC</td><td>2</td><td>59.65</td><td>8.125</td><td>2.875</td><td></td><td>6-5/8" Reg</td></tr> <tr><td>MWD Tool</td><td colspan="3">UBHO</td><td>1</td><td>3.49</td><td>7.875</td><td>3.000</td><td></td><td>6-5/8" Reg</td></tr> <tr><td>Integral Blade Stabilizer</td><td colspan="3">12 1/8" IBS</td><td>1</td><td>8.10</td><td>8.000</td><td>2.875</td><td></td><td>6-5/8" Reg</td></tr> <tr><td>Bent Housing</td><td colspan="3">MUD MOTOR</td><td>1</td><td>32.39</td><td>8.000</td><td></td><td></td><td>6-5/8" Reg</td></tr> <tr><td>PDC Bit</td><td colspan="3">12.25" PDC</td><td>1</td><td>1.50</td><td>12.250</td><td></td><td></td><td>6-5/8" Reg</td></tr> </tbody> </table>									COMPONENT TYPE	ITEM DESCRIPTION			NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE	Crossover Sub	XO			1	3.00	6.312	2.500		4-1/2 IF	Drill Collar	6.5" DC			12	531.04	6.312	2.062		4-1/2 XH	Crossover Sub	XO			1	3.10	7.750	2.500		4-1/2 XH	Drill Collar	8" DC			6	175.90	8.000	2.992		6-5/8" Reg	Integral Blade Stabilizer	12 1/8" IBS			1	7.90	8.000	2.992		6-5/8" Reg	Non-Mag Drill Collar	NMDC			2	59.65	8.125	2.875		6-5/8" Reg	MWD Tool	UBHO			1	3.49	7.875	3.000		6-5/8" Reg	Integral Blade Stabilizer	12 1/8" IBS			1	8.10	8.000	2.875		6-5/8" Reg	Bent Housing	MUD MOTOR			1	32.39	8.000			6-5/8" Reg	PDC Bit	12.25" PDC			1	1.50	12.250			6-5/8" Reg
COMPONENT TYPE	ITEM DESCRIPTION			NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE																																																																																																													
Crossover Sub	XO			1	3.00	6.312	2.500		4-1/2 IF																																																																																																													
Drill Collar	6.5" DC			12	531.04	6.312	2.062		4-1/2 XH																																																																																																													
Crossover Sub	XO			1	3.10	7.750	2.500		4-1/2 XH																																																																																																													
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Integral Blade Stabilizer	12 1/8" IBS			1	7.90	8.000	2.992		6-5/8" Reg																																																																																																													
Non-Mag Drill Collar	NMDC			2	59.65	8.125	2.875		6-5/8" Reg																																																																																																													
MWD Tool	UBHO			1	3.49	7.875	3.000		6-5/8" Reg																																																																																																													
Integral Blade Stabilizer	12 1/8" IBS			1	8.10	8.000	2.875		6-5/8" Reg																																																																																																													
Bent Housing	MUD MOTOR			1	32.39	8.000			6-5/8" Reg																																																																																																													
PDC Bit	12.25" PDC			1	1.50	12.250			6-5/8" Reg																																																																																																													
SURVEY																																																																																																																						
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)																																																																																																														
NORMAL	6,336.0	0.70	94.20	6,335.5	4.04	40.79	4.04	0.07																																																																																																														
NORMAL	6,147.0	0.80	87.90	6,146.5	4.07	38.32	4.07	0.13																																																																																																														
NORMAL	5,959.0	0.90	72.90	5,958.5	3.59	35.60	3.59	0.17																																																																																																														
NORMAL	5,771.0	0.70	54.00	5,770.5	2.48	33.25	2.48	0.10																																																																																																														
NORMAL	5,583.0	0.70	38.30	5,582.6	0.90	31.61	0.90	0.18																																																																																																														
NORMAL	5,394.0	0.60	67.80	5,393.6	-0.38	29.98	-0.38	0.27																																																																																																														
NORMAL	5,206.0	1.00	43.80	5,205.6	-1.93	27.94	-1.93	0.19																																																																																																														
NORMAL	5,017.0	0.80	63.30	5,016.6	-3.71	25.62	-3.71	0.07																																																																																																														
CASING																																																																																																																						
S/T	DESCRIPTION		SIZE		WEIGHT	GRADE	SETTING DEPTH																																																																																																															
00	SURFACE		13.375		48.00	H-40	535.0																																																																																																															
MUD PUMPS/HYDRAULICS				SPP: AV(DP): AV(DC): HP:	2200 (psi) 1.003 (hp/in <sup>2</sup> )	SPR																																																																																																																
# 1	STROKE 12.00	SPM 70.00	LINER 6.000	FLOW RATE 293.0		SPM	PPSR																																																																																																															
# 2	12.00	70.00	6.000	293.0																																																																																																																		
PERSONNEL DATA																																																																																																																						
COMPANY		QTY	HRS	COMPANY			QTY	HRS																																																																																																														
EPI CONSULTING		1	24.00	HORIZON MUD			1	24.00																																																																																																														
TOTAL ENERGY SERVICES		1	24.00	MS DIRECTIONAL			2	24.00																																																																																																														
BOS SOLUTIONS		2	24.00	PATTERSON			11	132.00																																																																																																														
TOTAL PERSONNEL ON BOARD: 18																																																																																																																						
TOTAL HOURS ON BOARD: 252																																																																																																																						
MATERIALS/CONSUMPTION																																																																																																																						
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND																																																																																																															
DIESEL, RIG FUEL	gal	1917	7908	DIESEL, MUD	gal	0	198																																																																																																															



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 06-29-2014				
API # 4238338545 00	24 HRS PROG 1,464.0 (ft)	TMD 6,202.0 (ft)	TD TVD 6,201.5 (ft)	REPT NO 10				
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 06-30-2014																										
API # 4238338545 00		24 HRS PROG 1,079.0 (ft)			TMD 7,281.0 (ft)			TD TVD 7,280.4 (ft)			REPT NO 11																											
RIG PATTERSON 173		FIELD NAME SPRABERRY			AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)			DFS 8.77 (days)	DOL 10.38 (days)																												
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS			ENGINEER ROY ALAN DE NAPOLI			PBTMD																													
REGION PERMIAN		DISTRICT GARDEN CITY - TX CZ			STATE / PROV TEXAS	COUNTY / PARISH REAGAN			RIG PHONE NO 432-242-3877	RIG FAX NO																												
AFE # 11-13-0422-DH		AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 77,877 DCC: CWC: Others: TOTAL: 77,877			CUMULATIVE COSTS DHC: 817,743 DCC: CWC: Others: TOTAL: 817,743																														
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)		LAST SAFETY MEETING 6/30/2014	BLOCK		OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE																													
LAST SURVEY MD 6,901.0 (ft) INC 0.80° AZM 97.10°		LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft			NEXT CASING 9.625 in @ 7,425.0 ft																														
CURRENT OPERATIONS: PUMP SWEEPS & CIRC HOLE CLEAN ( TD=7450' )																																						
24 HR SUMMARY: DRLG F/6202' T/ 7281																																						
24 HR FORECAST: CONTINUE TO DRILL 12.25" INTERMEDIATE HOLE SECTION TO TD @ 7450' CIRC SWEEPS AROUND AND DROP GYRO. POOH RUN 9 5/8" CSG.																																						
OPERATION SUMMARY																																						
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY																															
0:00	20:30	20.50	INT-DRL	DRLG	PP		DRLG F/6202 - T/7146' (944' @ 46'/HR, WOB-35, RPM-45, DIFF-450, GPM-580)																															
20:30	21:00	0.50	INT-DRL	RIGSER	PP		PERFORM RIG SERVICE																															
21:00	0:00	3.00	INT-DRL	DRLG	PP		DRLG F/7146 - T/7281' (135' @ /HR, WOB-35, RPM-45, DIFF-450, GPM-580)																															
24.00 = Total Hours Today																																						
06:00 UPDATE																																						
0000-0600	0000-0400 DRLG F/7281 - T/7450' (169' @ 42'/HR, WOB-35, RPM-45, DIFF-450, GPM-580)			0400-0600 PUMP SWEEPS & CIRC HOLE CLEAN																																		
BIT DATA																																						
BIT / RUN	BIT SIZE (in)	MANUFACTURER			TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R																											
2 / 1	12.250	Reed-Hycalog			SKHI716M -12	A197124	7x13		535.00 / 06-26-2014		-----																											
BIT OPERATIONS																																						
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP																											
2/1	/35.0	/45	594.42	2250	352	23.50	1,079.0	45.9	98.50	6,746.0	68.5																											
MOTOR OUTPUT																																						
RPV: 0.17rev/gal	ROTARY CURRENT: 45			TOTAL RPM: 146																																		
LCM: 0.0	MUD PROPERTIES			MUD TYPE: Water-Based Mud																																		
VIS (s/qt)	PV/YP (cp) / (lbf/100ft²)	GELS (lbf/100ft²)	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)																									
38.00	9.00/18	11/12	40.0/0.0	3.0/0.00	0.00/0.00	0.00/0.0	9.50/0.70	0.20/0.40	1800	240	0	0	3.86																									
Density (ppg)	8.90	ECD (ppg)	9.06	DP (ppg)	0.00	DAILY COST	0	CUM COST	0	% OIL	0.00	% H2O	95.90																									
BHA	2	JAR S/N		BHA / HOLE CONDITIONS					JAR HRS		BIT																											
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH																												
(kip)		250.0 (kip)		230.0 (kip)		240.0 (kip)		(ft-lbf)		826.07 (ft)																												



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 06-30-2014			
API # 4238338545 00	24 HRS PROG 1,079.0 (ft)	TMD 7,281.0 (ft)	TD TVD 7,280.4 (ft)			REPT NO 11					
COMPONENT TYPE	ITEM DESCRIPTION	NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE				
Crossover Sub	XO	1	3.00	6.312	2.500			4-1/2 IF			
Drill Collar	6.5" DC	12	531.04	6.312	2.062			4-1/2 XH			
Crossover Sub	XO	1	3.10	7.750	2.500			4-1/2 XH			
Drill Collar	8" DC	6	175.90	8.000	2.992			6-5/8" Reg			
Integral Blade Stabilizer	12 1/8" IBS	1	7.90	8.000	2.992			6-5/8" Reg			
Non-Mag Drill Collar	NMDC	2	59.65	8.125	2.875			6-5/8" Reg			
MWD Tool	UBHO	1	3.49	7.875	3.000			6-5/8" Reg			
Integral Blade Stabilizer	12 1/8" IBS	1	8.10	8.000	2.875			6-5/8" Reg			
Bent Housing	MUD MOTOR	1	32.39	8.000				6-5/8" Reg			
PDC Bit	12.25" PDC	1	1.50	12.250				6-5/8" Reg			
SURVEY											
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)			
NORMAL	7,393.0	0.80	69.40	7,392.4	4.74	55.45	4.74	0.01			
NORMAL	7,277.0	0.80	69.90	7,276.4	4.17	53.93	4.17	0.18			
NORMAL	7,089.0	0.80	94.00	7,088.4	3.81	51.39	3.81	0.02			
NORMAL	6,901.0	0.80	97.10	6,900.4	4.07	48.78	4.07	0.02			
NORMAL	6,712.0	0.80	94.30	6,711.4	4.33	46.16	4.33	0.12			
NORMAL	6,524.0	0.90	80.70	6,523.5	4.19	43.39	4.19	0.15			
CASING											
S/T	DESCRIPTION		SIZE	WEIGHT		GRADE	SETTING DEPTH				
00	SURFACE		13.375	48.00		H-40	535.0				
MUD PUMPS/HYDRAULICS				SPP: AV(DP): AV(DC): HP:	2250 (psi) 1.035 (hp/in²)	SPR					
	STROKE	SPM	LINER	FLOW RATE		SPM	PPSR				
# 1	12.00	72.00	6.000	301.4							
# 2	12.00	70.00	6.000	293.0							
PERSONNEL DATA											
COMPANY		QTY	HRS	COMPANY			QTY	HRS			
TOTAL ENERGY SERVICES		1	24.00	EPI CONSULTING			1	24.00			
HORIZON MUD		1	24.00	BOS SOLUTIONS			2	24.00			
MS DIRECTIONAL		2	24.00	PATTERSON			11	132.00			
TOTAL PERSONNEL ON BOARD: 18											
TOTAL HOURS ON BOARD: 252											
MATERIALS/CONSUMPTION											
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND				
DIESEL, RIG FUEL	gal	2555	12,461	DIESEL, MUD	gal	0	198				
SAFETY DRILLS											
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL			
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014						
INCIDENT REPORT											
INCIDENTS TYPE	LOST TIME? NO		INCIDENTS DESCRIPTION No incidents reported in last 24 hours.								



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 07-01-2014												
API # 4238338545 00	24 HRS PROG 169.0 (ft)		TMD 7,450.0 (ft)		TD TVD 7,449.5 (ft)		REPT NO 12													
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)		DFS 9.77 (days)	DOL 11.38 (days)													
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / GLENN WILLIAMS		ENGINEER ROY ALAN DE NAPOLI		PBTMD													
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO													
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 40,772 DCC: CWC: Others: TOTAL: 40,772		CUMULATIVE COSTS DHC: 858,514 DCC: CWC: Others: TOTAL: 858,514														
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/1/2014	BLOCK		OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)		BHA HRS OF SERVICE													
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft		NEXT CASING 9.625 in @ 7,450.0 ft														
CURRENT OPERATIONS: RUNNING 9 5/8" CSG @ 4100'																				
24 HR SUMMARY: DRLG F/ 7281 T/7450 TD . CIRCULATE SWEEPS AND CLEAN HOLE. POOH L/D BHA. R/U CGS CREW AND RUN CSG TO 450'																				
24 HR FORECAST: RUN 9 5/8" 40# J-55 LTC INTERMEDIATE CSG. CIRC HOLE, R/U AND PUMP CMT AS PER PROG, NIPPLE DOWN AND INSTALL WELL HEAD.																				
OPERATION SUMMARY																				
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY													
0:00	4:00	4.00	INT-DRL	DRLG	PP		DRILL F/7281 - T/7450 (169' @ 43'/HR, WOB-35, DIFF-400, RPM-45, GPM-580)													
4:00	8:00	4.00	INT-DRL	CIRC	PP		PUMP SWEEPS & CIRC HOLE CLEAN, BUILD & PUMP SLUG													
8:00	12:00	4.00	INT-DRL	TRIP	PP		POH T/ DC'S													
12:00	12:30	0.50	INT-DRL	RIGSER	PP		RIG SERVICE													
12:30	13:30	1.00	INT-DRL	RU_RD	PP		HOLD SFTY MTG, R/U L/D TRUCK													
13:30	20:00	6.50	INT-DRL	TRIPBHA	PP		L/D BHA													
20:00	22:30	2.50	INT-CSG	RU_RD	PP		CLEAR RIG FLOOR AND RIG UP EXPRESS CSG EQUIPMENT.													
22:30	23:00	0.50	INT-CSG	PRESAFE	PP		HELD SAFETY MEETING WITH RIG AND CASING CREWS.													
23:00	0:00	1.00	INT-CSG	R_PCSG	PP		M/U FLOAT EQUIP & RUN 9 5/8" 40# J-55 LTC INTERMEDIATE CSG F/ 0' T/450 MIDNIGHT DEPTH.													
24.00 = Total Hours Today																				
06:00 UPDATE																				
0000-0600 0000-0100 RUN 9 5/8" 40# J-55 LTC INTERMEDIATE CSG F/ 450' TO 1527' FILLING PIPE EVERY 30 JOINTS (HAD RETURNS WHILE RUINNING PIPE) 0100-0130 CIRCULATE 1000 STROKES @ 1527' NO RETURNS PIUMPING 5 BPM 0130-0400 RUN 9 5/8" 40# J-55 LTC INTERMEDIATE CSG F/ 1527' TO 3063" FILLING PIPE EVERY 30 JOINTS (HAD RETURNS WHILE RUINNING PIPE) 0400-0430 CIRCULATE 2000 STROKES NO RETURNS WHILE CIRCULATING. PUMPING 5 BPM 0430-0600 RUN 9 5/8" 40# J-55 LTC INTERMEDIATE CSG F/ 3063' TO 4100,' FILLING PIPE EVERY 30 JOINTS																				
BIT DATA																				
BIT / RUN	BIT SIZE (in)	MANUFACTURER	TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R													
2 / 1	12.250	Reed-Hycalog	SKHI716M -12	A197124	7x13	535.00 / 06-26-2014	2-3-CT-G-X-I-FC-TD													



