

EP WELLS DAILY OPERATIONS REPORT

Report 24

10/09/2017

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 19 PW UNIT 1407H
 Wellbore UNIVERSITY 19 PW UNIT 1407H
 WBS No/API No 30266571 / 4230133203

Event Summary

Event Type	Completion only	Event Start Date	09/03/2017	Days on Location	24.00
Objective	Install Completion	Original Spud Date	05/11/2017		
Est. Days	31.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Tina	Measured Depth(ft)	
Engineer	Alex Villegas	TVD(ft)	
Other Supervisor	Morgan, Brett O	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,792.70 / 2,766.70	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	12.42/51.74	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,707,721/4,701,640.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.36	LOT/FIT EMW(ppg)	
Daily Cost	95,150	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			TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)
Safety Comments:						

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			23

Operations Summary

24 Hour Summary
PERF STG 20,21 FRAC 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	0.38	FRAC	FRT			0		Stage 19 Summary University 19 PW Unit 1407H Interval 17042 - 17176 FINISH FRAC
0:23	0.62	FRAC	FWL			0		23 Handover from frac to WL. 48 Pick up lubricator. Remove night cap. PU tools. 52 Stab lubricator. Fill lubricator. 52 PT lubricator to 8000psi 100 Open well with 4825psi.
1:00	2.17	FRAC	FWL			0		152 "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 @11122". Pump down as follows: 3bpm @ 4800psi11535 6bpm @ 5000psi11650 9bpm @ 5300psi11700 bpm @ psi bpm @ psi 9bpm @ 6497psi Set plug @ 17022ft Perforate as follows: 16997' - 16998' 16953' - 16954' 16908' - 16909' 16864' - 16865' Stabilized pressure after perf: 5844psi Pump down volume: 111bbl" 157 POOH
3:10	0.23	FRAC	WLF			0		310 Shut in well with 4750psi. Bleed off. 315 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 324 Handover from WL to frac.
3:24	4.00	FRAC	WLF			0		WAIT ON OTHER PAD OPERATIONS
7:24	1.85	FRAC	WLT			0		Stage 20 Summary University 19 PW Unit 1407H Interval 16864 - 16998 Open Well Pressure 5,802 psi Max Treating Pressure 9,340 psi Max Slurry Rate 52.5 bpm Average Treating Pressure 8,905 psi Average Slurry Rate 46.2 bpm Breakdown Pressure 7,231 psi Breakdown Rate 8.0 bpm Breakdown Volume 126 gal Avg HHP 10,084 hp Final ISIP 5,469 psi Frac Gradient 0.947 psi/ft Pad Volume 1,554 gal Main Body Volume 179,466 gal Flush Volume 27,384 gal 100 MAZ Sand Pumped 0 lbs 100 M Brown Sand Pumped 143,500 lbs 100 M Sand Pumped 276,730 lbs Proppant in Formation 420,230 lbs Avg Proppant Concentration 2.92 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,384 bbls Load to Recover w/o Acid 4,376 bbls 15% HCL Spearhead 336 gal Slickwater Fluid Pumped 4,185 bbls 20# Linear Fluid Pumped 80 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 111 bbls pump down rate 9.0 bpm Max pump down pressure 6,497 psi

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Fluid Temp 72.0 ?F Total Pump Time 1:50 hr:min Pumps Lost During Job 0 Treatment Start Time 7:24 0:00 0:00 Treatment End Time 9:14 0:00 1:50 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.
9:15	0.43	FRAC	FWL			0		Handover from frac to WL.Pick up lubricator. Remove night cap. PU tools.Stab lubricator. Fill lubricator.PT lubricator to 8000psi.Open well with 4600psi.
9:41	0.82	FRAC	FWL			0		"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 @11122". Pump down as follows: 3bpm @ 5200psi11380 6bpm @ 5800psi11600 9bpm @ 6000psi11730 10bpm @ 6200 psi 10bpm @ 6200psi Set plug @ 16840ft Perforate as follows: 16819' - 16819' 16775' - 16776' 16730' - 16731 16686' - 16687' Stabilized pressure after perf: 5250psi Pump down volume: 97bbl" POOH
10:30	0.75	FRAC	FWL			0		Wait on other pad opeartion
11:15	0.33	FRAC	WLF			0		Shut in well with 5100psi. Bleed off.Break lubricator. All shots fired.MU night cap. LD tools and lub.Secure crown and wing valves.Handover from WL to frac.
11:35	11.77	FRAC	WLF			1		****KEANE WIRELINE**** Run string was dropped out of lubricator while comming off well. All work was shut down for a safety stand down. ***END NPT KEANE WIRE LINE
23:21	0.65	FRAC	WLF			1		***NPT KEANE FRAC DATA VAN HAS NO GENERATOR
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	WLF			1	***NPT KEANE FRAC DATA VAN HAS NO GENERATOR

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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 11:35	KEANE FRAC LP	Perforation		WLF	N	Elect W/L Surface Equipment	3.89	11.77	1	OPEN
Description: Run string was dropped out of lubricator while comming off well .						Title: Wireline UPO on Surface with Dropped object				
10/09/2017 23:21	KEANE FRAC LP	Wait On Equipment/ Materials		WLF	N		0.00	0.00	1	OPEN
Description: FRAC VAN has no generator						Title: Keane FRAC Van Generator Down				
Total							3.89	11.77		