

EP WELLS DAILY OPERATIONS REPORT

Report 42

08/17/2017

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	41.00
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	Measured Depth(ft)	
Engineer	Bobby Ramos	TVD(ft)	
Other Supervisor	Ben Dickinson	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/%)	11.92/49.65	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,246,803/4,757,442.00	Current MW / BH EMW(ppg)	/
Actual divided by AFE	0.47	LOT/FIT EMW(ppg)	
Daily Cost	96,863	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	40

Operations Summary

24 Hour Summary
Issues with pumps and leaks pressure testing. 0655 resume zipper ops. WL stages 7, 8. Frac stage 8
Update Since Report Time
24 Hour Forecast
Cont. zipper frac operations.

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Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.17	FRAC	RIF			1		Valve team line up valves for injection test. Readings on wells as follows: 1503 = 2200 psi. 1504 = 3700 psi. 1505 = 3500 psi.
0:10	0.25	FRAC	RIF			1		Oil states have issues with accumulator engine for zipper manifold. Drain fuel water separator and fuel up/prime fuel system. Problem fixed, fire up and line out valves on zipper manifold.
0:25	0.40	FRAC	FRP			1		Valve team open LMV on 1504 and check valve alignment
0:49	0.27	FRAC	FRP			1		Keane frac equalize pressure to 3700 psi.
1:05	0.42	FRAC	FRP			1		Valve team open UMW on 1504 Begin injection test. Pump away 827 bbls. Shut down.
1:30	0.13	FRAC	FRP			1		Valve team shut in UMW. End injection. SAFETY PAUSE: Keane WL and Crane discuss picking up WL and UNCAAP Safe Work Strategy.
1:38	0.12	FRAC	WLT			1		WL PU lube and stab BOPS Very slow getting picked up.
1:45	0.50	FRAC	WLT			1		Valve team line out valves for pumpdown.
2:15	0.17	FRAC	RIF			1		Keane having issues with pumps. 1 of 2 pump down pumps has bad hydraulic fan motor Frac pump 5 has bad oil hose Frac pump 13 has bad starter Frac pump 9 ECU/fueling issues Decide to RD good pump down pump and move to frac fleet. Will stack frac on the 1504 until new pumps arrive on location.
2:25	0.37	FRAC	WLT			1		Keane WL having issues reading line tension due to computer troubles.
2:47	0.22	FRAC	WLT			1		Restart computers and change cables, able to read line tension again. Swing over and stab BOPS.
3:00	0.08	FRAC	WLT			1		Function TEST WL BOPS Upper rams open - close - open Middle rams open - close - open Lower rams open - close - open TEST GOOD
3:05	0.42	FRAC	WLT			1		WL cont. picking up tools and getting set up. Frac wrap up rigging over pump down pump to frac line.
3:30	0.50	FRAC	WLT			1		WL PU new guns and plug. Swing over and stab 1504. Frac line up valves to pressure test to zipper manifold.
4:00	0.42	FRAC	FRP			1		KEANE FRAC leaks during pressure test Need to swap o ring on frac iron coming off missile.
4:25	0.08	FRAC	FRP			1		Retest iron to zipper manifold. TEST GOOD
4:30	0.08	FRAC	WLT			2		***NPT KEANE WL*** Valve team open zipper manifold to 1504. Blender send boost and fill lube. Begin pressure test, discover leak on BOP needle valve.
4:35	0.77	FRAC	WLT			2		Keane WL replace needle valve on BOPS.
5:21	0.48	FRAC	WLT			1		Keane work on pumps over night. 1 of 2 pump down pumps has bad hydraulic fan motor (have new fan motor coming out). Frac pump 5 has bad oil hose (Having new hose made)/ Frac pump 13 has bad starter (Fixed onsite) Frac pump 9 ECU/fueling issues (Fixed onsite) Will resume zipper ops with 12 frac pumps. Pumpdown pump leak will have containment put below it and will be monitored until motor AOL.

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5:50	0.17	FRAC	RIF			1		Test frac pumps to zipper manifold. TEST GOOD. Valve team open zipper manifold to 1505. Standby for WL on 1504.
6:00	0.17	FRAC	WLT			1		WL retest pumpdown pumps Low 500 ps, High 8500 psi. TEST GOOD.
6:10	0.08	FRAC	WLT			2		***NPT KEANE WL*** Valve teamline out valves. Send boost and fill lube. Begin pressure test, discover leak on needle valve again.
6:15	0.58	FRAC	WLT			2		Begin repair of needle valve on BOP again.
6:50	0.08	FRAC	WLT			1		Needle valve fixed. Send boost. Pressure test 1000 psi, 8000 psi. TEST GOOD Bleed back to 3800 psi.
6:55	2.42	FRAC	WLT			1		Open well with 3800 psi. RIH. "Stage #7 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 @ . Bring on pumps at 11200'. Pump down as follows: 3 bpm @ 4230 psi 6 bpm @ 4432 psi 9 bpm @ 4740 psi 10 bpm @ 6248 psi Max:10 bpm. Max: 6590 psi Set plug @ 19432 ft Perforate as follows: 19408' - 19409' 19363' - 19364' 19319' - 19320' 19274' - 19275' Stabilized pressure after perforating: 4955 psi Pump down volume: 198 bbl" *****OFF KEANE WL NPT*****
9:20	1.17	FRAC	WLT			0		POOH. Log from 19274' to 10700' up passed liner top at 10,881'. Continue to POOH.
10:30	1.67	FRAC	WLT			0		Wait for frac at 200'.
12:10	0.65	FRAC	WLT			0		POOH with WL. Repair man lift. Grease upper and lower master valves (54 minutes to grease valves). Drop ball on the 1503 well.
12:49	0.10	FRAC	WLF			0		Shut in well with 4900 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.
12:55	0.58	FRAC	OPO			0		Other pad operations
13:30	1.50	FRAC	FRP			1		*****NPT KEANE FRAC***** Work on Blender and Chemical trailer. Sensors not calibrated right. pumping more chemicals that there should be. Recalibrate and bucket test. ***** NPT ENDS KEANE FRAC*****
15:00	3.57	FRAC	FRT			0		Stage 7 Summary University 19 PW Unit 1504H Interval 19274 - 19409 Open Well Pressure 4,060 psi Max Treating Pressure 9,290 psi Max Slurry Rate 52.4 bpm Average Treating Pressure 8,759 psi Average Slurry Rate 38.7 bpm Breakdown Pressure 8,806 psi Breakdown Rate 9.2 bpm Breakdown Volume 18,060 gal Avg HHP 8,308 hp Final ISIP 4,990 psi Frac Gradient 0.865 psi/ft Pad Volume 22,848 gal Main Body Volume 279,048 gal

