

EP WELLS DAILY OPERATIONS REPORT

Report 19

06/26/2017

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	18.54
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	04/30/2017	Days Since Spud	14.00
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)	19,615.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,698.51
Other Supervisor	ASHLEY HRIVNAK	24 Hr Progress(ft)	1,336.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,793.00 / 2,767.00	Hole size(in)	
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	1,396,043/2,664,436.41	Current MW / BH EMW(ppg)	13.80/
Actual divided by AFE	0.52	LOT/FIT EMW(ppg)	
Daily Cost	54,103	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	257	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
MAN HOURS: 298							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	06/15/2017	11	JSA's/Toolbox Talks	1
Last BOP function test	06/15/2017	11	Days Since Last Drill	
Last BOP Test	07/06/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
DRILLED F/ 18,279' T/ 19,615'. PUMPED CLEAN UP CYCLES. POOH WHILE BACKREAMING AND PUMPING F/ 19,251' 17,057'.
Update Since Report Time
POOH WHILE BACKREAMING AND PUMPING F/ 17,057' T/ 15,277'.
24 Hour Forecast
POOH. L/D BHA. R/U CASING EQUIPMENT. RUN 4.5" LINER.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.50	MNH1	DRL		18,312.00	0		SLIDE DRILL F/ 18,279' - T/ 18,312' (33' @ 22 FT/HR) RPM MOTOR 228 BIT 228 WOB 31 K SPP 6,000 PSI GPM 284 P/U 269 K S/O 0 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,925 FLARE: NONE
1:30	4.00	MNH1	DRL		18,803.00	0		ROTATE DRILL F/ 18,312' - T/ 18,803' (491' @ 122.75 FT/HR) RPM SURFACE 65 MOTOR 219 BIT 284 WOB 28K SPP 6,300 PSI GPM 274 TORQUE ON BTM 19 K TORQUE OFF BTM 8 K P/U 278 K S/O 0 K ROT 157 K MUD 13.6 PPG MOTOR REV: .8 GAS: 3,850 FLARE: NONE
5:30	0.50	MNH1	SVC		18,803.00	0		RIG SERVICE.
6:00	9.00	MNH1	DRL		19,615.00	0		ROTATE DRILL F/ 18,803' - T/ 19,615' (812' @ 90.22 FT/HR) RPM SURFACE 65 MOTOR 218 BIT 283 WOB 28K SPP 6,450 PSI GPM 273 TORQUE ON BTM 14 K TORQUE OFF BTM 9 K P/U 285 K S/O 0 K ROT 157 K MUD 13.6 PPG MOTOR REV: .8 GAS: 2,900 FLARE: NONE
15:00	1.50	MNH1	CBU		19,615.00	0		PUMP CLEAN UP CYCLES.
16:30	0.50	MNH1	SVC		19,615.00	0		RIG SERVICE.
17:00	1.00	MNH1	TOH		19,615.00	0		PUMP SLUG. POOH WHILE PUMPING F/ 19,615' T/ 19,251'.
18:00	6.00	MNH1	TOH		19,615.00	0		POOH WHILE BACKREAMING AND PUMPING F/ 19,251' 17,057'.
Total	24.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
19,292.00	90.23	164.46	11,698.86	-7,229.60	1,864.33	7,462.27	0.11	PTW MWD+HDGM_2016
19,381.00	90.20	164.80	11,698.52	-7,315.42	1,887.92	7,551.26	0.38	PTW MWD+HDGM_2016
19,471.00	90.11	164.42	11,698.28	-7,402.19	1,911.81	7,641.24	0.43	PTW MWD+HDGM_2016
19,565.00	89.81	165.41	11,698.34	-7,492.95	1,936.27	7,735.22	1.10	PTW MWD+HDGM_2016
19,615.00	89.81	165.41	11,698.51	-7,541.34	1,948.87	7,785.20	0.00	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	58.00/13.00	POM (cc)	
MD (ft)	19,181.00	TS/HGS/LGS (%)	27.30//	CaCl2 (%)	
Mud Density (ppg)	13.80	Sand (%)	0.20	Caom/Clom (ppm)	
Vis (s/qt)	75.00	Oil/Water Ratio (%)	81.70/18.30	ACT	
PV/YP (cp/lbf/100ft²)	32.00/20.000	LCM (lbm/bbl)		XS Lime(lbm/bbl)	1.81
Gels 10 s/m (lbf/100ft²)	13.000/25.000	ECD (ppg)	15.140	ES (Volts)	484.0
API/HTHP WL (cc/30min)	0.0/	H2S (gas unit)		R600/300 (°)	
FC/HTHP FC (32nd")	0.0/5.0	KCl (%)		R200/100 (°)	
WPS (ppm)	304,950			R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

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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)
18,312.00	31.0/31.0	0	284.0	6,000.00	106.36	1.77	17.62	1.50	36.00	24.0	69.50	6,733.00	96.9
18,803.00	28.0/28.0	65	274.0	6,300.00	99.00	1.57	15.82	4.00	491.00	122.7	73.50	7,224.00	98.3
19,615.00	28.0/28.0	65	273.0	6,450.00	98.28	1.52	15.65	9.00	812.00	90.2	82.50	8,036.00	97.4

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
5" DP	474	14,911.21	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.
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)
18,312.00	269.0	0.00	0.00	269.00	0.0	0.0	36.00
18,803.00	278.0	0.00	157.00	121.00	19,000.0	8,000.0	491.00
19,615.00	285.0	0.00	157.00	128.00	14,000.0	9,000.0	812.00

Remarks

DIESEL ON LOCATION: 16,187 GAL
DIESEL DELIVERED: 7,300 GAL
DIESEL USED: 6,547 GAL
LNG USED: 0 GAL