

EP WELLS DAILY OPERATIONS REPORT

Report 11

06/18/2017

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	10.54
Objective	Drill - Wolfcamp B1 Shale	Original Spud Date	04/30/2017	Days Since Spud	6.00
Est. Days	25.00	Contractor	PRECISION		
Work Unit	PRECISION 559	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	DENNIS MORGAN	Measured Depth(ft)	11,115.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	11,092.38
Other Supervisor	TANNER MANUEL / YU LIU	24 Hr Progress(ft)	1,278.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,793.00 / 2,767.00	Hole size(in)	8.750
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	9.625in@4,921.00ft
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	7.000in@11,992.00ft
Actual cost to date/AFE	898,079/2,664,436.41	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.34	LOT/FIT EMW(ppg)	
Daily Cost	52,498	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	249	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
MAN HRS: 242							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	10
Last Derrick Inspection	06/15/2017	3		
Last BOP function test	06/15/2017	3		
Last BOP Test	07/06/2017			
Next BOP Test				

Operations Summary

24 Hour Summary
DRILL F/ 9837' - T/ 11115 (KOP). PUMP CLEANUP CYCLE. TOO. L/D DRILL COLLARS. L/D BHA. P/U CURVE BHA. TIH T/ 1546'.
Update Since Report Time
TIH F/ 1546' - T/ 10100'.
24 Hour Forecast
FINISH TIH. INDUCE FLOW. DRILL CURVE. TOO. L/D CURVE BHA. PREPARE TO RUN 7" CASING.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.00	INT1	DRL		10,463.00	0		ROTATE DRILL F/ 9837 - T/ 10463' (626' @ 104.3 FT/HR) RPM SURFACE 70 MOTOR 145 BIT 215 WOB 40 K SPP 3770 PSI GPM 600 TORQUE ON BTM 18 K TORQUE OFF BTM 9 K P/U 300 K S/O 140 K ROT 200 K MUD 9.6 PPG MOTOR REV: .242 BACKGROUND GAS: 489 UNITS BTMS UP GAS: 900 UNITS FLARE: NONE
6:00	5.00	INT1	DRL		11,115.00	0		ROTATE DRILL F/ 10463 - T/ 11115' (652' @ 130.4 FT/HR) RPM SURFACE 70 MOTOR 145 BIT 215 WOB 40 K SPP 3770 PSI GPM 600 TORQUE ON BTM 20 K TORQUE OFF BTM 14 K P/U 330 K S/O 230 K ROT 265 K MUD 9.7 PPG MOTOR REV: .242 BACKGROUND GAS: 1017 UNITS BTMS UP GAS: 4821 UNITS FLARE: NONE
11:00	1.50	INT1	CDM		11,115.00	0		CONDITION MUD & CIRULATE SWEEPS
12:30	5.00	INT1	DRL		11,115.00	0		TOOH F/ 11115' - T/ BHA.
17:30	0.50	INT1	DRL		11,115.00	0		REMOVE ROTATING HEAD.
18:00	2.00	INT1	DRL		11,115.00	0		TOOH. L/D 15 JTS OF 6.5" DRILL COLLARS.
20:00	1.50	INT1	DRL		11,115.00	0		BREAK OUT & L/D DIRECTIONAL BHA. BIT #2 RUN #1 SMITH XS716 (7X11's) SN: JM9438 (BIT GRADE: 1-2-CT-N-X-1-NO-BHA)
21:30	1.00	INT1	DRL		11,115.00	0		P/U & M/U DIRECTIONAL CURVE BHA.
22:30	1.50	INT1	DRL		11,115.00	0		TIH F/ BHA - T/ 1546'.
Total	24.00							

Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
10,311.00	1.70	107.49	10,288.45	348.80	-319.76	-424.52	1.23	PTW MWD+HDGM_2016
10,489.00	0.79	157.56	10,466.41	346.87	-316.77	-421.83	0.75	PTW MWD+HDGM_2016
10,667.00	0.86	61.40	10,644.40	346.37	-315.13	-420.90	0.69	PTW MWD+HDGM_2016
10,845.00	0.50	85.19	10,822.39	347.08	-313.19	-421.03	0.25	PTW MWD+HDGM_2016
11,024.00	0.24	154.93	11,001.38	346.80	-312.25	-420.50	0.26	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	HALLIBURTON	GTD64C			1200069	6x12	11,115.00		-----

