

EP WELLS DAILY OPERATIONS REPORT

Report 3

03/28/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	3.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Jeannine Snyder	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	62,071/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	8,374	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	2

Operations Summary

24 Hour Summary
Rig up frac stack and zipper manifold
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 3

03/28/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
8:30	0.50					0		Hold prejob safety meeting
9:00						0		Rig up and torque Cactus hydraulic upper master valve; flowcross; goathead & crown valve on all four wells - 2501H, 2502H, 2503H, 2504H; Spot zipper manifold and install remaining center barrel spacer; Spot accumulators and run accumulator hoses to 2501H and 2502H.
Total	0.50							

Remarks

Re-start costs for trailers, R&R combo unit, Sunbelt forklift & manbasket

EP WELLS DAILY OPERATIONS REPORT

Report 4

03/29/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	4.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Jeannine Snyder	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	70,445/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	8,374	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:							
Personnel: 19							
Total Hours Worked: 200							

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	3

Operations Summary

24 Hour Summary
Finished N/U zipper manifold, ran accululator hoses, function tested valves and R/U flowback.
Update Since Report Time
24 Hour Forecast
Cont. R/U flowback, pressure test frac stacks and finish running grease hoses.

EP WELLS DAILY OPERATIONS REPORT

Report 4

03/29/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
8:30	0.50	PREW	SAF			0		Hold pre-tour safety meeting
9:00	1.67	PREW	RUF			0		Begin R/U accumulator hoses, finish N/U zipper manifold
10:40	1.92	PREW	RUF			0		Begin R/U flowback iron
12:35	0.42	PREW	PPW			0		Begin Shell pressure testing - Low: 375 psi, 5 mins, High: 12,500 psi, 5 mins - GOOD LMV: Closed, UMW: Open, HWVs: Open, MWVs: Open, Crown: Open
13:00	1.00	PREW	RUF			0		Troubleshoot Pro pump - failed (will require replacement)
14:00	3.75	PREW	RUF			0		Finish running accumulator hoses and function testing valves
17:45	1.58	PREW	RUF			0		Finish R/U of 2" & 3" flowback iron
19:20	0.17	PREW	SIW			0		Secure location
Total	11.00							

EP WELLS DAILY OPERATIONS REPORT

Report 5

03/30/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	5.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Jeannine Snyder	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	78,806/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	8,293	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:							
Personnel: 10							
Total Hours Worked: 90							

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	4

Operations Summary

24 Hour Summary
Ran grease hoses and finished R/U flowback, grease hoses and pressure tested frac stacks and flow back iron.
Update Since Report Time
24 Hour Forecast
Cont. running grease hoses.

EP WELLS DAILY OPERATIONS REPORT

Report 5

03/30/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.50	PREW	NOA			0		No activity
7:30	0.50	PREW	SAF			0		Hold pre-tour safety meeting
8:00	1.58	PREW	RUF			0		R/U restraints, grease hose and test pump
9:35	0.67	PREW	PPW			0		Begin positive pressure testing - Low: 5 mins @ 300 psi, High: 5 mins @ 12,500 psi - GOOD LMV: Open, UMW: Closed, HWVs: Open, MWVs: Open, Crown: Open
10:15	5.33	PREW	RUF			0		Cont. R/U restraints and grease hoses
15:35	1.17	PREW	PPW			0		Fill flow back iron and pressure test - Low: 5 mins @ 250 psi, High: 5 mins @ 12,600 psi - GOOD LMV: Closed, UMW: Closed, HWVs: Open, MWVs: Open, Crown: Closed
16:45	1.83	PREW	RUF			0		Cont. R/U grease hoses
18:35	0.17	PREW	SIW			0		Secure location
18:45	5.25	PREW	NOA			0		No activity
Total	24.00							

EP WELLS DAILY OPERATIONS REPORT

Report 6

03/31/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	6.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Jeannine Snyder	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor		24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	87,093/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	8,288	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	5

Operations Summary

24 Hour Summary
Finish rigging up wellhead grease skid
Update Since Report Time
Released forklift, manbasket, combo unit, light plants for 1-April
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 6 03/31/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
Total								

Remarks

Released forklift, manbasket, combo unit, light plants

EP WELLS DAILY OPERATIONS REPORT

Report 7

04/08/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	7.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Randolph	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Nick Morrison	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	104,247/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	16,327	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	6

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 7

04/08/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	24.00	FRAC	RIF			0		Wait for equipment and spot as it arrives. Rig up CIG sand storms. RU frac iron to manifold, RU crane, Spot and rig up WL equipment, RU Extreame pressure test unit. Load sand into sand boxes. Remove night caps, Install rig lock.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	RIF			0	RU frac iron to manifold, Spot and rig up WL equipment, RU Extreame pressure test unit. Load sand into sand boxes. Remove night caps, Install rig lock. MU risers from manifold to well

EP WELLS DAILY OPERATIONS REPORT

Report 8

04/09/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	8.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matt Randolph	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Nick Morrison	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	120,574/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	16,327	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:							
Ma Hours 1125							

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	7

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 8

04/09/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	9.75	FRAC	RIF			0		RU frac iron to manifold, Spot and rig up WL equipment, RU Extreame pressure test unit. Load sand into sand boxes. Remove night caps, Install rig lock. MU risers from manifold to well
9:45	6.25	FRAC	RIF			0		Drug dog arrives to location. Shut down operations and wait for drug testing to be completed.
16:00	8.00	FRAC	RIF			0		Resume rig up risers to well and run restraints, install rig locks, function test WL BOP, Rund data cables to transducers, Set snd pressure test backside PRV, Change out PRV
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	3.25	PREW	PDP			0	Change out PRV and pressure test annulus. Change out PRV and reset to 2800 psi. Pressure test annulus to 2700 psi hold for 10 min. Bleed off.
3:15		PREW				0	Other pad operations

EP WELLS DAILY OPERATIONS REPORT

Report 9

04/10/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	9.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Matthew "Hank" Persaud	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Nick Morrison / Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	136,902/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	16,327	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	8

Operations Summary

24 Hour Summary
Continue with Prework
Update Since Report Time
24 Hour Forecast
Continue with Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 9

04/10/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.25	PREW	PDP			0		Change out PRV and pressure test annulus. Change out PRV and reset to 2800 psi. Pressure test annulus to 2700 psi hold for 10 min. Bleed off.
3:15	1.75	PREW				0		Other pad operations
5:00	3.75	FRAC	RIF			0		Start pumps and work on data van / pump software.
8:45	0.75	FRAC	RIF			0		Prime pumps.
9:30	2.00	FRAC	RIF			0		Fix leaks. Pressure test all zipper legs and all stacks to 11,000 psi.
11:30	0.50	FRAC	RIF			0		Double check valve alignment and check pressures on all wells - all at zero psi.
12:00	1.00	PREW	PTC			0		Bleed annulus to 0 psi and leave open to vent. Open well with 0 psi. TRRC test: 6825 - 6786 psi in 10 mins. Shell Integrity #1: 7490 - 7463 psi in 10 mins. Shell Integrity #2: 8340 - 8300 psi in 10 mins.
13:00	2.00	PREW	INJ			0		Sleeve Open: 9278 psi. Stable rate and pressure on brine: 14 @ 10,400 psi. Stable rate and pressure pre-acid: 15 @ 10,500 psi. Stable rate and pressure post-acid (no soak): 33 @ 10,000 psi. Stage TP Summary University 20 PW 2501H Interval 0 0 0 Open Well Pressure 73 0 0 psi Shut In Well Pressure 5,400 0 0 psi Max Treating Pressure 10,674 psi Max Slurry Rate 35.8 bpm Average Treating Pressure 9,228 psi Average Slurry Rate 14.0 bpm Average Rate w/ Prop on Bottom 0.0 bpm Breakdown Pressure 9,278 psi Breakdown Rate 2.5 bpm Breakdown Volume 1,050 gal Avg HHP 0 hp Final ISIP 5,527 psi Frac Gradient 0.923 psi/ft Pad Volume 0 gal Main Body Volume 28,989 gal Flush Volume 21,462 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 0 lbs Proppant in Formation 0 lbs Avg Proppant Concentration 0.00 lb/gal Max Proppant Concentration 0.00 lb/gal Load to Recover 690 bbls Load to Recover w/o Acid 618 bbls 15% HCL Spearhead 3,033 gal Slickwater Fluid Pumped 511 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 107 bbls Pump down volume 0 bbls pump down rate 0.0 bpm Max pump down pressure 0 psi Fluid Temp 76.4 ?F Total Pump Time 3:00 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 11:56 0:00 0:00 0:00 Treatment End Time 14:56 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - Ball in place style plug was used - Toe Port opened at 9278 psi

