

EP WELLS DAILY OPERATIONS REPORT

Report 18

06/25/2017

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	17.54
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	04/30/2017	Days Since Spud	13.00
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)	18,279.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,692.99
Other Supervisor	ASHLEY HRIVNAK	24 Hr Progress(ft)	2,349.00
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	1,341,884/2,664,436.41	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.50	LOT/FIT EMW(ppg)	
Daily Cost	77,110	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	256	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
MAN HOURS: 296							

Drills

Drill Category	Drill Type	Detection (sec)	Complete (sec)	Crew drilled	Pass / Fail	PIC	Comments
Well Control Crew	BOP			Day	Pass		

HSE Drills

Drills/Tests	Date	Days Since Last	
Last Derrick Inspection	06/15/2017	10	JSA's/Toolbox Talks Days Since Last Drill
Last BOP function test	06/15/2017	10	
Last BOP Test	07/06/2017		
Next BOP Test			

Operations Summary

24 Hour Summary
DRILLED F/ 15,930' T/ 18,279'.
Update Since Report Time
DRILLED F/ 18,279' T/ 18,620' @ 04:00.
24 Hour Forecast

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DRILL AHEAD TO TD. PUMP CLEAN UP CYCLES. POOH.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	MNH1	DRL		16,120.00	0		ROTATE DRILL F/ 15,930' - T/ 16,120' (190' @ 95 FT/HR) RPM SURFACE 65 MOTOR 228 BIT 293 WOB 24K SPP 6,100 PSI GPM 285 TORQUE ON BTM 12 K TORQUE OFF BTM 7 K P/U 235 K S/O 0 K ROT 163 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,271 FLARE: NONE
2:00	1.00	MNH1	DRL		16,154.00	0		SLIDE DRILL F/ 16,120' - T/ 16,154' (34' @ 34 FT/HR) RPM MOTOR 228 BIT 228 WOB 30 K SPP 5,750 PSI GPM 285 P/U 230 K S/O 0 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,271 FLARE: NONE
3:00	1.00	MNH1	DRL		16,289.00	0		ROTATE DRILL F/ 16,154' - T/ 16,289' (135' @ 135 FT/HR) RPM SURFACE 65 MOTOR 228 BIT 293 WOB 24K SPP 6,175 PSI GPM 285 TORQUE ON BTM 12 K TORQUE OFF BTM 8 K P/U 230 K S/O 0 K ROT 163 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,800 FLARE: NONE
4:00	0.50	MNH1	SVC		16,289.00	0		RIG SERVICE.
4:30	1.50	MNH1	DRL		16,469.00	0		ROTATE DRILL F/ 16,289' - T/ 16,469' (180' @ 120 FT/HR) RPM SURFACE 65 MOTOR 228 BIT 293 WOB 25K SPP 6,175 PSI GPM 285 TORQUE ON BTM 13 K TORQUE OFF BTM 8 K P/U 230 K S/O 0 K ROT 163 K MUD 13.6 PPG MOTOR REV: .8 GAS: 4,800 FLARE: NONE
6:00	3.00	MNH1	DRL		16,753.00	0		ROTATE DRILL F/ 16,469' - T/ 16,753' (284' @ 94.67 FT/HR) RPM SURFACE 65 MOTOR 226 BIT 291 WOB 28K SPP 6,400 PSI GPM 282 TORQUE ON BTM 14 K TORQUE OFF BTM 7 K P/U 230 K S/O 0 K ROT 163 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,900 FLARE: NONE
9:00	1.00	MNH1	DRL		16,788.00	0		SLIDE DRILL F/ 16,753' - T/ 16,788' (35' @ 35 FT/HR) RPM MOTOR 226 BIT 226 WOB 32 K SPP 5,800 PSI GPM 282 P/U 250 K S/O 0 K MUD 13.6 PPG MOTOR REV: .8 GAS: 2,800 FLARE: NONE
10:00	2.50	MNH1	DRL		17,020.00	0		ROTATE DRILL F/ 16,788' - T/ 17,020' (232' @ 92.8 FT/HR) RPM SURFACE 65 MOTOR 226 BIT 291 WOB 28K SPP 6,400 PSI GPM 282 TORQUE ON BTM 14 K TORQUE OFF BTM 7 K P/U 230 K S/O 0 K ROT 163 K MUD 13.6 PPG

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								MOTOR REV: .8 GAS: 3,900 FLARE: NONE
12:30	1.00	MNH1	DRL		17,060.00	0		SLIDE DRILL F/ 17,020' - T/ 17,060' (40' @ 40 FT/HR) RPM MOTOR 226 BIT 226 WOB 32 K SPP 5,800 PSI GPM 282 P/U 250 K S/O 0 K MUD 13.6 PPG MOTOR REV: .8 GAS: 2,800 FLARE: NONE
13:30	3.00	MNH1	DRL		17,456.00	0		ROTATE DRILL F/ 17,060' - T/ 17,456' (396' @ 132 FT/HR) RPM SURFACE 65 MOTOR 226 BIT 291 WOB 28K SPP 6,400 PSI GPM 282 TORQUE ON BTM 14 K TORQUE OFF BTM 7 K P/U 235 K S/O 0 K ROT 163 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,900 FLARE: NONE
16:30	0.50	MNH1	DRL		17,456.00	0		RIG SERVICE.
17:00	1.00	MNH1	DRL		17,546.00	0		ROTATE DRILL F/ 17,456' - T/ 17,546' (90' @ 90 FT/HR) RPM SURFACE 65 MOTOR 226 BIT 291 WOB 28K SPP 6,400 PSI GPM 282 TORQUE ON BTM 14 K TORQUE OFF BTM 7 K P/U 235 K S/O 0 K ROT 163 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,900 FLARE: NONE
18:00	6.00	MNH1	DRL		18,276.00	0		ROTATE DRILL F/ 17,546' - T/ 18,276' (730' @ 121.67 FT/HR) RPM SURFACE 65 MOTOR 228 BIT 293 WOB 27K SPP 6,500 PSI GPM 285 TORQUE ON BTM 16 K TORQUE OFF BTM 8 K P/U 267 K S/O 0 K ROT 157 K MUD 13.6 PPG MOTOR REV: .8 GAS: 4,750 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
17,855.00	89.65	166.02	11,688.12	-5,846.36	1,477.10	6,025.94	0.91	PTW MWD+HDGM_2016
17,945.00	89.17	166.16	11,689.04	-5,933.72	1,498.73	6,115.86	0.56	PTW MWD+HDGM_2016
18,035.00	89.14	165.77	11,690.37	-6,021.02	1,520.56	6,205.78	0.43	PTW MWD+HDGM_2016
18,124.00	89.11	166.39	11,691.73	-6,107.40	1,541.96	6,294.69	0.70	PTW MWD+HDGM_2016
18,214.00	89.76	168.41	11,692.62	-6,195.22	1,561.60	6,384.49	2.36	PTW MWD+HDGM_2016

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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/100ft ²)		LCM (lbm/bbl)	XS Lime(lbm/bbl)
Gels 10 s/m (lbf/100ft ²)		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)	

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	13,575.21	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
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.

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Remarks

DIESEL ON LOCATION: 15,105 GAL
DIESEL DELIVERED: 7,500 GAL
DIESEL USED: 6,156 GAL
LNG USED: 0 GAL