

EP WELLS DAILY OPERATIONS REPORT

Report 10

09/19/2017

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	9.88
Objective	Drill - New Well	Original Spud Date	08/10/2017	Days Since Spud	8.13
Est. Days	23.00	Contractor	PRECISION		
Work Unit	PRECISION 563	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	THOMAS DOWNES	Measured Depth(ft)	10,880.00
Engineer	ROBERT HAHN	TVD(ft)	10,805.10
Other Supervisor	JAMES WHITTINGTON	24 Hr Progress(ft)	369.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,788.55 / 2,762.90	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@4,952.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.000in@12,009.00ft
Actual cost to date/AFE	819,418/3,161,561.00	Current MW / BH EMW(ppg)	9.60/
Actual divided by AFE	0.26	LOT/FIT EMW(ppg)	
Daily Cost	63,041	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	323	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	5
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	09/15/2017	4	JSA's/Toolbox Talks	5
Last BOP function test	09/06/2017	13	Days Since Last Drill	9
Last BOP Test	09/20/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
CONTINUE TO DRILL TO 10,864'. POOH DUR TO LOW ROP. C/O BHA, P/U CURVE BHA AND TRIP BACK TO BOTTOM, TAKING MISSED SURVEYS. CONTINUE TO DRILL TO 10,880'.
Update Since Report Time
CONTINUE TO DRILL FROM 10,880' TO 11,110'. BEGIN DRILLING THE CURVE SECTION.
24 Hour Forecast
CONTINUE TO DRILL FROM 10,880' TO 11,110'. DRILL THE CURVE SECTION. CLEAN UP WELL. POOH. R/U TO RUN CASING.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.00	INT1	DRL		10,864.00	0		DRILL ROTATING FROM 10,511' TO 10,864'. 353' @ 50'/HR WOB: 30, 3,980PSI @ 550 GPM 70 RPM, 173 MOTOR RPM, 193 BIT RPM TORQUE O/B: 18K OFF/B 16K STRING WEIGHT: P/U 350, S/O 190, ROT 245 MW@ 9.6 MOTOR @ .288 GAS: CG-5525, BG-103 NOTE: MWD NOT WORKING @ 10,465'.
7:00	6.00	INT1	TOH		10,864.00	0		POOH FROM 10,864' TO BHA.
13:00	3.00	INT1	BHA		10,864.00	0		L/D 15 DRILL COLLARS AND BHA. (BIT @ 0-1-BT-N-X-I-NO-PR)
16:00	1.00	INT1	BHA		10,864.00	0		HELD PJSM, P/U AND M/U NEW BIT, MUD MOTOR, AND MWD TOOLS.
17:00	0.50	INT1	TIH		10,864.00	0		TIH TO 1,754'.
17:30	0.50	INT1	SVC		10,864.00	0		SERVICE TOP DRIVE AND RIG.
18:00	4.00	INT1	TIH		10,864.00	0		CONTINUE TO TIH TO 10,421'.
22:00	1.00	INT1	TIH		10,864.00	0		CONTINUE TO TIH TAKING SURVEYS @ 10,421', 10,609', 10,781', & 10,864'.
23:00	1.00	INT1	DRL		10,880.00	0		DRILL ROTATING FROM 10,864' TO 10,880'. 16' @ 16'/HR WOB: 30, 2,944PSI @ 550 GPM 20 RPM, 270 MOTOR RPM, 290 BIT RPM TORQUE O/B: 17K OFF/B 15K STRING WEIGHT: P/U 350, S/O 200, ROT 255 MW@ 9.6 MOTOR @ .49 GAS: CG-7,525, BG-1,800
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		INT1	DRL		10,880.00	0	DRILL ROTATING FROM 10,880' TO 10,880'. 16' @ 16'/HR WOB: 30, 2,944PSI @ 550 GPM 20 RPM, 270 MOTOR RPM, 290 BIT RPM TORQUE O/B: 17K OFF/B 15K STRING WEIGHT: P/U 350, S/O 200, ROT 255 MW@ 9.6 MOTOR @ .49 GAS: CG-7,525, BG-1,800

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,385.65	2.56	223.75	10,311.23	857.55	181.12	601.82	0.25	PTW MWD+HDGM_2016
10,564.65	2.65	228.00	10,490.05	851.90	175.28	593.89	0.12	PTW MWD+HDGM_2016
10,733.97	2.27	223.76	10,659.21	846.85	170.05	586.80	0.25	PTW MWD+HDGM_2016
10,743.65	2.65	228.00	10,668.88	846.57	169.75	586.39	4.35	PTW MWD+HDGM_2016
10,833.65	2.39	237.94	10,758.79	844.18	166.61	582.47	0.56	PTW MWD+HDGM_2016