EP WELLS DAILY OPERATIONS REPORT

Report 9

04/10/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- Had to shut down briefly after injection due to needing to swap acid hose - 107 bbls of brine was pumped - 3033 gals 15% HCl was pumped. - All proppant placed and the stage was treated with Fresh water Time between Stages (TBF) 0:00:00 Hours : Minutes Estimated Cost from Job Packet
15:00		PREW	OPO			0		Other pad ops.
Total	15.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	2.00	PREW	OPO			0	Other pad ops.
2:00	0.95	PREW	OPO			0	Pause and hold safety huddle with keane wiring crew discuss operation have A&A 7 step conversation with crew to rig up on well 2501H
2:57	1.05	PREW	OPO			0	Pressure Test w/l lub high tet failed leaking O-ring on lub replace O-ring
4:00	0.33	PREW	OPO			0	retest lub 300 low 5 min 9800 high 5 min good test equalize to 5400 psi
4:20		PREW	OPO			0	Open well 5400 psi

EP WELLS DAILY OPERATIONS REPORT

Report 10

04/11/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	10.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	209,399/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	72,497	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:							
Total man hours=	1140						

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 ops
Update Since Report Time
24 Hour Forecast
Continue frac ops

EP WELLS DAILY OPERATIONS REPORT

Report 10

04/11/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	PREW	PSL			0		Other pad ops.
2:00	0.95	PREW	OPO			0		Pause and hold safety huddle with keane wiring crew discuss operation have A&A 7 step conversation with crew to rig up on well 2501H
2:57	1.05	FRAC	WLT			0		Pressure Test w/l lub high tet failed leaking O-ring on lub replace O-ring
4:00	0.33	FRAC	WLT			0		retest lub 300 low 5 min 9800 high 5 min good test equalize to 5400 psi
4:20	1.45	FRAC	WLT			0		Open well 5400 psi
5:47	0.45	FRAC	WLT			0		<p>"Stage #1 pump down sub and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and 3.65" pump down sub.</p> <p>Perforate as follows: 16538' - 16539' 16495' - 16496' 16452' - 16453'</p> <p>Stabilized pressure after perforating: 5300 psi Final pump down rate: 12 bpm Pump down volume: 243 bbl</p>
6:14	1.43	FRAC	WLT			0		POOH
7:40	0.25	FRAC	GRS			0		Routine UMW greasing. Shut in well
7:55	0.20	FRAC	WLT			0		Handover well to frac.
8:07	11.68	FRAC	WLF			0		Other Pad Ops
19:48	2.33	FRAC	FRT			0		<p>Stage 1 Summary University 20 PW 2501H Interval 16452 - 16538 0 0 0</p> <p>Open Well Pressure 4,567 0 0 psi Shut In Well Pressure 5,000 0 0 psi Max Treating Pressure 9,468 psi Max Slurry Rate 60.7 bpm Average Treating Pressure 8,875 psi Average Slurry Rate 56.0 bpm Average Rate w/ Prop on Bottom 57.7 bpm Breakdown Pressure 0 psi Breakdown Rate 0.0 bpm Breakdown Volume 0 gal Avg HHP 12,181 hp Final ISIP 5,672 psi Frac Gradient 0.936 psi/ft Pad Volume 17,220 gal Main Body Volume 285,768 gal Flush Volume 20,664 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,340 lbs Proppant in Formation 421,340 lbs Avg Proppant Concentration 1.78 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 6,804 bbls Load to Recover w/o Acid 6,791 bbls 15% HCL Spearhead 546 gal Slickwater Fluid Pumped 6,548 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 243 bbls pump down rate 12.0 bpm Max pump down pressure 8,444 psi Fluid Temp 76.4 °F Total Pump Time 2:20 hr:min</p>

EP WELLS DAILY OPERATIONS REPORT

Report 10

04/11/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pumps Lost During Job 0 0 0 0 Treatment Start Time 19:48 0:00 0:00 0:00 Treatment End Time 22:08 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 546 gals 15% HCl was pumped. - Proppant was stepped up from 0.5 PPA to 3.0 PPA in 0.5 PPA increments - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 18:04:00 Hours : Minutes Estimated Cost from Job Packet \$ 37,823.79
22:08	1.87	FRAC	FWL			0		other pad ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.00	FRAC	FWL			0	other pad ops
1:00	0.25	FRAC	FWL			0	01:00 Handover well to wireline. 01:09 Pressure test lubricator to 5000 psi. 01:15 Open well with 4300 psi.
1:15		FRAC	FWL			0	02:00 "Stage #1 Bridge Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog ECO Bridge Plug solid core Note Perform Casing test to 9900 psi for 10 min good test.. Set plug @ 16429' Perforate as follows: 16409' - 16410' 16366' - 16367' 16323' - 16324' 16280' - 16281' Stabilized pressure after perforating: 4700 psi Final pump down rate: 11 bpm Pump down volume: 144 bbl" 03:14 POOH

EP WELLS DAILY OPERATIONS REPORT

Report 11

04/12/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	11.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	4.00/16.67	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	405,560/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	196,161	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:							
Total Man Hours= 1145							

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	10

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 11

04/12/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.00	FRAC	FWL			0		other pad ops
1:00	0.25	FRAC	FWL			0		01:00 Handover well to wireline. 01:09 Pressure test lubricator to 5000 psi. 01:15 Open well with 4300 psi.
1:15	2.75	FRAC	WLT			0		02:00 "Stage #1 Bridge Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog ECO Bridge Plug solid core Note Perform Casing test to 9900 psi for 10 min good test. Set plug @ 16429' Perforate as follows: 16409' - 16410' 16366' - 16367' 16323' - 16324' 16280' - 16281' Stabilized pressure after perforating: 4700 psi Final pump down rate: 11 bpm Pump down volume: 144 bbl" 03:14 POOH
4:00	0.20	FRAC	GRS			0		04:00 Routine UMW greasing.
4:12	0.30	FRAC	FWL			0		04:12 Shut in well with 3500 psi. 04:30 Handover well to frac.
4:30	0.30	FRAC	OPO			0		Other pad ops
4:48	2.27	FRAC	FRT			0		Stage 2 Summary University 20 PW 2501H Interval 16280 - 16409 0 0 0 Open Well Pressure 3,600 0 0 psi Shut In Well Pressure 5,600 0 0 psi Max Treating Pressure 9,553 psi Max Slurry Rate 61.2 bpm Average Treating Pressure 9,165 psi Average Slurry Rate 57.1 bpm Average Rate w/ Prop on Bottom 57.7 bpm Breakdown Pressure 8,189 psi Breakdown Rate 9.0 bpm Breakdown Volume 546 gal Avg HHP 12,827 hp Final ISIP 5,736 psi Frac Gradient 0.942 psi/ft Pad Volume 7,770 gal Main Body Volume 260,244 gal Flush Volume 19,908 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,360 lbs Proppant in Formation 421,360 lbs Avg Proppant Concentration 1.86 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 6,196 bbls Load to Recover w/o Acid 6,190 bbls 15% HCL Spearhead 272 gal Slickwater Fluid Pumped 6,040 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 150 bbls pump down rate 11.0 bpm Max pump down pressure 6,500 psi Fluid Temp 76.4 ?F Total Pump Time 2:16 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 4:48 0:00 0:00 0:00 Treatment End Time 7:04 0:00 0:00 0:00

