

## EP WELLS DAILY OPERATIONS REPORT

Report 46

08/24/2017

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	45.00
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	Nick Morrison	Measured Depth(ft)	
Engineer	Bobby Ramos	TVD(ft)	
Other Supervisor	Tommy Hurdle	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	3,533,866/4,184,415.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.84	LOT/FIT EMW(ppg)	
Daily Cost	88,679	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:							

## 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	44

## Operations Summary

24 Hour Summary
Frac Stg 35. Perf Stg 36
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

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## Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	5.75	FRAC	WLF			0		Other Pad Ops
5:45	0.08	FRAC	FRP			0		Prime up and equalize. Open well @ 2838 psi.
5:50	2.10	FRAC	FRT			0		<p>Stage 35 Summary University 19 PW Unit 1503H</p> <p>Interval 13250 - 13385</p> <p>Open Well Pressure 2,838 psi</p> <p>Max Treating Pressure 9,340 psi</p> <p>Max Slurry Rate 60.3 bpm</p> <p>Average Treating Pressure 8,574 psi</p> <p>Average Slurry Rate 48.2 bpm</p> <p>Breakdown Pressure 8,294 psi</p> <p>Breakdown Rate 9.6 bpm</p> <p>Breakdown Volume 14,868 gal</p> <p>Avg HHP 10,129 hp</p> <p>Final ISIP 5,108 psi</p> <p>Frac Gradient 0.875 psi/ft</p> <p>Pad Volume 16,044 gal</p> <p>Main Body Volume 203,784 gal</p> <p>Flush Volume 25,158 gal</p> <p>30/50 AZ Sand Pumped 0 lbs</p> <p>100 Mesh Sand Pumped 423,260 lbs</p> <p>Proppant in Formation 423,260 lbs</p> <p>Avg Proppant Concentration 2.74 lb/gal</p> <p>Max Proppant Concentration 3.50 lb/gal</p> <p>Load to Recover 4,899 bbls</p> <p>Load to Recover w/o Acid 4,887 bbls</p> <p>15% HCL Spearhead 504 gal</p> <p>Slickwater Fluid Pumped 4,760 bbls</p> <p>20# Linear Fluid Pumped 80 bbls</p> <p>20# Crosslink Fluid Pumped 0 bbls</p> <p>Pump down volume 47 bbls</p> <p>pump down rate 10.0 bpm</p> <p>Max pump down pressure 6,272 psi</p> <p>Fluid Temp 72.0 ?F</p> <p>Total Pump Time 2:05 hr:min</p> <p>Pumps Lost During Job 0</p> <p>Treatment Start Time 5:51 0:00 0:00</p> <p>Treatment End Time 7:56 0:00 2:05</p> <p>Diverter Slurry bbls</p> <p>Proppant pumped as a ramp from 0.5PPA-2.5PPA, then 2.5PPA, 3.0PPA, and 3.5PPA. All proppant placed. 500gal of 15% HCl was placed and two 20# gel sweeps were pumped at 40 bbls each prior to flush.</p>
7:56	0.38	FRAC	FWL			0		Other pad Operations
8:19	1.00	FRAC	WLT			0		Handover from frac to wireline. WI Rehead., Pump maintenance, sucked out all cellars.
9:19	0.52	FRAC	WLT			0		<p>Pick up lubricator. Remove night cap. PU tools.</p> <p>Stab lubricator. Fill lubricator.</p> <p>Pressure test lubricator to 8000 psi</p> <p>Open well with 4000 psi. RIH.</p>
9:50	0.88	FRAC	WLT			0		<p>"Stage #36 Plug and Perf</p> <p>RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite frac plug. Tie into liner top @ . Bring on pumps at 11300'.</p> <p>Pump down as follows:</p> <p>3 bpm @ 3832 psi</p> <p>6 bpm @ 4227 psi</p> <p>10 bpm @ 4892 psi</p> <p>12 bpm @ psi</p> <p>Max:10 bpm. Max: 6490 psi</p> <p>Set plug @ 13230 ft</p> <p>Perforate as follows:</p> <p>13206' - 13207'</p> <p>13161' - 13162'</p>

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								13117' - 13118' 13072' - 13073' Stabilized pressure after perforating: 4118 psi Pump down volume: 49 bbl"
10:43	0.62	FRAC	WLT			0		POOH to 200'
11:20	0.95	FRAC	OPO			0		Wait at 200 ft for frac
12:17	0.15	FRAC	WLF			0		Shut in well with 3650 psi Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. Handover from WL to frac. Grease hydraulic and crown valve/ zipper 04 valves
12:26	11.57	FRAC	OPO			0		Other pad operations
<b>Total</b>	<b>24.00</b>							