

EP WELLS DAILY OPERATIONS REPORT

Report 28

10/07/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 PW UNIT 1804H
Wellbore	UNIVERSITY 19 PW UNIT 1804H
WBS No/API No	30269397 / 4230133264.00

Event Summary

Event Type	Drilling only	Event Start Date	08/09/2017	Days on Location	28.88
Objective	Drill - Wolfcamp	Original Spud Date	08/10/2017	Days Since Spud	27.13
Est. Days	23.00	Contractor	PRECISION		
Work Unit	PRECISION 563	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	KEVIN BERGERON	Measured Depth(ft)	19,039.00
Engineer	ROBERT HAHN	TVD(ft)	11,650.94
Other Supervisor	ROSS GRAHAM	24 Hr Progress(ft)	1,432.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,788.55 / 2,762.90	Hole size(in)	6.125
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.000in@11,261.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@20,210.00ft
Actual cost to date/AFE	2,234,374/2,627,752.00	Current MW / BH EMW(ppg)	13.35/
Actual divided by AFE	0.85	LOT/FIT EMW(ppg)	
Daily Cost	39,206	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	10/31/2016	341	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	28
Last Derrick Inspection	09/15/2017	22		
Last BOP function test	09/25/2017	12		
Last BOP Test	10/16/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
DRILLED FROM 17607' TO 19039' IN LATERAL.
Update Since Report Time
@ 03:00 - DRILLING AHEAD AT 19536'
24 Hour Forecast
DRILL AHEAD IN LATERAL.

EP WELLS DAILY OPERATIONS REPORT

Report 28

10/07/2017

Well UNIVERSITY 19 PW UNIT 1804H
Wellbore UNIVERSITY 19 PW UNIT 1804H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.50	MNH1	DRL		17,621.00	0		SLIDE FROM 17607' TO 17621' (14' @ 9 FPH) WOB: 45-55K PRESSURE & FLOW: 5300 PSI @ 275 GPM RPM: SURFACE 0 MOTOR 220 BIT 220 MW: 13.3 PPG MOTOR: 0.8 RPG GAS: CG 1500 BG 500 FLARE: NONE
1:30	6.50	MNH1	DRL		18,370.00	0		ROTATE FROM 17621' TO 18370' (749' @ 115 FPH) WOB: 25-30K PRESSURE & FLOW: 6300 PSI @ 275 GPM RPM: SURFACE 80 MOTOR 220 BIT 300 TORQUE: ON BOT 13-14K OFF BOT 8K STRING WEIGHT: P/U 250K S/O 100K ROT 160K MW: 13.3 PPG MOTOR: 0.8 RPG GAS: CG 2300 BG 500 FLARE: NONE
8:00	1.00	MNH1	SVC		18,370.00	0		PERFORM DROPS INSPECTION ON DERRICK AND TOPDRIVE.
9:00	5.50	MNH1	DRL		18,907.00	0		ROTATE FROM 18370' TO 18907' (537' @ 97 FPH) WOB: 25-30K PRESSURE & FLOW: 6300 PSI @ 275 GPM RPM: SURFACE 80 MOTOR 220 BIT 300 TORQUE: ON BOT 13-14K OFF BOT 8K STRING WEIGHT: P/U 250K S/O 100K ROT 160K MW: 13.3 PPG MOTOR: 0.8 RPG GAS: CG 3100 BG 500 FLARE: NONE
14:30	4.50	MNH1	DRL		18,946.00	0		SLIDE FROM 18907' TO 18946' (39' @ 9 FPH) WOB: 45-55K PRESSURE & FLOW: 6500 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.3 PPG MOTOR: 0.8 RPG GAS: CG 1500 BG 500 FLARE: NONE
19:00	0.50	MNH1	DRL		19,014.00	0		ROTATE FROM 18946' TO 19014' (68' @ 136 FPH) WOB: 25-30K PRESSURE & FLOW: 6500 PSI @ 275 GPM RPM: SURFACE 80 MOTOR 220 BIT 300 TORQUE: ON BOT 13-14K OFF BOT 8K STRING WEIGHT: P/U 290K S/O 100K ROT 160K MW: 13.3 PPG MOTOR: 0.8 RPG GAS: CG 2600 BG 500 FLARE: NONE
19:30	4.50	MNH1	DRL		19,039.00	0		SLIDE FROM 19014' TO 19039' (25' @ 6 FPH) WOB: 15-30K PRESSURE & FLOW: 5600 PSI @ 275 GPM RPM: SURFACE 0 MOTOR 220 BIT 220 MW: 13.3 PPG MOTOR: 0.8 RPG GAS: CG 500 BG 500 FLARE: NONE
Total	24.00							