EP WELLS DAILY OPERATIONS REPORT

Report 11

04/12/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 272 gals 15% HCl was pumped. - Proppant was stepped up from 0.5 PPA to 3.0 PPA in 0.5 PPA increments - Bridge Plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 3:47:00 Hours : Minutes Estimated Cost from Job Packet \$ 35,289.09
7:04	1.50	FRAC	OPO			0		Other Pad Ops
8:34	0.27	FRAC	WLT			0		Handover well to wireline.
8:50	0.13	FRAC	WLT			0		Pressure test lubricator to 8000 psi.
8:58	1.15	FRAC	WLT			0		Open well with 4600 psi.
10:07	0.10	FRAC	WLT			0		"Stage #3 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology ECO Hybrid composite ball-drop frac plug. Set plug @ 16257' Perforate as follows: 16234' - 16235' 16192' - 16193' 16151' - 16152' 16108' - 16109' Stabilized pressure after perforating: 4900 psi Final pump down rate: 11 bpm Pump down volume: 163 bbl"
10:13	0.87	FRAC	WLT			0		POOH
11:05	0.17	FRAC	GRS			0		Routine UMW greasing.
11:15	0.15	FRAC	WLT			0		Shut in well with 4425 psi. Handover to Frac
11:24	1.50	FRAC	OPO			0		Opther pad ops
12:54	2.48	FRAC	FRT			0		Stage 3 Summary University 20 PW 2501H Interval 16108 - 16234 0 0 0 Open Well Pressure 4,160 0 0 psi Shut In Well Pressure 5,200 0 0 psi Max Treating Pressure 9,534 psi Max Slurry Rate 59.2 bpm Average Treating Pressure 9,159 psi Average Slurry Rate 55.1 bpm Average Rate w/ Prop on Bottom 56.1 bpm Breakdown Pressure 8,850 psi Breakdown Rate 7.5 bpm Breakdown Volume 10,752 gal Avg HHP 12,369 hp Final ISIP 5,418 psi Frac Gradient 0.913 psi/ft Pad Volume 14,875 gal Main Body Volume 295,937 gal Flush Volume 19,950 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 424,860 lbs Proppant in Formation 424,860 lbs Avg Proppant Concentration 1.67 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 7,046 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 11

04/12/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Load to Recover w/o Acid 7,040 bbls 15% HCL Spearhead 272 gal Slickwater Fluid Pumped 6,875 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 165 bbls pump down rate 11.0 bpm Max pump down pressure 6,500 psi Fluid Temp 76.4 ?F Total Pump Time 2:29 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 12:54 0:00 0:00 0:00 Treatment End Time 15:23 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 272 gals 15% HCl was pumped. - Proppant was stepped up from 0.5 PPA to 3.0 PPA in 0.5 PPA increments - Bridge Plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 1:05:00 Hours : Minutes Estimated Cost from Job Packet \$ 36,073.51
15:23	0.05	FRAC	FWL			0		Handover well to wireline.
15:26	0.08	WOR	BOP			0		Pressure test lubricator to 5000 psi.
15:31	1.22	FRAC	WLT			0		Open well with 4950 psi.
16:44	0.10	FRAC	WLT			0		"Stage #4 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology ECO Hybrid composite ball-drop frac plug. Set plug @ 16065' Perforate as follows: 16065' - 16066' 16022' - 16023' 15979' - 15980' 15936' - 15937' Stabilized pressure after perforating: 4600 psi Final pump down rate: 12 bpm Pump down volume: 161 bbl"
16:50	1.33	FRAC	WLT			0		POOH
18:10	0.15	FRAC	GRS			0		18:10 Routine UMV greasing.
18:19	0.18	FRAC	WLF			0		18:19 Shut in well with 4400 psi.
18:30	1.50	FRAC	WLF			0		18:30 Handover well to frac. Pad ops
20:00	2.00	FRAC	FRT			1		Keane cut sand due to blender issues START NPT: KEANE Blender Gear Box swap out blender NOTE: Keane Frac back on stage pumping sand
22:00	1.08	FRAC	FRT			1		Stage 4 Summary University 20 PW 2501H Interval 15936 - 16065 Frac 1 Frac 2 0 Open Well Pressure 4,217 4,730 0 psi Shut In Well Pressure 5,600 5,314 0 psi Max Treating Pressure 9,617 psi Max Slurry Rate 56.0 bpm Average Treating Pressure 9,144 psi Average Slurry Rate 53.7 bpm Average Rate w/ Prop on Bottom 54.8 bpm

EP WELLS DAILY OPERATIONS REPORT

Report 11

04/12/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Breakdown Pressure 7,737 psi Breakdown Rate 10.3 bpm Breakdown Volume 10,332 gal Avg HHP 12,035 hp Final ISIP 5,946 psi Frac Gradient 0.960 psi/ft Pad Volume 15,372 gal Main Body Volume 322,325 gal Flush Volume 33,348 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,880 lbs Proppant in Formation 420,880 lbs Avg Proppant Concentration 1.58 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 7,674 bbls Load to Recover w/o Acid 7,668 bbls 15% HCL Spearhead 269 gal Slickwater Fluid Pumped 7,505 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 163 bbls pump down rate 12.0 bpm Max pump down pressure 6,500 psi Fluid Temp 76.4 ?F Total Pump Time 2:47 hr:min Pumps Lost During Job 0 Frac 1 Frac 2 0 Treatment Start Time 18:38 21:40 0:00 0:00 Treatment End Time 20:00 23:05 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 272 gals 15% HCl was pumped. - Proppant was stepped up from 0.5 PPA to 2.0 PPA in 0.5 PPA increments cut sand due to issues with the blender. After swapping blenders proppant was stepped up from 0.5 PPA to 3.0 PPA in 0.5 PPA increments - Ball drop plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:27:00 Hours : Minutes Estimated Cost from Job Packet \$ 36,662.66
23:05	0.92	FRAC	FRT			1		Other pad Ops START NPT: WOW HIGH WINDS AND LIGHTING UNABLE TO PROCEED WITH OPS.
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	5.00	FRAC	FRT			1	START NPT: WOW HIGH WINDS AND LIGHTING UNABLE TO PROCEED WITH OPS.
5:00	1.00	FRAC	FRT			1	Winds laid down pick up guns and plug stab lub on well

EP WELLS DAILY OPERATIONS REPORT

Report 11

04/12/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

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
04/12/2019 20:00	KEANE FRAC LP	Stimulation		FRT	EN	Frac Blender		2.00	2	OPEN
Description: Gear box on blender has gone out Note: Blender Gear Box runs hydraulic for blender will have to swop out the blender						Title: Blender issues				
04/12/2019 23:05	SHELL	Wait On Truck	0.00	FRT	N			5.92	1	OPEN
Description: Waiting on high wind and lighting unable tproceed with ops .						Title: WOW				
Total								7.92		

EP WELLS DAILY OPERATIONS REPORT

Report 12

04/13/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	12.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	24.00/100.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	540,763/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	135,204	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:							
Total man hours = 1150							

