

## EP WELLS DAILY OPERATIONS REPORT

Report 56

09/14/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 PW UNIT 1503H
Wellbore	UNIVERSITY 19 PW UNIT 1503H
WBS No/API No	30265013 / 4230133170

## Event Summary

Event Type	Completion only	Event Start Date	04/28/2017	Days on Location	55.00
Objective	Install Completion	Original Spud Date	01/29/2017		
Est. Days	25.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	David Stein	Measured Depth(ft)	
Engineer	Bobby Ramos	TVD(ft)	
Other Supervisor	Mike Reber	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,761.85 / 2,736.20	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	0/0	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	4,347,054/4,184,415.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	1.04	LOT/FIT EMW(ppg)	
Daily Cost	74,691	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 <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>			TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
435 man hours							
48 travel hours							

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			JSA's/Toolbox Talks Days Since Last Drill	54

## Operations Summary

24 Hour Summary
Pressure test CT package, open well, RIH and drill plugs 1-42, POOH
Update Since Report Time
24 Hour Forecast

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## Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.50	COIL	BOP			0		<p>Break circulation to gas buster, SD pump, close in choke manifold</p> <p>00:05 Pressure test CT surface package as follows 300 psi / low / Shut Down -Leak on Bowen connection above BOP's / bleed off / go up and BD Bowen, change out oring and grease, MU Bowen</p> <p>350 psi / Low / 5 min good test 8,500 psi / High / losing 200 psi, there is drip off the BOP's, go up in manlift and inspect, no leak, just drippings from when we BD the Bowen to change the o-ring, bring pressure back up and test 8,600 psi / High / 10 min / good test</p> <p>01:15 Bleed off to 3,000 psi, check well pressure at 3,000 psi on b-section</p> <p>01:30 Open well UFV 31 turns, well equalized at 3,000 psi, RIH to drill plugs #1-#42</p>
1:30	4.62	COIL	MIL			0		<p>5000' Weight check / PU 14K / 1.0 in 1.0 out / 3,800 CP / 3,400 WH</p> <p>03:15 Weight check at 11,000' / PU 34K / 3.0 in 3.0 out / 6,600 CP / 3,400 WH</p> <p>04:00 Plug #1 was no show at 11,984' / 3.0 - 3.0 / 3,300</p> <p>04:08 12,149' plug #2 / 5 min / 3.0 in 3.0 out / 6,500 CP / 3,200 WH</p> <p>04:38 12,326' plug #3 / 1 min / 3.25 in 3.25 out / 6,800 CP / 2,900 WH</p> <p>04:48 12,504' plug #4 / 1 min / 3.25 in 3.25 out / 6,700 CP / 2,800 WH</p> <p>Pump 5 bbl 100 cp gel sweep</p> <p>05:00 12,680' plug #5 / 2 min / 3.35 in 3.20 out / 6,800 CP / 2,800 WH</p> <p>05:18 12,867' plug #6 / 2 min / 3.25 in 3.20 out / 6,600 CP / 2,800 WH</p> <p>Pump 5 bbl 100 cp gel sweep</p> <p>06:00 13,315' current depth / 6,582 CP / 2,676 WH / 3.25 in 3.25 out / RIH weight 12.9K at report time</p>
6:07	0.30	COIL	MIL			0		Make a 200-ft pick up to insure hole is clean. CT depth 13,386-ft.
6:25	0.13	COIL	MIL			0		Start running back in the hole after wider trip.
6:33	0.32	COIL	MIL			0		<p>Drill Plug 9 of 41:</p> <ul style="list-style-type: none"> <li>- Depth: 13,412-ft</li> <li>- CP: 6600-psi</li> <li>- WH: 2800-psi</li> <li>- Rate(in): 3.25-bpm, Rate (out): 3.1-bpm</li> <li>- Time: 4-min</li> </ul> <p>Chemicals:</p> <ul style="list-style-type: none"> <li>- FR (0.16 gal/10)</li> </ul>
6:52	0.52	COIL	MIL			0		<p>Drill Plug 10 of 41:</p> <ul style="list-style-type: none"> <li>- Depth: 13,563-ft</li> <li>- CP: 6800-psi</li> <li>- WH: 2800-psi</li> <li>- Rate(in): 3.25-bpm, Rate (out): 3.1-bpm</li> <li>- Time: 3-min</li> </ul> <p>Chemicals:</p> <ul style="list-style-type: none"> <li>- FR (0.16 gal/10), POP (0.25 gal/10)</li> </ul> <p>Note: Gen-set shut down for 10-min, during that time CT stopped moving downward.</p>
7:23	0.65	COIL	MIL			0		<p>Drill Plug 11 of 41:</p> <ul style="list-style-type: none"> <li>- Depth: 13,736-ft</li> <li>- CP: 6900-psi</li> <li>- WH: 2900-psi</li> </ul>