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Flush Volume 28,854 gal 30/50 AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,660 lbs Proppant in Formation 420,660 lbs Avg Proppant Concentration 1.24 lb/gal Max Proppant Concentration 2.50 lb/gal Load to Recover 6,842 bbls Load to Recover w/o Acid 6,830 bbls 15% HCL Spearhead 504 gal Slickwater Fluid Pumped 6,552 bbls 20# Linear Fluid Pumped 80 bbls 20# Crosslink Fluid Pumped 0 bbls Pump down volume 198 bbls pump down rate 10.0 bpm Max pump down pressure 6,662 psi Fluid Temp 72.0 ?F Total Pump Time 3:30 hr:min Pumps Lost During Job 3 Treatment Start Time 15:04 0:00 0:00 Treatment End Time 18:34 0:00 3:30 Diverter Slurry bbls Proppant pumped at 0.5PPA increments from 0.5PPA-4.0PPA. All proppant placed. 500gal. of 15% HCl was placed and two 20# gel sweeps were pumped at 40 bbls each prior to flush. -Pump 10078 was taken out during the stage for fluid end maintenance. Chems were operated manually during the stage from the chem add unit and the blender Pump 10078 was taken out during the stage for fluid end maintenance, 10083 was taken out for mechanical issue, 10073 was taken out for low fuel
18:34	0.37	FRAC	OPO			0		Other pad operations
18:56	0.07	FRAC	FWL			0		Handover from frac to wireline.
19:00	0.12	FRAC	WLT			0		Line out valves and break off night cap. WL PU new guns and plug
19:07	0.13	FRAC	WLT			0		WL swing over and stab 1504. Send boost, fill ube and pressure test. low 1000 psi, high 8000 psi. TEST GOOD Bleed back and equalize.
19:15	1.48	FRAC	WLT			0		Valve team open UMW @ 4700 psi. Start WL PERF 1504 Stage 8. "Stage #Stg 8 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 '. Pump down as follows: 3 bpm @ 4700 psi 6 bpm @ 5000 psi 9 bpm @ 5900 psi 10 bpm @ 6300 psi Max:10 bpm. Max: 6550 psi Set plug @ 19249 ft UP 5' Perforate as follows: 19227' - 19228' UP 3' 19185' - 19186' 19141' - 19142' 19096' - 19097' Stabilized pressure after perforating: 4500 psi Pump down volume: 244 bbl
20:44	0.93	FRAC	WLT			0		WL POOH
21:40	1.08	FRAC	WLT			1		***NPT WEATHER*** WL wait for weather to pass. WL stay at 200'

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Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
22:45	0.25	FRAC	WLT			0		UNCAAP PAUSE: Review UNCAAP safe work strategy before coming to surface and coming off well.
23:00	0.12	FRAC	WLT			0		WL at surface.
23:07	0.13	FRAC	GRS			0		Oil states grease UMW and wing valve
23:15	0.12	FRAC	WLT			0		Valve team shut UMW, bleed off.
23:22	0.22	FRAC	WLT			0		WL break off lube and swing back. Drop out and check fire. All shots fired, balls away. Stab night cap and shut crown valve
23:35	0.08	FRAC	WLF			0		WL rack out lube and PCE. Hand back well.
23:40	0.17	FRAC	GRS			0		Oil states grease 1504 zipper manifold valves.
23:50	0.17	FRAC	OPO			0		Standby for other operations.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	3.67	FRAC	OPO			1	Standby for other operations.
3:40		FRAC	FRP			1	Keane frac perform pump maintenance after 1503 stg 28 frac.

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
08/17/2017 04:30	KEANE FRAC LP	Perforation		WLT	EN	Elect W/L Surface Equipment	0.85	0.85	1	OPEN
Description: Leak on needle valve on BOPS						Title: Leak on needle valve				
08/17/2017 06:10	KEANE FRAC LP	Perforation		WLT	EN	Elect W/L Surface Equipment	0.67	0.67	1	OPEN
Description: Leak on needle valve on BOP again.						Title: Leak on needle valve				
08/17/2017 13:30	KEANE FRAC LP	Stimulation		FRP	EN	Frac Blender	1.50	1.50		OPEN
Description: Work on Blender and Chemical trailer. Sensors not calibrated right. pumping more chemicals that there should be. Recalibrate and bucket test.						Title: Blender down				
08/17/2017 21:40	SHELL	Wait On Weather		WLT	N		1.08	1.08		OPEN
Description: wait on lightning and storm to pass						Title: WOW				
Total							4.10	4.10		