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	11

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 12

04/13/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	5.00	FRAC	FWL			1		START NPT: WOW HIGH WINDS AND LIGHTING UNABLE TO PROCEED WITH OPS.
5:00	0.47	FRAC	FWL			1		Handover well to wireline. Winds laid down pick up guns and plug stab lub on well
5:28	0.12	FRAC	WLT			1		Pressure test lubricator to 5200 psi.
5:35	1.25	FRAC	WLT			1		Open well with 4300 psi.
6:50	0.13	FRAC	WLT			1		"Stage #5 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15913' Perforate as follows: 15893' - 15894' 15850' - 15851' 15807' - 15808' 15764' - 15765' Stabilized pressure after perforating: 5400 psi Final pump down rate: 12 bpm Pump down volume: 149 bbl"
6:58	0.87	FRAC	WLT			1		POOH
7:50	0.37	FRAC	WLT			1		Routine UMW greasing.
8:12	0.13	FRAC	WLT			1		Shut in well with 4175 psi. Handover well to frac.
8:20	0.07	FRAC	FRP			1		Equalize to well pressure
8:24	2.47	FRAC	FRT			1		Stage 5 Summary University 20 PW 2501H Interval 15764 - 15893 0 0 0 Open Well Pressure 4,000 0 0 psi Shut In Well Pressure 5,300 0 0 psi Max Treating Pressure 9,560 psi Max Slurry Rate 52.3 bpm Average Treating Pressure 9,221 psi Average Slurry Rate 44.1 bpm Average Rate w/ Prop on Bottom 46.5 bpm Breakdown Pressure 8,683 psi Breakdown Rate 10.2 bpm Breakdown Volume 294 gal Avg HHP 9,967 hp Final ISIP 5,453 psi Frac Gradient 0.916 psi/ft Pad Volume 3,234 gal Main Body Volume 259,361 gal Flush Volume 19,110 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,100 lbs Proppant in Formation 420,100 lbs Avg Proppant Concentration 1.82 lb/gal Max Proppant Concentration 2.50 lb/gal Load to Recover 6,175 bbls Load to Recover w/o Acid 6,175 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 6,023 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 152 bbls pump down rate 12.0 bpm Max pump down pressure 7,300 psi Fluid Temp 76.4 °F Total Pump Time 2:28 hr:min

EP WELLS DAILY OPERATIONS REPORT

Report 12

04/13/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pumps Lost During Job 0 0 0 0 Treatment Start Time 8:24 0:00 0:00 0:00 Treatment End Time 10:52 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 2.5 PPA - Ball in place plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 2:37:00 Hours : Minutes Estimated Cost from Job Packet \$ 34,873.97
10:52	4.13	FRAC	WLT			1		***NPT***
15:00	0.50	FRAC	WLT			1		Keane Wireline: Tool Trap not functioning properly
15:30	1.40	FRAC	WLT			1		Pressure test lubricator to 8000 psi.
16:54	0.60	FRAC	WLT			1		Open well with 4200 psi.
								"Stage #6 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15741' Perforate as follows: 15719' - 15720' 15678' - 15679' 15635' - 15636' 15592' - 15593' Stabilized pressure after perforating: 5700 psi Final pump down rate: 13 bpm Pump down volume: 152 bbl"
17:30	0.28	FRAC	WLT			1		17:30 Shut in well with 4300 psi.
17:47	0.22	FRAC	WLT			1		18:00 Handover well to frac.
18:00	0.12	FRAC	WLT			1		Routine UMV greasing.
18:07	2.27	FRAC	FRT			1		Other pad Ops
								Stage 6 Summary University 20 PW 2501H Interval 15592 - 15719 0 0 0 Open Well Pressure 4,177 0 0 psi Shut In Well Pressure 5,155 0 0 psi Max Treating Pressure 9,607 psi Max Slurry Rate 58.2 bpm Average Treating Pressure 9,165 psi Average Slurry Rate 51.1 bpm Average Rate w/ Prop on Bottom 53.2 bpm Breakdown Pressure 9,063 psi Breakdown Rate 9.8 bpm Breakdown Volume 420 gal Avg HHP 11,479 hp Final ISIP 5,698 psi Frac Gradient 0.938 psi/ft Pad Volume 15,372 gal Main Body Volume 239,916 gal Flush Volume 19,740 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 415,580 lbs Proppant in Formation 415,580 lbs Avg Proppant Concentration 2.10 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,712 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 12

04/13/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Load to Recover w/o Acid 5,706 bbls 15% HCL Spearhead 264 gal Slickwater Fluid Pumped 5,551 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 155 bbls pump down rate 13.0 bpm Max pump down pressure 7,300 psi Fluid Temp 76.4 ?F Total Pump Time 2:16 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 18:07 0:00 0:00 0:00 Treatment End Time 20:23 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 264 gal 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA - Ball in place plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 3:29:00 Hours : Minutes Estimated Cost from Job Packet \$ 34,303.30
20:23	0.15	FRAC	OPO			1		Other pad ops
20:32	0.30	FRAC	FWL			1		20:32 Handover well to wireline. 20:45 Pressure test lubricator to 5200 psi. 20:50 Open well with 4800 psi.
20:50	1.83	FRAC	WLT			1		21:57 "Stage #7 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15569' Perforate as follows: 15549' - 15550' 15506' - 15507' 15463' - 15464' 15420' - 15421' Stabilized pressure after perforating: 5000 psi Final pump down rate: 12 bpm Pump down volume: 119 bbl" 22:01 POOH
22:40	0.20	FRAC	GRS			1		22:40 Routine UMW greasing.
22:52	0.13	FRAC	WLF			1		22:52 Shut in well with 4400 psi. 23:00 Handover well to frac.
23:00	0.20	FRAC	OPO			1		Other pad ops
23:12	0.80	FRAC	OPO			1		Start Frac Treatment Stage 7
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.57	FRAC	FRT			1	Stage 7 Summary University 20 PW 2501H Interval 15420 - 15549 0 0 0 Open Well Pressure 4,294 0 0 psi Shut In Well Pressure 5,119 0 0 psi Max Treating Pressure 9,866 psi Max Slurry Rate 52.8 bpm

EP WELLS DAILY OPERATIONS REPORT

Report 12

04/13/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Average Treating Pressure 9,163 psi Average Slurry Rate 45.6 bpm Average Rate w/ Prop on Bottom 46.6 bpm Breakdown Pressure 9,156 psi Breakdown Rate 10.0 bpm Breakdown Volume 378 gal Avg HHP 10,241 hp Final ISIP 5,779 psi Frac Gradient 0.945 psi/ft Pad Volume 14,280 gal Main Body Volume 221,681 gal Flush Volume 19,824 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 419,688 lbs Proppant in Formation 419,688 lbs Avg Proppant Concentration 2.30 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,278 bbls Load to Recover w/o Acid 5,272 bbls 15% HCL Spearhead 257 gal Slickwater Fluid Pumped 5,150 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 122 bbls pump down rate 12.0 bpm Max pump down pressure 6,300 psi Fluid Temp 76.4 °F Total Pump Time 2:22 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 23:12 0:00 0:00 0:00 Treatment End Time 1:34 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 257 gal 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA - Ball in place plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:33:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,651.78
1:34	0.18	FRAC	FWL			1	Other pad ops
1:45	0.83	FRAC	WLT			1	01:45 Handover well to wireline. 02:29 Pressure test lubricator to 5000 psi. 02:35 Open well with 4600 psi.
2:35	1.58	FRAC	WLT			1	03:38 "Stage #8 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15397' Perforate as follows: 15377' - 15378' 15334' - 15335' 15291' - 15292' 15248' - 15249' Stabilized pressure after perforating: 5300 psi Final pump down rate: 12 bpm Pump down volume: 121 bbl" 03:32 POOH
4:10	0.35	FRAC	GRS			1	04:10 Routine UMW greasing.
4:31	0.23	FRAC	WLF			1	04:31 Shut in well with 4300 psi. 04:45 Handover well to frac.