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- Rate(in): 3.25-bpm, Rate (out): 3.1-bpm - Time: 5-min  Chemicals: - FR (0.16 gal/10), POP (0.25 gal/10)
8:02	0.43	COIL	MIL			0		Drill Plug 12 of 41: - Depth: 13,922-ft - CP: 6200-psi - WH: 3000-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 4-min  Chemicals: - FR (0.16 gal/10), POP (0.25 gal/10)
8:28	0.80	COIL	MIL			0		Drill Plug 13 of 41: - Depth: 14,096-ft - CP: 6200-psi - WH: 3000-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.16 gal/10), POP (0.25 gal/10)
9:16	0.30	COIL	MIL			0		Drill Plug 14 of 41: - Depth: 14,322-ft - CP: 6200-psi - WH: 3000-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: No indication of plug  Chemicals: - FR (0.16 gal/10), POP (0.25 gal/10)
9:34	0.50	COIL	MIL			0		Drill Plug 15 of 41: - Depth: 14,451-ft - CP: 6300-psi - WH: 3000-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
10:04	0.35	COIL	MIL			0		Drill Plug 16 of 41: - Depth: 14,662-ft - CP: 6200-psi - WH: 3000-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: No indication of plug  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
10:25	0.22	COIL	MIL			0		Drill Plug 17 of 41: - Depth: 14,836-ft - CP: 6400-psi - WH: 3250-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: No indication of plug  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
10:38	0.32	COIL	MIL			0		Drill Plug 18 of 41: - Depth: 14,963-ft - CP: 6400-psi - WH: 3200-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals:

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- FR (0.13 gal/10), POP (0.25 gal/10)
10:57	0.38	COIL	MIL			0		Drill Plug 19 of 41: - Depth: 15,135-ft - CP: 6400-psi - WH: 3200-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 2-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
11:20	0.37	COIL	MIL			0		Drill Plug 20 of 41: - Depth: 15,317-ft - CP: 6400-psi - WH: 3200-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Note: Pump 5-bbl gel sweep.  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
11:42	0.42	COIL	MIL			0		Drill Plug 21 of 41: - Depth: 15,491-ft - CP: 6400-psi - WH: 3100-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 2-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
12:07	0.30	COIL	MIL			0		Drill Plug 22 of 41: - Depth: 15,666-ft - CP: 6500-psi - WH: 3100-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 2-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
12:25	0.35	COIL	MIL			0		Drill Plug 23 of 41: - Depth: 15,842-ft - CP: 6500-psi - WH: 3100-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 2-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
12:46	0.33	COIL	MIL			0		Drill Plug 24 of 41: - Depth: 16,018-ft - CP: 6500-psi - WH: 3100-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
13:06	0.38	COIL	MIL			0		Drill Plug 25 of 41: - Depth: 16,196-ft - CP: 6400-psi - WH: 2800-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
13:29	0.63	COIL	MIL			0		Drill Plug 26 of 41: - Depth: 16,374-ft - CP: 6400-psi - WH: 2900-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
14:07	1.07	COIL	MIL			0		Drill Plug 27 of 41: - Depth: 16,556-ft - CP: 6500-psi - WH: 3400-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 2-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
15:11	0.30	COIL	MIL			0		Drill Plug 28 of 41: - Depth: 16,733-ft - CP: 7000-psi - WH: 3600-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
15:29	0.42	COIL	MIL			0		Drill Plug 29 of 41: - Depth: 16,909-ft - CP: 6400-psi - WH: 3600-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
15:54	0.57	COIL	MIL			0		Drill Plug 30 of 41: - Depth: 17,084-ft - CP: 6800-psi - WH: 3000-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
16:28	0.58	COIL	MIL			0		Drill Plug 31 of 41: - Depth: 17,267-ft - CP: 6900-psi - WH: 3100-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Note: Pumped a 10-bbl gel sweep.  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
17:03	0.95	COIL	MIL			0		Drill Plug 32 of 41: - Depth: 17,443-ft - CP: 6800-psi - WH: 3100-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 4-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
18:00	0.25	COIL	MIL			0		Drill Plug 33 of 41: - Depth: 17,624-ft