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU											DATE 07-01-2014						
API # 4238338545 00	24 HRS PROG 169.0 (ft)	TMD 7,450.0 (ft)	TD TVD 7,449.5 (ft)						REPT NO 12								
BIT OPERATIONS																	
BIT / RUN 2/1	WOB /35.0	RPM /45	FLOW RATE 602.79	PRESS 2250	P BIT 362	HRS 4.00	24 Hr PROG 169.0	24 HR ROP 42.2	CUM HRS 102.50	CUM PROG 6,915.0	CUM ROP 67.5						
MOTOR OUTPUT																	
RPV: 0.17rev/gal	ROTARY CURRENT: 45				TOTAL RPM: 147												
LCM:	MUD PROPERTIES MUD TYPE: Water-Based Mud																
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbf/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)				
38.00	10.00/17	11/12	40.0	3.0			9.60/0.70	0.20/0.40	19,000	260			3.86				
Density (ppg)	8.90		PP		DAILY COST	0	CUM COST	0	%OIL			% H2O	95.70				
BHA	2	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS			BIT						
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH							
(kip)		255.0 (kip)		245.0 (kip)		238.0 (kip)		(ft-lbf)		826.07 (ft)							
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE						
Crossover Sub		XO				1	3.00	6.312	2.500		4-1/2 IF						
Drill Collar		6.5" DC				12	531.04	6.312	2.062		4-1/2 XH						
Crossover Sub		XO				1	3.10	7.750	2.500		4-1/2 XH						
Drill Collar		8" DC				6	175.90	8.000	2.992		6-5/8" Reg						
Integral Blade Stabilizer		12 1/8" IBS				1	7.90	8.000	2.992		6-5/8" Reg						
Non-Mag Drill Collar		NMDC				2	59.65	8.125	2.875		6-5/8" Reg						
MWD Tool		UBHO				1	3.49	7.875	3.000		6-5/8" Reg						
Integral Blade Stabilizer		12 1/8" IBS				1	8.10	8.000	2.875		6-5/8" Reg						
Bent Housing		MUD MOTOR				1	32.39	8.000			6-5/8" Reg						
PDC Bit		12.25" PDC				1	1.50	12.250			6-5/8" Reg						
SURVEY																	
TYPE	MD (ft)	DEG (°)	AZI (°)	TVB (ft)	+N-S (ft)	+E-W (ft)	V.SECT (ft)	D.L (°/100ft)									
NORMAL					-6.92	24.44	-6.92	0.00									
CASING																	
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH									
00	SURFACE			13.375	48.00		H-40	535.0									
MUD PUMPS/HYDRAULICS				SPP: 2250 (psi)	SPR												
STROKE	SPM	LINER	FLOW RATE	AV(DP):		SPM	PPSR										
# 1 # 2	12.00 12.00	72.00 72.00	6.000 6.000	301.4 301.4	AV(DC): HP: 1.079 (hp/in <sup>2</sup> )												
PERSONNEL DATA																	
COMPANY			QTY	HRS	COMPANY				QTY	HRS							
EPI CONSULTING			1	24.00	TOTAL ENERGY SERVICES				1	24.00							
HORIZON MUD			1	24.00	BOS SOLUTIONS				2	24.00							
MS DIRECTIONAL			2	24.00	PATRSON				11	132.00							
TOTAL PERSONNEL ON BOARD: 18																	
TOTAL HOURS ON BOARD: 252																	
MATERIALS/CONSUMPTION																	



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-01-2014
API # 4238338545 00	24 HRS PROG 169.0 (ft)	TMD 7,450.0 (ft)	TD TVD 7,449.5 (ft)	REPT NO 12
ITEM	UNITS	USAGE	ON HAND	ITEM
DIESEL, RIG FUEL	gal	958	11,503	DIESEL, MUD
BASE OIL	bbl		1654	gal
SAFETY DRILLS				
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014
INCIDENT REPORT				
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.		



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-02-2014			
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,543.5 (ft)	REPT NO 13			
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 10.77 (days)	DOL 12.38 (days)		
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / TERRY MOORE	ENGINEER ROY ALAN DE NAPOLI	PBTMD		
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO		
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS DHC: 320,009 DCC: CWC: Others: TOTAL: 320,009	CUMULATIVE COSTS DHC: 1,195,523 DCC: CWC: Others: TOTAL: 1,195,523				
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/2/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)	BHA HRS OF SERVICE		
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)		LAST CASING 13.375 in @ 535.0 ft	NEXT CASING 9.625 in @ 7,450.0 ft			
CURRENT OPERATIONS: N/D BOPS & PREPARE TO P/U STACK TO SET CSG SLIPS							
24 HR SUMMARY: RUN 176 JTS OF 9 5/8" CSG, CMT SAME.							
24 HR FORECAST: FINISH CMT JOB, N/D, SET SLIPS, N/U & TEST BOPS, P/U BHA TIH T/ DV TOOL							
OPERATION SUMMARY							
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY
0:00	10:30	10.50	INT-CSG	CSG	PP		RUN 176 JTS OF 9 5/8" 40# J55 LTC CSG T/7450' (SHOE @ 7450', FLOAT COLLAR @ 7407', DVT @ 4297')
10:30	12:00	1.50	INT-CSG	CIRC	PP		R/U CMT HEAD & CIRC W/ RIG PUMP @ 250 GPM'S (R/D CSG TOOLS)
12:00	17:00	5.00	INT-CMT	CMTPRI	PP		HOLD SFTY MTG W/ CREST, SWITCH LINES, TEST T/3500 PSI. (FIRST STAGE) -PUMP 40 BBLS FRESH WATER, 154 BBLS (265 SX) OF 10.6 PPG LEAD CMT, 76 BBLS (260 SX) OF 13.2 PPG TAIL CMT, SHUT DOWN, DROP PLUG, DISP W/ 561 BBLS OF 9.0 PPG WBM, BUMP PLUG @ 16:45 ON 7/2/14 (750-1250 PSI), HOLD 5 MIN, BLEED BACK 2.5 BBLS - NO RETURNS THROUGHOUT 1ST STAGE - CONTACTED TRRC ON 7/1/14 @ 20:00 HRS (SHARONDA)
17:00	22:00	5.00	INT-CSG	CIRC	PP		DROP DV BOMB, WAIT 17 MIN, PUMP 30 BBLS OF FRESH WATER, SWITCH LINES & PUMP 3 BBL/MIN W/RIG PUMP- FULL RETURNS (CIRC 2 BTMS UP, PUMP SALT PILL & CONT CIRC) (APPROX 35 BBLS CMT - 60 SX BACK TO SURFACE FROM 1ST STAGE)
22:00	0:00	2.00	INT-CMT	CMTPRI	PP		HOLD SFTY MTG W/CREST, SWITCH LINES, TEST T/3500 PSI (2ND STAGE) PUMP 40 BBL FRESHWATER SPACER, 350 BBLS-815 SX 11.9 PPG LEAD, 24 BBLS-100 SX 14.8 PPG TAIL CMT, SHUTDOWN, DROP PLUG & DISP W/326 BBLS 9.0 PPG WBM @ 5BPM FOR FIRST 95BBL AND LOST RETURNS, SLOWED DOWN TO 3 BPM AND REGAINED PARTICAL RETURNS. DISPLACING @ MIDNIGHT.
24.00 = Total Hours Today							
06:00 UPDATE							
0000-0600	00:00 - 01:30 FINISHED DISPLACING W/PARTICAL RETURNS, LOST ALL RETURNS LAST 30 BBLS OF DISPLACEMENT. BUMP PLUG @ 01:22 HRS ON 7/3/14 W/320 PSI @3BPM, PRESS UP T/1690 HELD 5MIN AND BLEED BACK 2.0 BBLS. DV TOOL CLOSED. 01:30 - 02:30 FLUSH STACK, R/D CREST CEMENTERS 02:30 - 03:30 R/D FLOW LINE, KOOMEY LINES AND TURN BUCKLES 03:30 - 06:00 R/U ETS STACKLIFT AND PREPARE TO P/U STACK						
CASING							
S/T	DESCRIPTION	SIZE	WEIGHT	GRADE	SETTING DEPTH		
00	SURFACE	13.375	48.00	H-40	535.0		
00	INTERMEDIATE 1	9.625	40.00	J-55	7,450.0		



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-02-2014				
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,543.5 (ft)	REPT NO 13				
PERSONNEL DATA								
COMPANY		QTY	HRS	COMPANY	QTY	HRS		
HORIZON MUD		1	24.00	EPI CONSULTING	1	24.00		
EDWARDS WELL SERVICE		1	12.00	MS DIRECTIONAL	2	24.00		
BOS SOLUTIONS		2	24.00	CREST CEMENTERS	5	12.00		
PATTERSON		11	132.00					
					TOTAL PERSONNEL ON BOARD: 23			
					TOTAL HOURS ON BOARD: 252			
MATERIALS/CONSUMPTION								
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND	
DIESEL, RIG FUEL	gal	959	10,544					
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU		DATE 07-03-2014					
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,543.5 (ft)				
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)				
DFS 11.77 (days)	DOL 13.38 (days)						
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE ERIC TAYLOR / TERRY MOORE	SUPERVISOR 1 ENGINEER ROY ALAN DE NAPOLI				
PBTMD							
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877			
RIG FAX NO							
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS  DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS  DHC: 145,177 DCC: CWC: Others: TOTAL: 145,177	CUMULATIVE COSTS  DHC: 1,340,700 DCC: CWC: Others: TOTAL: 1,340,700				
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/3/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)	BHA HRS OF SERVICE		
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)		LAST CASING 13.375 in @ 535.0 ft	NEXT CASING 9.625 in @ 7,450.0 ft			
CURRENT OPERATIONS: N/D BOPS @ 06:00 (DUE TO A-SECTION DROPPIN APPROX 2')							
24 HR SUMMARY: PUMP 2ND STAGE INTERMEDIATE CMT JOB, N/U B SECT, N/U BOP'S & TEST SAME							
24 HR FORECAST: WHILE TESTING BOPS, STACK AND A SECTION DROPPED APPROX 2 FOOT, N/D BOPS AND INSTALL NEW A SECTION							
OPERATION SUMMARY							
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY
0:00	1:30	1.50	INT-CMT	CMTPRI	PP		HOLD SFTY MTG W/CREST, SWITCH LINES, TEST T/3500 PSI (2ND STAGE) PUMP 40 BBL FRESHWATER SPACER, 350 BBLS-815 SX 11.9 PPG LEAD, 24 BBLS-100 SX 14.8 PPG TAIL CMT, SHUTDOWN, DROP PLUG & DISP W/326 BBLS 9.0 PPG WBM @ 5BPM FOR FIRST 95BBL AND LOST RETURNS, SLOWED DOWN TO 3 BPM AND REGAINED PARTICAL RETURNS, BUMP PLUG 500 OVER @ 01:22 HRS ON 7/3/14, HOLD 5 MIN & BLEED BACK 2 BBLS, FLOATS HELD.
1:30	2:30	1.00	INT-NUP	BOPS	PP		FLUSH STACK & R/D CEMENTERS, TRANSFER WBM FROM MUD PITS TO FRACK TANKS
2:30	3:30	1.00	INT-NUP	BOPS	PP		HOLD SAFETY MEETING, R/D FLOWLINE, KOOMEY LINES & TURNBUCKLES, DUMP AND JET MUD PITS
3:30	6:00	2.50	INT-NUP	BOPS	PP		R/U ETS STACK LIFT, BREAK BOLTS & P/U STACK, SET 9 5/8" SLIPS W/ 35K OVER. CLEAN MUD PITS IN PREP FOR OBM.
6:00	15:30	9.50	INT-NUP	WLHEAD	PP		ROUGH CUT CSG, L/O CUT JNT, REMOVE SPOOL, FINAL CUT CSG, INSTALL B SECTION
15:30	20:00	4.50	INT-NUP	WLHEAD	PP		SET DOWN STACK, M/U & TORQUE BOP BOLTS W/ ETS
20:00	0:00	4.00	INT-NUP	BOPS	PP		R/U ETS TESTERS AND TEST BOPS AND RELATED EQUIP 250 LOW TO 5000 HIGH, HYDRIL 3500
24.00 = Total Hours Today							
06:00 UPDATE							
0000-0600 00:00 - 06:00 WHILE TESTING BOPS, STACK AND A SECTION DROPPED APPROX 2 FOOT. NOTIFIED PROPER PERSONNEL, DECISION WAS MADE TO N/D BOPS AND INSTALL NEW A SECTION. N/D BOPS @ 06:00 HRS							
CASING							
S/T	DESCRIPTION		SIZE	WEIGHT	GRADE	SETTING DEPTH	
00	SURFACE		13.375	48.00	H-40	535.0	
00	INTERMEDIATE 1		9.625	40.00	J-55	7,450.0	



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-03-2014
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,543.5 (ft)	REPT NO 14
PERSONNEL DATA				
COMPANY EDWARDS WELL SERVICE EPI CONSULTING MS DIRECTIONAL	QTY 1 1 2	HRS 12.00 24.00 24.00	COMPANY HORIZON MUD BOS SOLUTIONS PATTERSON	QTY 1 2 11
TOTAL PERSONNEL ON BOARD: 18 TOTAL HOURS ON BOARD: 240				
MATERIALS/CONSUMPTION				
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 719	ON HAND 9825	ITEM DIESEL, MUD
				UNITS gal 1412
SAFETY DRILLS				
RAMS (psi) 3000	ANNULARS (psi) 06-25-2014 / 2000	CASING 06-26-2014 / 500	LAST BOP FUNCTION 06-25-2014	LAST BOP PRESSURE TEST 06-25-2014
				NEXT BOP PRESS TEST 07-09-2014
INCIDENT REPORT				
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.		



