EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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	22.88
Objective	Drill - Wolfcamp	Original Spud Date	08/10/2017	Days Since Spud	21.13
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)	13,752.00
Engineer	ROBERT HAHN	TVD(ft)	11,649.99
Other Supervisor	ROSS GRAHAM	24 Hr Progress(ft)	1,482.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,788.55 / 2,762.90	Hole size(in)	6.125
THF Datum			
Daily NPT(hr/%)	0.50/2.08	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	1,857,438/2,627,752.00	Current MW / BH EMW(ppg)	13.15/
Actual divided by AFE	0.71	LOT/FIT EMW(ppg)	
Daily Cost	44,138	Lithology	
		Formation/MD Top	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	
FAC			**GOAL ZERO DAYS**	10/31/2016	335	Safety Card - Unsafe	
Last casing pressure test			**PS BARRIER EVENT**			SSE%	
			PS barrier bowtie review			Last casing pressure(psi)	

Safety Comments:

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	
Last BOP function test	09/15/2017	16	Days Since Last Drill	22
Last BOP Test	09/25/2017	6		
Next BOP Test	10/16/2017			

Operations Summary

24 Hour Summary

DRILL IN LATERAL FROM 12270' TO 13752'.

Update Since Report Time

@ 04:30 - DRILLING AHEAD AT 14,098'

24 Hour Forecast

DRILL AHEAD IN LATERAL.

EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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	0.50	MNH1	DRL		12,287.00	0		ROTATE FROM 12270' TO 12287' (17' @ 34 FPH) WOB: 20-25K PRESSURE & FLOW: 6200 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 10-12K OFF BOT 7K STRING WEIGHT: P/U 200K S/O 140K ROT 170K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
0:30	0.50	MNH1	NOA		12,287.00	1		NPT- NABORS DIRECTIONAL - CHANGE OUT TRANSDUCER.
1:00	0.50	MNH1	DRL		12,360.00	0		ROTATE FROM 12287' TO 12360' (73' @ 146 FPH) WOB: 20-25K PRESSURE & FLOW: 6200 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 10-12K OFF BOT 7K STRING WEIGHT: P/U 200K S/O 140K ROT 170K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
1:30	1.50	MNH1	DRL		12,422.00	0		SLIDE FROM 12360' TO 12422' (62' @ 42 FPH) WOB: 10-20K PRESSURE & FLOW: 5500 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
3:00	0.50	MNH1	DRL		12,463.00	0		ROTATE FROM 12422' TO 12463' (41' @ 82 FPH) WOB: 20-25K PRESSURE & FLOW: 6200 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 10-12K OFF BOT 7K STRING WEIGHT: P/U 200K S/O 140K ROT 170K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
3:30	1.50	MNH1	DRL		12,526.00	0		SLIDE FROM 12463' TO 12526' (63' @ 42 FPH) WOB: 10-20K PRESSURE & FLOW: 5500 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
5:00	0.50	MNH1	SVC		12,526.00	0		RIG SERVICE.
5:30	0.50	MNH1	DRL		12,550.00	0		ROTATE FROM 12526' TO 12550' (24' @ 48 FPH) WOB: 20-30K PRESSURE & FLOW: 6200 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 10-12K OFF BOT 8K STRING WEIGHT: P/U 200K S/O 140K ROT 170K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE

EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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
6:00	1.00	MNH1	DRL		12,612.00	0		SLIDE FROM 12550' TO 12612' (62' @ 62 FPH) WOB: 20-30K PRESSURE & FLOW: 5500 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
7:00	1.00	MNH1	DRL		12,675.00	0		ROTATE FROM 12612' TO 12675' (63' @ 63 FPH) WOB: 20-30K PRESSURE & FLOW: 6200 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 11-12K OFF BOT 8K STRING WEIGHT: P/U 205K S/O 140K ROT 168K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
8:00	1.00	MNH1	DRL		12,719.00	0		SLIDE FROM 12675' TO 12719' (44' @ 44 FPH) WOB: 20-30K PRESSURE & FLOW: 5600 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
9:00	0.50	MNH1	SVC		12,719.00	0		RIG SERVICE.
9:30	2.00	MNH1	DRL		13,000.00	0		ROTATE FROM 12719' TO 13000' (281' @ 140 FPH) WOB: 20-30K PRESSURE & FLOW: 6400 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 12-13K OFF BOT 8K STRING WEIGHT: P/U 210K S/O 135K ROT 168K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
11:30	1.50	MNH1	DRL		13,045.00	0		SLIDE FROM 13000' TO 13045' (45' @ 30 FPH) WOB: 10-15K PRESSURE & FLOW: 5500 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
13:00	0.50	MNH1	DRL		13,090.00	0		ROTATE FROM 13045' TO 13090' (45' @ 90 FPH) WOB: 20-30K PRESSURE & FLOW: 6350 PSI @ 300 GPM RPM: SURFACE 80 MOTOR 240 BIT 320 TORQUE: ON BOT 12-13K OFF BOT 8K STRING WEIGHT: P/U 205K S/O 125K ROT 168K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
13:30	2.50	MNH1	DRL		13,243.00	0		SLIDE FROM 13090' TO 13243' (153' @ 61 FPH) WOB: 20-40K PRESSURE & FLOW: 5700 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240

EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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
								MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
16:00	0.50	MNH1	SVC		13,243.00	0		RIG SERVICE.
16:30	0.50	MNH1	DRL		13,268.00	0		ROTATE FROM 13243' TO 13268' (25' @ 50 FPH) WOB: 20-30K PRESSURE & FLOW: 6300 PSI @ 300 GPM RPM: SURFACE 90 MOTOR 240 BIT 330 TORQUE: ON BOT 13-14K OFF BOT 8K STRING WEIGHT: P/U 205K S/O 125K ROT 168K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
17:00	1.00	MNH1	DRL		13,318.00	0		SLIDE FROM 13268' TO 13318' (50' @ 50 FPH) WOB: 20-40K PRESSURE & FLOW: 5700 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
18:00	1.50	MNH1	DRL		13,543.00	0		ROTATE FROM 13318' TO 13543' (225' @ 150 FPH) WOB: 20-30K PRESSURE & FLOW: 6400 PSI @ 300 GPM RPM: SURFACE 100 MOTOR 240 BIT 340 TORQUE: ON BOT 11-13K OFF BOT 8K STRING WEIGHT: P/U 205K S/O 125K ROT 168K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 450 BG 450 FLARE: NONE
19:30	2.00	MNH1	DRL		13,605.00	0		SLIDE FROM 13543' TO 13605' (62' @ 31 FPH) WOB: 20-40K PRESSURE & FLOW: 5500 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 3900 BG 800 FLARE: NONE
21:30	1.00	MNH1	DRL		13,717.00	0		ROTATE FROM 13605' TO 13717' (112' @ 112 FPH) WOB: 20-30K PRESSURE & FLOW: 6400 PSI @ 300 GPM RPM: SURFACE 100 MOTOR 240 BIT 340 TORQUE: ON BOT 11-13K OFF BOT 8K STRING WEIGHT: P/U 220K S/O 100K ROT 165K MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 3900 BG 800 FLARE: NONE
22:30	1.50	MNH1	DRL		13,752.00	0		SLIDE FROM 13717' TO 13752' (35' @ 23 FPH) WOB: 10K PRESSURE & FLOW: 5600 PSI @ 300 GPM RPM: SURFACE 0 MOTOR 240 BIT 240 MW: 13.2 PPG MOTOR: 0.8 RPG GAS: CG 3900 BG 850 FLARE: NONE

EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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

Total 24.00

NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
10/01/2017 00:30	NABORS DRILLING USA LP	Directional (MWD Measurement While Drilling/gyro)	12,287.00	NOA	EN	MWD Tools	0.50	0.50		OPEN

Description: CHANGE OUT TRANSDUCER **Title:** CHANGE OUT TRANSDUCER

Total **0.50** **0.50**

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
13,383.65	90.03	164.38	11,651.90	-1,000.17	668.52	-245.95	0.95	PTW MWD+HDGM_2016
13,473.65	90.03	166.94	11,651.85	-1,087.36	690.81	-292.59	2.84	PTW MWD+HDGM_2016
13,563.65	90.20	168.11	11,651.67	-1,175.23	710.25	-341.71	1.31	PTW MWD+HDGM_2016
13,652.65	90.23	166.38	11,651.34	-1,262.03	729.90	-389.92	1.94	PTW MWD+HDGM_2016
13,742.65	91.24	167.49	11,650.18	-1,349.69	750.24	-438.26	1.67	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	55.00/19.00	POM (cc)	
MD (ft)	13,256.00	TS/HGS/LGS (%)	23.70/15.70/8.00	CaCl2 (%)	
Mud Density (ppg)	13.15	Sand (%)	0.00	Caom/Clom (ppm)	
Vis (s/qt)	71.00	Oil/Water Ratio (%)	74.30/25.70	ACT	
PV/YP (cp/lbf/100ft²)	27.00/15.000			XS Lime(lbm/bbl)	4.14
Gels 10 s/m (lbf/100ft²)	13.000/15.000	LCM (lbm/bbl)		ES (Volts)	553.0
API/HTHP WL (cc/30min)	/10.0	ECD (ppg)	13.190	R600/300 (°)	
FC/HTHP FC (32nd")	/4.0	H2S (gas unit)		R200/100 (°)	
WPS (ppm)	275,082	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
8	6.125	BAKER HUGHES	T405FTS			5273362	5x15	12,010.00		- - - - - -

EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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