EP WELLS DAILY OPERATIONS REPORT

Report 12

04/13/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
4:45		FRAC	OPO			1	Other pad ops

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
04/13/2019 10:52	KEANE FRAC LP	Perforation		WLT	EN	Elect W/L Surface Equipment	4.13	4.13	2	OPEN
Description: Tool trap would not close when trying to come off well . Had to close trap manually. Came off well and tried to fix tool trap but couldn't. Installed new tool trap.						Title: Wireline:Tool Trap not functioning properly				
Total							4.13	4.13		

EP WELLS DAILY OPERATIONS REPORT

Report 13

04/14/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	13.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	24.00/100.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	724,277/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	187,171	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	12

Operations Summary

24 Hour Summary
Frac Ops.
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 13

04/14/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.57	FRAC	FRT			1		Stage 7 Summary University 20 PW 2501H Interval 15420 - 15549 0 0 0 Open Well Pressure 4,294 0 0 psi Shut In Well Pressure 5,119 0 0 psi Max Treating Pressure 9,866 psi Max Slurry Rate 52.8 bpm Average Treating Pressure 9,163 psi Average Slurry Rate 45.6 bpm Average Rate w/ Prop on Bottom 46.6 bpm Breakdown Pressure 9,156 psi Breakdown Rate 10.0 bpm Breakdown Volume 378 gal Avg HHP 10,241 hp Final ISIP 5,779 psi Frac Gradient 0.945 psi/ft Pad Volume 14,280 gal Main Body Volume 221,681 gal Flush Volume 19,824 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 419,688 lbs Proppant in Formation 419,688 lbs Avg Proppant Concentration 2.30 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,278 bbls Load to Recover w/o Acid 5,272 bbls 15% HCL Spearhead 257 gal Slickwater Fluid Pumped 5,150 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 122 bbls pump down rate 12.0 bpm Max pump down pressure 6,300 psi Fluid Temp 76.4 °F Total Pump Time 2:22 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 23:12 0:00 0:00 0:00 Treatment End Time 1:34 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 257 gal 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA - Ball in place plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:33:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,651.78
1:34	0.18	FRAC	FWL			1		Other pad ops
1:45	0.83	FRAC	WLT			1		01:45 Handover well to wireline. 02:29 Pressure test lubricator to 5000 psi. 02:35 Open well with 4600 psi.
2:35	1.58	FRAC	WLT			1		03:38 "Stage #8 Plug and Perf. RIH with (4) 1" Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15397' Perforate as follows: 15377' - 15378' 15334' - 15335' 15291' - 15292'

EP WELLS DAILY OPERATIONS REPORT

Report 13

04/14/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								15248' - 15249' Stabilized pressure after perforating: 5300 psi Final pump down rate: 12 bpm Pump down volume: 121 bbl" 03:32 POOH
4:10	0.35	FRAC	GRS			1		04:10 Routine UMW greasing.
4:31	0.23	FRAC	WLF			1		04:31 Shut in well with 4300 psi. 04:45 Handover well to frac.
4:45	2.10	FRAC	OPO			1		Other pad ops
6:51	2.53	FRAC	FRT			1		Stage 8 Summary University 20 PW 2501H Interval 15248 - 15377 0 0 0 Open Well Pressure 4,000 0 0 psi Shut In Well Pressure 5,500 0 0 psi Max Treating Pressure 9,641 psi Max Slurry Rate 53.0 bpm Average Treating Pressure 9,334 psi Average Slurry Rate 47.9 bpm Average Rate w/ Prop on Bottom 49.9 bpm Breakdown Pressure 8,284 psi Breakdown Rate 6.0 bpm Breakdown Volume 294 gal Avg HHP 10,958 hp Final ISIP 5,801 psi Frac Gradient 0.947 psi/ft Pad Volume 1,008 gal Main Body Volume 255,360 gal Flush Volume 35,574 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,000 lbs Proppant in Formation 421,000 lbs Avg Proppant Concentration 1.97 lb/gal Max Proppant Concentration 2.50 lb/gal Load to Recover 6,080 bbls Load to Recover w/o Acid 6,074 bbls 15% HCL Spearhead 254 gal Slickwater Fluid Pumped 5,951 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 123 bbls pump down rate 12.0 bpm Max pump down pressure 6,900 psi Fluid Temp 76.4 ?F Total Pump Time 2:32 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 6:51 0:00 0:00 0:00 Treatment End Time 9:23 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 254 gal 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 2.5 PPA - Ball in place plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 1:52:00 Hours : Minutes Estimated Cost from Job Packet \$ 34,539.40
9:23	0.07	FRAC	FWL			1		Handover well to wireline.
9:27	0.08	FRAC	WLT			1		Pressure test lubricator to 5500 psi.

EP WELLS DAILY OPERATIONS REPORT

Report 13

04/14/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
9:32	0.97	FRAC	WLT			1		Open well with 5150 psi.
10:30	0.08	FRAC	WLT			1		"Stage #9 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15225' Perforate as follows: 15202' - 15203' 15161' - 15162' 15119' - 15120' 15076' - 15077' Stabilized pressure after perforating: 5300 psi Final pump down rate: 12 bpm Pump down volume: 129 bbl"
10:35	0.63	FRAC	WLT			1		POOH
11:13	0.17	FRAC	GRS			1		Routine UMW greasing.
11:23	0.13	FRAC	WLT			1		Shut in well with 4728 psi. Handover well to frac.
11:31	0.73	FRAC	GRS			1		Grease the Zipper
12:15	1.00	FRAC	FRT			1		***NPT*** CIG: Viper belt on sand delivery system had a bearing go out.
13:15	2.68	FRAC	FRT			1		Stage 9 Summary University 20 PW 2501H Interval 15076 - 15202 0 0 0 Open Well Pressure 4,300 0 0 psi Shut In Well Pressure 5,100 0 0 psi Max Treating Pressure 9,702 psi Max Slurry Rate 51.2 bpm Average Treating Pressure 9,245 psi Average Slurry Rate 45.6 bpm Average Rate w/ Prop on Bottom 46.4 bpm Breakdown Pressure 9,049 psi Breakdown Rate 10.0 bpm Breakdown Volume 3,696 gal Avg HHP 10,333 hp Final ISIP 5,406 psi Frac Gradient 0.912 psi/ft Pad Volume 22,738 gal Main Body Volume 263,133 gal Flush Volume 19,404 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 425,650 lbs Proppant in Formation 425,650 lbs Avg Proppant Concentration 1.98 lb/gal Max Proppant Concentration 2.50 lb/gal Load to Recover 6,265 bbls Load to Recover w/o Acid 6,259 bbls 15% HCL Spearhead 248 gal Slickwater Fluid Pumped 6,127 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 132 bbls pump down rate 12.0 bpm Max pump down pressure 6,800 psi Fluid Temp 76.4 ?F Total Pump Time 2:40 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 13:16 0:00 0:00 0:00 Treatment End Time 15:56 0:00 0:00 0:00 Diverter Slurry bbls

EP WELLS DAILY OPERATIONS REPORT

Report 13

04/14/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 248 gal 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 4.0 PPA - Ball in place plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 2:00:00 Hours : Minutes Estimated Cost from Job Packet \$ 35,006.96
15:56	0.07	FRAC	FWL			1		Handover well to wireline.
16:00	0.08	FRAC	WLT			1		Pressure test lubricator to 4900 psi
16:05	1.15	FRAC	WLT			1		Open well with 4850 psi.
17:14	0.08	FRAC	WLT			1		"Stage #10 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 15053' Perforate as follows: 15033' - 15034' 14990' - 14991' 14947' - 14948' 14904' - 14905' Stabilized pressure after perforating: 4800 psi Final pump down rate: 13 bpm Pump down volume: 116 bbl"
17:19	0.52	FRAC	WLT			1		POOH
17:50	0.33	FRAC	GRS			1		1750 Routine UMW greasing.
18:10	0.33	FRAC	WLF			1		1810 Shut in well with 4400 psi.
18:30	5.50	FRAC	OPO			1		1830 Handover well to frac. Other pad ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.73	FRAC	OPO			1	Other pad ops
1:44	2.08	FRAC	FRT			1	Stage 10 Summary University 20 PW 2501H Interval 14904 - 15033 0 0 0 Open Well Pressure 3,885 0 0 psi Shut In Well Pressure 5,469 0 0 psi Max Treating Pressure 9,692 psi Max Slurry Rate 55.3 bpm Average Treating Pressure 9,120 psi Average Slurry Rate 50.8 bpm Average Rate w/ Prop on Bottom 51.5 bpm Breakdown Pressure 8,303 psi Breakdown Rate 9.6 bpm Breakdown Volume 294 gal Avg HHP 11,355 hp Final ISIP 5,931 psi Frac Gradient 0.959 psi/ft Pad Volume 14,658 gal Main Body Volume 231,009 gal Flush Volume 19,740 gal 100 Mesh Brown Sand Pumped 0 lbs

