

EP WELLS DAILY OPERATIONS REPORT

Report 23

10/07/2017

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	23.00
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/%)	0/0	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,395,339/4,135,334.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.34	LOT/FIT EMW(ppg)	
Daily Cost	149,369	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		
Last Derrick Inspection Last BOP function test Last BOP Test Next BOP Test			JSA's/Toolbox Talks Days Since Last Drill	22

Operations Summary

24 Hour Summary
FRAC STG 16,17 PERF STG 17
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	1.28	FRAC	FWL			0		WAIT ON OTHER PAD OPERATIONS
1:17	2.50	FRAC	FWL			0		117 Handover from frac to WL. 125 Pick up lubricator. Remove night cap. PU tools. 128 Stab lubricator. Fill lubricator. 131 PT lubricator to 8000psi 135 Open well with 4500psi.
3:47	0.08	FRAC	WLT			0		344 Shut in well with 4500psi. Bleed off. 348 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 352 Handover from WL to frac.
3:52	2.47	FRAC	WLT			0		All, Stage 16 Summary University 19 H 0908H Interval 16285 - 16418 Open Well Pressure 4,356 psi Max Treating Pressure 9,402 psi Max Slurry Rate 60.5 bpm Average Treating Pressure 8,636 psi Average Slurry Rate 51.4 bpm Breakdown Pressure 8,142 psi Breakdown Rate 9.6 bpm Breakdown Volume 336 gal Avg HHP 10,880 hp Final ISIP 5,293 psi Frac Gradient 0.891 psi/ft Pad Volume 3,864 gal Main Body Volume 178,584 gal Flush Volume 26,922 gal 100 M AZ Sand Pumped 0 lbs 100 M Brown Sand Pumped 139,600 lbs 100 M Sand Pumped 283,260 lbs Proppant in Formation 422,860 lbs Avg Proppant Concentration 3.00 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,343 bbls Load to Recover w/o Acid 4,334 bbls 15% HCL Spearhead 378 gal Slickwater Fluid Pumped 4,163 bbls 20# Linear Fluid Pumped 80 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 91 bbls pump down rate 9.0 bpm Max pump down pressure 5,961 psi Fluid Temp 72.0 ?F Total Pump Time 1:42 hr:min Pumps Lost During Job 0 Treatment Start Time 4:37 0:00 0:00 Treatment End Time 6:19 0:00 1:42 Diverter Slurry bbls -Pumped sand in a 0.50 PPA -3.00 PPA ramp,3.00 PPA hold,3.50 and 4.00 PPA steps. -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.
6:20	3.93	FRAC	FWL			0		Wait on other pad operations.
10:16	2.73	FRAC	WLT			0		"Stage #17 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 @ 4300psi11471 6bpm @ 4700psi11500 9bpm @ 6250psi11600 9bpm @ 6300psi

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Set plug @ 16265ft Perforate as follows: 16241' - 16242' 16197' - 16198' 16153' - 16154' 16109' - 16110' Stabilized pressure after perf: 5450psi Pump down volume: 88bbl" POOH
13:00	0.83	FRAC	WLT			0		Wait @ 200ft for other pad operations.
13:50	0.50	FRAC	WLT			0		1350 Shut in well with 4500psi. Bleed off. 1353 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 1420 Handover from WL to frac.
14:20	4.17	FRAC	WLT			0		wait on other pad operations
18:30	1.97	FRAC	FRT			0		Stage 17 Summary University 19 H 0908H Interval 16109 - 16242 Open Well Pressure 4,920 psi Max Treating Pressure 9,534 psi Max Slurry Rate 54.4 bpm Average Treating Pressure 8,833 psi Average Slurry Rate 42.2 bpm Breakdown Pressure 8,076 psi Breakdown Rate 8.4 bpm Breakdown Volume 252 gal Avg HHP 9,136 hp Final ISIP 5,462 psi Frac Gradient 0.906 psi/ft Pad Volume 2,310 gal Main Body Volume 179,522 gal Flush Volume 26,838 gal 100 M AZ Sand Pumped 0 lbs 100 M Brown Sand Pumped 194,520 lbs 100 M Sand Pumped 227,720 lbs Proppant in Formation 422,240 lbs Avg Proppant Concentration 2.94 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,362 bbls Load to Recover w/o Acid 4,354 bbls 15% HCL Spearhead 350 gal Slickwater Fluid Pumped 4,186 bbls 20# Linear Fluid Pumped 80 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 88 bbls pump down rate 9.0 bpm Max pump down pressure 6,329 psi Fluid Temp 72.0 ?F Total Pump Time 1:56 hr:min Pumps Lost During Job 0 Treatment Start Time 18:32 0:00 0:00 Treatment End Time 20:28 0:00 1:56 Diverter Slurry bbls -Pumped sand in a 0.50 PPA -3.00 PPA ramp,3.00 PPA hold,3.50 and 4.00 PPA steps. -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.
20:28	3.53	FRAC	FRT			0		CHANGE VALVES AND SEATS CHANGE GREASE TUBES
Total	24.00							

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06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.62	FRAC	FWL			0	2350 Handover from frac to WL. 0 Pick up lubricator. Remove night cap. PU tools. 30 Stab lubricator. Fill lubricator. 35 PT lubricator to 11650psi 37 Open well with 11730psi.
0:37	1.10	FRAC	WLT			0	140 "Stage #18 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 @ 4500psi11650 6bpm @ 4800psi11730 9bpm @ 5000psi11820 bpm @ psi bpm @ psi 9bpm @ 6100psi Set plug @ 16089ft Perforate as follows: 16065' - 16066' 16021' - 16022' 15977' - 15978' 15933' - 15934' Stabilized pressure after perf: 5340psi Pump down volume: 93bbl" 144 POOH
1:43	1.07	FRAC	WLF			0	235 Shut in well with 4700psi. Bleed off. 239 Break lubricator. All shots fired. Drop ball. MU night cap. LD tools and lub. Secure crown and wing valves. 247 Handover from WL to frac.
2:47		FRAC	WLF			0	WAIT ON OTHER PAD OPERATIONS