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 07-04-2014			
API # 4238338545 00	24 HRS PROG (ft)		TMD 7,450.0 (ft)		TD TVD 7,543.5 (ft)		REPT NO 15				
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 12.77 (days)	DOL 14.38 (days)					
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / TERRY MOORE		ENGINEER ROY ALAN DE NAPOLI	PBTMD					
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO					
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 89,871 DCC: CWC: Others: TOTAL: 89,871	CUMULATIVE COSTS DHC: 1,417,571 DCC: CWC: Others: TOTAL: 1,417,571						
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/4/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE				
LAST SURVEY MD 0.0 (ft) INC 0.00° AZM 0.00°	LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft	NEXT CASING 9.625 in @ 7,450.0 ft						
CURRENT OPERATIONS: WAITING ON CMT TO SET IN CELLAR											
24 HR SUMMARY:	ATTEMPT TO TEST BOPS WHEN THEY DROPPED, N/D, R/U & PULL 9 5/8 SLIPS, PULL & RESET "A" SECTION, WELD BASE PLATE ON WELL HEAD, POUR CEMENT IN CELLAR, WOC										
24 HR FORECAST:	WOC TO 6 AM, SET SLIPS ON 9 5/8 CSG, INSTALL "B" SECTION, N/U AND TEST BOPS, P/U BIT AND SUB & TIH T/ DRILL DVT										
OPERATION SUMMARY											
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY				
0:00	3:00	3.00	INT-NUP	BOPS	PN	WH	WHILE TESTING BOPS, STACK AND "A" SECTION DROPPED APPROX 2 FOOT. NOTIFIED PROPER PERSONNEL, DECISION WAS MADE TO N/D BOPS.				
3:00	10:00	7.00	INT-NUP	BOPS	PN	WH	N/D BOP'S, SET OUT WITH POLE TRUCK, REMOVE SPACER SPOOL & B SECTION				
10:00	14:00	4.00	INT-NUP	WLHEAD	PN	WH	M/U STINGER, STING INTO 9 5/8" CSG, WELD CSG SLIPS TO 9 5/8", P/U TO 240K, REMOVE SLIPS, P/U A-SECTION & SURFACE CSG TO CORRECT WELLHEAD HEIGHT.				
14:00	20:30	6.50	INT-NUP	WLHEAD	PN	WH	WAIT ON 1" PLATE FOR BASEPLATE, FAB W/WELDER TO FIT A-SECTION, WELD SAME.				
20:30	22:00	1.50	INT-NUP	WLHEAD	PN	WH	POUR CONCRETE IN CELLAR TO BASEPLATE				
22:00	0:00	2.00	INT-NUP	WLHEAD	PN	WH	WAIT ON CMT IN CELLAR TO SET UP				
24.00 = Total Hours Today											
06:00 UPDATE											
0000-0600	00:00 - 06:00 WAIT ON CMT IN CELLAR TO SET UP										
CASING											
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH			
00	SURFACE			13.375	48.00		H-40	535.0			
00	INTERMEDIATE 1			9.625	40.00		J-55	7,450.0			
PERSONNEL DATA											
COMPANY	QTY	HRS	COMPANY			QTY	HRS				
EDWARDS WELL SERVICE	1	12.00	HORIZON MUD			1	24.00				
EPI CONSULTING	1	24.00	MS DIRECTIONAL			2	24.00				
BOS SOLUTIONS	2	24.00	PATTERSON			11	132.00				
TOTAL PERSONNEL ON BOARD: 18											
TOTAL HOURS ON BOARD: 240											
MATERIALS/CONSUMPTION											
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND				
DIESEL, RIG FUEL	gal	784	11,503	DIESEL, MUD	gal	5582	4982				



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME				DATE	
UNIVERSITY 2505 2HU				07-04-2014	

API #	24 HRS PROG	TMD	TD TVD	REPT NO
4238338545 00	(ft)	7,450.0 (ft)	7,543.5 (ft)	15

## SAFETY DRILLS

RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			

## INCIDENT REPORT

INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.
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## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU						DATE 07-05-2014	
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,449.4 (ft)		REPT NO 16		
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 13.77 (days)	DOL 15.38 (days)		
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / TERRY MOORE	ENGINEER ROY ALAN DE NAPOLI	PBTMD		
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO	
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS DHC: 73,526 DCC: CWC: Others: TOTAL: 73,526		CUMULATIVE COSTS DHC: 1,491,097 DCC: CWC: Others: TOTAL: 1,491,097			
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/5/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)		BHA HRS OF SERVICE	
LAST SURVEY MD 6,901.0 (ft) INC 0.80°	AZM 97.10°	LAST CSG SHOE TEST (EMW)		LAST CASING 13.375 in @ 535.0 ft	NEXT CASING 9.625 in @ 7,450.0 ft		
CURRENT OPERATIONS: RUN GYRO SURVEY							
24 HR SUMMARY: WOC TO 6 AM, SET SLIPS ON 9 5/8 CSG, INSTALL "B" SECTION, N/U AND TEST BOPS, P/U BIT AND SUB & TIH T/ DRILL DVT & TEST CSG							
24 HR FORECAST: POOH, R/U RUN GYRO, P/U DIRECTIONAL TOOLS, TIH, DISPLACE W/ OBM, DRILL OUT FLT/SHOE EQUIP, START DRLG PRODUCTION CURVE SECTION							
OPERATION SUMMARY							
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY
0:00	6:00	6.00	INT-NUP	WLHEAD	PN	WH	WAIT ON CEMENT IN CELLAR TO SET UP
6:00	8:00	2.00	INT-NUP	WLHEAD	PN	WH	SET CSG SLIPS W/280K STRING WEIGHT, R/D CSG SPEAR
8:00	9:00	1.00	INT-NUP	WLHEAD	PN	WH	INSTALL B-SECTION & TEST T/2000
9:00	13:30	4.50	INT-NUP	BOPS	PN	WH	N/U SPACER SPOOLS, BOP'S & ALL RELATED EQUIPMENT, TORQUE SAME
13:30	18:00	4.50	INT-NUP	BOPS	PP		TEST BOP'S, CHOKE MANIFOLD & ALL RELATED VALVES T/5000H, 250L, HYDRIL 3500H
18:00	19:00	1.00	INT-NUP	BOPS	PP		N/U FLOW LINE, INSTALL TRIP NIPPLE
19:00	22:00	3.00	INT-DRL	TRIP	PP		TIH T/4266'
22:00	23:00	1.00	INT-CSG	TEST	PP		TEST CSG 1500 PSI, HOLD F/ 5 MIN, DRILL DVT
23:00	0:00	1.00	INT-CSG	TEST	PP		TEST CSG 1500 PSI, HOLD F/30 MIN
24.00 = Total Hours Today							
06:00 UPDATE							
0000-0600	00:00 - 02:30 POOH 02:30 - 03:30 R/U MS GYRO, STAGE DIRECTIONAL BHA ON PIPE RACKS 03:30 - 06:00 RUN GYRO						
TESTED GSG T/1500 PSI, HELD F/30 MIN, GOOD TEST							
CASING							
S/T	DESCRIPTION		SIZE	WEIGHT	GRADE	SETTING DEPTH	
00	SURFACE		13.375	48.00	H-40	535.0	
00	INTERMEDIATE 1		9.625	40.00	J-55	7,450.0	



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU					DATE 07-05-2014			
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,449.4 (ft)	REPT NO 16				
PERSONNEL DATA								
COMPANY HORIZON MUD EPI CONSULTING MS DIRECTIONAL		QTY 1 1 4	HRS 24.00 24.00 24.00	COMPANY EDWARDS WELL SERVICE BOS SOLUTIONS PATTERSON	QTY 1 2 11	HRS 12.00 24.00 132.00		
						TOTAL PERSONNEL ON BOARD: 20		
						TOTAL HOURS ON BOARD: 240		
MATERIALS/CONSUMPTION								
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 719	ON HAND 10,784					
SAFETY DRILLS								
RAMS (psi) 3000	ANNULARS (psi) 06-25-2014 / 2000	CASING 06-26-2014 / 500	LAST BOP FUNCTION 06-25-2014	LAST BOP PRESSURE TEST 06-25-2014	NEXT BOP PRESS TEST 07-09-2014	FIRE DRILL	H2S DRILL	ABND. DRILL
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 07-06-2014						
API # 4238338545 00	24 HRS PROG (ft)		TMD 7,450.0 (ft)		TD TVD 7,449.3 (ft)		REPT NO 17							
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,550.00 (ft)	PLANNED DOW 22.00 (days)	DFS 14.77 (days)	DOL 16.38 (days)								
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / TERRY MOORE		ENGINEER ROY ALAN DE NAPOLI	PBTMD								
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS	COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO								
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 66,055 DCC: CWC: Others: TOTAL: 66,055	CUMULATIVE COSTS DHC: 1,557,152 DCC: CWC: Others: TOTAL: 1,557,152									
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/6/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE							
LAST SURVEY MD 7,400.0 (ft) INC 1.07° AZM 82.98°	LAST CSG SHOE TEST (EMW)			LAST CASING 13.375 in @ 535.0 ft	NEXT CASING 9.625 in @ 7,450.0 ft									
CURRENT OPERATIONS: ROT DRILL T / KICK OFF POINT F/7450' - T/7490'														
24 HR SUMMARY: POOH, R/U RUN GYRO, P/U DIRECTIONAL TOOLS, TIH, RPR PIN ON TRAVELING BLOCK, TIH														
24 HR FORECAST: FINISH TIH, DRLG FLOAT/SHOE EQUIP W/DISPLACING W/OBM, DRILL AHEAD IN PRODUCTION SECTION														
OPERATION SUMMARY														
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY							
0:00	2:30	2.50	INT-DRL	TRIP	PP		POH T / RUN GYRO & P/U CURVE ASSY							
2:30	7:00	4.50	INT-DRL	DEVSUR	PP		R/U & RUN MS GYRO, R/D SAME							
7:00	9:00	2.00	INT-DRL	TRIPBHA	PP		M/U DIRECTIONAL BHA, SCRIBE & TEST SAME							
9:00	10:30	1.50	INT-DRL	TRIP	PP		TIH T/2700' (RIG CREW NOTICED PIN BACKING OUT OF BLOCK)							
10:30	11:30	1.00	INT-DRL	RIGSER	PP		SERVICE RIG							
11:30	19:00	7.50	INT-DRL	RIGSER	PN	RO	PIN BACKING OUT OF BLOCK, INSPECT & WAIT ON MECHANIC, MECHANIC ARRIVED AND INSPECTED, RECOMMENDED CALLING WELDER, CALLED OUT WELDER TO WELD PIN IN PLACE							
19:00	22:00	3.00	INT-DRL	TRIP	PP		TIH F/DERRICK T/6964'							
22:00	0:00	2.00	INT-DRL	TRIP	PP		TIH P/U SINGLES FROM PIPE RACK							
24.00 = Total Hours Today														
06:00 UPDATE														
0000-0600	00:00 - 00:30 REPLACE DIES ON ST80 00:30 - 01:30 TIH T/7406' P/U SINGLES FROM PIPE RACK 01:30 - 02:30 DRLG FLOAT EQUIP & DISPLACE W/OBM 02:30 - 03:30 INSTALL ROTATING HEAD 03:30 - 04:00 DRLG CSG SHOE 04:00 - 06:00 ROT DRILL T / KICK OFF POINT F/7450' - T/7490'													
BIT DATA														
BIT / RUN	BIT SIZE (in)	MANUFACTURER	TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R							
3 / 1		Halliburton	MMD55DM	12482118	5x16	7,450.00 / 07-06-2014	-----							
MOTOR OUTPUT														
RPV:	ROTARY CURRENT:			TOTAL RPM:										



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 07-06-2014		
API # 4238338545 00	24 HRS PROG (ft)			TMD 7,450.0 (ft)			TD TVD 7,449.3 (ft)			REPT NO 17				
LCM: MUD PROPERTIES MUD TYPE:														
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)	
			PP	DAILY COST	0	CUM COST	0	%OIL			% H2O			
BHA	1	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT		3		
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH				
(kip)		(kip)		(kip)		(kip)		(ft-lbf)		94.68 (ft)				
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D.	I.D.	CONN SIZE	CONN TYPE			
PDC Bit		8.5 PDC				1	1.00	8.500				4 1/2" REG		
Fixed Bend Housing		2.38 FIXED				1	26.46	6.750				4-1/2 IF		
Float Sub		FLOAT SUB				1	3.04	6.875				4-1/2 IF		
Orienting Sub		UBHO				1	2.95	6.500				4-1/2 IF		
Non-Mag Flex Drill Collar		NMFC				1	30.76	6.812				4-1/2 IF		
Non-Mag Flex Drill Collar		NMFC				1	30.47	6.750				4-1/2 IF		



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU								DATE 07-06-2014
API #	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,449.3 (ft)			REPT NO 17		
SURVEY								
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)
NORMAL	7,400.0	1.07	82.98	7,399.3	-1.08	55.60	-1.08	0.01
Tie On	7,400.0	1.07	82.98	7,399.3	-1.08	55.60	-1.08	0.00
NORMAL	7,300.0	1.06	83.05	7,299.3	-1.30	53.75	-1.30	0.15
NORMAL	7,200.0	1.15	76.85	7,199.3	-1.64	51.86	-1.64	0.21
NORMAL	7,100.0	1.06	86.60	7,099.3	-1.93	49.96	-1.93	0.08
NORMAL	7,000.0	1.14	86.46	6,999.4	-2.04	48.04	-2.04	0.09
NORMAL	6,900.0	1.12	90.85	6,899.4	-2.09	46.07	-2.09	0.12
NORMAL	6,800.0	1.09	96.96	6,799.4	-1.96	44.15	-1.96	0.07
NORMAL	6,700.0	1.05	94.15	6,699.4	-1.78	42.29	-1.78	0.12
NORMAL	6,600.0	0.95	97.82	6,599.4	-1.60	40.56	-1.60	0.21
NORMAL	6,500.0	0.88	110.31	6,499.4	-1.22	39.01	-1.22	0.23
NORMAL	6,400.0	1.07	103.06	6,399.5	-0.74	37.38	-0.74	0.08
NORMAL	6,300.0	0.99	101.68	6,299.5	-0.36	35.63	-0.36	0.15
NORMAL	6,200.0	0.84	100.01	6,199.5	-0.06	34.06	-0.06	0.09
NORMAL	6,100.0	0.78	95.57	6,099.5	0.14	32.66	0.14	0.05
NORMAL	6,000.0	0.82	93.51	5,999.5	0.25	31.27	0.25	0.12
NORMAL	5,900.0	0.92	98.05	5,899.5	0.40	29.76	0.40	0.29
NORMAL	5,800.0	0.65	91.27	5,799.5	0.53	28.40	0.53	0.13
NORMAL	5,700.0	0.53	86.52	5,699.5	0.51	27.37	0.51	0.23
NORMAL	5,600.0	0.64	66.28	5,599.5	0.26	26.40	0.26	0.19
NORMAL	5,500.0	0.55	82.18	5,499.5	-0.03	25.41	-0.03	0.24
NORMAL	5,400.0	0.67	101.71	5,399.6	0.02	24.36	0.02	0.72
NORMAL	5,300.0	1.11	63.21	5,299.6	-0.29	22.93	-0.29	0.27
NORMAL	5,200.0	1.28	52.93	5,199.6	-1.40	21.17	-1.40	0.12
NORMAL	5,100.0	1.20	56.76	5,099.6	-2.65	19.40	-2.65	0.31
NORMAL	5,000.0	0.96	45.86	4,999.6	-3.81	17.93	-3.81	0.22
NORMAL	4,900.0	0.74	48.70	4,899.6	-4.82	16.84	-4.82	0.18
NORMAL	4,800.0	0.69	62.78	4,799.6	-5.52	15.82	-5.52	0.21
NORMAL	4,700.0	0.69	80.31	4,699.7	-5.90	14.69	-5.90	0.34
NORMAL	4,600.0	0.99	91.49	4,599.7	-5.98	13.23	-5.98	0.20
NORMAL	4,500.0	1.06	81.24	4,499.7	-6.09	11.45	-6.09	0.18
NORMAL	4,400.0	1.19	74.91	4,399.7	-6.50	9.54	-6.50	0.23
NORMAL	4,300.0	1.25	64.33	4,299.7	-7.25	7.55	-7.25	0.08
NORMAL	4,200.0	1.26	60.83	4,199.7	-8.26	5.61	-8.26	0.12
NORMAL	4,100.0	1.19	56.51	4,099.8	-9.36	3.78	-9.36	0.09
NORMAL	4,000.0	1.15	60.41	3,999.8	-10.43	2.04	-10.43	0.19
NORMAL	3,900.0	0.99	65.73	3,899.8	-11.28	0.38	-11.28	0.15
NORMAL	3,800.0	1.07	58.91	3,799.8	-12.12	-1.20	-12.12	0.34
NORMAL	3,700.0	0.76	67.79	3,699.8	-12.85	-2.62	-12.85	0.36
NORMAL	3,600.0	0.48	89.19	3,599.8	-13.11	-3.65	-13.11	0.23
NORMAL	3,500.0	0.46	117.95	3,499.8	-12.93	-4.42	-12.93	0.38
NORMAL	3,400.0	0.67	85.02	3,399.8	-12.79	-5.36	-12.79	0.21
NORMAL	3,300.0	0.84	94.18	3,299.9	-12.79	-6.67	-12.79	0.42
NORMAL	3,200.0	0.87	122.34	3,199.9	-12.33	-8.05	-12.33	0.27
NORMAL	3,100.0	0.77	140.12	3,099.9	-11.41	-9.12	-11.41	0.33
NORMAL	3,000.0	0.49	156.65	2,999.9	-10.50	-9.72	-10.50	0.20
NORMAL	2,900.0	0.35	136.19	2,899.9	-9.89	-10.10	-9.89	0.09
NORMAL	2,800.0	0.28	146.57	2,799.9	-9.46	-10.45	-9.46	0.22
NORMAL	2,700.0	0.46	125.88	2,699.9	-9.02	-10.91	-9.02	0.18
NORMAL	2,600.0	0.64	127.54	2,599.9	-8.45	-11.67	-8.45	0.11
NORMAL	2,500.0	0.54	131.84	2,499.9	-7.79	-12.47	-7.79	0.11