EP WELLS DAILY OPERATIONS REPORT

Report 13

04/14/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,170 lbs Proppant in Formation 420,170 lbs Avg Proppant Concentration 2.20 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,500 bbls Load to Recover w/o Acid 5,495 bbls 15% HCL Spearhead 219 gal Slickwater Fluid Pumped 5,376 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 119 bbls pump down rate 13.0 bpm Max pump down pressure 6,600 psi Fluid Temp 76.4 ?F Total Pump Time 2:05 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 1:44 0:00 0:00 0:00 Treatment End Time 3:49 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 219 gal of 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA. - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 1:10:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,490.08
3:49		FRAC	OPO			1	Other pad ops

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
04/14/2019 12:15				FRT	EN			1.00	2	
Description: Had to wait to start next stage do to bearing failure on viper belt. Replace bearing and started next stage.						Title: CIG/Frac Sand: Bearing went out on viper belt.				
Total								1.00		

EP WELLS DAILY OPERATIONS REPORT

Report 14

04/15/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	14.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	15.17/100.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	751,881/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	17,864	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:							
Total man hours = 1140							

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	13

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 14

04/15/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.73	FRAC	OPO			1		Other pad ops
1:44	2.08	FRAC	FRT			1		Stage 10 Summary University 20 PW 2501H Interval 14904 - 15033 0 0 0 Open Well Pressure 3,885 0 0 psi Shut In Well Pressure 5,469 0 0 psi Max Treating Pressure 9,692 psi Max Slurry Rate 55.3 bpm Average Treating Pressure 9,120 psi Average Slurry Rate 50.8 bpm Average Rate w/ Prop on Bottom 51.5 bpm Breakdown Pressure 8,303 psi Breakdown Rate 9.6 bpm Breakdown Volume 294 gal Avg HHP 11,355 hp Final ISIP 5,931 psi Frac Gradient 0.959 psi/ft Pad Volume 14,658 gal Main Body Volume 231,009 gal Flush Volume 19,740 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,170 lbs Proppant in Formation 420,170 lbs Avg Proppant Concentration 2.20 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,500 bbls Load to Recover w/o Acid 5,495 bbls 15% HCL Spearhead 219 gal Slickwater Fluid Pumped 5,376 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 119 bbls pump down rate 13.0 bpm Max pump down pressure 6,600 psi Fluid Temp 76.4 ?F Total Pump Time 2:05 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 1:44 0:00 0:00 0:00 Treatment End Time 3:49 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 219 gal of 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA. - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 1:10:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,490.08
3:49	3.18	FRAC	OPO			1		Other pad ops
7:00	0.08	FRAC	WLT			1		Pressure test lubricator to 4500 psi.
7:05	0.97	FRAC	WLT			1		Open well with 4500 psi.
8:03	0.10	FRAC	WLT			1		"Stage #11 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60" phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 14880' Perforate as follows: 14861' - 14862' 14818' - 14819'

EP WELLS DAILY OPERATIONS REPORT

Report 14

04/15/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								14775' - 14776' 14732' - 14733' Stabilized pressure after perforating: 4900 psi Final pump down rate: 12 bpm Pump down volume: 104 bbl"
8:09	0.68	FRAC	WLT			1		POOH
8:50	0.53	FRAC	WLT			1		Routine UMW greasing.
9:22	0.13	FRAC	WLT			1		Shut in well with 4400 psi. Handover well to frac.
9:30	3.47	FRAC	OPO			1		Other Pad Ops
12:58	2.20	FRAC	FRT			1		Stage 11 Summary University 20 PW 2501H Interval 14732 - 14861 0 0 0 Open Well Pressure 4,100 0 0 psi Shut In Well Pressure 5,300 0 0 psi Max Treating Pressure 9,649 psi Max Slurry Rate 51.0 bpm Average Treating Pressure 9,174 psi Average Slurry Rate 46.5 bpm Average Rate w/ Prop on Bottom 49.0 bpm Breakdown Pressure 8,623 psi Breakdown Rate 10.0 bpm Breakdown Volume 378 gal Avg HHP 10,456 hp Final ISIP 5,497 psi Frac Gradient 0.920 psi/ft Pad Volume 4,106 gal Main Body Volume 242,304 gal Flush Volume 19,278 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 431,730 lbs Proppant in Formation 431,730 lbs Avg Proppant Concentration 2.01 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,769 bbls Load to Recover w/o Acid 5,769 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 5,662 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 107 bbls pump down rate 12.0 bpm Max pump down pressure 6,900 psi Fluid Temp 76.4 ?F Total Pump Time 2:12 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 12:58 0:00 0:00 0:00 Treatment End Time 15:10 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was stepped from 0.5 PPA to 3.0 PPA - Ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:38:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,825.87
15:10		FRAC	OPO			1		Other Pad Ops
Total	15.17							

EP WELLS DAILY OPERATIONS REPORT

Report 15

04/16/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	15.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	24.00/100.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	998,064/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	129,824	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:							
Total man hours = 1140							

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	14

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 15

04/16/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	FRAC	WLT			1		Continue wireline Ops
0:30	0.37	FRAC	WLF			1		0:30 Shut in well with 4000 psi. 0:52 Handover well to frac.
0:52	1.18	FRAC	OPO			1		Other pad ops
2:03	1.95	FRAC	FRT			1		Stage 12 Summary University 20 PW 2501H Interval 14560 - 14689 0 0 0 Open Well Pressure 3,908 0 0 psi Shut In Well Pressure 5,307 0 0 psi Max Treating Pressure 9,788 psi Max Slurry Rate 55.4 bpm Average Treating Pressure 8,883 psi Average Slurry Rate 49.6 bpm Average Rate w/ Prop on Bottom 51.4 bpm Breakdown Pressure 7,240 psi Breakdown Rate 9.3 bpm Breakdown Volume 210 gal Avg HHP 10,799 hp Final ISIP 5,884 psi Frac Gradient 0.955 psi/ft Pad Volume 3,066 gal Main Body Volume 222,707 gal Flush Volume 19,110 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 425,950 lbs Proppant in Formation 425,950 lbs Avg Proppant Concentration 2.17 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,303 bbls Load to Recover w/o Acid 5,297 bbls 15% HCL Spearhead 233 gal Slickwater Fluid Pumped 5,196 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 101 bbls pump down rate 12.0 bpm Max pump down pressure 7,000 psi Fluid Temp 76.4 °F Total Pump Time 1:57 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 2:03 0:00 0:00 0:00 Treatment End Time 4:00 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 233 gal of 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA. - Ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:05:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,453.30
4:00	5.05	FRAC	OPO			1		Other pad ops
9:03	0.22	FRAC	FWL			1		Handover well to wireline.
9:16	0.10	FRAC	FWL			1		Pressure test lubricator to 4350 psi.
9:22	0.78	FRAC	WLT			1		Open well with 4300 psi.
10:09	0.05	FRAC	WLT			1		"Stage #13 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60°