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)
12,287.00	20.0/25.0	80	300.0	6,200.00	146.95	2.37	25.72	0.50	17.00	34.0	5.50	277.00	50.4
12,360.00	20.0/25.0	80	300.0	6,200.00	146.95	2.37	25.72	0.50	73.00	146.0	6.00	350.00	58.3
12,422.00	10.0/20.0	0	300.0	5,500.00	146.95	2.67	25.72	1.50	62.00	41.3	8.00	453.00	56.6
12,463.00	20.0/25.0	80	300.0	6,200.00	146.95	2.37	25.72	0.50	41.00	82.0	8.00	453.00	56.6
12,526.00	10.0/20.0	0	300.0	5,500.00	146.95	2.67	25.72	1.50	63.00	42.0	9.50	516.00	54.3
12,550.00	20.0/30.0	80	300.0	6,200.00	146.95	2.37	25.72	0.50	24.00	48.0	10.00	540.00	54.0
12,612.00	20.0/30.0	0	300.0	5,500.00	146.95	2.67	25.72	1.00	62.00	62.0	11.00	602.00	54.7
12,675.00	20.0/30.0	80	300.0	6,200.00	146.95	2.37	25.72	1.00	63.00	63.0	12.00	665.00	55.4
12,719.00	20.0/30.0	0	300.0	5,600.00	146.95	2.62	25.72	1.00	44.00	44.0	13.00	709.00	54.5
13,000.00	20.0/30.0	80	300.0	6,400.00	146.95	2.30	25.72	2.00	281.00	140.5	15.00	990.00	66.0
13,045.00	10.0/15.0	0	300.0	5,500.00	146.95	2.67	25.72	1.50	45.00	30.0	16.50	1,035.00	62.7
13,090.00	20.0/30.0	80	300.0	6,350.00	146.95	2.31	25.72	0.50	45.00	90.0	17.00	1,080.00	63.5
13,243.00	20.0/40.0	0	300.0	5,700.00	146.95	2.58	25.72	2.50	153.00	61.2	19.50	1,233.00	63.2
13,268.00	20.0/30.0	90	300.0	6,300.00	146.95	2.33	25.72	0.50	25.00	50.0	20.00	1,258.00	62.9
13,318.00	20.0/40.0	0	300.0	5,700.00	146.95	2.58	25.72	1.00	50.00	50.0	21.00	1,308.00	62.3
13,543.00	20.0/30.0	100	300.0	6,400.00	146.95	2.30	25.72	1.50	225.00	150.0	22.50	1,533.00	68.1
13,605.00	20.0/40.0	0	300.0	5,500.00	146.95	2.67	25.72	2.00	62.00	31.0	24.50	1,595.00	65.1
13,717.00	20.0/30.0	100	300.0	6,400.00	146.95	2.30	25.72	1.00	112.00	112.0	25.50	1,707.00	66.9
13,752.00	10.0/10.0	0	300.0	5,600.00	146.95	2.62	25.72	1.50	35.00	23.3	27.00	1,742.00	64.5

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DRILL PIPE	289	9,111.89	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			C4027
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
BICO 5" MUD MOTOR, LOBES: 6/7. STAGE: 8.0. SET @ 1.74°.	1	32.33	5.062			3-1/2 IF			G233
BIT #8 RUN #1 6.125" BAKER T405FTX (5X15) SN: 5273362	1	1.00	6.125	6.125		3 -1/2 REG			5273362

EP WELLS DAILY OPERATIONS REPORT

Report 22 10/01/2017

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
09/30/2017 19:00				8	152.30		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)
12,287.00	200.0	140.00	170.00	30.00	12,000.0	7,000.0	17.00
12,360.00	200.0	140.00	170.00	30.00	12,000.0	7,000.0	73.00
12,422.00	0.0	0.00	0.00	0.00	0.0	0.0	62.00
12,463.00	200.0	140.00	170.00	30.00	12,000.0	7,000.0	41.00
12,526.00	0.0	0.00	0.00	0.00	0.0	0.0	63.00
12,550.00	200.0	140.00	170.00	30.00	12,000.0	8,000.0	24.00
12,612.00	0.0	0.00	0.00	0.00	0.0	0.0	62.00
12,675.00	205.0	140.00	168.00	37.00	12,000.0	8,000.0	63.00
12,719.00	0.0	0.00	0.00	0.00	0.0	0.0	44.00
13,000.00	210.0	135.00	168.00	42.00	13,000.0	8,000.0	281.00
13,045.00	0.0	0.00	0.00	0.00	0.0	0.0	45.00
13,090.00	205.0	125.00	168.00	37.00	13,000.0	8,000.0	45.00
13,243.00	0.0	0.00	0.00	0.00	0.0	0.0	153.00
13,268.00	205.0	125.00	168.00	37.00	14,000.0	8,000.0	25.00
13,318.00	0.0	0.00	0.00	0.00	0.0	0.0	50.00
13,543.00	205.0	125.00	168.00	37.00	13,000.0	8,000.0	225.00
13,605.00	0.0	0.00	0.00	0.00	0.0	0.0	62.00
13,717.00	220.0	100.00	165.00	55.00	13,000.0	8,000.0	112.00
13,752.00	0.0	0.00	0.00	0.00	0.0	0.0	35.00

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: 8800 GALS
FUEL USED: 3834 GALS
FUEL RECEIVED: 0 GAL