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU								DATE 07-06-2014					
API # 4238338545 00	24 HRS PROG (ft)	TMD 7,450.0 (ft)	TD TVD 7,449.3 (ft)			REPT NO 17							
SURVEY													
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)					
NORMAL	2,400.0	0.43	134.56	2,399.9	-7.21	-13.09	-7.21	0.08					
NORMAL	2,300.0	0.51	133.79	2,299.9	-6.64	-13.67	-6.64	0.29					
NORMAL	2,200.0	0.24	151.53	2,199.9	-6.15	-14.10	-6.15	0.39					
NORMAL	2,100.0	0.54	191.72	2,099.9	-5.51	-14.10	-5.51	0.17					
NORMAL	2,000.0	0.53	209.91	1,999.9	-4.64	-13.77	-4.64	0.11					
NORMAL	1,900.0	0.59	218.99	1,899.9	-3.84	-13.22	-3.84	0.15					
NORMAL	1,800.0	0.61	204.69	1,799.9	-2.96	-12.67	-2.96	0.12					
NORMAL	1,700.0	0.52	212.38	1,699.9	-2.09	-12.21	-2.09	0.09					
NORMAL	1,600.0	0.43	210.40	1,599.9	-1.38	-11.77	-1.38	0.35					
NORMAL	1,500.0	0.35	262.69	1,499.9	-1.02	-11.28	-1.02	0.15					
NORMAL	1,400.0	0.50	258.57	1,399.9	-0.90	-10.55	-0.90	0.20					
NORMAL	1,300.0	0.33	272.35	1,299.9	-0.82	-9.84	-0.82	0.12					
NORMAL	1,200.0	0.24	287.86	1,199.9	-0.90	-9.35	-0.90	0.06					
NORMAL	1,100.0	0.19	278.42	1,099.9	-0.99	-8.98	-0.99	0.21					
NORMAL	1,000.0	0.34	313.20	999.9	-1.21	-8.60	-1.21	0.04					
NORMAL	900.0	0.38	315.19	899.9	-1.65	-8.15	-1.65	0.18					
NORMAL	800.0	0.29	288.79	799.9	-1.97	-7.68	-1.97	0.08					
NORMAL	700.0	0.37	284.30	700.0	-2.13	-7.13	-2.13	0.21					
NORMAL	600.0	0.19	262.12	600.0	-2.19	-6.65	-2.19	0.21					
NORMAL	500.0	0.40	262.17	500.0	-2.12	-6.14	-2.12	0.43					
NORMAL	400.0	0.80	246.96	400.0	-1.80	-5.15	-1.80	0.10					
NORMAL	300.0	0.88	250.57	300.0	-1.27	-3.79	-1.27	0.07					
NORMAL	200.0	0.95	249.21	200.0	-0.72	-2.29	-0.72	0.10					
NORMAL	100.0	0.90	254.35	100.0	-0.21	-0.76	-0.21	0.90					
Tie On	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00					
CASING													
S/T	DESCRIPTION		SIZE	WEIGHT	GRADE		SETTING DEPTH						
00	SURFACE		13.375	48.00	H-40		535.0						
00	INTERMEDIATE 1		9.625	40.00	J-55		7,450.0						
PERSONNEL DATA													
COMPANY	QTY	HRS	COMPANY			QTY	HRS						
EPI CONSULTING	1	24.00	EDWARDS WELL SERVICE			1	12.00						
HORIZON MUD	1	24.00	BOS SOLUTIONS			2	24.00						
MS DIRECTIONAL	4	24.00	PATTERSON			11	132.00						
TOTAL PERSONNEL ON BOARD: 20													
TOTAL HOURS ON BOARD: 240													
MATERIALS/CONSUMPTION													
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND						
DIESEL, RIG FUEL	gal	959	9825	DIESEL, MUD	gal	871	8460						
SAFETY DRILLS													
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL					
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014								
INCIDENT REPORT													
INCIDENTS TYPE	LOST TIME? NO		INCIDENTS DESCRIPTION No incidents reported in last 24 hours.										



## APACHE CORPORATION

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## Daily Drilling Report

<b>WELLBORE NAME</b> UNIVERSITY 2505 2HU								<b>DATE</b> 07-07-2014
<b>API #</b> 4238338545 00		<b>24 HRS PROG</b> 188.0 (ft)		<b>TMD</b> 7,638.0 (ft)		<b>TD TVD</b> 7,637.1 (ft)		<b>REPT NO</b> 18
<b>RIG</b> PATTERSON 173		<b>FIELD NAME</b> SPRABERRY		<b>AUTH TMD</b> 15,550.00 (ft)	<b>PLANNED DOW</b> 22.00 (days)		<b>DFS</b> 15.77 (days)	<b>DOL</b> 17.38 (days)
<b>WB KO DATE</b> 06-22-2014 05:30	<b>WELL SPUD DATE</b> 06-22-2014 05:30	<b>RIG RELEASE</b>	<b>SUPERVISOR 1</b> ERIC TAYLOR / TERRY MOORE			<b>ENGINEER</b> ROY ALAN DE NAPOLI	<b>PBTMD</b>	
<b>REGION</b> PERMIAN		<b>DISTRICT</b> GARDEN CITY - TX CZ		<b>STATE / PROV</b> TEXAS		<b>COUNTY / PARISH</b> REAGAN	<b>RIG PHONE NO</b> 432-242-3877	<b>RIG FAX NO</b>
<b>AFE # 11-13-0422-DH</b>		<b>AFE COSTS</b> DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			<b>DAILY COSTS</b> DHC: 51,771 DCC: CWC: Others: TOTAL: 51,771		<b>CUMULATIVE COSTS</b> DHC: 1,608,923 DCC: CWC: Others: TOTAL: 1,608,923	
<b>DEFAULT DATUM / ELEVATION</b> RKB/RT / 2,647.6 (ft)		<b>LAST SAFETY MEETING</b> 7/7/2014	<b>BLOCK</b>		<b>OCSG#</b>	<b>TARGET FORMATION</b> WOLFCAMP (HORIZONTAL)		<b>BHA HRS OF SERVICE</b>
<b>LAST SURVEY</b> MD 7,577.0 (ft) INC 4.00°		<b>LAST CSG SHOE TEST (EMW)</b>			<b>LAST CASING</b> 9.625 in @ 7,450.0 ft		<b>NEXT CASING</b> 5.500 in @ 15,480.0 ft	
<b>CURRENT OPERATIONS:</b> TIH @ 5350' <b>24 HR SUMMARY:</b> TIH T/ FLOAT/SHOE EQUIP AND DRILL OUT, DRLG CURVE IN PRODUCTION SECTION, POOH FOR LOW ROP <b>24 HR FORECAST:</b> POOH, INSPECT BHA, REPLACE BIT, TIH, SLIP/CUT DRILL LINE, TIH T/7638', DRLG AHEAD IN PRODUCTION SECTION								
OPERATION SUMMARY								
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY	
0:00	0:30	0.50	INT-DRL	TRIP	PN	IRF	REPLACE ST-80 DIES	
0:30	1:30	1.00	INT-DRL	TRIP	PP		P/U SINGLES OFF CATWALK T/7406'	
1:30	2:30	1.00	INT-DRL	DOCMT	PP		TAG CMT @ 7406', DRILL FLOAT COLLAR & DISP HOLE W/10.3 PPG OBM	
2:30	3:30	1.00	INT-DRL	RU_RD	PP		INSTALL ROT RUBBER	
3:30	4:00	0.50	INT-DRL	DOCMT	PP		DRILL CSG SHOE @ 7450'	
4:00	4:00	0.00	P-DRL	M_SPROD	PP		START PRODUCTION @ 7450'	
4:00	6:00	2.00	P-DRL	DRLG	PP		DRILL F/7450 - T/7540 (WOB-20, RPM-30, GPM-550, DIFF-200)	
6:00	6:00	0.00	P-DRL	M_FHzC	PP		START CURVE @ 7540'	
6:00	17:30	11.50	P-DRL	DSLIDE	PP		SLIDE DRILL F/7540 - T/7638 (WOB-20, DIFF-75/150, GPM-450/550)	
17:30	19:00	1.50	P-DRL	CIRCT	PP		LOW ROP, PUMP SWEEP & CIRC HOLE CLEAN	
19:00	20:30	1.50	P-DRL	TRIP	PP		POOH FOR LOW ROP T/5205'	
20:30	22:30	2.00	P-DRL	RIGSER	PN	BRK	RPR WICHITA BREAK	
22:30	0:00	1.50	P-DRL	TRIP	PP		POOH FOR LOW ROP T/1823'	
24.00 = Total Hours Today								
06:00 UPDATE								
0000-0600	00:00 - 02:00 POOH FOR LOW ROP, SURFACE INSPECTION REVELED THE CUTTERS ON THE SHOULDER OF THE BIT WERE ALL BROKEN AND CHIPPED 02:00 - 03:00 INSPECT BHA, C/O BIT & MWD 03:00 - 06:00 TIH T/ 5350'							
BIT DATA								
BIT / RUN	BIT SIZE (in)	MANUFACTURER	TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN	I-O-D-L-B-G-O-R
3 / 1	8.500	Halliburton	MMD55DM	12482118	5x16		7,450.00 / 07-06-2014	1-6-BT-S-X-I-CT-PR



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU											DATE 07-07-2014								
API # 4238338545 00	24 HRS PROG 188.0 (ft)			TMD 7,638.0 (ft)			TD TVD 7,637.1 (ft)			REPT NO 18									
BIT OPERATIONS																			
BIT / RUN 3/1	WOB /28.0	RPM /35	FLOW RATE 586.05	PRESS 2671	P BIT 338	HRS 13.50	24 Hr PROG 188.0	24 HR ROP 13.9	CUM HRS 13.50	CUM PROG 188.0	CUM ROP 13.9								
MOTOR OUTPUT																			
RPV: 0.28rev/gal	ROTARY CURRENT: 0			TOTAL RPM: 164															
LCM:	MUD PROPERTIES MUD TYPE: Oil (Regular)																		
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)						
70.00	22.00/15	7/14	/7.0	/15.00	81.00/19.00								7.80						
Density (ppg)	10.30	ECD (ppg)	10.75	PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O	16.00							
BHA	3	JAR S/N			BHA / HOLE CONDITIONS			JAR HRS		BIT	3								
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH									
(kip)		198.0 (kip)		175.0 (kip)		185.0 (kip)		(ft-lbf)		94.68 (ft)									
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE								
Non-Mag Flex Drill Collar		NMFC				1	30.47	6.750			4-1/2 IF								
Non-Mag Flex Drill Collar		NMFC				1	30.76	6.812			4-1/2 IF								
Orienting Sub		UBHO				1	2.95	6.500			4-1/2 IF								
Float Sub		FLOAT SUB				1	3.04	6.875			4-1/2 IF								
Fixed Bend Housing		2.38 FIXED				1	26.46	6.750			4-1/2 IF								
PDC Bit		8.5 PDC				1	1.00	8.500			4 1/2" REG								
SURVEY																			
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N-S (ft)	+E-W (ft)	V.SECT (ft)	D.L (°/100ft)											
NORMAL	7,577.0	4.00	209.50	7,576.2	-2.57	56.96	1.42	8.23											
NORMAL	7,546.0	1.70	185.00	7,545.3	-1.17	57.53	0.01	7.16											
NORMAL	7,514.0	1.00	71.30	7,513.3	-0.78	57.31	-0.37	1.06											
NORMAL	7,483.0	0.70	80.60	7,482.3	-0.90	56.87	-0.24	0.45											
CASING																			
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH											
00	SURFACE			13.375	48.00		H-40	535.0											
00	INTERMEDIATE 1			9.625	40.00		J-55	7,450.0											
MUD PUMPS/HYDRAULICS				SPP: 2671 (psi)	SPR														
# 1	STROKE 12.00	SPM 70.00	LINER 6.000	FLOW RATE 293.0	AV(DP):	SPM		PPSR											
# 2	12.00	70.00	6.000	293.0	AV(DC): HP: 2.036 (hp/in <sup>2</sup> )														
PERSONNEL DATA																			
COMPANY			QTY	HRS	COMPANY				QTY	HRS									
EDWARDS WELL SERVICE			1	12.00	EPI CONSULTING				1	24.00									
HORIZON MUD			1	24.00	BOS SOLUTIONS				2	24.00									
MS DIRECTIONAL			4	24.00	PATTERSON				11	132.00									
TOTAL PERSONNEL ON BOARD: 20																			
TOTAL HOURS ON BOARD: 240																			
MATERIALS/CONSUMPTION																			
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND												
DIESEL, RIG FUEL	gal	1438	8387	DIESEL, MUD	gal	4006	4454												



