

EP WELLS DAILY OPERATIONS REPORT

Report 16

06/23/2017

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	15.54
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	04/30/2017	Days Since Spud	11.00
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 559	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	DENNIS JOHNSON	Measured Depth(ft)	13,776.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,668.94
Other Supervisor	ASHLEY HRIVNAK	24 Hr Progress(ft)	1,793.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,793.00 / 2,767.00	Hole size(in)	
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	1,223,067/2,664,436.41	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.46	LOT/FIT EMW(ppg)	
Daily Cost	66,047	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 GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	10/12/2016	254	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
MAN HOURS: 294							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	06/15/2017	8	JSA's/Toolbox Talks	1
Last BOP function test	06/15/2017	8	Days Since Last Drill	
Last BOP Test	07/06/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
DRILLED THROUGH SHOE TRACK WHILE DISPLACING T/ 13.5 PPG OBM. DRILLED F/ 11,983' T/ 12,969' . DOWNLINKED TOOL THREE TIMES. TROUBLESHOT POSSIBLE PUMP PROBLEMS. DRILLED F/ 12,969'T/ 13,776' (1,793').
Update Since Report Time
DRILLED F/ 13,776' T/ 14,041' @ 04:00.
24 Hour Forecast
DRILL AHEAD.

EP WELLS DAILY OPERATIONS REPORT

Report 16

06/23/2017

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	1.00	MNH1	DCM		11,983.00	0		DRILL THROUGH SHOE TRACK WHILE DISPLACING T/ 13.5 PPG OBM.
1:00	2.50	MNH1	DRL		12,175.00	0		ROTATE DRILL F/ 11,983' - T/ 12,175' (192' @ 76.8 FT/HR) RPM SURFACE 30 MOTOR 240 BIT 270 WOB 22K SPP 6,200 PSI GPM 300 TORQUE ON BTM 11 K TORQUE OFF BTM 5 K P/U 186 K S/O 134 K ROT 162 K MUD 13.4 PPG MOTOR REV: .8 GAS: 719 FLARE: NONE
3:30	0.50	MNH1	SVC		12,175.00	0		RIG SERVICE.
4:00	0.50	MNH1	DRL		12,196.00	0		SLIDE DRILL F/ 12,175' - T/ 12,196' (21' @ 42 FT/HR) RPM MOTOR 240 BIT 240 WOB 20 K SPP 5,550 PSI GPM 300 P/U 186 K S/O 134 K MUD 13.4 PPG MOTOR REV: .8 GAS: 506 FLARE: NONE
4:30	1.50	MNH1	DRL		12,430.00	0		ROTATE DRILL F/ 12,196' - T/ 12,430' (234' @ 156 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,250 PSI GPM 300 TORQUE ON BTM 10 K TORQUE OFF BTM 5 K P/U 186 K S/O 134 K ROT 162 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1700 FLARE: NONE
6:00	2.50	MNH1	DRL		12,760.00	0		ROTATE DRILL F/ 12,430' - T/ 12,760' (330' @ 132 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,300 PSI GPM 300 TORQUE ON BTM 10 K TORQUE OFF BTM 5 K P/U 180 K S/O 150 K ROT 165 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1780 FLARE: NONE
8:30	1.00	MNH1	DRL		12,789.00	0		SLIDE DRILL F/ 12,760' - T/ 12,789' (29' @ 29 FT/HR) RPM MOTOR 240 BIT 240 WOB 30 K SPP 5,600 PSI GPM 300 P/U 205 K S/O 130 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1850 FLARE: NONE
9:30	1.00	MNH1	DRL		12,890.00	0		ROTATE DRILL F/ 12,789' - T/ 12,890' (101' @ 101 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,300 PSI GPM 300 TORQUE ON BTM 10 K TORQUE OFF BTM 5 K P/U 180 K S/O 150 K ROT 165 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1850 FLARE: NONE
10:30	0.50	MNH1	DRL		12,900.00	0		SLIDE DRILL F/ 12,890' - T/ 12,900' (10' @ 20 FT/HR) RPM MOTOR 240 BIT 240 WOB 30 K SPP 5,600 PSI GPM 300