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- CP: 6800-psi - WH: 3400-psi - Rate(in): 3.0-bpm, Rate (out): 3.0-bpm - Time: 3-min  Chemicals: - FR (0.13 gal/10), POP (0.25 gal/10)
18:15	5.75	COIL	MIL			0		NOTE Continue mixing FR at .13 gal / 10 bbls and POP at .25 gal / 10 bbls 18:32 17,799' plug #34 / 7 min / 3.0 in 3.0 out / 6,700 CP / 3,000 WH 18:56 17,976' plug #35 / 2 min / 3.0 in 3.0 out / 6,900 CP / 3,000 WH NOTE FR at .20 gal / 10 bbls / Mixing POP at .20 gal / 10 bbls 19:44 18,333' plug #37 / 2 min / 3.0 in 3.1 out / 6,900 CP / 3,000 WH 20:19 18,576' plug #38 / 4 min / 3.0 in 3.0 out / 6,900 CP / 3,100 WH 20:46 18,684' plug #39 / 2 min / 3.0 in 3.0 out / 6,900 CP / 3,200 WH NOTE: Washing very heavy sand last 400', dumping sand trap and switching sides at choke 21:49' 18,868' plug #40 / 3 min / 3.0 in 3.1 out / 6,900 CP / 3,100 WH 23:03 19,056' plug #41 / 1 min / 3.0 in 3.1 out / 6,700 CP / 3,200 WH NOTE Pump 10 / 10 / 10 sweep, time to exit based on RIH rate 23:45 19,202 plug #42 / 1 min / 3.0 in 3.1 out / 6,800 CP / 3,150 WH  23:47 Continue RIH washing sand to top of Toe Sleeve, soft tag at 19,212', stall, drop rate on pump to 1 bbl, PU, hung up, PU to 85K x2 cycles, set max PU at 100K, start POOH and have flowback surge well, string free, max PU 92K, POOH at 20 ft/min, weight vary between 56K to 65K NOTE Will increase speed after 10/10/10 gel sweeps work through horizontal
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		COIL	PCT			0	00:05 POOH at 20 ft/min off bottom chasing 10/10/10 gel sweep, CT pulling sticky  01:15 17,824' current depth, POOH weight 64K, CT pulling sticky, 3.0 in 3.0 out, 6,800 CP / 3,200 WH, cut POP when POOH, FR at .2 gal / 10 bbls  02:45 14,272' current depth, POOH 50 ft/min / POOH weight 53K, 3.0 in 3.0 out / 6,500 CP / 3,300 WH  Pump 10 bbl gel sweep and time to exit CT as we wipe the heel  04:00 11,120 current depth / starting POOH at 120 ft/min / 3.0 in 3.1 out / 6,700 CP / 3,200 WH