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-07-2014				
API # 4238338545 00	24 HRS PROG 188.0 (ft)	TMD 7,638.0 (ft)	TD TVD 7,637.1 (ft)	REPT NO 18				
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 07-08-2014
API # 4238338545 00		24 HRS PROG 176.0 (ft)		TMD 7,814.0 (ft)			TD TVD 7,805.6 (ft)			REPT NO 19		
RIG PATTERSON 173		FIELD NAME SPRABERRY			AUTH TMD 15,485.00 (ft)		PLANNED DOW 22.00 (days)		DFS 16.77 (days)		DOL 18.38 (days)	
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 ERIC TAYLOR / TERRY MOORE				ENGINEER ROY ALAN DE NAPOLI			PBTMD		
REGION PERMIAN		DISTRICT GARDEN CITY - TX CZ			STATE / PROV TEXAS		COUNTY / PARISH REAGAN		RIG PHONE NO 432-242-3877		RIG FAX NO	
AFE # 11-13-0422-DH  DESCRIPTION:		AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 89,320 DCC: CWC: Others: TOTAL: 89,320			CUMULATIVE COSTS DHC: 1,698,243 DCC: CWC: Others: TOTAL: 1,698,243				
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)		LAST SAFETY MEETING 7/8/2014	BLOCK			OCSG#		TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE	
LAST SURVEY MD 7,734.0 (ft) INC 18.00° AZM 195.80°		LAST CSG SHOE TEST (EMW)			LAST CASING 9.625 in @ 7,450.0 ft			NEXT CASING 5.500 in @ 15,480.0 ft				
CURRENT OPERATIONS: SLIDE DRLG IN PRODUCTION CURVE @ 7925'												
24 HR SUMMARY: POOH FOR BIT, TIH TO SHOE, SLIP CUT DRILL LINE, SLIDE DRLG F/7638' T/7814'												
24 HR FORECAST: DRLG CURVE IN PRODUCTION SECTION												
OPERATION SUMMARY												
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY					
0:00	2:00	2.00	P-DRL	TRIP	PP		POH T/BHA					
2:00	3:00	1.00	P-DRL	TRIPBHA	PP		CHANGE BIT & MWD & INSPECT MOTOR, TEST SAME					
3:00	7:30	4.50	P-DRL	TRIP	PP		TIH T/7414'					
7:30	10:30	3.00	P-DRL	CUTDL	PP		SLIP & CUT DRILL LINE					
10:30	16:30	6.00	P-DRL	DSLIDE	PP		SLIDE DRILL F/7638' - T/7744' 106' @ 17.6 FPH, WOB- 12-30K, GPM- 544, DRLG TORQ 3390K, RPM- 30-40, MTRPM 152, OFF BTM SPP 2360, ON BTM 2735					
16:30	19:30	3.00	P-DRL	RIGSER	PN	BRK	REPAIR WICHITA BREAK					
19:30	0:00	4.50	P-DRL	DSLIDE	PP		SLIDE DRILL F/7744' - T/7814' 70' @ 15.5 FPH, 100% SLIDE, WOB- 12-30K, GPM- 500, MTRPM 140, OFF BTM SPP 2095, ON BTM 2430					
24.00 = Total Hours Today												
06:00 UPDATE												
0000-0600		00:00 - 06:00 SLIDE DRILL F/7814' - T/7925' 111' @ 18.5 FPH, 100% SLIDE, WOB- 12-30K, GPM- 500, MTRPM 140, OFF BTM SPP 2150, ON BTM 2430										
SURVEY MD 7828, INC 30.1, AZM 188.6, TVD 7815.40, DLS 13.65, PTB 7877, INC 36.7, AZM 187, MY 13.6, DLN 13.9, 13' BELOW, 6' RIGHT												
BIT DATA												
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R		
3 / 1	8.500	Halliburton		MMD55DM	12482118	5x16		7,450.00 / 07-06-2014		1-6-BT-S-X-I-CT-PR		
4 / 1	8.500	Halliburton		MMD55DM	12401529	5x16		7,638.00 / 07-08-2014		-----		
BIT OPERATIONS												
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP	
4/1	/25.0	/40	502.33	2250	248	10.50	176.0	16.8	10.50	176.0	16.8	
MOTOR OUTPUT												
RPV: 0.28rev/gal				ROTARY CURRENT: 0				TOTAL RPM: 141				



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-08-2014				
API # 4238338545 00	24 HRS PROG 176.0 (ft)			TMD 7,814.0 (ft)			TD TVD 7,805.6 (ft)			REPT NO 19				
LCM: 0.0 MUD PROPERTIES MUD TYPE: Oil (Regular)														
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)	
66.00	22.00/15	8/15	/6.5	/13.00	79.00/21.00						0	3.70		
Density (ppg)	10.30		PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O	18.00			
BHA	4	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT	4			
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH				
(kip)		202.0 (kip)		197.0 (kip)		200.0 (kip)		(ft-lbf)		94.68 (ft)				
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D.	I.D.	CONN SIZE	CONN TYPE			
Non-Mag Flex Drill Collar		NMFC				1	30.47	6.750			4-1/2 IF			
Non-Mag Flex Drill Collar		NMFC				1	30.76	6.812			4-1/2 IF			
MWD Tool		UBHO				1	2.95	6.500			4-1/2 IF			
Float Sub		FLOAT SUB				1	3.04	6.875			4-1/2 IF			
Fixed Bend Housing		2.38 FIXED				1	26.46	6.750			4-1/2 IF			
PDC Bit		MMD55DM				1	1.00	8.500			4 1/2" REG			
SURVEY														
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)						
NORMAL	7,734.0	18.00	195.80	7,729.5	-33.23	47.95	32.26	5.64						
NORMAL	7,702.0	16.20	195.30	7,698.9	-24.17	50.47	23.15	8.76						
NORMAL	7,671.0	13.50	194.20	7,669.0	-16.49	52.50	15.43	9.69						
NORMAL	7,640.0	10.50	195.00	7,638.7	-10.25	54.12	9.16	9.32						
NORMAL	7,608.0	7.70	201.60	7,607.1	-5.44	55.66	4.32	12.19						
CASING														
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH						
00	SURFACE			13.375	48.00		H-40	535.0						
00	INTERMEDIATE 1			9.625	40.00		J-55	7,450.0						
MUD PUMPS/HYDRAULICS				SPP: AV(DP): AV(DC): HP:	2250 (psi) 1.282 (hp/in <sup>2</sup> )	SPR SPM PPSR								
# 1	STROKE 12.00	SPM 60.00	LINER 6.000	FLOW RATE 251.2										
# 2	12.00	60.00	6.000	251.2										
PERSONNEL DATA														
COMPANY			QTY	HRS	COMPANY				QTY	HRS				
EPI CONSULTING			1	24.00	EDWARDS WELL SERVICE				1	12.00				
HORIZON MUD			1	24.00	BOS SOLUTIONS				2	24.00				
MS DIRECTIONAL			4	24.00	PATTERSON				11	132.00				
TOTAL PERSONNEL ON BOARD: 20														
TOTAL HOURS ON BOARD: 240														
MATERIALS/CONSUMPTION														
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND							
DIESEL, RIG FUEL	gal	1121	11,023	DIESEL, MUD	gal	808	7057							



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME				DATE
UNIVERSITY 2505 2HU				07-08-2014

API #	24 HRS PROG	TMD	TD TVD	REPT NO
4238338545 00	176.0 (ft)	7,814.0 (ft)	7,805.6 (ft)	19

## SAFETY DRILLS

RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			

## INCIDENT REPORT

INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.
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## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-10-2014	
API # 4238338545 00		24 HRS PROG 590.0 (ft)		TMD 8,812.0 (ft)			TD TVD 8,032.0 (ft)			REPT NO 21	
RIG PATTERSON 173		FIELD NAME SPRABERRY			AUTH TMD 15,485.00 (ft)	PLANNED DOW 22.00 (days)		DFS 18.77 (days)	DOL 20.38 (days)		
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / TERRY MOORE			ENGINEER ROY ALAN DE NAPOLI			PBTMD		
REGION PERMIAN		DISTRICT GARDEN CITY - TX CZ			STATE / PROV TEXAS	COUNTY / PARISH REAGAN		RIG PHONE NO 432-242-3877	RIG FAX NO		
AFE # 11-13-0422-DH  DESCRIPTION:		AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 119,439 DCC: CWC: Others: TOTAL: 119,439			CUMULATIVE COSTS DHC: 1,878,519 DCC: CWC: Others: TOTAL: 1,878,519			
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)		LAST SAFETY MEETING 7/10/2014	BLOCK			OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)		BHA HRS OF SERVICE		
LAST SURVEY MD 8,990.0 (ft) INC 90.50° AZM 181.20°				LAST CSG SHOE TEST (EMW)			LAST CASING 9.625 in @ 7,450.0 ft	NEXT CASING 5.500 in @ 15,480.0 ft			
CURRENT OPERATIONS: DRLG AHEAD IN THE PRODUCTION LATERAL @ 9330'											
24 HR SUMMARY: FINISH POOH, C/O BHA, TIH W/ LATERAL ASSY, DRLG LATERAL F/8222' T/8812											
24 HR FORECAST: DRLG AHEAD IN PRODUCTION LATERAL											
OPERATION SUMMARY											
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY				
0:00	2:30	2.50	P-DRL	TRIP	PP		FINISH POOH				
2:30	3:30	1.00	P-DRL	TRIPBHA	PP		L/D CURVE ASSY				
3:30	5:30	2.00	P-DRL	TRIPBHA	PP		P/U LATERAL BHA				
5:30	6:00	0.50	P-DRL	TRIPBHA	PP		SCRIBE MWD/MOTOR, TEST SAME, M/U BIT				
6:00	9:30	3.50	P-DRL	TRIP	PP		TIH T/ 3130'				
9:30	10:00	0.50	P-DRL	RIGSER	PP		SERVICE RIG				
10:00	14:00	4.00	P-DRL	TRIP	PP		TIH T/ 8222'				
14:00	0:00	10.00	P-DRL	DRLG	PP		SLIDE/ROTATE F/8222' - T/8812' 590' @ 59 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2430, ON BTM 2656				
24.00 = Total Hours Today											
06:00 UPDATE											
0000-0600	00:00 - 06:00 SLIDE/ROTATE F/8812' - T/9330' 518' @ 86.3 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2430, ON BTM 2790										
LAST MW SURVEY MD 9177, INC 90.7, AZM 181.5, TVD 8027.70, DLS 0.65, 2.7' BELOW, 0.90' LEFT											
BIT DATA											
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R	
5 / 5 4 / 1	8.500 8.500	Halliburton Halliburton		MMD55M MMD55DM	12401529 12401529	5x16 5x16		8,222.00 / 07-10-2014 7,638.00 / 07-08-2014		----- 2-2-WT-A-X-I-NO-TD	
BIT OPERATIONS											
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP
5/5	/40.0	/70	502.33	2656	246	10.00	590.0	59.0	10.00	590.0	59.0
MOTOR OUTPUT											
RPV: 0.28rev/gal	ROTARY CURRENT: 70				TOTAL RPM: 211						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 07-10-2014					
API # 4238338545 00	24 HRS PROG 590.0 (ft)			TMD 8,812.0 (ft)			TD TVD 8,032.0 (ft)			REPT NO 21							
LCM: 0.0 MUD PROPERTIES MUD TYPE: Oil (Regular)																	
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)				
65.00	22.00/15	6/16	/6.5	/13.00	79.00/21.00						0		4.50				
Density (ppg)	10.20		PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O		18.00					
BHA	5	JAR S/N		BHA / HOLE CONDITIONS			JAR HRS		BIT		5						
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH							
(kip)		200.0 (kip)		180.0 (kip)		190.0 (kip)		(ft-lbf)		100.54 (ft)							
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D.	I.D.	CONN SIZE	CONN TYPE						
Non-Mag Flex Drill Collar		NMFC				1	30.58	6.750			4-1/2 IF						
Non-Mag Flex Drill Collar		NMFC				1	29.61	6.812			4-1/2 IF						
Float Sub		FLOAT SUB				1	3.05	6.875			4-1/2 IF						
Integral Blade Stabilizer		NORTRAC STABALIZER				1	6.50	6.875			4-1/2 IF						
Fixed Bend Housing		1.83 FIXED				1	29.80	6.750			4-1/2 IF						
PDC Bit		MMD55M				1	1.00	8.500			4 1/2" REG						
SURVEY																	
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)									
NORMAL	8,990.0	90.50	181.20	8,029.8	-1,151.90	-22.51	1,152.11	0.85									
NORMAL	8,895.0	90.90	181.90	8,031.0	-1,056.94	-19.94	1,057.13	0.48									
NORMAL	8,801.0	90.50	182.10	8,032.1	-963.00	-16.66	963.14	0.32									
NORMAL	8,707.0	90.80	182.10	8,033.2	-869.07	-13.22	869.16	2.13									
NORMAL	8,613.0	88.80	182.10	8,032.9	-775.14	-9.77	775.18	0.80									
NORMAL	8,518.0	89.50	181.80	8,031.5	-680.21	-6.54	680.20	1.18									
NORMAL	8,424.0	89.60	182.90	8,030.7	-586.29	-2.69	586.23	1.82									
NORMAL	8,330.0	88.00	183.50	8,028.8	-492.46	2.56	492.31	0.70									
NORMAL	8,266.0	88.20	183.10	8,026.6	-428.60	6.24	428.39	4.60									
NORMAL	8,237.0	86.90	183.40	8,025.4	-399.68	7.88	399.44	13.92									
NORMAL	8,205.0	82.50	184.10	8,022.4	-367.89	9.97	367.61	16.68									
CASING																	
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH									
00	SURFACE			13.375	48.00		H-40	535.0									
00	INTERMEDIATE 1			9.625	40.00		J-55	7,450.0									
MUD PUMPS/HYDRAULICS					SPP: AV(DP):	2656 (psi)	SPR										
# 1	STROKE 12.00	SPM 60.00	LINER 6.000	FLOW RATE 251.2	AV(DC):		SPM		PPSR								
# 2	12.00	60.00	6.000	251.2	HP:	1.270 (hp/in <sup>2</sup> )											
PERSONNEL DATA																	
COMPANY	QTY		HRS	COMPANY			QTY	HRS									
AIP	1		24.00	HORIZON MUD			1	24.00									
EDWARDS WELL SERVICE	1		24.00	BOS SOLUTIONS			2	24.00									
MS DIRECTIONAL	4		24.00	PATTERSON			11	132.00									
TOTAL PERSONNEL ON BOARD: 20 TOTAL HOURS ON BOARD: 252																	
MATERIALS/CONSUMPTION																	



