

EP WELLS DAILY OPERATIONS REPORT

Report 17

06/24/2017

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	16.54
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	04/30/2017	Days Since Spud	12.00
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)	15,930.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,675.70
Other Supervisor	ASHLEY HRIVNAK	24 Hr Progress(ft)	2,154.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,793.00 / 2,767.00	Hole size(in)	6.125
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.000in@11,968.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@19,578.00ft
Actual cost to date/AFE	1,264,774/2,664,436.41	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.47	LOT/FIT EMW(ppg)	
Daily Cost	48,097	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	255	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
MAN HOURS: 287							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	2
Last Derrick Inspection	06/15/2017	9		
Last BOP function test	06/15/2017	9		
Last BOP Test	07/06/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
DRILLED F/ 13,776' T/ 15,930'.
Update Since Report Time
DRILLED F/ 15,930' T/ 16,237' @ 04:00.
24 Hour Forecast
DRILL AHEAD.

EP WELLS DAILY OPERATIONS REPORT

Report 17

06/24/2017

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	1.50	MNH1	DRL		13,882.00	0		ROTATE DRILL F/ 13,776' - T/ 13,882' (106' @ 70.67 FT/HR) RPM SURFACE 80 MOTOR 240 BIT 320 WOB 22K SPP 6,100 PSI GPM 300 TORQUE ON BTM 9 K TORQUE OFF BTM 5 K P/U 220 K S/O 100 K ROT 167 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1,267 FLARE: NONE
1:30	1.00	MNH1	DRL		13,911.00	0		SLIDE DRILL F/ 13,882' - T/ 13,911' (29' @ 29 FT/HR) RPM MOTOR 240 BIT 240 WOB 16 K SPP 5,160 PSI GPM 300 P/U 228 K S/O 96 K MUD 13.4 PPG MOTOR REV: .8 GAS: 2,359 FLARE: NONE
2:30	1.50	MNH1	DRL		14,043.00	0		ROTATE DRILL F/ 13,911' - T/ 14,043' (132' @ 88 FT/HR) RPM SURFACE 60 MOTOR 226 BIT 286 WOB 24K SPP 6,700 PSI GPM 282 TORQUE ON BTM 14 K TORQUE OFF BTM 5 K P/U 197 K S/O 129 K ROT 164 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1,800 FLARE: NONE
4:00	0.50	MNH1	SVC		14,043.00	0		RIG SERVICE.
4:30	1.50	MNH1	DRL		14,225.00	0		ROTATE DRILL F/ 14,043' - T/ 14,225' (182' @ 121.33 FT/HR) RPM SURFACE 60 MOTOR 226 BIT 286 WOB 24K SPP 5,800 PSI GPM 282 TORQUE ON BTM 14 K TORQUE OFF BTM 5 K P/U 197 K S/O 129 K ROT 164 K MUD 13.4 PPG MOTOR REV: .8 GAS: 1,800 FLARE: NONE
6:00	3.50	MNH1	DRL		14,614.00	0		ROTATE DRILL F/ 14,225' - T/ 14,614' (389' @ 111.14 FT/HR) RPM SURFACE 60 MOTOR 226 BIT 286 WOB 27K SPP 5,500 PSI GPM 282 TORQUE ON BTM 13 K TORQUE OFF BTM 6 K P/U 200 K S/O 135 K ROT 165 K MUD 13.3 PPG MOTOR REV: .8 GAS: 1,500 FLARE: NONE
9:30	3.00	MNH1	DRL		14,953.00	0		ROTATE DRILL F/ 14,614' - T/ 14,953' (339' @ 113 FT/HR) RPM SURFACE 60 MOTOR 226 BIT 286 WOB 27K SPP 5,500 PSI GPM 282 TORQUE ON BTM 13 K TORQUE OFF BTM 6 K P/U 200 K S/O 135 K ROT 165 K MUD 13.5 PPG MOTOR REV: .8 GAS: 2,500 FLARE: NONE
12:30	1.00	MNH1	DRL		14,983.00	0		SLIDE DRILL F/ 14,953' - T/ 14,983' (30' @ 30 FT/HR) RPM MOTOR 226 BIT 226 WOB 30 K SPP 5,600 PSI GPM 282 P/U 220 K S/O 100 K