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" DRILL PIPE	304	9,568.82	5.000		4.276	4 1/2 IF			RIG
HWDP	12	374.06	5.000		2.875	4 1/2 IF			RIG
5" DRILL PIPE	24	1,067.35	5.000		4.276	4 1/2 IF			RIG
X/O SUB	1	3.45	5.000			4 1/2 IF			RIG
FLOAT SUB	1	3.49	6.500		2.875	4-1/2 XH			DR24146
SCREEN SUB	1	3.26	6.250		3.250	4-1/2 XH			DR27729
NMDC	1	32.57	6.280		2.875	4 1/2 XH			PXGFC6501111
GAP SUB	1	3.60	6.600			4 1/2 IF			VG650136P TS
650 CENTRALIZER COLLAR VELOCITY	1	8.54	6.680			4 1/2 IF			VC650049
650 LANDING SUB VELOCITY	1	3.52	6.630			4 1/2 IF			VL650024
650 X/O SUB VELOCITY	1	1.60	6.500			4 1/2 XH			VX650003
NMPC	1	15.15	6.500		2.880	4 1/2 XH			PXGPC6501066
PHX MUD MOTOR FBH 4/5 LOBE. STAGE 7 SET @ 2.38°	1	28.69	7.250			4-1/2 XH			24XH-67550 9-PTS
BIT #3 RUN #1 HALLIBURTON GTD64C (6X12's) SN: 1200069	1	0.90	8.750	8.750		4 1/2 REG			1200069

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
06/18/2017 21:30		3	478.83		DRILL 8.75" INTERMEDIATE SECTION

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
2	8.750	SMITH BITS	XS716			JM9438	7x11	4,936.00	11,115.00	1-2-CT-N-X-1-NO-BHA

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" DRILL PIPE	283	10,180.82	5.000		4.276	4 1/2 IF			RIG
HWDP	12	374.06	5.000		2.875	4 1/2 IF			RIG
X/O SUB	1	3.45	5.000			4 1/2 IF			RIG
DRILL COLLARS	15	443.71	6.500			4 1/2 XH			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.
SCREEN SUB	1	2.63	6.250		3.250	4-1/2 XH			DR21586
STABILIZER	1	6.07	8.500		3.188	4 1/2 XH			DR30857
NMDC	1	28.64	6.280		2.875	4 1/2 XH			NESNM650235
STABILIZER	1	5.23	8.500		2.938	4 1/2 XH			DR28753
GAP SUB	1	3.50	6.600			4 1/2 IF			VG650023P TS
650 CENTRALIZER COLLAR VELOCITY	1	8.54	6.680			4 1/2 IF			VC650023
650 LANDING SUB VELOCITY	1	3.52	6.630			4 1/2 IF			VL650114
650 X/O SUB VELOCITY	1	1.52	6.500			4 1/2 XH			VX650006
NMPC	1	15.15	6.500		2.880	4 1/2 XH			PXGPC6501066
STABILIZER	1	4.55	8.500		2.875	4 1/2 XH			DR32107
PHX MUD MOTOR FBH 7/8 LOBE. STAGE 5.7 SET @ 1.50°	1	32.36	7.250			4-1/2 XH			24XH-675536-PTS
BIT #2 RUN #1 SMITH XS716 (7X11's) SN: JM9438	1	1.25	8.750	8.750		4 1/2 REG			JM9438

Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
06/16/2017 00:30	06/18/2017 21:30	2	1,413.01		DRILL 8.75" INTERMEDIATE SECTION

Remarks

DIESEL ON LOCATION: 9149 GAL
DIESEL DELIVERED: GAL
DIESEL USED: 1365 GAL
LNG USED: 736.11 GAL

NOTIFIED TRRC OF 7" CASING & CEMENT: OP 12 (MICHELLE)