EP WELLS DAILY OPERATIONS REPORT

Report 15

04/16/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 14537' Perforate as follows: 14517' - 14518' 14474' - 14475' 14431' - 14432' 14388' - 14389' Stabilized pressure after perforating: 4900 psi Final pump down rate: 12 bpm Pump down volume: 93 bbl"
10:12	0.80	FRAC	WLT			1		POOH
11:00	0.17	FRAC	GRS			1		Routine UMW greasing.
11:10	0.17	FRAC	WLT			1		Shut in well with 4275 psi. Handover well to frac.
11:20	1.17	FRAC	OPO			1		Other Pad Ops
12:30	1.43	FRAC	WLF			1		***NPT*** Keane: Pump Maintenance
13:56	1.95	FRAC	FRT			1		Stage 13 Summary University 20 PW 2501H Interval 14388 - 14517 0 0 0 Open Well Pressure 4,100 0 0 psi Shut In Well Pressure 5,100 0 0 psi Max Treating Pressure 9,552 psi Max Slurry Rate 60.4 bpm Average Treating Pressure 8,554 psi Average Slurry Rate 47.9 bpm Average Rate w/ Prop on Bottom 50.4 bpm Breakdown Pressure 8,781 psi Breakdown Rate 13.0 bpm Breakdown Volume 756 gal Avg HHP 10,043 hp Final ISIP 5,472 psi Frac Gradient 0.918 psi/ft Pad Volume 2,213 gal Main Body Volume 214,932 gal Flush Volume 19,404 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,420 lbs Proppant in Formation 420,420 lbs Avg Proppant Concentration 2.19 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 5,117 bbls Load to Recover w/o Acid 5,117 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 5,082 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 35 bbls pump down rate 12.0 bpm Max pump down pressure 6,400 psi Fluid Temp 76.4 ?F Total Pump Time 1:57 hr:min Pumps Lost During Job 2 0 0 0 Treatment Start Time 13:56 0:00 0:00 0:00 Treatment End Time 15:53 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - 256 gal of 15% HCL was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to

EP WELLS DAILY OPERATIONS REPORT

Report 15

04/16/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								3.5 PPA then back down to 2.5 PPA due to pressure - Ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water - Lost pump 10096 due to greaser not working - Lost pump 409 due to packing Time between Stages (TBF) 2:12:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,798.07
15:53	2.37	FRAC	FWL			1		Other Pad Ops
18:15	0.17	FRAC	WLT			1		18:15 Handover well to wireline. 18:20 Pressure test lubricator to 5000 psi. 18:25 Open well with 4500 psi.
18:25	1.55	FRAC	WLT			1		19:28 "Stage #14 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 14369' Perforate as follows: 14345' - 14346' 14302' - 14303' 14259' - 14260' 14216' - 14217' Stabilized pressure after perforating: 5100 psi Final pump down rate: 12 bpm Pump down volume: 79 bbl" 19:32 POOH
19:58	0.37	FRAC	GRS			1		19:58 Routine UMW greasing.
20:20	0.17	FRAC	WLF			1		20:20 Shut in well with 4700 psi. 20:30 Handover well to frac.
20:30	3.50	FRAC	OPO			1		Other pad ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.65	FRAC	OPO			0	Other pad ops
1:39	1.72	FRAC	FRT			1	Stage 14 Summary University 20 PW 2501H Interval 14216 - 14345 0 0 0 Open Well Pressure 4,380 0 0 psi Shut In Well Pressure 5,144 0 0 psi Max Treating Pressure 9,535 psi Max Slurry Rate 59.1 bpm Average Treating Pressure 9,112 psi Average Slurry Rate 51.0 bpm Average Rate w/ Prop on Bottom 54.5 bpm Breakdown Pressure 8,146 psi Breakdown Rate 10.0 bpm Breakdown Volume 168 gal Avg HHP 11,390 hp Final ISIP 6,063 psi Frac Gradient 0.971 psi/ft Pad Volume 1,722 gal Main Body Volume 206,682 gal Flush Volume 19,236 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 427,180 lbs Proppant in Formation 427,180 lbs Avg Proppant Concentration 2.34 lb/gal

EP WELLS DAILY OPERATIONS REPORT

Report 15

04/16/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Max Proppant Concentration 3.00 lb/gal Load to Recover 4,921 bbls Load to Recover w/o Acid 4,921 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,840 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 81 bbls pump down rate 12.0 bpm Max pump down pressure 6,500 psi Fluid Temp 76.4 ?F Total Pump Time 1:43 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 1:39 0:00 0:00 0:00 Treatment End Time 3:22 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA - Ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:05:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,848.24
3:22		FRAC	OPO			1	Other pad ops

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
04/16/2019 12:30				WLF	EN			1.43	2	
Description: Had to due multiple packing's on pumps and communications between data van and pumps						Title: Keane: Pump Maintenance				
Total								1.43		

EP WELLS DAILY OPERATIONS REPORT

Report 16

04/17/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	16.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	22.35/93.13	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,130,240/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	129,425	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:							
Total man hours = 1144							

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	15

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 16

04/17/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.65	FRAC	OPO			0		Other pad ops
1:39	1.72	FRAC	FRT			1		Stage 14 Summary University 20 PW 2501H Interval 14216 - 14345 0 0 0 Open Well Pressure 4,380 0 0 psi Shut In Well Pressure 5,144 0 0 psi Max Treating Pressure 9,535 psi Max Slurry Rate 59.1 bpm Average Treating Pressure 9,112 psi Average Slurry Rate 51.0 bpm Average Rate w/ Prop on Bottom 54.5 bpm Breakdown Pressure 8,146 psi Breakdown Rate 10.0 bpm Breakdown Volume 168 gal Avg HHP 11,390 hp Final ISIP 6,063 psi Frac Gradient 0.971 psi/ft Pad Volume 1,722 gal Main Body Volume 206,682 gal Flush Volume 19,236 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 427,180 lbs Proppant in Formation 427,180 lbs Avg Proppant Concentration 2.34 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 4,921 bbls Load to Recover w/o Acid 4,921 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,840 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 81 bbls pump down rate 12.0 bpm Max pump down pressure 6,500 psi Fluid Temp 76.4 ?F Total Pump Time 1:43 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 1:39 0:00 0:00 0:00 Treatment End Time 3:22 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.0 PPA then stepped to 3.0 PPA - Ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:05:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,848.24
3:22	0.63	FRAC	OPO			1		Other pad ops
4:00	0.17	FRAC	FWL			1		04:00 Handover well to wireline. 04:05 Pressure test lubricator to 5200 psi. 04:10 Open well with 4600 psi.
4:10	1.17	FRAC	WLT			1		05:07 "Stage #15 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. NOTE: PLUG DID NOT SET WIRELINE POOH TO CHECK TOOLS AND VERIFY ISSUES Set plug @ 14193' Perforate as follows: ' - 1'

EP WELLS DAILY OPERATIONS REPORT

Report 16

04/17/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								' - 1' ' - 1' ' - 1' Stabilized pressure after perforating: psi Final pump down rate: 12 bpm Pump down volume: 72 bbl" 05:20 POOH
5:20	3.42	FRAC	WLT			1		START NPT: ON KNEANE WIRELINE FOR MISS RUN WITH PLUG DID NOT SEE ANY INDICATION THAT PLUG SET POOH CHECK TOOLS
8:45	0.08	FRAC	WLT			1		"Stage #15 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 14193' Perforate as follows: 14173' - 14174' 14130' - 14131' 14087' - 14088' 14046' - 14047' Stabilized pressure after perforating: 5037 psi Final pump down rate: 12 bpm Pump down volume: 72 bbl"
8:50	0.83	FRAC	WLT			1		POOH
9:40	0.17	FRAC	GRS			1		Routine UMW greasing.
9:50	0.08	FRAC	WLF			1		Shut in well with 4075 psi. Handover well to frac.
9:55	3.98	FRAC	OPO			1		Other Pad Ops
13:54	1.52	FRAC	FRT			1		Stage 15 Summary University 20 PW 2501H Interval 14046 - 14173 0 0 0 Open Well Pressure 4,000 0 0 psi Shut In Well Pressure 5,376 0 0 psi Max Treating Pressure 9,675 psi Max Slurry Rate 61.0 bpm Average Treating Pressure 9,117 psi Average Slurry Rate 53.5 bpm Average Rate w/ Prop on Bottom 57.1 bpm Breakdown Pressure 8,294 psi Breakdown Rate 10.9 bpm Breakdown Volume 336 gal Avg HHP 11,955 hp Final ISIP 5,736 psi Frac Gradient 0.942 psi/ft Pad Volume 1,806 gal Main Body Volume 212,604 gal Flush Volume 19,446 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 432,440 lbs Proppant in Formation 432,440 lbs Avg Proppant Concentration 2.35 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,062 bbls Load to Recover w/o Acid 5,062 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,890 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 172 bbls pump down rate 12.0 bpm Max pump down pressure 6,420 psi Fluid Temp 76.4 ?F

