

EP WELLS DAILY OPERATIONS REPORT

Report 19

08/10/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 PW UNIT 1407H
Wellbore	UNIVERSITY 19 PW UNIT 1407H
WBS No/API No	30264950 / 4230133203

Event Summary

Event Type	Drilling only	Event Start Date	05/10/2017	Days on Location	18.38
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	05/11/2017	Days Since Spud	15.94
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)	14,991.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,733.24
Other Supervisor	TANNER MANUEL, YU LIU	24 Hr Progress(ft)	771.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,792.70 / 2,766.70	Hole size(in)	6.125
THF Datum			
Daily NPT(hr/%)	8.50/35.42	Last Casing MD	7.000in@12,087.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@
Actual cost to date/AFE	1,682,866/2,726,365.58	Current MW / BH EMW(ppg)	13.60/
Actual divided by AFE	0.62	LOT/FIT EMW(ppg)	
Daily Cost	43,184	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	302	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
NO HSE ISSUES							
MAN HOURS - 285 HRS							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	18
Last Derrick Inspection	05/14/2017	88		
Last BOP function test	05/14/2017	88		
Last BOP Test	06/04/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
TIH, CUT DRILL LINE, ROTATE/SLIDE DRILL F/14,220' T/14,991'
Update Since Report Time
CONTINUE ROTATE/SLIDE DRILL F/14,991' T/15,326'
24 Hour Forecast
CONTINUE DRILL LATERAL SECTION

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	MNH1	BHA		14,220.00	1		NPT-TIH W/BHA, SCRIBE MUD MOTOR, INSPECT FILTER SUB, TIH W/ONE STAND
0:30	1.00	MNH1	SVC		14,220.00	1		NPT-GREASE TOP DRIVE, CLEAN RIG FLOOR
1:30	4.50	MNH1	TIH		14,220.00	1		NPT-TIH F/95' T.11,255', FILL EVERY 30 STANDS
6:00	1.00	MNH1	TIH		14,220.00	1		NPT-TIH F/11,255' T/12,066'
7:00	1.00	MNH1	CUT		14,220.00	0		CUT DRILL LINE 90'
8:00	0.50	MNH1	SVC		14,220.00	0		SERVICCE TOP DRIVE
8:30	1.50	MNH1	TIH		14,220.00	1		NPT-TIH F/12,066' T/14,221'
10:00	2.00	MNH1	DRL		14,321.00	0		ROTATE DRILL F/ 14,220' T/ 14,321' (101' @ 50.5 FPH) WOB: 27K RPM: SURF 75 MOTOR 232 BIT 307 PRESSURE: 5400 PSI FLOW: 290 GPM TORQUE: ON BTM 11K OFF BTM 5K P/U: 200K S/O: 140K ROT: 160K B/G GAS: 650 UNITS B/U GAS: 2300 UNITS MW: 13.5 MOTOR REV/GAL: 0.8 NO FLARE
12:00	1.00	MNH1	DRL		14,341.00	0		SLIDE DRILL F/ 14,321' T/ 14,341'(20' @ 20 FPH) WOB: 35K RPM: MOTOR 232 BIT 232 PRESSURE: 5400 PSI FLOW: 290 GPM P/U: 200K S/O: 140K B/G GAS: 950 UNITS B/U GAS: 2500 UNITS MW: 13.5 MOTOR REV/GAL: 0.8
13:00	3.50	MNH1	DRL		14,690.00	0		ROTATE DRILL F/ 14,341' T/ 14,690' (349' @ 99.7 FPH) WOB: 27K RPM: SURF 75 MOTOR 232 BIT 307 PRESSURE: 5400 PSI FLOW: 290 GPM TORQUE: ON BTM 11K OFF BTM 5K P/U: 200K S/O: 140K ROT: 160K B/G GAS: 650 UNITS B/U GAS: 2300 UNITS MW: 13.5 MOTOR REV/GAL: 0.8 NO FLARE
16:30	1.00	MNH1	DRL		14,730.00	0		SLIDE DRILL F/ 14,690' T/ 14,730'(40' @ 40 FPH) WOB: 35K RPM: MOTOR 232 BIT 232 PRESSURE: 5400 PSI FLOW: 290 GPM P/U: 200K S/O: 140K B/G GAS: 950 UNITS B/U GAS: 2500 UNITS MW: 13.5 MOTOR REV/GAL: 0.8
17:30	0.50	MNH1	DRL		14,759.00	0		ROTATE DRILL F/ 14730' T/ 14759' (29' @ 58 FPH) WOB: 27K RPM: SURF 75 MOTOR 232 BIT 307 PRESSURE: 5400 PSI FLOW: 290 GPM TORQUE: ON BTM 11K OFF BTM 5K P/U: 200K S/O: 140K ROT: 160K B/G GAS: 650 UNITS B/U GAS: 2300 UNITS MW: 13.5 MOTOR REV/GAL: 0.8 NO FLARE
18:00	2.00	MNH1	DRL		14,839.00	0		SLIDE DRILL F/ 14,759' T/ 14,839'(80' @ 40 FPH) WOB: 24K RPM: MOTOR 232 BIT 232 PRESSURE: 5640 PSI FLOW: 290 GPM P/U: 220K S/O: 120K B/G GAS: 700 UNITS B/U GAS: 2500 UNITS MW: 13.5

