

## EP WELLS DAILY OPERATIONS REPORT

Report 25

10/09/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 H 0908H
Wellbore	UNIVERSITY 19 H 0908H
WBS No/API No	30266564 / 4230133234.00

## Event Summary

Event Type	Completion only	Event Start Date	09/03/2017	Days on Location	25.00
Objective	Install Completion	Original Spud Date	05/08/2017		
Est. Days	31.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	T GREGA	Measured Depth(ft)	
Engineer	Alex Villegas	TVD(ft)	
Other Supervisor	STEELE,MORGAN BRETT	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,792.80 / 2,766.80	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	12.27/51.11	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,641,048/4,135,334.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.40	LOT/FIT EMW(ppg)	
Daily Cost	149,648	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	24

## Operations Summary

24 Hour Summary
FRAC STGE 19,20 PERF STG 20
Update Since Report Time
24 Hour Forecast
CONTINUE FRAC OPERATIONS

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## Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.05	FRAC	WLF			0		WAIT ON OTHER PAD OPERATIONS
1:03	0.45	FRAC	WLF			1		***NPT KEAN FRAC GENERATOR SHOWED UP TRIED TO HOOK IT UP WAS NOT WORKING PROPERLY USED GENERATOR IN VAN AGAIN
1:30	1.58	FRAC	FRT			0		Stage 19 Summary University 19 H 0908H Interval 15758 - 15890 Open Well Pressure 4,206 psi Max Treating Pressure 9,534 psi Max Slurry Rate 60.2 bpm Average Treating Pressure 8,951 psi Average Slurry Rate 51.6 bpm Breakdown Pressure 7,380 psi Breakdown Rate 9.1 bpm Breakdown Volume 252 gal Avg HHP 11,320 hp Final ISIP 5,420 psi Frac Gradient 0.902 psi/ft Pad Volume 1,848 gal Main Body Volume 176,414 gal Flush Volume 26,712 gal 100 MAZ Sand Pumped 0 lbs 100 M Brown Sand Pumped 0 lbs 100 M Sand Pumped 418,460 lbs Proppant in Formation 418,460 lbs Avg Proppant Concentration 2.96 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,290 bbls Load to Recover w/o Acid 4,282 bbls 15% HCL Spearhead 350 gal Slickwater Fluid Pumped 4,112 bbls 20# Linear Fluid Pumped 80 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 90 bbls pump down rate 10.0 bpm Max pump down pressure 5,906 psi Fluid Temp 72.0 ?F Total Pump Time 1:34 hr:min Pumps Lost During Job 0 Treatment Start Time 1:31 0:00 0:00 Treatment End Time 3:05 0:00 1:34 Diverter Slurry bbls -Pumped sand in a 0.50 PPA -3.00 PPA ramp, 3.00 PPA hold, 3.50 and 4.00 PPA step. -Two 20# gel sweeps 40 bbls each were pumped prior to flush. - Pumped one 350 gal shot of acid. - Ran a ball in place plug.  Time for Prop on Perfs 23.0 minutes
3:05	0.32	FRAC	FWL			0		WAIT ON OTHER PAD OPERATIONS
3:24	0.38	FRAC	FWL			0		324 Handover from frac to WL. 328 Pick up lubricator. Remove night cap. PU tools. 331 Stab lubricator. Fill lubricator. 338 PT lubricator to 8000psi 347 Open well with 5050psi.
3:47	1.93	FRAC	WLT			0		436 "Stage #20 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite ball-drop frac plug. Tie into liner top @11016". Pump down as follows: 3bpm @ psi11430 6bpm @ psi11510 9bpm @ psi11600 bpm @ psi bpm @ psi