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Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	0.00/92.00	pH/Pm (cc)	10.00/0.50
MD (ft)	10,864.00	TS/HGS/LGS (%)	1.70//	Pf/Mf (cc)	0.10/0.20
Mud Density (ppg)	9.60	Sand (%)	0.00	Ca+ (ppm)	
Vis (s/qt)	30.00			Cl- (ppm)	110,000
PV/YP (cp/lbf/100ft ²)	1.00/3.000	MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft ²)	1.000/1.000	LCM (lbm/bbl)			
API/HTHP WL (cc/30min)	100.0/	ECD (ppg)	9.600	R600/300 (°)	
FC/HTHP FC (32nd")	1.0/	H2S (gas unit)		R200/100 (°)	
		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
3	8.750	SMITH INTERNA	XS716			XXXXXX	2x20, 5x16	9,578.00	10,864.00	0-1-BT-N-X-I-NO-PR

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)
10,864.00	30.0/30.0	70	550.0	3,980.00	105.08	2.64	33.71	7.00	353.00	50.4	7.00	353.00	50.4

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
5" DRILL PIPE	313	9,869.93	5.000		4.276	4 1/2 IF			RIG
(4 STDS) 5" HWDP	12	375.50	5.000		3.000	4 1/2 IF			RIG
CROSSOVER SUB	1	3.45				4 1/2 IF			RIG
(5 STDS) 6.5" DC'S	15	464.93	6.500			4 1/2 XH			RIG
CROSSOVER SUB	1	2.95	6.688		2.812	4 1/2 XH			SD100288
FILTER SUB	1	5.92	6.625		2.812	4-1/2 IF			SD116123
NON-MAG SPIRAL IBS	1	6.01	6.750		2.875	4-1/2 IF			SD29586
NON-MAG DRILL COLLAR	1	29.95	6.812		3.250	4-1/2 IF			SD25817
NON-MAG SPIRAL IBS	1	5.35	6.750		2.812	4-1/2 IF			SD600926
ACCUMP	1	33.85	6.500		2.875	4-1/2 IF			C2022
NON-MAG PONY COLLAR	1	12.32	6.812		2.875	4-1/2 IF			SD53143
SPIRAL IBS	1	5.97	6.562		2.375	4-1/2 IF			SD22383
CROSSOVER SUB	1	4.07	6.875		2.938	4-1/2 IF			SD115532
CROSSOVER SUB	1	2.25	6.688		3.562	4-1/2 XH			66-196
7" SCIENTIC MUD MOTOR, LOBES: 7/8. STAGE: 9.4. FBH @	1	40.70	7.812			5-1/2 FH			XXXXXXX
BIT #3 RUN #1 8.75" SMITH XS716 (5x16's. 2x20's) SN:	1	0.85	8.750	8.750		4 -1/2 REG			XXXXXX

Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
09/18/2017 02:30		09/19/2017 16:00		3	994.07		DRILL 8.75" INTERMEDIATE 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)
10,864.00	350.0	190.00	245.00	105.00	18,000.0	16,000.0	353.00

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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	8.750	HALLIBURTON	MMD64C			12890318	5x18	10,864.00		-----

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)
10,880.00	30.0/30.0	20	550.0	2,944.00	173.24	5.88	55.58	1.00	16.00	16.0	1.00	16.00	16.0

Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
5" DRILL PIPE	265	8,318.21	5.000		4.276	4 1/2 IF			RIG
SHOCK SUB/AGITATOR	1	23.83	6.812		2.500	4 1/2 IF			23659
(4 STDS) 5" HWDP	12	375.50	5.000		3.000	4 1/2 IF			RIG
5" DRILL PIPE	46	2,057.63	5.000		4.276	4 1/2 IF			RIG
FILTER SUB	1	5.95	6.625		2.812	4-1/2 IF			SD117031
NON-MAG FLEX COLLAR	1	30.28	6.812		3.250	4-1/2 IF			551326
ACCUMP	1	28.64	6.500		2.875	4-1/2 IF			C4016
NON-MAG PONY COLLAR	1	12.32	6.812		2.875	4-1/2 IF			SD53143
6.75" SCIENTIC MUD MOTOR, LOBES: 4/5. STAGE: 7. FBH @	1	26.79	6.750			5-1/2 FH			RY675111
BIT #4 RUN #1 8.75" SECURITY (5x18) SN: 12890318	1	0.85	8.750	8.750		4 -1/2 REG			12890318

Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
09/19/2017 16:00				4	1,498.23		DRILL 8.75" CURVE 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)
10,880.00	350.0	200.00	255.00	95.00	17,000.0	15,000.0	16.00

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: 15,214 GAL
FUEL USED: 1,208 GAL
FUEL DELIVERED: 7407 GAL