EP WELLS DAILY OPERATIONS REPORT

Report 28

10/07/2017

Well UNIVERSITY 19 PW UNIT 1804H
Wellbore UNIVERSITY 19 PW UNIT 1804H

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
18,591.65	88.68	166.02	11,630.78	-5,957.28	2,194.08	-2,716.77	0.71	PTW MWD+HDGM_2016
18,680.65	88.16	166.14	11,633.23	-6,043.63	2,215.48	-2,763.43	0.60	PTW MWD+HDGM_2016
18,770.65	87.45	166.19	11,636.68	-6,130.96	2,236.99	-2,810.72	0.79	PTW MWD+HDGM_2016
18,860.65	86.18	166.10	11,641.68	-6,218.20	2,258.51	-2,857.94	1.41	PTW MWD+HDGM_2016
18,950.65	86.70	166.25	11,647.27	-6,305.42	2,279.97	-2,905.18	0.60	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	58.00/16.00	POM (cc)	5.70 554.0
MD (ft)	18,929.00	TS/HGS/LGS (%)	24.10/17.40/6.70	CaCl2 (%)	
Mud Density (ppg)	13.35	Sand (%)	0.00	Caom/Clom (ppm)	
Vis (s/qt)	64.00	Oil/Water Ratio (%)	78.40/21.60	ACT	
PV/YP (cp/lbf/100ft²)	24.00/12.000	LCM (lbm/bbl) ECD (ppg) H2S (gas unit) KCl (%)	17.610	XS Lime(lbm/bbl)	
Gels 10 s/m (lbf/100ft²)	12.000/14.000			ES (Volts)	
API/HTHP WL (cc/30min)	/10.0			R600/300 (°)	
FC/HTHP FC (32nd")	/4.0			R200/100 (°)	
WPS (ppm)	283,490			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
9	6.125	BAKER HUGHES	DD405T			5273464	5x16	17,027.00		-----

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)
17,621.00	45.0/55.0	0	275.0	5,300.00	96.11	1.81	15.42	1.50	14.00	9.3	16.50	594.00	36.0
18,370.00	25.0/30.0	80	275.0	6,300.00	96.11	1.53	15.42	6.50	749.00	115.2	23.00	1,343.00	58.4
18,907.00	25.0/30.0	80	275.0	6,300.00	96.11	1.53	15.42	5.50	537.00	97.6	28.50	1,880.00	66.0
18,946.00	45.0/55.0	0	300.0	6,500.00	114.38	1.76	20.02	4.50	39.00	8.7	33.00	1,919.00	58.2
19,014.00	25.0/30.0	80	275.0	6,500.00	96.11	1.48	15.42	0.50	68.00	136.0	33.50	1,987.00	59.3
19,039.00	15.0/30.0	0	275.0	5,600.00	96.11	1.72	15.42	4.50	25.00	5.6	38.00	2,012.00	52.9

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DRILL PIPE	457	14,402.98	4.000		3.340	XT-39			RIG
SHOCK SUB	1	11.15	5.000		2.062	XT-39			W1748799-8
(33 STANDS) 4" DRILL PIPE	94	2,962.27	4.000		2.688	XT-39			RIG
SHOCK SUB/AGITATOR	1	22.35	5.000		2.875	XT-39			W1885763-8
(17 STANDS) 4" DRILL PIPE	48	1,525.54	4.000		2.687	XT-39			RIG
CROSSOVER	1	2.94	4.937		2.687	XT-39			SD112640
FILTER SUB	1	5.95	4.750		2.250	3-1/2 IF			SD117021
NMDC	1	30.66	4.750		2.750	3-1/2 IF			SD53425
ACCUMP	1	28.45	4.750		3.750	3-1/2 IF			C2078
NMPC	1	15.04	4.750		2.312	3-1/2 IF			SD3855
FLOAT SUB	1	2.43	4.625		2.250	3-1/2 IF			SD10611
NDS 5" MUD MOTOR, LOBES: 6/7. STAGE: 8.0. SET @ 1.82°	1	28.33	5.000			3-1/2 IF			RY500021
BIT #9 RUN #1 6.125" BAKER DD405T (5X16) SN: 5273464	1	0.91	6.125	6.125		3 -1/2 REG			5273464

EP WELLS DAILY OPERATIONS REPORT

Report 28

10/07/2017

Well UNIVERSITY 19 PW UNIT 1804H
Wellbore UNIVERSITY 19 PW UNIT 1804H

Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
10/05/2017 21:00				9	148.21		DRILL 6.125" PRODUCTION SECTION
MD (ft)	SW Up (kip)	SW Down (kip)	SW Rotn (kip)	Drag (kip)	Tq On Btm (ft-lbf)	Tq Off Btm (ft-lbf)	Footage (ft)
17,621.00	0.0	0.00	0.00	0.00	0.0	0.0	14.00
18,370.00	250.0	100.00	160.00	90.00	14,000.0	8,000.0	749.00
18,907.00	250.0	100.00	160.00	90.00	14,000.0	8,000.0	537.00
18,946.00	0.0	0.00	0.00	0.00	0.0	0.0	39.00
19,014.00	290.0	100.00	160.00	130.00	14,000.0	8,000.0	68.00
19,039.00	0.0	0.00	0.00	0.00	0.0	0.0	25.00

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		JJMMC / F-1600	12.00						
2		JJMMC / F-1600	12.00						

Remarks

FUEL ON HAND: 8801 GALS
FUEL USED: 3625 GALS
FUEL RECEIVED: 0 GAL