

## EP WELLS DAILY OPERATIONS REPORT

Report 12

06/19/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 PW UNIT 1406H
Wellbore	UNIVERSITY 19 PW UNIT 1406H
WBS No/API No	30264949 / 4230133213.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/26/2017	Days on Location	11.54
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	04/30/2017	Days Since Spud	7.00
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 559	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	DENNIS MORGAN	Measured Depth(ft)	11,115.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,092.38
Other Supervisor	TANNER MANUEL / YU LIU	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,793.00 / 2,767.00	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@4,921.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.000in@11,992.00ft
Actual cost to date/AFE	949,340/2,664,436.41	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.36	LOT/FIT EMW(ppg)	
Daily Cost	52,861	Lithology	
		Formation/MD Top	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	10/12/2016	250	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
MAN HRS: 227							

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	11
Last Derrick Inspection	06/15/2017	4		
Last BOP function test	06/15/2017	4		
Last BOP Test	07/06/2017			
Next BOP Test				

## Operations Summary

24 Hour Summary
TIH, INDUCE FLOW, DRILL F/ 11,115' - T/ 11,893'. (TD CURVE)
Update Since Report Time
PUMP CLEAN UP CYCLE, POOH T/ 11072'. DOWNLINK MWD.
24 Hour Forecast
FINISH POOH FORCE FILLING & LAYING DOWN 5" DP. L/D BHA. RUN 7" CASING & CEMENT.

## EP WELLS DAILY OPERATIONS REPORT

Report 12

06/19/2017

Well UNIVERSITY 19 PW UNIT 1406H  
Wellbore UNIVERSITY 19 PW UNIT 1406H

## Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	4.50	INT1	DRL		11,115.00	0		TIH F/ BHA - T/ 1546'.
4:30	1.50	INT1	DRL		11,115.00	0		INDUCE FLOW, PUMP 180BBLs FW THROUGH KILL LINE, THEN PUMP 75 BBLs DOWN DP.
6:00	3.00	INT1	DRL		11,115.00	0		FINISH INDUCING FLOW
9:00	1.50	INT1	DRL		11,255.00	0		SLIDE DRILL F/ 11115' T/ 11255' (140' @ 93 FPH) WOB: 30 K RPM: MOTOR 298 BIT 298 PRESSURE: 2300 PSI FLOW: 600 GPM P/U: 310K S/O: 230K ROT: 270K TORQUE: ON BTM 16 K B/G GAS: 850 UNITS B/U GAS: 1100 UNITS MW: 9.5 MOTOR REV/GAL: 0.497 NO FLARE
10:30	0.50	INT1	DRL		11,285.00	0		ROTATE DRILL F/ 11255' T/ 11285' (30' @ 60 FPH) WOB: 40K RPM: SURF 20 MOTOR 298 BIT 318 PRESSURE: 2300 PSI FLOW: 600 GPM TORQUE: ON BTM 16 K OFF BTM 12 K P/U: 310K S/O: 230K ROT: 270K B/G GAS: 850 UNITS B/U GAS: 1100 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE
11:00	0.50	INT1	DRL		11,343.00	0		SLIDE DRILL F/ 11285' T/ 11343' (58' @ 116 FPH) WOB: 30 K RPM: MOTOR 298 BIT 298 PRESSURE: 2300 PSI FLOW: 600 GPM P/U: 310K S/O: 230K ROT: 270K TORQUE: ON BTM 16 K B/G GAS: 850 UNITS B/U GAS: 1100 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE
11:30	0.50	INT1	DRL		11,384.00	0		ROTATE DRILL F/ 11343' T/ 11384' (41' @ 82 FPH) WOB: 40K RPM: SURF 20 MOTOR 298 BIT 318 PRESSURE: 2300 PSI FLOW: 600 GPM TORQUE: ON BTM 16K OFF BTM 12K P/U: 310K S/O: 230K ROT: 270K B/G GAS: 850 UNITS B/U GAS: 1100 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE
12:00	2.50	INT1	DRL		11,384.00	0		SLIDE DRILL F/ 11384' T/ 11476' (92' @ 37 FPH) WOB: 30 K RPM: MOTOR 298 BIT 298 PRESSURE: 2300 PSI FLOW: 600 GPM P/U: 310K S/O: 230K ROT: 270K TORQUE: ON BTM 16 K B/G GAS: 850 UNITS B/U GAS: 1100 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE
14:30	1.00	INT1	DRL		11,543.00	0		ROTATE DRILL F/ 11476' T/ 11543' (67' @ 34 FPH) WOB: 40K RPM: SURF 20 MOTOR 298 BIT 318 PRESSURE: 2300 PSI FLOW: 600 GPM TORQUE: ON BTM 16K OFF BTM 12K P/U: 310K S/O: 230K ROT: 270K B/G GAS: 1000 UNITS B/U GAS: 1300 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE

