

EP WELLS DAILY OPERATIONS REPORT

Report 12

09/05/2017

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	9.23
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	06/19/2017	Days Since Spud	8.82
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)	11,940.00
Engineer	BRANDON FOOTE	TVD(ft)	11,606.02
Other Supervisor	TREVOR KELLEY	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	1,248,217/2,503,951.00	Current MW / BH EMW(ppg)	13.40/
Actual divided by AFE	0.50	LOT/FIT EMW(ppg)	
Daily Cost	68,686	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	707	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	1500
Safety Comments:							
298 MAN HOURS							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	07/11/2017	56	JSA's/Toolbox Talks	11
Last BOP function test	06/28/2017	69	Days Since Last Drill	
Last BOP Test	07/19/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
ACCEPT RIG @0700. WALK RIG. N/U BOPS. REMOVE BPV & INSTALL BIT GUIDE. P/U BHA. TIH T/11284'. SLIP & CUT DRILL LINE. TIH T/ FLOAT COLLAR. BEGIN DRILL OUT SHOE TRACK & DISPLACE TO OBM.
Update Since Report Time
FINISH DRILL OUT SHOE & DISPLACE T/ OBM. DRILL T/11958'
24 Hour Forecast
DRILL AHEAD IN LATERAL. TD EST @ 18415'

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
7:00	0.50	MNH1	WLK		11,940.00	0		ACCEPT RIG @0700 PREP RIG WALK.
7:30	0.50	MNH1	WLK		11,940.00	0		WALK RIG F/1403H T/0904H
8:00	4.00	MNH1	RUP		11,940.00	0		INSTALL NEW SEAL ASSY. SET BOPS DOWN. M/U SPEED CAP TEST T/250 LOW 10K HIGH. HOLD 10 MIN. INSTALL TURNBUCKLES. REMOVE BPV. INSTALL DRILL BIT GUIDE W/ R/U MUD LINES, FLARE LINE, OVERBOARD LINES.
12:00	1.00	MNH1	SVC		11,940.00	0		CLEAN & CLEAR AROUND CELLAR AREA L/O DIR BHA.
13:00	2.50	MNH1	BHA		11,940.00	0		PJSM W/ DIR P/U DIR TOOLS, SCRIBE MUD MOTOR, M/U BIT.
15:30	1.00	MNH1	TIH		11,940.00	0		TIH F/92' T/1793'.
16:30	0.50	MNH1	TIH		11,940.00	0		P/U AGITATOR & TEST SAME.
17:00	3.50	MNH1	TIH		11,940.00	0		TIH F/1793' T/10456'
20:30	0.50	MNH1	TIH		11,940.00	0		INSTALL ROT HEAD & FILL PIPE.
21:00	0.50	MNH1	TIH		11,940.00	0		TIH F/10456' T/11284'
21:30	1.50	MNH1	CUT		11,940.00	0		SLIP & CUT DRILL LINE.
23:00	1.00	MNH1	TIH		11,940.00	0		TIH T/ FLOAT COLLAR @ 11831'. WASH DOWN LAST TWO STANDS. BEGIN DISPLACING TO OBM.
Total	17.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
11,688.00	57.80	353.24	11,527.45	-437.07	-247.62	-352.13	8.38	PTW MWD+HDGM+AXIAL_2016
11,777.00	67.66	352.51	11,568.17	-358.67	-257.44	-274.06	11.10	PTW MWD+HDGM+AXIAL_2016
11,777.00	67.66	352.51	11,568.07	-360.68	-258.08	-275.81	11.10	PTW MWD+HDGM_2016
11,867.00	77.51	351.59	11,595.08	-273.73	-269.32	-189.13	10.99	PTW MWD+HDGM+AXIAL_2016
11,867.00	77.50	351.59	11,594.98	-275.74	-269.96	-190.88	10.98	PTW MWD+HDGM_2016

Fluid Details

Mud type	Invermul	Oil/Water (%)	58.00/15.50	POM (cc)	
MD (ft)	11,940.00	TS/HGS/LGS (%)	24.70/16.70/8.00	CaCl2 (%)	
Mud Density (ppg)	13.40	Sand (%)	0.20	Caom/Clom (ppm)	
Vis (s/qt)	62.00	Oil/Water Ratio (%)	78.90/21.10	ACT	
PV/YP (cp/lbf/100ft²)	20.00/10.000			XS Lime(lbm/bbl)	2.33
Gels 10 s/m (lbf/100ft²)	10.000/12.000	LCM (lbm/bbl)	13.990	ES (Volts)	470.0
API/HTHP WL (cc/30min)	/8.0	ECD (ppg)		R600/300 (°)	
FC/HTHP FC (32nd")	/4.0	H2S (gas unit)		R200/100 (°)	
WPS (ppm)	256,376	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
5	6.125	BAKER HUGHES	TD405FX			5271315	5x16	11,940.00		-----

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)

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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.
4" DP	244	7,685.83	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
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			NESFS475151
NON-MAG SLICK COLLAR	1	29.12	4.500		2.560	3-1/2 IF			NESNM475445
VELOCITY GAP SUB	1	3.79	5.125		3.250	3-1/2 IF			VG475120PTS
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			24XH513010
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		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: 21412 GAL
FUEL DELIVERED: 7500 GAL
FUEL USED: 1484 GAL