

EP WELLS DAILY OPERATIONS REPORT

Report 17

09/10/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 D 0904H
Wellbore	UNIVERSITY 19 D 0904H
WBS No/API No	30265147 / 4230133226.00

Event Summary

Event Type	Drilling only	Event Start Date	06/19/2017	Days on Location	14.10
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	06/19/2017	Days Since Spud	13.85
Est. Days	21.00	Contractor	ENSIGN		
Work Unit	ENSIGN 775	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	BIM JOHNSON	Measured Depth(ft)	18,580.00
Engineer	BRANDON FOOTE	TVD(ft)	11,639.18
Other Supervisor	TANNER MANUEL	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,799.10 / 2,771.10	Hole size(in)	6.125
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	7.000in@11,925.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	4.500in@18,415.00ft
Actual cost to date/AFE	1,699,257/2,503,951.00	Current MW / BH EMW(ppg)	13.80/
Actual divided by AFE	0.68	LOT/FIT EMW(ppg)	
Daily Cost	44,294	Lithology	
		Formation/MD Top	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test	06/23/2017		PSI NII HPI GOAL ZERO DAYS PS BARRIER EVENT PS barrier bowtie review	09/29/2015	712	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	1500
Safety Comments:							
MAN HRS: 284							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test	09/05/2017 09/26/2017	5	JSA's/Toolbox Talks Days Since Last Drill	16

Operations Summary

24 Hour Summary
POOH F/ 9992' - T/ BHA. LAY DOWN BHA. RUN 4.5" LINER F/ SURFACE - T/ 7569'. P/U & M/U PACKER. RIH WITH DRILL PIPE F/ 7569' - T/ 18580'.
Update Since Report Time
CIRCULATE BOTTOMS UP. PUMP SETTING BALL DOWN HOLE & PRESSURE UP TO SHEAR. RIG UP CEMENT LINES TO CEMENT HEAD. PUMP CEMENT.
24 Hour Forecast
FINISH CEMENT JOB. SET PACKER. STING OUT OF PACKER WITH POSITIVE PRESSURE DOWN DRILL PIPE. CIRCULATE OUT CEMENT. TEST PACKER. DISPLACE WELL TO BRINE.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	MNH1	TOH		18,580.00	0		POOH F/ 9992' - T/ 5325'.
2:00	0.50	MNH1	TOH		18,580.00	0		PULL ROTATING HEAD.
2:30	2.00	MNH1	TOH		18,580.00	0		POOH F/ 5325' - T/ BHA.
4:30	1.00	MNH1	BHA		18,580.00	0		L/D DIRECTIONAL BHA.
5:30	0.50	MNH1	SVC		18,580.00	0		CLEAN & CLEAR RIG FLOOR.
6:00	1.00	MNH1	RIC		18,580.00	0		PJSM WITH EXPRESS CASING CREW. R/U CASING TOOLS.
7:00	7.50	MNH1	RIC		18,580.00	0		P/U & M/U SHOE TRACK. RIH WITH 4.5" LINER F/ SURFACE - T/ 7569'.
14:30	0.50	MNH1	RIC		18,580.00	0		P/U & M/U LINER PACKER.
15:00	9.00	MNH1	CLR		18,580.00	0		RUN LINER IN HOLE WITH DRILL PIPE F/ 7989' - T/ 18580'. WASHED LAST STAND TO BOTTOM. ESTABLISHED CIRCULATION @ SHOE.
Total	24.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
18,235.00	91.79	346.18	11,641.82	5,838.86	-2,002.33	6,164.37	2.31	PTW MWD+HDGM_2016
18,329.00	91.04	345.45	11,639.49	5,929.97	-2,025.36	6,258.29	1.11	PTW MWD+HDGM_2016
18,424.00	90.98	345.77	11,637.82	6,021.97	-2,048.96	6,353.24	0.34	PTW MWD+HDGM_2016
18,532.00	88.72	344.70	11,638.10	6,126.40	-2,076.48	6,461.21	2.32	PTW MWD+HDGM_2016
18,580.00	88.72	344.70	11,639.18	6,172.68	-2,089.15	6,509.20	0.00	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	57.50/14.00	POM (cc)	
MD (ft)	18,580.00	TS/HGS/LGS (%)	27.00/18.70/8.30	CaCl2 (%)	
Mud Density (ppg)	13.80	Sand (%)	0.20	Caom/Clom (ppm)	
Vis (s/qt)	62.00	Oil/Water Ratio (%)	80.40/19.60	ACT	
PV/YP (cp/lbf/100ft²)	24.00/12.000	LCM (lbm/bbl)		XS Lime(lbm/bbl)	3.63
Gels 10 s/m (lb/100ft²)	13.000/16.000	ECD (ppg)	0.000	ES (Volts)	525.0
API/HTHP WL (cc/30min)	9.0/	H2S (gas unit)		R600/300 (°)	
FC/HTHP FC (32nd")	4.0/	KCl (%)		R200/100 (°)	
WPS (ppm)	255,103			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
5	6.125	BAKER HUGHES	TD405FX			5271315	5x16	11,940.00	18,580.00	-----

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.
4" DP	455	14,325.83	4.000		3.340	XT-39			RIG
SHOCK SUB	1	11.15	5.000			XT-39			SHTLO500-0061
(78 JTS) DP	78	2,459.91	5.250		3.250	XT-39			RIG

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Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
AGITATOR 1.40 PLATE & SHOCK SUB	1	22.36	5.000			XT-39			W1665958-1
(53 JTS) DP	53	1,667.63	5.250		3.250	XT-39			RIG
CROSSOVER SUB	1	1.95	5.000		2.750	XT-39			DR18060
SCREEN SUB	1	3.98	4.880		2.750	3-1/2 IF			DR31955
FLOAT SUB	1	2.96	4.750		2.750	4-1/2 XH			NESFS4751 51
NON-MAG SLICK COLLAR	1	29.12	4.500		2.560	3-1/2 IF			NESNM4754 45
VELOCITY GAP SUB	1	3.79	5.125		3.250	3-1/2 IF			VG475120P TS
VELOCITY CENTRALIZER SUB	1	8.33	5.125		4.250	3-1/2 IF			VC475049
VELOCITY LANDING SUB	1	3.42	5.000		3.000	3-1/2 IF			VL475093
VELOCITY CROSSOVER	1	1.64	5.000		2.750	3-1/2 IF			X475112
SLICK PONY COLLAR	1	11.01	4.630		2.750	3-1/2 IF			DR31741
5" PHOENIX 24XMUD MOTOR, 6/7 LOBES. 6.4 STG. FIXED @	1	25.92	5.375			3-1/2 IF			24XH51301 0
BIT #5 RUN #1 BAKER TD405FX, SN: 5271315.5x16's	1	1.00	6.125	6.125					5271315

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
09/05/2017 15:30	09/10/2017 05:30	5	126.63		DRILL 6.125" PRODUCTION 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: 16112 GAL
FUEL DELIVERED: GAL
FUEL USED: 2120 GAL

NOTIFIED TRRC OF 4.5" LINER RUN & CEMENT: AUDRY OP # 2