

EP WELLS DAILY OPERATIONS REPORT

Report 11

05/29/2017

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19 PW UNIT 1504H
Wellbore	UNIVERSITY 19 PW UNIT 1504H ST01
WBS No/API No	30265014 / 4230133171.01

Event Summary

Event Type	Completion only	Event Start Date	04/28/2017	Days on Location	10.00
Objective	Install Completion	Original Spud Date	02/02/2017		
Est. Days	25.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison / Scott Wallace	Measured Depth(ft)	
Engineer	Justin Midgley	TVD(ft)	
Other Supervisor	Tommy Hurdle	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,761.75 / 2,736.10	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	290,827/4,757,442.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.06	LOT/FIT EMW(ppg)	
Daily Cost	44,965	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)	6

Safety Comments:

Total People - 197
Total Hours Worked - 1174
Total Hours driven - 190

Gaol Zero Day 4

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	9

Operations Summary

24 Hour Summary
Frac Stg 1. Perf Stg 2
Update Since Report Time
24 Hour Forecast
Continue frac ops

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Wellbore UNIVERSITY 19 PW UNIT 1504H ST01

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.33	FRAC	FRT			0		Verified valve alignment. Broke circulation with each pump to gas buster. Tested each pump. Pressure tested frac iron. Found small leak in the iron. Bled off pressure changed out o-ring in the chicksan. Hammered back up and installed restraint.
2:20	0.33	FRAC	FRT			0		Walked pressure up to 9600 psi to verify no leaks. Confirmed no leaks were present. Bled off pressure to zero.
2:40	0.42	FRAC	FRT			0		Pressure test low 1000 psi for 5 minutes. While holding the 9800 high a small drip was noticed on the 1505H on the flowcross flange to 3" flowback iron. Also, a small drip was discovered on a riser on the 1503H. Bled off pressure to zero.
3:05	1.42	FRAC	FRT			0		Changed out o-ring on a 1503H riser. Checked and torqued up the the outside flanges on the flow cross onthe 1505H and 1504H.
4:30	2.00	FRAC	FRT			0		Pressured up to 9500 psi. Noticed that the 1503H riser was still leaking after changing the o-ring. Bled off pressure and changed the 10' joint on the 1503H riser.
6:30	0.50	FRAC	FRT			0		Break circulation to gas buster. Pressured up to 9800 psi and looked for leaks. Bled off pressure to start pressure test. Pressure test low 1000 psi for 5 min and high 9800 psi for 5 minutes and discovered leak between two riser joints. Bled off pressure. Meanwhile: Held Pre-tower safety meeeting.
7:00	2.50	FRAC	RIF			0		Changed o-ring between the riser iron on the 1505H well. Pressure test frac iron to 9,800 psi for 10 min.
9:30	5.32	FRAC	OPO			0		Wait on other pad operations
14:49	1.43	FRAC	FRT			0		Stage 1 Summary University 19 PW Unit 1504H Interval 20355 - 20358 Open Well Pressure 4,158 psi Max Treating Pressure 9,230 psi Max Slurry Rate 56.1 bpm Average Treating Pressure 8,741 psi Average Slurry Rate 46.5 bpm Breakdown Pressure 6,996 psi Breakdown Rate 10.0 bpm Breakdown Volume 126 gal Avg HHP 9,962 hp Final ISIP 5,265 psi Frac Gradient 0.889 psi/ft Pad Volume 4,536 gal Main Body Volume 120,498 gal Flush Volume 32,928 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 105,580 lbs Proppant in Formation 105,580 lbs Avg Proppant Concentration 1.32 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 2,869 bbls Load to Recover w/o Acid 2,845 bbls 15% HCL Spearhead 1,008 gal Slickwater Fluid Pumped 2,805 bbls 20# Linear Fluid Pumped 40 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 0 bbls pump down rate 0.0 bpm Max pump down pressure 0 psi Fluid Temp 72.0 ?F Total Pump Time 1:25 hr:min Pumps Lost During Job 1 Treatment Start Time 14:48 15:26 0:00 Treatment End Time 15:24 16:15 0:00 Diverter Slurry bbls During the 0.5 PPA sand stage, a leak was noticed on the back of a pump. Sand was cut, the pump was isolated, and the stage was resumed.
16:15	2.75	FRAC	OPO			0		Wait on other pad operations

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
19:00	1.75	FRAC	WLT			0		Pick up lubricator. Remove night cap. PU guns/plug. Stab lubricator. Fill lubricator. Attempted to pressure test and had issues holding a test. Bumped up several time. Grease UMW and cycled. Pressure tested low 500 psi for 5 min and high 8500 psi for 10 min. Test Good
20:45	1.50	FRAC	WLT			0		"Stage #2 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 frac plug. Tie into liner top @10881. Bring on pumps at 11200'. Pump down as follows: 3bpm @ 4300psi @11200 6bpm @ 4650psi @11400 9bpm @ 5500psi @11500 12bpm w/ 5900psi @11600 Max Rate 12bpm w/ 8240psi Set plug @ 20315ft Perforate as follows: 20305' - 20306' 20261' - 20262' 20216' - 20217' 20172' - 20173' Stabilized pressure after perf: 4900psi Pump down volume: 305bbl"
22:15	1.50	FRAC	WLT			0		POOH w/ WL logging the well @ 100 ft/min
23:45	0.25	FRAC	WLT			0		Bump up and SIW @ 4200. Bled off pressure and break lubricator. Lowered Perf guns out of lubricator and confirmed all shots fired. Drop ball, N/U nightcap and close crown valve. L/D perf guns and P/U next set of guns for next run. Move WL BOP's to next well. Greased UMW and LMV - grease time 10 min.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.42	FRAC	WLF			0	Other Well ops
1:25		FRAC	FRT			0	