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								MOTOR REV/GAL: 0.8
20:00	0.50	MNH1	DRL		14,880.00	0		ROTATE DRILL F/ 14,839' T/ 14,880' (41' @ 82 FPH) WOB: 27K RPM: SURF 75 MOTOR 232 BIT 307 PRESSURE: 5400 PSI FLOW: 290 GPM TORQUE: ON BTM 11K OFF BTM 5K P/U: 200K S/O: 140K ROT: 160K B/G GAS: 650 UNITS B/U GAS: 2300 UNITS MW: 13.5 MOTOR REV/GAL: 0.8 NO FLARE
20:30	3.00	MNH1	DRL		14,880.00	0		SLIDE DRILL F/ 14,880' T/ 14,939' (59' @ 19.6 FPH) WOB: 24K RPM: MOTOR 232 BIT 232 PRESSURE: 5640 PSI FLOW: 290 GPM P/U: 220K S/O: 120K B/G GAS: 700 UNITS B/U GAS: 2300 UNITS MW: 13.5 MOTOR REV/GAL: 0.8
23:30	0.50	MNH1	DRL		14,991.00	0		ROTATE DRILL F/ 14,939' T/ 14,991' (52' @ 104 FPH) WOB: 25K RPM: SURF 75 MOTOR 232 BIT 307 PRESSURE: 6240 PSI FLOW: 290 GPM TORQUE: ON BTM 11K OFF BTM 6K P/U: 220K S/O: 120K ROT: 156K B/G GAS: 811 UNITS B/U GAS: 2480 UNITS MW: 13.5 MOTOR REV/GAL: 0.8 NO FLARE
Total	24.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
14,619.00	90.41	171.70	11,729.40	-2,403.82	1,336.75	2,682.28	6.13	PTW MWD_2016
14,708.00	89.75	178.63	11,729.28	-2,492.45	1,344.25	2,769.45	7.82	PTW MWD_2016
14,798.00	90.44	173.29	11,729.13	-2,582.20	1,350.59	2,857.37	5.98	PTW MWD_2016
14,888.00	88.39	169.75	11,730.05	-2,671.19	1,363.86	2,946.51	4.54	PTW MWD_2016
14,978.00	88.10	164.45	11,732.80	-2,758.84	1,383.93	3,036.28	5.89	PTW MWD_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	54.00/18.00	POM (cc)	
MD (ft)	14,332.00	TS/HGS/LGS (%)	26.00//	CaCl2 (%)	
Mud Density (ppg)	13.60	Sand (%)	0.00	Caom/Clom (ppm)	
Vis (s/qt)	80.00	Oil/Water Ratio (%)	75.00/25.00	ACT	
PV/YP (cp/lbf/100ft²)	33.00/15.000			XS Lime(lbm/bbl)	3.88
Gels 10 s/m (lbf/100ft²)	8.000/15.000	LCM (lbm/bbl)	15.500	ES (Volts)	568.0
API/HTHP WL (cc/30min)	0.0/	ECD (ppg)		R600/300 (°)	
FC/HTHP FC (32nd")	0.0/4.0	H2S (gas unit)		R200/100 (°)	
WPS (ppm)	262,742	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
6	6.125	BAKER HUGHES	TD405FX			5271645	5x16	14,220.00		-----