## EP WELLS DAILY OPERATIONS REPORT

Report 12

06/19/2017

Well UNIVERSITY 19 PW UNIT 1406H  
Wellbore UNIVERSITY 19 PW UNIT 1406H

## Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
15:30	2.50	INT1	DRL		11,700.00	0		SLIDE DRILL F/ 11543' T/ 11700' (157' @ 63 FPH) WOB: 30 K RPM: MOTOR 298 BIT 298 PRESSURE: 2300 PSI FLOW: 600 GPM P/U: 310K S/O: 230K ROT: 270K TORQUE: ON BTM 16 K B/G GAS: 850 UNITS B/U GAS: 1100 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE
18:00	0.50	INT1	DRL		11,735.00	0		ROTATE DRILL F/ 11700' T/ 11735' (35' @ 70 FPH) WOB: 35K RPM: SURF 20 MOTOR 298 BIT 318 PRESSURE: 3150 PSI FLOW: 600 GPM TORQUE: ON BTM 19K OFF BTM 10K P/U: 310K S/O: 220K ROT: 260K B/G GAS: 2000 UNITS B/U GAS: 2300 UNITS MW: 9.6 MOTOR REV/GAL: 0.497 NO FLARE
18:30	0.50	INT1	DRL		11,790.00	0		SLIDE DRILL F/ 11735' T/ 11790' (55' @ 110 FPH) WOB: 30 K RPM: MOTOR 298 BIT 298 PRESSURE: 2300 PSI FLOW: 600 GPM P/U: 310K S/O: 220K ROT: 270K TORQUE: ON BTM 16 K B/G GAS: 1100 UNITS B/U GAS: 1800 UNITS MW: 9.7 MOTOR REV/GAL: 0.497 NO FLARE
19:00	0.50	INT1	DRL		11,800.00	0		ROTATE DRILL F/ 11790' T/ 11800' (10' @ 20 FPH) WOB: 35K RPM: SURF 20 MOTOR 298 BIT 318 PRESSURE: 3150 PSI FLOW: 600 GPM TORQUE: ON BTM 19K OFF BTM 10K P/U: 310K S/O: 220K ROT: 260K B/G GAS: 1000 UNITS B/U GAS: 2000 UNITS MW: 9.7 MOTOR REV/GAL: 0.497 NO FLARE
19:30	4.00	INT1	DRL		11,968.00	0		SLIDE DRILL F/ 11800' T/ 11968' (168' @ 42 FPH) WOB: 35 K RPM: MOTOR 298 BIT 298 PRESSURE: 2882 PSI FLOW: 600 GPM P/U: 310K S/O: 220K ROT: 270K TORQUE: ON BTM 19K B/G GAS: 1100 UNITS B/U GAS: 1800 UNITS MW: 9.7 MOTOR REV/GAL: 0.497 NO FLARE
23:30	0.50	INT1	DRL		11,983.00	0		ROTATE DRILL F/ 11968' T/ 11983' (15' @ 30 FPH) WOB: 35K RPM: SURF 20 MOTOR 298 BIT 318 PRESSURE: 3150 PSI FLOW: 600 GPM TORQUE: ON BTM 19K OFF BTM 10K P/U: 310K S/O: 220K ROT: 260K B/G GAS: 1000 UNITS B/U GAS: 2000 UNITS MW: 9.7 MOTOR REV/GAL: 0.497 NO FLARE
<b>Total</b>	<b>24.00</b>							