EP WELLS DAILY OPERATIONS REPORT

Report 16

06/23/2017

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
								P/U 205 K S/O 130 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1850 FLARE: NONE
11:00	1.00	MNH1	DRL		12,969.00	0		ROTATE DRILL F/ 12,900' - T/ 12,969' (79' @ 79 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,300 PSI GPM 300 TORQUE ON BTM 10 K TORQUE OFF BTM 5 K P/U 180 K S/O 150 K ROT 165 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1600 FLARE: NONE
12:00	1.00	MNH1	DRL		12,969.00	0		NPT: DOWNLINK TOOL THREE TIMES. TROUBLESHOOT POSSIBLE PUMP PROBLEMS.
13:00	1.50	MNH1	DRL		13,009.00	0		SLIDE DRILL F/ 12,969' - T/ 13,009' (40' @ 26.67 FT/HR) RPM MOTOR 240 BIT 240 WOB 30 K SPP 5,600 PSI GPM 300 P/U 205 K S/O 130 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1750 FLARE: NONE
14:30	2.00	MNH1	DRL		13,238.00	0		ROTATE DRILL F/ 13,009' - T/ 13,238' (229' @ 114.5 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,300 PSI GPM 300 TORQUE ON BTM 10 K TORQUE OFF BTM 5 K P/U 180 K S/O 150 K ROT 165 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1530 FLARE: NONE
16:30	0.50	MNH1	DRL		13,263.00	0		SLIDE DRILL F/ 13,238' - T/ 13,263' (25' @ 50 FT/HR) RPM MOTOR 240 BIT 240 WOB 30 K SPP 5,600 PSI GPM 300 P/U 205 K S/O 130 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1850 FLARE: NONE
17:00	0.50	MNH1	DRL		13,328.00	0		ROTATE DRILL F/ 13,263' - T/ 13,328' (65' @ 130 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,300 PSI GPM 300 TORQUE ON BTM 10 K TORQUE OFF BTM 5 K P/U 180 K S/O 150 K ROT 165 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1530 FLARE: NONE
17:30	0.50	MNH1	SVC		13,328.00	0		RIG SERVICE.
18:00	0.50	MNH1	DRL		13,343.00	0		ROTATE DRILL F/ 13,328' - T/ 13,343' (15' @ 30 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,000 PSI GPM 300 TORQUE ON BTM 9 K TORQUE OFF BTM 5 K P/U 209 K S/O 105 K ROT 163 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1000 FLARE: NONE

EP WELLS DAILY OPERATIONS REPORT

Report 16

06/23/2017

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
18:30	1.00	MNH1	DRL		13,375.00	0		SLIDE DRILL F/ 13,343' - T/ 13,375' (32' @ 45 FT/HR) RPM MOTOR 240 BIT 240 WOB 45 K SPP 5,300 PSI GPM 300 P/U 205 K S/O 105 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1500 FLARE: NONE
19:30	0.50	MNH1	DRL		13,433.00	0		ROTATE DRILL F/ 13,375' - T/ 13,433' (58' @ 116 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 23K SPP 6,000 PSI GPM 300 TORQUE ON BTM 9 K TORQUE OFF BTM 5 K P/U 209 K S/O 105 K ROT 163 K MUD 13.4 PPG MOTOR REV: .8 GAS: 667 FLARE: NONE
20:00	1.00	MNH1	DRL		13,472.00	0		SLIDE DRILL F/ 13,433' - T/ 13,472' (39' @ 39 FT/HR) RPM MOTOR 240 BIT 240 WOB 23 K SPP 5,500 PSI GPM 300 P/U 209 K S/O 112 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1644 FLARE: NONE
21:00	3.00	MNH1	DRL		13,776.00	0		ROTATE DRILL F/ 13,472' - T/ 13,776' (304' @ 101 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 23K SPP 6,000 PSI GPM 300 TORQUE ON BTM 9 K TORQUE OFF BTM 5 K P/U 209 K S/O 115 K ROT 167 K MUD 13.4 PPG MOTOR REV: .8 GAS: 686 FLARE: NONE
Total	24.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
13,368.00	84.54	157.45	11,658.79	-1,514.25	326.93	1,545.14	3.31	PTW MWD+HDGM_2016
13,457.00	86.61	156.87	11,665.65	-1,596.02	361.37	1,633.29	2.41	PTW MWD+HDGM_2016
13,547.00	89.68	160.90	11,668.57	-1,679.91	393.76	1,722.90	5.63	PTW MWD+HDGM_2016
13,637.00	89.67	160.49	11,669.08	-1,764.84	423.51	1,812.77	0.46	PTW MWD+HDGM_2016
13,726.00	90.28	161.28	11,669.12	-1,848.94	452.66	1,901.66	1.12	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	POM (cc)
MD (ft)		TS/HGS/LGS (%)	CaCl2 (%)
Mud Density (ppg)		Sand (%)	Caom/Clom (ppm)
Vis (s/qt)		Oil/Water Ratio (%)	ACT
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	ES (Volts)
API/HTHP WL (cc/30min)		H2S (gas unit)	R600/300 (°)
FC/HTHP FC (32nd")		KCl (%)	R200/100 (°)
WPS (ppm)			R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

EP WELLS DAILY OPERATIONS REPORT

Report 16 06/23/2017

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

Remarks

DIESEL ON LOCATION: 13,954 GAL
DIESEL DELIVERED: 7,588 GAL
DIESEL USED: 6,610 GAL
LNG USED: 0 GAL