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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)
14,321.00	27.0/27.0	75	290.0	5,400.00	109.29	2.02	18.49	2.00	101.00	50.5	2.00	101.00	50.5
14,341.00	35.0/35.0	0	290.0	5,400.00	109.29	2.02	18.49	1.00	20.00	20.0	3.00	121.00	40.3
14,690.00	27.0/27.0	75	290.0	5,400.00	109.29	2.02	18.49	3.50	349.00	99.7	6.50	470.00	72.3
14,730.00	35.0/35.0	0	290.0	5,400.00	109.29	2.02	18.49	1.00	40.00	40.0	7.50	510.00	68.0
14,759.00	27.0/27.0	75	290.0	5,400.00	109.29	2.02	18.49	0.50	29.00	58.0	8.00	539.00	67.4
14,839.00	24.0/24.0	0	290.0	5,640.00	109.29	1.94	18.49	2.00	80.00	40.0	10.00	619.00	61.9
14,880.00	27.0/27.0	75	290.0	5,400.00	109.29	2.02	18.49	0.50	41.00	82.0	10.50	660.00	62.9
14,939.00	24.0/24.0	0	290.0	5,640.00	109.29	1.94	18.49	3.00	59.00	19.7	13.50	719.00	53.3
14,991.00	25.0/25.0	75	290.0	6,240.00	109.29	1.75	18.49	0.50	52.00	104.0	14.00	771.00	55.1

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DRILL PIPE	327	10,287.07	4.000		3.340	XT-39			RIG
SHOCK SUB	1	11.07	5.000		2.000	XT-39			W1836693-1
64 JTS 4" DP	64	2,872.72	4.000		3.340	XT-39			RIG
AGITATOR	1	22.10	5.000		2.000	XT-39			W1857319-1 /1583003-10
38 JTS 4" DP	38	1,702.77	4.000		3.340	XT-39			RIG
CROSSOVER	1	2.70	4.800		2.630	XT-39			DR28568
FLOAT SUB	1	1.58	4.625		2.688	3 1/2 IF			NESFS4752 41
FILTER SUB	1	2.88	4.688		2.250	3 1/2 IF			DR20599
NMDC	1	30.12	4.540		2.688	3 1/2 IF			NESNM4755 61
475 GAP SUB	1	3.78	5.100			3 1/2 IF			VG475082P TS
475 CENTRALIZER COLLAR ASSY	1	8.35	5.110			3 1/2 IF			VC475031
475 LANDING SUB	1	3.42	5.080			3 1/2 IF			VL475079
475 X/O SUB	1	1.64	4.760			3 1/2 IF			VX475044
NMPC	1	13.95	4.688		2.688	3 1/2 IF			NESPC4754 036
5" PHX FBH MUD MOTOR 6/7 LOBE. STAGE 6.4. SET @ 1.75°	1	25.91	5.020			3 1/2 IF			24XH-51303 0-PTS
BIT #6 RUN #1 6.125" BAKER TD405FX (5X16'S) SN: 5271645	1	0.94	6.125	6.125		3 1/2 REG			5271645

Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
08/09/2017 23:30				6	128.44		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)
14,321.00	200.0	140.00	160.00	40.00	11,000.0	5,000.0	101.00
14,341.00	200.0	140.00	0.00	200.00	0.0	0.0	20.00
14,690.00	200.0	140.00	160.00	40.00	11,000.0	5,000.0	349.00
14,730.00	200.0	140.00	0.00	200.00	0.0	0.0	40.00
14,759.00	200.0	140.00	160.00	40.00	11,000.0	5,000.0	29.00
14,839.00	220.0	120.00	0.00	220.00	0.0	0.0	80.00
14,880.00	200.0	140.00	160.00	40.00	11,000.0	5,000.0	41.00
14,939.00	220.0	120.00	0.00	220.00	0.0	0.0	59.00
14,991.00	220.0	120.00	156.00	64.00	11,000.0	6,000.0	52.00

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Well UNIVERSITY 19 PW UNIT 1407H
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Remarks

DIESEL ON LOCATION: 11554 GAL
DIESEL DELIVERED: 0 GAL
DIESEL USED: 2400 GAL
LNG USED: 557.14 GAL