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,845.00	0.50	85.19	10,822.39	347.00	-313.07	-420.92	0.25	PTW MWD+HDGM_2016

## EP WELLS DAILY OPERATIONS REPORT

Report 12

06/19/2017

Well UNIVERSITY 19 PW UNIT 1406H  
Wellbore UNIVERSITY 19 PW UNIT 1406H

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
11,024.00	0.24	154.93	11,001.38	346.73	-312.13	-420.40	0.26	PTW MWD+HDGM_2016
11,024.00	0.24	154.93	11,001.38	346.80	-312.25	-420.50	0.26	PTW MWD+HDGM_2016
11,111.00	1.05	148.48	11,088.38	345.89	-311.64	-419.45	0.93	PTW MWD+HDGM_2016
11,111.00	1.05	148.48	11,088.38	345.96	-311.75	-419.55	0.93	PTW MWD+HDGM_2016

## Fluid Details

Mud type MD (ft) Mud Density (ppg) Vis (s/qt) PV/YP (cp/lbf/100ft²) Gels 10 s/m (lbf/100ft²) API/HTHP WL (cc/30min) FC/HTHP FC (32nd") FL temp. (°F)	NaCl Brine	Oil/Water (%) TS/HGS/LGS (%) Sand (%)  MBT (lbm/bbl) LCM (lbm/bbl) ECD (ppg) H2S (gas unit) KCl (%) Ditch Magnet in Last 24hrs/Cum. (gm)	pH/Pm (cc) Pf/Mf (cc) Ca+ (ppm) Cl- (ppm)  R600/300 (°) R200/100 (°) R6/3 (°)
--	------------	---	--

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
3	8.750	HALLIBURTON	GTD64C			1200069	6x12	11,115.00		-----

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
5" DRILL PIPE	304	9,568.82	5.000		4.276	4 1/2 IF			RIG
HWDP	12	374.06	5.000		2.875	4 1/2 IF			RIG
5" DRILL PIPE	24	1,067.35	5.000		4.276	4 1/2 IF			RIG
X/O SUB	1	3.45	5.000			4 1/2 IF			RIG
FLOAT SUB	1	3.49	6.500		2.875	4-1/2 XH			DR24146
SCREEN SUB	1	3.26	6.250		3.250	4-1/2 XH			DR27729
NMDC	1	32.57	6.280		2.875	4 1/2 XH			PXGFC6501 111
GAP SUB	1	3.60	6.600			4 1/2 IF			VG650136P TS
650 CENTRALIZER COLLAR VELOCITY	1	8.54	6.680			4 1/2 IF			VC650049
650 LANDING SUB VELOCITY	1	3.52	6.630			4 1/2 IF			VL650024
650 X/O SUB VELOCITY	1	1.60	6.500			4 1/2 XH			VX650003
NMPC	1	15.15	6.500		2.880	4 1/2 XH			PXGPC6501 066
PHX MUD MOTOR FBH 4/5 LOBE. STAGE 7 SET @ 2.38°	1	28.69	7.250			4-1/2 XH			24XH-67550 9-PTS
BIT #3 RUN #1 HALLIBURTON GTD64C (6X12's) SN: 1200069	1	0.90	8.750	8.750		4 1/2 REG			1200069

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
06/18/2017 21:30		3	478.83		DRILL 8.75" INTERMEDIATE SECTION

EP WELLS DAILY OPERATIONS REPORT

Report 12      06/19/2017

Well	UNIVERSITY 19 PW UNIT 1406H
Wellbore	UNIVERSITY 19 PW UNIT 1406H

Remarks

DIESEL ON LOCATION: 15600 GAL  
DIESEL DELIVERED: 7500 GAL  
DIESEL USED: 1049 GAL  
LNG USED: 877.06 GAL