EP WELLS DAILY OPERATIONS REPORT

Report 17

06/24/2017

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
								MUD 13.5 PPG MOTOR REV: .8 GAS: 2,300 FLARE: NONE
13:30	2.00	MNH1	DRL		15,222.00	0		ROTATE DRILL F/ 14,983' - T/ 15,222' (239' @ 120 FT/HR) RPM SURFACE 75 MOTOR 226 BIT 301 WOB 27K SPP 5,500 PSI GPM 282 TORQUE ON BTM 13 K TORQUE OFF BTM 6 K P/U 200 K S/O 135 K ROT 165 K MUD 13.5 PPG MOTOR REV: .8 GAS: 3,000 FLARE: NONE
15:30	1.50	MNH1	DRL		15,262.00	0		SLIDE DRILL F/ 15,222' - T/ 15,262' (40' @ 40 FT/HR) RPM MOTOR 226 BIT 226 WOB 30 K SPP 5,600 PSI GPM 282 P/U 220 K S/O 100 K MUD 13.5 PPG MOTOR REV: .8 GAS: 2,300 FLARE: NONE
17:00	0.50	MNH1	DRL		15,302.00	0		ROTATE DRILL F/ 15,262' - T/ 15,302' (40' @ 80 FT/HR) RPM SURFACE 75 MOTOR 226 BIT 301 WOB 27K SPP 5,500 PSI GPM 282 TORQUE ON BTM 13 K TORQUE OFF BTM 6 K P/U 200 K S/O 135 K ROT 165 K MUD 13.5 PPG MOTOR REV: .8 GAS: 3,000 FLARE: NONE
17:30	0.50	MNH1	SVC		15,302.00	0		RIG SERVICE.
18:00	3.50	MNH1	DRL		15,681.00	0		ROTATE DRILL F/ 15,302' - T/ 15,681' (379' @ 108.3 FT/HR) RPM SURFACE 65 MOTOR 228 BIT 293 WOB 20K SPP 6,000 PSI GPM 285 TORQUE ON BTM 13 K TORQUE OFF BTM 7 K P/U 223 K S/O 0 K ROT 165 K MUD 13.5+ PPG MOTOR REV: .8 GAS: 4,300 FLARE: NONE
21:30	1.00	MNH1	DRL		15,706.00	0		SLIDE DRILL F/ 15,681' - T/ 15,706' (25' @ 25 FT/HR) RPM MOTOR 228 BIT 228 WOB 31 K SPP 5,500 PSI GPM 285 P/U 223 K S/O 0 K MUD 13.5+ PPG MOTOR REV: .8 GAS: 4,600 FLARE: NONE
22:30	1.50	MNH1	DRL		15,930.00	0		ROTATE DRILL F/ 15,706' - T/ 15,930' (224' @ 149.3 FT/HR) RPM SURFACE 65 MOTOR 228 BIT 293 WOB 22K SPP 6,050 PSI GPM 285 TORQUE ON BTM 13 K TORQUE OFF BTM 7 K P/U 223 K S/O 0 K ROT 162 K MUD 13.5+ PPG MOTOR REV: .8 GAS: 4,000 FLARE: NONE
Total	24.00							

EP WELLS DAILY OPERATIONS REPORT

Report 17

06/24/2017

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
15,521.00	88.80	163.08	11,676.61	-3,587.36	892.72	3,693.73	1.29	PTW MWD+HDGM_2016
15,610.00	91.59	170.64	11,676.31	-3,673.96	912.93	3,782.52	9.05	PTW MWD+HDGM_2016
15,701.00	90.44	165.81	11,674.70	-3,763.00	931.50	3,873.19	5.46	PTW MWD+HDGM_2016
15,790.00	89.21	163.45	11,674.97	-3,848.81	955.08	3,962.17	2.99	PTW MWD+HDGM_2016
15,880.00	89.92	164.47	11,675.65	-3,935.31	979.95	4,052.17	1.38	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)			XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	ES (Volts)
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
WPS (ppm)		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

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
4	6.125	SMITH BITS	X516			JM9909	5x16	11,983.00		-----

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" DP	1	11,226.21	5.000		4.276	XT-39			RIG
SHOCK SUB	1	11.13	5.000		2.000	XT-39			W1838010-2
64 JTS 5" DP	64	2,872.00	5.000		3.340	XT-39			RIG
AGITATOR SHOCK SUB COMBO	1	22.13	5.000		2.000	XT-39			1586707-1/A SA500-013
36 JTS 5" DP	36	1,612.00	5.000		3.340	XT-39			RIG
6" DOGLEG REAMER	1	4.26	6.000		2.750	XT-39			A1-96857
2 JTS 5" DP	2	90.00	5.000		3.340	XT-39			RIG
FLOAT SUB	1	1.58	4.625		2.687	3 1/2 IF			NESFS4752 41
FILTER SUB	1	2.88	4.687		2.250	3 1/2 IF			DR28535
NMDC	1	30.69	4.540		2.687	3 1/2 IF			NESNM4755 98
475 X/O SUB	1	1.67	4.760			3 1/2 IF			VX475041
475 LANDING SUB	1	3.42	5.080			3 1/2 IF			VL475065
475 CENTRALIZER COLLAR ASSY	1	8.37	5.110			3 1/2 IF			VC475029
475 CAP SUB	1	3.77	5.100			3 1/2 IF			VG475096P TS
NMPC	1	13.17	4.687		2.687	3 1/2 IF			NESPC4756 83

EP WELLS DAILY OPERATIONS REPORT

Report 17

06/24/2017

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

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
MUD MOTOR 500 NOV 513	1	25.92	5.470			3 1/2 IF			24XH-51300 1-PTS
RUN #1 BIT #4 6.125" SMITH X516 (5X16'S) SN: JM9909	1	0.80	6.125	6.125		3 1/2 IF			JM9909

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
06/20/2017 17:00		4	129.79		DRILL 6.125" PRODUCTION HOLE SECTION.

Remarks

DIESEL ON LOCATION: 13,761 GAL
DIESEL DELIVERED: 7,500 GAL
DIESEL USED: 7,693 GAL
LNG USED: 0 GAL