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-10-2014				
API # 4238338545 00	24 HRS PROG 590.0 (ft)	TMD 8,812.0 (ft)	TD TVD 8,032.0 (ft)	REPT NO 21				
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND	
DIESEL, RIG FUEL	gal	1225	14,379	DIESEL, MUD	gal	434	6294	
OIL BASE MUD	bbl	16	473					
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-10-2014	
API # 4238338545 00		24 HRS PROG 590.0 (ft)		TMD 8,812.0 (ft)			TD TVD 8,032.0 (ft)			REPT NO 21	
RIG PATTERSON 173		FIELD NAME SPRABERRY			AUTH TMD 15,485.00 (ft)	PLANNED DOW 22.00 (days)		DFS 18.77 (days)	DOL 20.38 (days)		
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / TERRY MOORE			ENGINEER ROY ALAN DE NAPOLI			PBTMD		
REGION PERMIAN		DISTRICT GARDEN CITY - TX CZ			STATE / PROV TEXAS	COUNTY / PARISH REAGAN		RIG PHONE NO 432-242-3877	RIG FAX NO		
AFE # 11-13-0422-DH  DESCRIPTION:		AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 119,439 DCC: CWC: Others: TOTAL: 119,439			CUMULATIVE COSTS DHC: 1,878,519 DCC: CWC: Others: TOTAL: 1,878,519			
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)		LAST SAFETY MEETING 7/10/2014	BLOCK			OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)		BHA HRS OF SERVICE		
LAST SURVEY MD 8,990.0 (ft) INC 90.50° AZM 181.20°				LAST CSG SHOE TEST (EMW)			LAST CASING 9.625 in @ 7,450.0 ft	NEXT CASING 5.500 in @ 15,480.0 ft			
CURRENT OPERATIONS: DRLG AHEAD IN THE PRODUCTION LATERAL @ 9330'											
24 HR SUMMARY: FINISH POOH, C/O BHA, TIH W/ LATERAL ASSY, DRLG LATERAL F/8222' T/8812											
24 HR FORECAST: DRLG AHEAD IN PRODUCTION LATERAL											
OPERATION SUMMARY											
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY				
0:00	2:30	2.50	P-DRL	TRIP	PP		FINISH POOH				
2:30	3:30	1.00	P-DRL	TRIPBHA	PP		L/D CURVE ASSY				
3:30	5:30	2.00	P-DRL	TRIPBHA	PP		P/U LATERAL BHA				
5:30	6:00	0.50	P-DRL	TRIPBHA	PP		SCRIBE MWD/MOTOR, TEST SAME, M/U BIT				
6:00	9:30	3.50	P-DRL	TRIP	PP		TIH T/ 3130'				
9:30	10:00	0.50	P-DRL	RIGSER	PP		SERVICE RIG				
10:00	14:00	4.00	P-DRL	TRIP	PP		TIH T/ 8222'				
14:00	0:00	10.00	P-DRL	DRLG	PP		SLIDE/ROTATE F/8222' - T/8812' 590' @ 59 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2430, ON BTM 2656				
24.00 = Total Hours Today											
06:00 UPDATE											
0000-0600	00:00 - 06:00 SLIDE/ROTATE F/8812' - T/9330' 518' @ 86.3 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2430, ON BTM 2790										
LAST MW SURVEY MD 9177, INC 90.7, AZM 181.5, TVD 8027.70, DLS 0.65, 2.7' BELOW, 0.90' LEFT											
BIT DATA											
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R	
5 / 5 4 / 1	8.500 8.500	Halliburton		MMD55M MMD55DM	12401529 12401529	5x16 5x16		8,222.00 / 07-10-2014 7,638.00 / 07-08-2014		----- 2-2-WT-A-X-I-NO-TD	
BIT OPERATIONS											
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP
5/5	/40.0	/70	502.33	2656	246	10.00	590.0	59.0	10.00	590.0	59.0
MOTOR OUTPUT											
RPV: 0.28rev/gal	ROTARY CURRENT: 70				TOTAL RPM: 211						



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU												DATE 07-10-2014						
API # 4238338545 00	24 HRS PROG 590.0 (ft)			TMD 8,812.0 (ft)			TD TVD 8,032.0 (ft)			REPT NO 21								
LCM: 0.0 MUD PROPERTIES MUD TYPE: Oil (Regular)																		
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)					
65.00	22.00/15	6/16	/6.5	/13.00	79.00/21.00						0		4.50					
Density (ppg)	10.20		PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O		18.00						
BHA	5	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT		5						
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH								
(kip)		200.0 (kip)		180.0 (kip)		190.0 (kip)		(ft-lbf)		100.54 (ft)								
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D.	I.D.	CONN SIZE	CONN TYPE							
Non-Mag Flex Drill Collar		NMFC				1	30.58	6.750				4-1/2 IF						
Non-Mag Flex Drill Collar		NMFC				1	29.61	6.812				4-1/2 IF						
Float Sub		FLOAT SUB				1	3.05	6.875				4-1/2 IF						
Integral Blade Stabilizer		NORTRAC STABALIZER				1	6.50	6.875				4-1/2 IF						
Fixed Bend Housing		1.83 FIXED				1	29.80	6.750				4-1/2 IF						
PDC Bit		MMD55M				1	1.00	8.500				4 1/2" REG						
SURVEY																		
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)										
NORMAL	8,990.0	90.50	181.20	8,029.8	-1,151.90	-22.51	1,152.11	0.85										
NORMAL	8,895.0	90.90	181.90	8,031.0	-1,056.94	-19.94	1,057.13	0.48										
NORMAL	8,801.0	90.50	182.10	8,032.1	-963.00	-16.66	963.14	0.32										
NORMAL	8,707.0	90.80	182.10	8,033.2	-869.07	-13.22	869.16	2.13										
NORMAL	8,613.0	88.80	182.10	8,032.9	-775.14	-9.77	775.18	0.80										
NORMAL	8,518.0	89.50	181.80	8,031.5	-680.21	-6.54	680.20	1.18										
NORMAL	8,424.0	89.60	182.90	8,030.7	-586.29	-2.69	586.23	1.82										
NORMAL	8,330.0	88.00	183.50	8,028.8	-492.46	2.56	492.31	0.70										
NORMAL	8,266.0	88.20	183.10	8,026.6	-428.60	6.24	428.39	4.60										
NORMAL	8,237.0	86.90	183.40	8,025.4	-399.68	7.88	399.44	13.92										
NORMAL	8,205.0	82.50	184.10	8,022.4	-367.89	9.97	367.61	16.68										
CASING																		
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH										
00	SURFACE			13.375	48.00		H-40	535.0										
00	INTERMEDIATE 1			9.625	40.00		J-55	7,450.0										
MUD PUMPS/HYDRAULICS					SPP: AV(DP):	2656 (psi)	SPR											
# 1	STROKE 12.00	SPM 60.00	LINER 6.000	FLOW RATE 251.2	AV(DC):		SPM		PPSR									
# 2	12.00	60.00	6.000	251.2	HP:	1.270 (hp/in <sup>2</sup> )												
PERSONNEL DATA																		
COMPANY	QTY		HRS	COMPANY				QTY	HRS									
AIP	1		24.00	HORIZON MUD				1	24.00									
EDWARDS WELL SERVICE	1		24.00	BOS SOLUTIONS				2	24.00									
MS DIRECTIONAL	4		24.00	PATTERSON				11	132.00									
TOTAL PERSONNEL ON BOARD: 20																		
TOTAL HOURS ON BOARD: 252																		
MATERIALS/CONSUMPTION																		



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-10-2014				
API # 4238338545 00	24 HRS PROG 590.0 (ft)	TMD 8,812.0 (ft)	TD TVD 8,032.0 (ft)	REPT NO 21				
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND	
DIESEL, RIG FUEL	gal	1225	14,379	DIESEL, MUD	gal	434	6294	
OIL BASE MUD	bbl	16	473					
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-11-2014											
API # 4238338545 00	24 HRS PROG 1,924.0 (ft)		TMD 10,736.0 (ft)			TD TVD 8,031.8 (ft)			REPT NO 22												
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,485.00 (ft)	PLANNED DOW 22.00 (days)		DFS 19.77 (days)	DOL 21.38 (days)														
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / TERRY MOORE			ENGINEER ROY ALAN DE NAPOLI	PBTMD														
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO														
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 49,874 DCC: CWC: Others: TOTAL: 49,874			CUMULATIVE COSTS DHC: 1,938,643 DCC: CWC: Others: TOTAL: 1,938,643														
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/11/2014	BLOCK		OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE													
LAST SURVEY MD 11,060.0 (ft) INC 90.10° AZM 182.0°	LAST CSG SHOE TEST (EMW)			LAST CASING 9.625 in @ 7,450.0 ft	NEXT CASING 5.500 in @ 15,480.0 ft																
CURRENT OPERATIONS: DRLG PRODUCTION LATERAL @ 11295'																					
24 HR SUMMARY: DRLG PRODUCTION LATERAL F/8812 T/10736																					
24 HR FORECAST: DRLG AHEAD IN PRODUCTION LATERAL																					
OPERATION SUMMARY																					
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY														
0:00	6:00	6.00	P-DRL	DRLG	PP		SLIDE/ROTATE F/8812' - T/9330' 518' @ 86.3 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2430, ON BTM 2790														
6:00	15:00	9.00	P-DRL	DRLG	PP		SLIDE/ROTATE F/9330' - T/10,076' 746' @ 82.8 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2430, ON BTM 2800														
15:00	15:30	0.50	P-DRL	RIGSER	PP		SERVICE RIG														
15:30	0:00	8.50	P-DRL	DRLG	PP		SLIDE/ROTATE F/10076' - T/10736' 660' @ 77.6 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2640, ON BTM 2990														
24.00 = Total Hours Today																					
06:00 UPDATE																					
0000-0600 00:00 - 06:00 SLIDE/ROTATE F/10736' - T/11295' 559' @ 93 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM SPP 2640, ON BTM 2990																					
LAST SURVEY MD 11060, INC 90.1, AZM 182.0, TVD 8032.58, DLS 0.11, 7.5' BELOW, .72' LEFT																					
BIT DATA																					
BIT / RUN	BIT SIZE (in)	MANUFACTURER	TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN	I-O-D-L-B-G-O-R													
5 / 5	8.500	Halliburton	MMD55M	12401529	5x16		8,222.00 / 07-10-2014	-----													
BIT OPERATIONS																					
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG											
5/5	/40.0	/70	502.33	2990	263	23.50	1,924.0	81.9	33.50	2,514.0											
MOTOR OUTPUT																					
RPV: 0.28rev/gal	ROTARY CURRENT: 70				TOTAL RPM: 211																



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-11-2014			
API # 4238338545 00	24 HRS PROG 1,924.0 (ft)		TMD 10,736.0 (ft)			TD TVD 8,031.8 (ft)			REPT NO 22				
LCM: 0.0 MUD PROPERTIES MUD TYPE: Oil (Regular)													
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)
69.00	23.00/13	7/17	/6.1	/13.00	79.00/21.00					0		4.50	
Density (ppg)	10.20		PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O	18.00		
BHA	5	JAR S/N		BHA / HOLE CONDITIONS			JAR HRS		BIT	5			
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH			
(kip)		220.0 (kip)		160.0 (kip)		190.0 (kip)		(ft-lbf)		100.54 (ft)			
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE	CONN TYPE		
Non-Mag Flex Drill Collar		NMFC				1	30.58	6.750			4-1/2 IF		
Non-Mag Flex Drill Collar		NMFC				1	29.61	6.812			4-1/2 IF		
Float Sub		FLOAT SUB				1	3.05	6.875			4-1/2 IF		
Integral Blade Stabilizer		NORTRAC STABALIZER				1	6.50	6.875			4-1/2 IF		
Fixed Bend Housing		1.83 FIXED				1	29.80	6.750			4-1/2 IF		
PDC Bit		MMD55M				1	1.00	8.500			4 1/2" REG		
SURVEY													
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)					
NORMAL	11,060.0	90.10	182.00	8,032.5	-3,221.01	-64.08	3,221.65	0.11					
NORMAL	10,966.0	90.20	182.00	8,032.7	-3,127.07	-60.80	3,127.66	3.10					
NORMAL	10,871.0	89.30	179.20	8,032.3	-3,032.08	-59.80	3,032.67	0.86					
NORMAL	10,777.0	90.00	179.60	8,031.8	-2,938.09	-60.79	2,938.72	1.18					
NORMAL	10,683.0	90.55	180.56	8,032.2	-2,844.09	-60.65	2,844.74	0.98					
NORMAL	10,587.0	90.60	181.50	8,033.2	-2,748.11	-58.93	2,748.74	0.15					
NORMAL	10,493.0	90.70	181.40	8,034.2	-2,654.15	-56.55	2,654.75	1.67					
NORMAL	10,399.0	90.00	182.80	8,034.8	-2,560.22	-53.11	2,560.77	0.77					
NORMAL	10,305.0	90.20	182.10	8,035.0	-2,466.30	-49.09	2,466.79	1.47					
NORMAL	10,210.0	88.80	182.10	8,034.1	-2,371.37	-45.61	2,371.81	0.77					
NORMAL	10,118.0	89.50	182.20	8,032.8	-2,279.45	-42.16	2,279.84	0.74					
NORMAL	10,023.0	89.60	181.50	8,032.0	-2,184.50	-39.09	2,184.85	1.36					
NORMAL	9,929.0	88.60	180.70	8,030.6	-2,090.53	-37.28	2,090.86	0.69					
NORMAL	9,836.0	89.10	180.30	8,028.7	-1,997.56	-36.47	1,997.89	0.11					
NORMAL	9,742.0	89.10	180.40	8,027.2	-1,903.57	-35.90	1,903.91	3.72					
NORMAL	9,647.0	90.80	183.50	8,027.1	-1,808.64	-32.67	1,808.93	1.25					
NORMAL	9,554.0	90.20	182.50	8,027.9	-1,715.77	-27.80	1,715.99	2.07					
NORMAL	9,461.0	89.90	180.60	8,028.0	-1,622.81	-25.28	1,622.99	2.25					
NORMAL	9,366.0	89.50	178.50	8,027.5	-1,527.82	-26.03	1,528.04	1.58					
NORMAL	9,272.0	90.00	179.90	8,027.1	-1,433.83	-27.34	1,434.09	1.84					
NORMAL	9,177.0	90.70	181.50	8,027.7	-1,338.85	-26.18	1,339.10	0.65					
NORMAL	9,084.0	90.70	180.90	8,028.8	-1,245.87	-24.23	1,246.11	0.38					
CASING													
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE	SETTING DEPTH					
00	SURFACE			13.375	48.00		H-40	535.0					
00	INTERMEDIATE 1			9.625	40.00		J-55	7,450.0					
MUD PUMPS/HYDRAULICS				SPP: AV(DP): AV(DC): HP:	2990 (psi) 48.00 1.357 (hp/in <sup>2</sup> )	SPR							
STROKE	SPM	LINER	FLOW RATE	SPM					PPSR				
# 1	12.00	60.00	6.000	251.2									
# 2	12.00	60.00	6.000	251.2									



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-11-2014
API # 4238338545 00	24 HRS PROG 1,924.0 (ft)	TMD 10,736.0 (ft)	TD TVD 8,031.8 (ft)	REPT NO 22
PERSONNEL DATA				
COMPANY AIP EDWARDS WELL SERVICE MS DIRECTIONAL		QTY 1 1 4	HRS 24.00 24.00 24.00	COMPANY HORIZON MUD BOS SOLUTIONS PATTERSON
TOTAL PERSONNEL ON BOARD: 20 TOTAL HOURS ON BOARD: 252				
MATERIALS/CONSUMPTION				
ITEM DIESEL, RIG FUEL	UNITS gal	USAGE 1678	ON HAND 12,701	ITEM DIESEL, MUD
OIL BASE MUD	bbl		493	gal 2103 4191
SAFETY DRILLS				
RAMS (psi) 3000	ANNULARS (psi) 06-25-2014 / 2000	CASING 06-26-2014 / 500	LAST BOP FUNCTION 06-25-2014	LAST BOP PRESSURE TEST 06-25-2014
NEXT BOP PRESS TEST 07-09-2014				
FIRE DRILL				
H2S DRILL				
ABND. DRILL				
INCIDENT REPORT				
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.		