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								9bpm @ 7214psi  Set plug @ 15735ft Perforate as follows: 15714' - 15715' 15667' - 15668' 15626' - 15627' 15582' - 15583' Stabilized pressure after perf: 6300psi Pump down volume: 87bbl" 441 POOH
5:43	0.12	FRAC	WLF			0		543 Shut in well with 5000psi. Bleed off. 548 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 550 Handover from WL to frac.
5:50	4.07	FRAC	WLF			0		WAIT ON OTHER PAD OPERATIONS
9:54	1.63	FRAC	FRT			0		Stage 20 Summary University 19 H 0908H Interval 15582 - 15715 Open Well Pressure 5,270 psi Max Treating Pressure 9,296 psi Max Slurry Rate 59.4 bpm Average Treating Pressure 8,787 psi Average Slurry Rate 52.0 bpm Breakdown Pressure 6,210 psi Breakdown Rate 8.0 bpm Breakdown Volume 42 gal Avg HHP 11,199 hp Final ISIP 5,359 psi Frac Gradient 0.897 psi/ft Pad Volume 1,722 gal Main Body Volume 187,782 gal Flush Volume 26,460 gal 100 MAZ Sand Pumped 0 lbs 100 M Brown Sand Pumped 145,260 lbs 100 M Sand Pumped 281,280 lbs Proppant in Formation 426,540 lbs Avg Proppant Concentration 2.79 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,558 bbls Load to Recover w/o Acid 4,550 bbls 15% HCL Spearhead 336 gal Slickwater Fluid Pumped 4,383 bbls 20# Linear Fluid Pumped 80 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 87 bbls pump down rate 9.0 bpm Max pump down pressure 7,214 psi Fluid Temp 72.0 ?F Total Pump Time 1:38 hr:min Pumps Lost During Job 0 Treatment Start Time 9:54 0:00 0:00 Treatment End Time 11:32 0:00 1:38 Diverter Slurry bbls -Pumped sand in a 0.50 PPA -3.00 PPA ramp,3.00 PPA hold,3.50 and 4.00 PPA step. -Two 20# gel sweeps 40 bbls each were pumped prior to flush. - Pumped one 350 gal shot of acid. - Ran a ball in place plug.
11:32	11.82	FRAC	FRT			1		****Safety stand down **** NPT KEANE WIRE LINE DROPPED GUNS
23:21	0.37	FRAC	WLT			0		2321 Handover from frac to wireline. Pick up lubricator. Remove night cap. PU tools. 2327 Stab lubricator. Fill lubricator. 2342 Pressure test lubricator to 8000 psi 2343 Open well with 4400 psi. RIH.

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## Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
23:43	0.28	FRAC	WLT			0		RUN IN HOLE WITH WIRE LINE
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	3.25	FRAC	WLT			0	<p>215 "Stage #21 Plug and Perf RIH with (4) 1' Keane guns: 2.75" OD HSC at 6SPF with 60* phased perforating guns and Downhole Technology Boss Hog composite ball-drop frac plug. Tie into liner top @11016". Pump down as follows: 3bpm @ 4400psi11450 6bpm @ 4700psi11550 9bpm @ 5100psi11650 bpm @ psi bpm @ psi 9bpm @ 6707psi15565</p> <p>Set plug @ 15562ft Perforate as follows: 15534' - 15535' 15494' - 15495' 15450' - 15451' 15406' - 15407' Stabilized pressure after perf: 5818psi Pump down volume: 82bbl" 222 POOH</p>
3:15	0.23	FRAC	WLF			0	<p>315 Shut in well with 4800psi. Bleed off. 323 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 329 Handover from WL to frac.</p>
3:29		FRAC	WLF			1	***KEANE FRAC WAIT ON GENERATOR FOR FRAC VAN

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
10/09/2017 01:03	KEANE FRAC LP	Stimulation		WLF	EN	Frac - Other Equipment	0.45	0.45	1	OPEN
<b>Description:</b> GENERATOR SHOWED UP TRIED TO HOOK IT UP WAS NOT WORKING PROPERLY USED GENERATOR IN VAN AGAIN						<b>Title:</b> WAITING ON FRAC				
10/09/2017 11:32	KEANE FRAC LP	Wait On Incident/Accident		FRT	EN		3.94	11.82	1	OPEN
<b>Description:</b> WL had UPO with dropped object on pad Safety standown was held for all of Operation on location						<b>Title:</b> Safety Standdown				
<b>Total</b>							<b>4.39</b>	<b>12.27</b>		