

EP WELLS DAILY OPERATIONS REPORT

Report 9

07/09/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 PW UNIT 1404H
Wellbore	UNIVERSITY 19 PW UNIT 1404H
WBS No/API No	30265150 / 4230133215.00

Event Summary

Event Type	Drilling only	Event Start Date	06/16/2017	Days on Location	8.31
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	06/17/2017	Days Since Spud	6.98
Est. Days	22.00	Contractor	ENSIGN		
Work Unit	ENSIGN 775	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	TRAMPUS STEWART	Measured Depth(ft)	11,251.00
Engineer	BRANDON FOOTE	TVD(ft)	11,235.50
Other Supervisor	TREVOR KELLEY	24 Hr Progress(ft)	1,003.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,800.10 / 2,772.10	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@4,893.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.000in@12,236.00ft
Actual cost to date/AFE	733,560/2,770,860.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.26	LOT/FIT EMW(ppg)	
Daily Cost	56,110	Lithology	
		Formation/MD Top	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	06/19/2017		PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	09/29/2015	649	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	8 2 1500
Safety Comments:							
252 MAN HOURS							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	07/05/2017	4	JSA's/Toolbox Talks	13
Last BOP function test	06/28/2017	11	Days Since Last Drill	9
Last BOP Test	07/19/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
DRILL F/10248' T/11032'. POOH. L/D BHA & P/U CURVE BHA. TIH. DRILL CURVE F/11032' T/11251'
Update Since Report Time
DRILL T/11521'
24 Hour Forecast
FINISH DRILLING CURVE. POOH. RUN 7" CSG.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.50	INT1	DRL		11,032.00	0		DRILL F/10248' T/11032' (784' @ 120.6 FPH) WOB:40-45K RPM: SURF 60 MOTOR 199 BIT 259 PSI & FLOW: SPP 3206 GPM 710 DIFF 450-550 STRING WT: P/U 350 S/O 290 ROT 315 TORQUE: ON BTM 15-17K OFF BTM 10K MW: 9.3 PPG MOTOR: .28 REVS/GAL GAS: BG 1000 CG 4000
6:30	0.50	INT1	CDM		11,032.00	0		FLOW CHECK. PUMP SLUG
7:00	4.50	INT1	TOH		11,032.00	0		POOH F/11032' T/127'
11:30	0.50	INT1	BHA		11,032.00	0		L/D BHA
12:00	0.50	INT1	SVC		11,032.00	0		CLEAN & CLEAR RIG FLOOR
12:30	0.50	INT1	BHA		11,032.00	0		M/U 8.75" CURVE ASSY
13:00	1.00	INT1	TIH		11,032.00	0		TIH T/1837'
14:00	0.50	INT1	BHA		11,032.00	0		TEST AGITATOR. M/U SAME. TEST AGAIN.
14:30	4.00	INT1	TIH		11,032.00	0		TIH T/11019'. FILL EVERY 30 STANDS.
18:30	0.50	INT1	TIH		11,032.00	0		WASH DOWN F/11019' T/11032' 550 GPM, 2335 PSI, 2-4 WOB
19:00	5.00	INT1	DRL		11,251.00	0		DRILL F/11032' T/11251' (219' @ 43.8 FPH) WOB:9-12K RPM: SURF MOTOR 273 BIT 273 PSI & FLOW: SPP 2335 GPM 550 DIFF 24-300 STRING WT: P/U 350 S/O 290 ROT 315 TORQUE: ON BTM K OFF BTM K MW: 9.3 PPG MOTOR: .497 REVS/GAL GAS: BG 1000 CG 2000
Total	24.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,779.00	2.29	262.24	10,766.97	126.05	-262.76	-44.25	0.56	PTW MWD+HDGM_2016
10,958.00	1.72	270.28	10,945.86	125.58	-268.99	-42.00	0.35	PTW MWD+HDGM_2016
11,062.00	2.62	199.55	11,049.80	123.35	-271.34	-39.17	2.52	PTW MWD+HDGM_2016
11,152.00	9.22	167.11	11,139.28	114.37	-270.42	-30.85	7.94	PTW MWD+HDGM_2016
11,240.00	16.64	162.62	11,224.99	95.44	-265.08	-14.30	8.50	PTW MWD+HDGM_2016

Fluid Details

Mud type	NaCl Brine	Oil/Water (%)		pH/Pm (cc)	
MD (ft)		TS/HGS/LGS (%)		Pf/Mf (cc)	
Mud Density (ppg)		Sand (%)		Ca+ (ppm)	
Vis (s/qt)				Cl- (ppm)	
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)			
API/HTHP WL (cc/30min)		ECD (ppg)		R600/300 (°)	
FC/HTHP FC (32nd")		H2S (gas unit)		R200/100 (°)	
		KCl (%)		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
3	8.750	BAKER HUGHES	T607FX			7164152	7x16	10,014.00	11,032.00	-----

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	327	10,095.32	5.000		4.276				RIG
(12 JTS) HWDP	12	360.68	6.500		3.250	4 1/2 IF			RIG
CROSSOVER SUB	1	2.34	6.700		2.810	4 1/2 IF			NESXO6755 48
(15 JTS) DRILL COLLARS	15	445.77	6.500		2.500	4 1/2 XH			RIG
SCREEN SUB	1	3.16	6.500		3.250	4 1/2 XH			DR27053
STABILIZER	1	5.91	8.500		2.870	4 1/2 XH			DR34214
NON-MAG SLICK COLLAR	1	30.79	6.750		2.870	4 1/2 XH			NESNM6756 37
STABILIZER	1	5.90	8.500		2.870	4 1/2 XH			DR34216
GAP SUB	1	3.59	6.625		2.870	4 1/2 XH			VG650134P TS
CENTRALIZER COLLAR	1	8.54	6.625		4.490	4 1/2 IF			VC650021
LANDING SUB	1	3.55	6.625		3.780	4 1/2 IF			VL650121
CROSSOVER SUB	1	1.56	6.500		2.750	4-1/2 XH			VX650075
NON-MAG PONY SLICK COLLAR	1	15.23	6.500		2.870	4 1/2 XH			PXGPC6501 068
STABILIZER	1	5.92	8.500		2.870	4 1/2 XH			DR34217
CROSSOVER SUB	1	2.09	6.560		3.250	4 1/2 XH			DR26769
7" SCIENTIFIC MUD MOTOR, LOBES: 7/8. STG: 9.4. ADJ @	1	40.65	8.500			5-1/2 FH			PHWHS-160 543-5
BIT #3 RUN #1 BAKER T607FX, 7X16's. SN: 7164152	1	1.00	8.750	8.750					7164152

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
07/08/2017 16:30	07/09/2017 11:30	3	936.68		DRILL 8.75" INTERMEDIATE SECTION

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		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

Remarks

FUEL ON LOCATION: 14840 GAL
FUEL USED: 1908 GAL