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-13-2014														
API # 4238338545 00	24 HRS PROG 1,318.0 (ft)		TMD 14,126.0 (ft)			TD TVD 8,026.0 (ft)			REPT NO 24															
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,485.00 (ft)	PLANNED DOW 22.00 (days)		DFS 21.77 (days)	DOL 23.38 (days)																	
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / TERRY MOORE			ENGINEER ROY ALAN DE NAPOLI	PBTMD																	
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO																	
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 71,946 DCC: CWC: Others: TOTAL: 71,946			CUMULATIVE COSTS DHC: 2,060,871 DCC: CWC: Others: TOTAL: 2,060,871																	
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/13/2014	BLOCK		OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE																
LAST SURVEY MD 14,365.0 (ft) INC 91.40° AZM 181.80°	LAST CSG SHOE TEST (EMW)			LAST CASING 9.625 in @ 7,450.0 ft		NEXT CASING 5.500 in @ 15,480.0 ft																		
CURRENT OPERATIONS: DRLG AHEAD @ 14470'																								
24 HR SUMMARY: DRGL LATERAL F/12808' - T/13373', RUN CLEAN UP CYCLE, DRLG LATERAL F/13373' - T/14126'																								
24 HR FORECAST: DRLG LATERAL TO TD @ 15483' RUN CLEAN UP CYCLE, LD 5" DP																								
OPERATION SUMMARY																								
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY																	
0:00	7:30	7.50	P-DRL	DRLG	PP		SLIDE/ROTATE F/12808' - T/13373' 565' @ 75.3 FPH, WOB- 25-40K, GPM- 520, MTRPM 146, OFF BTM TQ 9523, OFF BTM SPP 3205, ON BTM 3330																	
7:30	10:30	3.00	P-DRL	CIRC	PP		RUN CLEAN UP CYCLE																	
10:30	13:30	3.00	P-DRL	DRLG	PP		SLIDE/ROTATE F/13373' - T/13561' 188' @ 62.6 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM TQ 6382, OFF BTM SPP 2808, ON BTM 3271																	
13:30	14:30	1.00	P-DRL	RIGSER	PP		SERVICE RIG																	
14:30	0:00	9.50	P-DRL	DRLG	PP		SLIDE/ROTATE F/13561' - T/14126' 556' @ 59.5 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM TQ 9143, OFF BTM SPP 3061, ON BTM 3370																	
24.00 = Total Hours Today																								
06:00 UPDATE																								
0000-0600	00:00 - 06:00 SLIDE/ROTATE F/14126' - T/14470' 344' @ 57.3 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM TQ 9143, OFF BTM SPP 3061, ON BTM 3370																							
SURVEY MD 14365, INC 91.4, AZM 181.8, TVD 8020.94, DLS .27, 8.5' ABOVE, 9.5' LEFT																								
BIT DATA																								
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA	DEPTH IN / DATE IN	I-O-D-L-B-G-O-R																
5 / 5	8.500	Halliburton		MMD55M	12401529	5x16	8,222.00 / 07-10-2014	-----																
BIT OPERATIONS																								
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP													
5/5	/40.0	/70	502.33	3371	246	20.00	1,318.0	65.9	76.50	5,904.0	77.2													
MOTOR OUTPUT																								
RPV: 0.28rev/gal	ROTARY CURRENT: 70			TOTAL RPM: 211																				



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-13-2014				
API # 4238338545 00	24 HRS PROG 1,318.0 (ft)		TMD 14,126.0 (ft)			TD TVD 8,026.0 (ft)			REPT NO 24					
LCM: 0.0 MUD PROPERTIES MUD TYPE: Oil (Regular)														
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)	
69.00	22.00/15	8/16	/5.5	/13.00	79.00/21.00					0		4.40		
Density (ppg)	10.20		PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O	18.00			
BHA	5	JAR S/N		BHA / HOLE CONDITIONS			JAR HRS		BIT	5				
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH				
(kip)		230.0 (kip)		160.0 (kip)		190.0 (kip)		(ft-lbf)		100.54 (ft)				
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D.	I.D.	CONN SIZE	CONN TYPE			
Non-Mag Flex Drill Collar		NMFC				1	30.58	6.750			4-1/2 IF			
Non-Mag Flex Drill Collar		NMFC				1	29.61	6.812			4-1/2 IF			
Float Sub		FLOAT SUB				1	3.05	6.875			4-1/2 IF			
Integral Blade Stabilizer		NORTRAC STABALIZER				1	6.50	6.875			4-1/2 IF			
Fixed Bend Housing		1.83 FIXED				1	29.80	6.750			4-1/2 IF			
PDC Bit		MMD55M				1	1.00	8.500			4 1/2" REG			
SURVEY														
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)						
NORMAL	14,365.0	91.40	181.80	8,020.9	-6,524.97	-121.69	6,526.10	0.27						
NORMAL	14,262.0	91.20	181.60	8,023.2	-6,422.05	-118.64	6,423.13	0.64						
NORMAL	14,168.0	91.20	182.20	8,025.2	-6,328.12	-115.52	6,329.16	0.57						
NORMAL	14,073.0	91.00	181.70	8,027.0	-6,233.19	-112.29	6,234.19	2.28						
NORMAL	13,979.0	89.70	180.00	8,027.6	-6,139.21	-110.90	6,140.20	0.74						
NORMAL	13,885.0	89.70	179.30	8,027.1	-6,045.21	-111.47	6,046.23	1.70						
NORMAL	13,790.0	89.90	180.90	8,026.7	-5,950.22	-111.31	5,951.25	0.44						
NORMAL	13,696.0	90.30	180.80	8,026.9	-5,856.23	-109.91	5,857.25	1.24						
NORMAL	13,602.0	91.30	181.40	8,028.2	-5,762.26	-108.11	5,763.26	0.48						
NORMAL	13,508.0	91.10	181.00	8,030.2	-5,668.30	-106.14	5,669.29	0.75						
NORMAL	13,414.0	91.00	181.70	8,031.9	-5,574.34	-103.92	5,575.30	3.10						
NORMAL	13,320.0	89.90	179.00	8,032.6	-5,480.35	-103.35	5,481.32	0.38						
NORMAL	13,226.0	89.60	178.80	8,032.2	-5,386.37	-105.16	5,387.40	2.34						
CASING														
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE		SETTING DEPTH					
00	SURFACE			13.375	48.00		H-40		535.0					
00	INTERMEDIATE 1			9.625	40.00		J-55		7,450.0					
MUD PUMPS/HYDRAULICS				SPP: AV(DP): AV(DC): HP:	3371 (psi) SPR SPM PPSR									
# 1	STROKE 12.00	SPM 60.00	LINER 6.000	FLOW RATE 251.2										
# 2	12.00	60.00	6.000	251.2										
PERSONNEL DATA														
COMPANY	QTY	HRS	COMPANY	QTY	HRS									
HORIZON MUD	1	24.00	EDWARDS WELL SERVICE	1	24.00									
AIP	1	24.00	BOS SOLUTIONS	2	24.00									
MS DIRECTIONAL	4	24.00	PATTERSON	11	132.00									
TOTAL PERSONNEL ON BOARD: 20 TOTAL HOURS ON BOARD: 252														



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-13-2014				
API # 4238338545 00	24 HRS PROG 1,318.0 (ft)	TMD 14,126.0 (ft)	TD TVD 8,026.0 (ft)	REPT NO 24				
MATERIALS/CONSUMPTION								
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND	
DIESEL, RIG FUEL	gal	3116	10,140	DIESEL, MUD	gal	1221	72	
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-14-2014								
API # 4238338545 00	24 HRS PROG 1,357.0 (ft)		TMD 15,483.0 (ft)			TD TVD 8,013.1 (ft)			REPT NO 25									
RIG PATTERSON 173	FIELD NAME SPRABERRY		AUTH TMD 15,485.00 (ft)	PLANNED DOW 22.00 (days)		DFS 22.77 (days)	DOL 24.38 (days)											
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE	SUPERVISOR 1 RAYMOND DUNLAP / TERRY MOORE			ENGINEER ROY ALAN DE NAPOLI	PBTMD											
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ		STATE / PROV TEXAS		COUNTY / PARISH REAGAN	RIG PHONE NO 432-242-3877	RIG FAX NO											
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500			DAILY COSTS DHC: 52,480 DCC: CWC: Others: TOTAL: 52,480			CUMULATIVE COSTS DHC: 2,113,351 DCC: CWC: Others: TOTAL: 2,113,351											
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/14/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)			BHA HRS OF SERVICE											
LAST SURVEY MD 15,430.0 (ft) INC 90.80° AZM 180.50°	LAST CSG SHOE TEST (EMW)			LAST CASING 9.625 in @ 7,450.0 ft		NEXT CASING 5.500 in @ 15,480.0 ft												
CURRENT OPERATIONS: RUNNING CLEAN UP CYCLE																		
24 HR SUMMARY: DRLG F/14126 T/15483, TD WELL, START CLEAN UP CYCLE																		
24 HR FORECAST: FINISH CLEAN UP CYCLE, POOH T/8666', RUN CLEAN UP CYCLE 400' F/ BOC, L/D 5" DP																		
OPERATION SUMMARY																		
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY											
0:00	11:30	11.50	P-DRL	DRLG	PP		SLIDE/ROTATE F/14126' - T/14787' 661' @ 57.4 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM TQ 9143, OFF BTM SPP 3061, ON BTM 3370											
11:30	12:30	1.00	P-DRL	RIGSER	PP		SERVICE RIG											
12:30	23:30	11.00	P-DRL	DRLG	PP		SLIDE/ROTATE F/14787' - T/15483' 696' @ 63.3 FPH, WOB- 25-40K, GPM- 500, MTRPM 140, OFF BTM TQ 9300, OFF BTM SPP 3250, ON BTM 3433											
23:30	23:30	0.00	P-DRL	M_TDFin	PP		TD WELL @ 15483' MD											
23:30	0:00	0.50	P-DRL	CIRCT	PP		RUN TD CLEANUP CYCLE											
24.00 = Total Hours Today																		
06:00 UPDATE																		
0000-0600 00:00 - 06:00 RUN CLEAN UP CYCLE @ TD 15483'																		
LAST MWD SURVEY, MD 15430, INC 90.8, AZM 180.5, TVD 8013.94, DLS 1.5, 16.8' ABOVE, 30.1' LEFT																		
BIT DATA																		
BIT / RUN	BIT SIZE (in)	MANUFACTURER	TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN		I-O-D-L-B-G-O-R									
4RR2 / 2	8.500	Halliburton	MMD55M	12401529	5x16		8,222.00 / 07-10-2014		-----									
BIT OPERATIONS																		
BIT / RUN	WOB	RPM	FLOW RATE	PRESS	P BIT	HRS	24 Hr PROG	24 HR ROP	CUM HRS	CUM PROG	CUM ROP							
4RR2/2	/38.0	/70	502.33	3212	246	22.50	1,357.0	60.3	99.00	7,261.0	73.3							
MOTOR OUTPUT																		
RPV: 0.28rev/gal			ROTARY CURRENT: 70			TOTAL RPM: 211												



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU										DATE 07-14-2014				
API # 4238338545 00	24 HRS PROG 1,357.0 (ft)		TMD 15,483.0 (ft)			TD TVD 8,013.1 (ft)			REPT NO 25					
LCM: MUD PROPERTIES MUD TYPE: Oil (Regular)														
VIS (s/qt)	PV/YP (cp) / (lbf/100ft <sup>2</sup> )	GELS (lbf/100ft <sup>2</sup> )	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)	
73.00	22.00/15	7/16	/5.3	/13.00	79.00/21.00							4.40		
Density (ppg)	10.20		PP	DAILY COST	0	CUM COST	0	%OIL	69.00	% H2O	18.00			
BHA	5	JAR S/N		BHA / HOLE CONDITIONS			JAR HRS		BIT	4RR2				
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH				
(kip)		230.0 (kip)		140.0 (kip)		190.0 (kip)		(ft-lbf)		100.54 (ft)				
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D.	I.D.	CONN SIZE	CONN TYPE			
Non-Mag Flex Drill Collar		NMFC				1	30.58	6.750			4-1/2 IF			
Non-Mag Flex Drill Collar		NMFC				1	29.61	6.812			4-1/2 IF			
Float Sub		FLOAT SUB				1	3.05	6.875			4-1/2 IF			
Integral Blade Stabilizer		NORTRAC STABALIZER				1	6.50	6.875			4-1/2 IF			
Fixed Bend Housing		1.83 FIXED				1	29.80	6.750			4-1/2 IF			
PDC Bit		MMD55M				1	1.00	8.500			4 1/2" REG			
SURVEY														
TYPE	MD (ft)	DEG (°)	AZI (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	V.SECT (ft)	D.L (°/100ft)						
NORMAL	15,430.0	90.80	180.50	8,013.9	-7,589.79	-122.91	7,590.72	1.50						
NORMAL	15,394.0	90.60	180.00	8,014.3	-7,553.79	-122.76	7,554.73	0.57						
NORMAL	15,300.0	90.40	179.50	8,015.1	-7,459.79	-123.17	7,460.76	1.18						
NORMAL	15,205.0	90.60	180.60	8,016.0	-7,364.80	-123.08	7,365.79	1.15						
NORMAL	15,111.0	90.20	179.60	8,016.6	-7,270.80	-122.92	7,271.81	0.83						
NORMAL	15,017.0	89.70	179.00	8,016.5	-7,176.81	-124.07	7,177.85	0.53						
NORMAL	14,923.0	89.40	178.60	8,015.8	-7,082.83	-126.04	7,083.94	1.48						
NORMAL	14,829.0	89.90	179.90	8,015.2	-6,988.85	-127.27	6,989.99	0.61						
NORMAL	14,734.0	90.20	179.40	8,015.3	-6,893.85	-127.85	6,895.03	1.28						
NORMAL	14,639.0	90.40	180.60	8,015.8	-6,798.85	-127.85	6,800.05	1.06						
NORMAL	14,545.0	91.20	181.20	8,017.1	-6,704.87	-126.37	6,706.06	0.33						
NORMAL	14,450.0	91.10	181.50	8,019.0	-6,609.92	-124.13	6,611.08	0.45						
CASING														
S/T	DESCRIPTION			SIZE	WEIGHT		GRADE		SETTING DEPTH					
00	SURFACE			13.375	48.00		H-40		535.0					
00	INTERMEDIATE 1			9.625	40.00		J-55		7,450.0					
MUD PUMPS/HYDRAULICS					SPP: AV(DP): AV(DC): HP:	3212 (psi) 1.270 (hp/in <sup>2</sup> )	SPR							
# 1	STROKE 12.00	SPM 60.00	LINER 6.000	FLOW RATE 251.2			SPM		PPSR					
# 2	12.00	60.00	6.000	251.2										
PERSONNEL DATA														
COMPANY	QTY	HRS	COMPANY				QTY	HRS						
HORIZON MUD	1	24.00	AIP				1	24.00						
EDWARDS WELL SERVICE	1	24.00	BOS SOLUTIONS				2	24.00						
MS DIRECTIONAL	4	24.00	PATTERSON				11	132.00						
TOTAL PERSONNEL ON BOARD: 20 TOTAL HOURS ON BOARD: 252														
MATERIALS/CONSUMPTION														



APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-14-2014				
API # 4238338545 00	24 HRS PROG 1,357.0 (ft)	TMD 15,483.0 (ft)	TD TVD 8,013.1 (ft)	REPT NO 25				
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND	
DIESEL, RIG FUEL	gal	4389	5751					
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION No incidents reported in last 24 hours.						



## APACHE CORPORATION

## Daily Drilling Report

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WELLBORE NAME UNIVERSITY 2505 2HU		DATE 07-16-2014											
API # 4238338545 00	24 HRS PROG (ft)	TMD 15,483.0 (ft)	TD TVD 8,013.1 (ft)										
RIG PATTERSON 173	FIELD NAME SPRABERRY	AUTH TMD 15,485.00 (ft)	PLANNED DOW 22.00 (days)										
DFS 24.77 (days)	DOL 26.38 (days)												
WB KO DATE 06-22-2014 05:30	WELL SPUD DATE 06-22-2014 05:30	RIG RELEASE RAYMOND DUNLAP / TERRY MOORE	SUPERVISOR 1 ROY ALAN DE NAPOLI										
PBTMD													
REGION PERMIAN	DISTRICT GARDEN CITY - TX CZ	STATE / PROV TEXAS	COUNTY / PARISH REAGAN										
RIG PHONE NO 432-242-3877	RIG FAX NO												
AFE # 11-13-0422-DH  DESCRIPTION:	AFE COSTS  DHC: 2,595,500 DCC: CWC: Others: TOTAL: 2,595,500	DAILY COSTS  DHC: 73,892 DCC: CWC: Others: TOTAL: 73,892	CUMULATIVE COSTS  DHC: 2,271,967 DCC: CWC: Others: TOTAL: 2,271,967										
DEFAULT DATUM / ELEVATION RKB/RT / 2,647.6 (ft)	LAST SAFETY MEETING 7/16/2014	BLOCK	OCSG#	TARGET FORMATION WOLFCAMP (HORIZONTAL)	BHA HRS OF SERVICE								
LAST SURVEY MD 15,430.0 (ft) INC 90.80° AZM 180.50°	LAST CSG SHOE TEST (EMW)		LAST CASING 9.625 in @ 7,450.0 ft	NEXT CASING 5.500 in @ 15,480.0 ft									
CURRENT OPERATIONS: SEE LCM													
24 HR SUMMARY: POOH LD DP AND BHA FROM 7500'. TIH TO 4900 POOH L/D DRILL PIPE .													
24 HR FORECAST: P/U AND RUN 5.5" PRODUCTION CASING													
OPERATION SUMMARY													
From	To	HRS	Op Phase	Op Code	PT/NPT	NPT CODES	ACTIVITY SUMMARY						
0:00	1:30	1.50	P-DRL	PU_LD	PP		POOH L/D 5" DP						
1:30	3:30	2.00	P-DRL	PU_LD	PP		POOH L/D BHA						
3:30	8:30	5.00	P-DRL	TRIP	PP		CLEAN RIG FLOOR, TIH W/STDS F/DERRICK						
8:30	17:30	9.00	P-DRL	TRIP	PP		R/U L/D TRUCK AND POOH L/D DRILL PIPE						
17.50 = Total Hours Today													
06:00 UPDATE													
0000-0600 SEE LCM													
BIT DATA													
BIT / RUN	BIT SIZE (in)	MANUFACTURER		TYPE	SERIAL NO	JETS OR TFA		DEPTH IN / DATE IN			I-O-D-L-B-G-O-R		
4RR2 / 2	8.500	Halliburton		MMD55M	12401529	5x16		8,222.00 / 07-10-2014			1-1-WT-A-X-I-NO-TD		
MOTOR OUTPUT													
RPV: 0.28rev/gal	ROTARY CURRENT:		TOTAL RPM:										
LCM:	MUD PROPERTIES		MUD TYPE:										
VIS (s/qt)	PV/YP (cp) / (lbf/100ft²)	GELS (lbf/100ft²)	WL/HTHP (cc/30min)	FC/T.SOL (32nd") / (%)	OIL/WAT (%)	% SAND/MBT (%) / (lbm/bbl)	pH/Pm	Pf/Mf (cc)	Cl (ppm)	Ca (ppm)	H2S (ppm)	KCL (ppm)	LGS (%)
			PP	DAILY COST	0	CUM COST	0	%OIL			% H2O		
BHA	5	JAR S/N		BHA / HOLE CONDITIONS				JAR HRS		BIT			
BHA WT BELOW JARS		STRING WT UP		STRING WT DN		STRING WT ROT		TORQUE/UNITS		BHA LENGTH			
(kip)		(kip)		(kip)		(kip)		(ft-lbf)		100.54 (ft)			
COMPONENT TYPE		ITEM DESCRIPTION				NO JTS	LENGTH	O.D	I.D	CONN SIZE		CONN TYPE	
Non-Mag Flex Drill Collar		NMFC				1	30.58	6.750				4-1/2 IF	
Non-Mag Flex Drill Collar		NMFC				1	29.61	6.812				4-1/2 IF	



## APACHE CORPORATION

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## Daily Drilling Report

WELLBORE NAME UNIVERSITY 2505 2HU				DATE 07-16-2014				
API # 4238338545 00	24 HRS PROG (ft)	TMD 15,483.0 (ft)	TD TVD 8,013.1 (ft)	REPT NO 27				
Float Sub	FLOAT SUB	1	3.05	6.875	4-1/2 IF			
Integral Blade Stabilizer	NORTRAC STABALIZER	1	6.50	6.875	4-1/2 IF			
Fixed Bend Housing	1.83 FIXED	1	29.80	6.750	4-1/2 IF			
PDC Bit	MMD55M	1	1.00	8.500	4 1/2" REG			
CASING								
S/T	DESCRIPTION	SIZE	WEIGHT	GRADE	SETTING DEPTH			
00	SURFACE	13.375	48.00	H-40	535.0			
00	INTERMEDIATE 1	9.625	40.00	J-55	7,450.0			
PERSONNEL DATA								
COMPANY	QTY	HRS	COMPANY	QTY	HRS			
AIP	1	24.00	TOTAL ENERGY SERVICES	1	24.00			
HORIZON MUD	1	24.00	BOS SOLUTIONS	2	12.00			
MS DIRECTIONAL	4	24.00	PATTERSON	11	132.00			
TOTAL PERSONNEL ON BOARD: 20								
TOTAL HOURS ON BOARD: 240								
MATERIALS/CONSUMPTION								
ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS			
DIESEL, RIG FUEL	gal	400	3913					
SAFETY DRILLS								
RAMS (psi)	ANNULARS (psi)	CASING	LAST BOP FUNCTION	LAST BOP PRESSURE TEST	NEXT BOP PRESS TEST	FIRE DRILL	H2S DRILL	ABND. DRILL
3000	06-25-2014 / 2000	06-26-2014 / 500	06-25-2014	06-25-2014	07-09-2014			
INCIDENT REPORT								
INCIDENTS TYPE	LOST TIME? NO	INCIDENTS DESCRIPTION	No incidents reported in last 24 hours.					



## APACHE CORPORATION

## Daily Land - Orig Comp Report

WELL NAME UNIVERSITY 2505 2HU								DATE 07-17-2014	
Operator APACHE CORPORATION		API 4238338545		GL 2,619.00	TMD 15,483.00	PBTD 0.00	RKB/RT 2,647.60	Working Int % 100.00	Report No 2
Region PERMIAN	District GARDEN CITY - TX CZ		License		Well Supervisor RAYMOND DUNLAP / GLENN WILLIAMS			Engineer / Geologist ROY ALAN DE NAPOLI	
Field SPRABERRY	State		County		Event Code LCM	Event Type LAND-ORIG COMP		Objective	
RIG Name PATTERSON 173 /			RIG PHONE NO 432-242-3877		RIG Fax No		Tool Pusher JACKY BROWN		
AFE #: 11-13-0422-CP		AFE Description:							
AFE Costs 4,964,000		Previous Day Cum 0		Daily Costs 488,985	Cumulative Cost 488,985	AFE Remaining 4,475,015	AFE % 9.85		
Status	NIPPLING DOWN BOP, AND CLEANING PIT								
Comment Summary	RUN 5.5" CGS. R/D CSG CREW R/U CMT CREW AND CIRC. HOLE WHILE WAITING ON CHEMICAL FROM CREST. CHEM ARRIVED @ 2300 HRS MIX SPACER.								
24 HR Forecast	PERFORM CMT JOB AS PER APACHE AND CREST PROCEDURE. NIPPLE DOWN INSTALL WELL HEAD AND RELEASE RIG . PREPARE TO MOVE RIG .								

## 24 HR Operational Comments

From	To	Duration	Operation Description
12:00AM	02:30AM	2.50	CONTINUE RUNNING 5.5" PRODUCTION CSG F/ 5662' T/7400'
02:30AM	04:00AM	1.50	MAKE REPAIR TO EATON BRAKE LEAKING WATER.
04:00AM	02:30PM	10.50	CONTINUE RUNNING 5.5" PRODUCTION CSG F/ 7400" T/15478'
02:30PM	06:00PM	3.50	RIG DOWN CASING CREW STING IN W/ CRT & CIRC. BTMS UP WHILE WAITING ON TAIL CEMENT TO ARRIVE ON LOCATION
06:00PM	06:30PM	0.50	MIX SPACER FOR CEMENTY JOB WHILE REVIEWING JOB PROCEDURE WITH CEMENTERS CO. MAN DETERMINED CEMENTER HAD NOT MIXED PROPER AMOUNT OF WEIGHTED SPACER & DID NOT HAVE MATERIAL ON LOCATION TO DO SO, A CALL WAS MADE TO ENGINEER & CALLS WERE MADE TO GET MATERIAL ON ITS WAY TO LOCATION PER ENGINEERS REQUEST
06:30PM	11:00PM	4.50	RIG UP CIRCULATING IRON & CIRC @ REDUCED PUMP RATE UNTIL MATERIALS ARRIVE ON LOCATION TO MIX CEMENT JOB. BARITE ARRIVED ON LOCATION @ 2300HRS
11:00PM	12:00AM	1.00	MIX CMT SPACER

**Remarks**

0000-0330 SWITCH LINES, TEST T/5000 PSI, PUMP 80 BBLS 11.0 PPG WEIGHTED GTX SPACER, 215 BBLS - 500 SX OF 11.9 PPG CLASS H 50/50 POZ W/ADDITIVES OF LEAD CMT FOLLOWED BY 456 BBLS-1600 SX OF 13.2 PPG CLASS H PREMIUM W/ADDITIVES OF TAIL CMT, SHUT DOWN, WASH LINES, DROP TOP PLUG & DISP.CEMENT W/ 343 BBLS OF BIOCID TREATED H2O, BUMPED PLUG 500 OVER @ 03:33 HRS ON 7/18/14 (2700 FCP @ 4 BPM) 60 BBLS SPACER BACK TO SURFACE.

03:30-0400 RIG DOWN CEMENTERS

04:00-06:00-NIPPLE DOWN FLOWLINE & TURNBUCKLES & READY BOP FOR N/D

## Directional Information

Initial Deviation	Max Dev		Max Dogleg	
7,608	91.4deg at	14,356	16.7 deg at	8,205

## Casing / Tubing Information

Description	Size	Weight	Grade	Depth	Sacks	CMT Top	Packer / SN	TOC Method
SURFACE	13.38	48	H-40	535.03	550	28.60	-2,112.62	Returns at Surface
INTERMEDIATE 1	9.63	40	J-55, N-80	7,450.00	1,440		4,801.68	

## Personnel

Company Name	No of People	Hours Today	Cum / Event
TOTAL ENERGY SERVICES	1	24.0	48.0
AIP	1	24.0	48.0
PATTERSON-UTI DRILLING	13	156.0	168.0
Total:	15	204.0	264.0

## Safety Drills

Rams	Annulars	Casing	Last BOP Test	Next BOP Test
3,000.00 (psi)	2,000.00 (psi)	6/25/2014 / 500.00 (psi)	6/25/2014	7/9/2014

## BULKS

Product	QTY
SPRAYBERRY MUD	0.0
DIESEL, MUD	72.0
DIESEL, RIG FUEL	2,636.0
OIL BASE MUD	393.0



## APACHE CORPORATION

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## Daily Land - Orig Comp Report

## Daily Cost Detail

Account Code	Description	AFE Amount	Previous	Daily Cost	Cumulative	Available	Description
70004	CASING CREW	30,000	0	0	0	30,000	
70006	CEMENT AND CEMENTING SERVICES	110,000	0	90,561	90,561	19,439	CMT PRODUCTION CSG
70009	COMPANY LABOR	20,000	0	0	0	20,000	
70017	CONTRACT LABOR			10,290			LAY DOWN MACHJINE AND CREW
70017	CONTRACT LABOR			11,811			CASING CREW
70017	CONTRACT LABOR			275			HOUSE KEEPER
70017	CONTRACT LABOR			8,375			CRT CREW
70017	CONTRACT LABOR	300,000	0	30,751	30,751	269,249	
70019	CONTRACT DRILLING-DAY/TURNKEY	316,000	0	23,040	23,040	292,960	PATTERSON 173
70021	CONTRACT SUPERVISION			1,650			TERRY MOORE
70021	CONTRACT SUPERVISION			1,650			RAYMOND DUNLAP
70021	CONTRACT SUPERVISION	33,000	0	3,300	3,300	29,700	
70022	DIRECTIONAL DRILLING			0			MS DAY RATE
70025	DRILLING FLUIDS			900			MUD COST
70031	EQUIPMENT RENTAL			125			H2S EQUIPMENT
70031	EQUIPMENT RENTAL			0			SLIDER DAILY RENTAL
70031	EQUIPMENT RENTAL			150			OBM TRANSFER PUMP
70031	EQUIPMENT RENTAL			90			GENERATOR FOR HOUSES
70031	EQUIPMENT RENTAL			225			KATCH KAN
70031	EQUIPMENT RENTAL			400			400 BBL PRE MIX
70031	EQUIPMENT RENTAL			55			SCREEN CLEANER
70031	EQUIPMENT RENTAL			150			ROTATING HEAD
70031	EQUIPMENT RENTAL			20			TRASH TRAILER
70031	EQUIPMENT RENTAL			455			OBM FRAC TANKS & PUMP
70031	EQUIPMENT RENTAL			50			LIGHT TOWER FOR FRACS
70031	EQUIPMENT RENTAL			150			SUPER VAC
70031	EQUIPMENT RENTAL			125			SLOP PUMP
70031	EQUIPMENT RENTAL			70			2 FRAC TANKS FOR FRESH WATER
70031	EQUIPMENT RENTAL			150			POWER WASHER
70031	EQUIPMENT RENTAL			165			3 SLOP FRAC'S
70031	EQUIPMENT RENTAL			154			RENTAL SPOOLS
70031	EQUIPMENT RENTAL			590			PASON EDR/AUTO DRILLER
70031	EQUIPMENT RENTAL			190			INTERNET& INTERCOMS MANGNUM
70031	EQUIPMENT RENTAL			90			TRASH PUMP
70031	EQUIPMENT RENTAL			761			CAMP HOUSING/WATER/SEPTIC/INTE
70031	EQUIPMENT RENTAL	350,000	0	4,165	4,165	345,835	
70034	FORMATION STIMULATION	2,400,000	0	0	0	2,400,000	
70039	ENGR/ GEOLOGICAL-CONTRACTORS/CON			0			MUD LOGGERS
70049	LOGGING	215,000	0	0	0	215,000	
70067	SALT WATER DISPOSAL	300,000	0	0	0	300,000	
70074	TRUCKING AND HAULING	100,000	0	0	0	100,000	
70076	TUBULAR INSPECTION/TESTING	5,000	0	1,531	1,531	3,469	DC REPAIRS
70077	WATER	300,000	0	0	0	300,000	
Total Intangible Cost		4,479,000	0	154,248	154,248	4,324,752	
71032	OTHER SUBSURFACE EQUIPMENT	100,000	0	22,815	22,815	77,185	FRACK SLEAVE AND LABOR FOR RUN
71040	PRODUCTION CASING	315,000	0	311,922	311,922	3,078	PRODUCTION CSG.5.5"
71053	TUBING	55,000	0	0	0	55,000	
71056	WELLHEAD ASSEMBLY	15,000	0	0	0	15,000	
Total Tangible Cost		485,000	0	334,737	334,737	150,263	
Total:		4,964,000	0	488,985	488,985	4,475,015	