EP WELLS DAILY OPERATIONS REPORT

Report 16

04/17/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Total Pump Time 1:41 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 13:54 0:00 0:00 0:00 Treatment End Time 15:35 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped to 3.0 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:31:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,767.10
15:25	8.58	FRAC	OPO			1		Other Pad Ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	OPO			1	Other Pad Ops

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
04/17/2019 05:20	KEANE FRAC LP	Perforation		WLT	EN	Elect W/line Perforating Equip		3.42	2	OPEN
Description: WIRELINE RIH ON STAGE 15 PUMP DOWN GOT ON DEPTH TO SET PLUG PERFORMED SETTING PROCEDURE WITH UNIT AND DID NOT SEE INDICATION THAT PLUG SET POOH WITH PLUG AND CHECK TOOLS						Title: KEANE WIRELINE				
Total								3.42		

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/18/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	17.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	24.00/100.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,254,984/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	124,496	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:							
Total man hours = 1145							

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	16

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/18/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	4.77	FRAC	OPO			1		Other Pad Ops
4:46	0.17	FRAC	FWL			1		04:46 Handover well to wireline. 04:50 Pressure test lubricator to 4800 psi. 04:56 Open well with 4000 psi.
4:56	1.83	FRAC	WLT			1		05:57 "Stage #16 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 14021' Perforate as follows: 14001' - 14002' 13958' - 13959' 13915' - 13916' 13872' - 13873' Stabilized pressure after perforating: 5300 psi Final pump down rate: 12 bpm Pump down volume: 74 bbl" 06:01 POOH
6:46	0.15	FRAC	GRS			1		Routine UMV greasing.
6:55	0.08	FRAC	WLF			1		Shut in well with 4100 psi. Handover well to frac.
7:00	0.25	FRAC	OPO			1		Other Pad Ops
7:15	0.68	FRAC	FRT			1		Opened up stage #16 Started stage but soon after had to flush due to water transfer being down.
7:56	3.65	FRAC	FRT			1		***NPT*** Grady Rentals: Overflow the working tanks and had split in transfer line
11:35	1.35	FRAC	FRT			1		Stage 16 Summary University 20 PW 2501H Interval 13872 - 13999 Frac A Frac B 0 Open Well Pressure 4,000 4,420 0 psi Shut In Well Pressure 5,500 5,340 0 psi Max Treating Pressure 10,019 psi Max Slurry Rate 65.2 bpm Average Treating Pressure 9,240 psi Average Slurry Rate 55.3 bpm Average Rate w/ Prop on Bottom 58.9 bpm Breakdown Pressure 8,134 psi Breakdown Rate 8.6 bpm Breakdown Volume 462 gal Avg HHP 12,524 hp Final ISIP 5,769 psi Frac Gradient 0.944 psi/ft Pad Volume 7,602 gal Main Body Volume 267,372 gal Flush Volume 36,834 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 426,700 lbs Proppant in Formation 426,700 lbs Avg Proppant Concentration 1.94 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 6,366 bbls Load to Recover w/o Acid 6,366 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 6,292 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 74 bbls pump down rate 12.0 bpm Max pump down pressure 7,140 psi Fluid Temp 76.4 ?F

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/18/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Total Pump Time 2:09 hr:min Pumps Lost During Job 0 Frac A Frac B 0 Treatment Start Time 7:15 11:35 0:00 0:00 Treatment End Time 8:03 12:56 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped to 3.0 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water - Cut sand and flushed the well 250 bbls into the 2.5 PPA hold. Water transfer developed a leak and could not keep up with rate. - The stage was resumed by restarting the ramp. Time between Stages (TBF) 0:38:00 Hours : Minutes Estimated Cost from Job Packet \$ 34,992.69
12:56	1.73	FRAC	OPO			1		Other Pad Ops
14:40	0.15	FRAC	FWL			1		14:40 Handover well to wireline. 14:47 Pressure test lubricator to 4200 psi. 14:49 Open well with 4700 psi.
14:49	1.80	FRAC	WLT			1		15:41 "Stage #17 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13829' Perforate as follows: 13829' - 13830' 13786' - 13787' 13743' - 13744' 13700' - 13701' Stabilized pressure after perforating: 5301 psi Final pump down rate: 12 bpm Pump down volume: 69 bbl" 15:44 POOH
16:37	0.13	FRAC	GRS			1		Routine UMV greasing.
16:45	0.13	FRAC	WLF			1		Shut in well with 4600 psi. Handover well to frac.
16:53	3.00	FRAC	OPO			1		Other Pad Ops
19:53	1.42	FRAC	FRT			1		Stage 17 Summary University 20 PW 2501H Interval 13700 - 13829 0 0 0 Open Well Pressure 4,290 0 0 psi Shut In Well Pressure 5,315 0 0 psi Max Treating Pressure 9,745 psi Max Slurry Rate 65.8 bpm Average Treating Pressure 9,316 psi Average Slurry Rate 59.0 bpm Average Rate w/ Prop on Bottom 63.9 bpm Breakdown Pressure 8,660 psi Breakdown Rate 10.0 bpm Breakdown Volume 210 gal Avg HHP 13,472 hp Final ISIP 6,134 psi Frac Gradient 0.977 psi/ft Pad Volume 1,302 gal Main Body Volume 192,402 gal Flush Volume 18,648 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 417,080 lbs

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/18/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Proppant in Formation 417,080 lbs Avg Proppant Concentration 2.46 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 4,581 bbls Load to Recover w/o Acid 4,581 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,512 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 69 bbls pump down rate 12.0 bpm Max pump down pressure 6,340 psi Fluid Temp 76.4 °F Total Pump Time 1:25 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 19:53 0:00 0:00 0:00 Treatment End Time 21:18 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped to 3.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:57:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,000.96
21:18	2.70	FRAC	OPO			1		Other pas ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.50	FRAC	FWL			1	Other pas ops
0:30	0.38	FRAC	WLT			1	00:30 Handover well to wireline. 00:40 Pressure test lubricator to 5000 psi. 00:53 Open well with 4500 psi.
0:53	1.73	FRAC	WLT			1	01:59 "Stage #18 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13677' Perforate as follows: 13657' - 13658' 13614' - 13615' 13571' - 13572' 13528' - 13529' Stabilized pressure after perforating: 4900 psi Final pump down rate: 12 bpm Pump down volume: 56 bbl" 02:02 POOH
2:37	0.32	FRAC	GRS			1	02:37 Routine UMW greasing.
2:56	0.15	FRAC	WLF			1	02:56 Shut in well with 4400 psi. 03:05 Handover well to frac.
3:05		FRAC	WLF			1	Frac waitnig on Cactus to grease UMHV on 2502H, 2503H due to leaking by

EP WELLS DAILY OPERATIONS REPORT

Report 17

04/18/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

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
04/18/2019 07:56				FRT	EN			3.65	2	
Description: Overflowed the working tanks and shut in the manifold on backside of tanks before all the water was drained out of the line. Causing the transfer line to split. Replace line before starting back up operations.						Title: Grady Rentals: Overflow the working tanks and had split in transfer line				
Total								3.65		

EP WELLS DAILY OPERATIONS REPORT

Report 18

04/19/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	18.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	24.00/100.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,389,660/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	128,274	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:							
Total man hours=	1140						

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	17

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 18

04/19/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	FRAC	FWL			1		Other pas ops
0:30	0.38	FRAC	WLT			1		00:30 Handover well to wireline. 00:40 Pressure test lubricator to 5000 psi. 00:53 Open well with 4500 psi.
0:53	1.73	FRAC	WLT			1		01:59 "Stage #18 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13677' Perforate as follows: 13657' - 13658' 13614' - 13615' 13571' - 13572' 13528' - 13529' Stabilized pressure after perforating: 4900 psi Final pump down rate: 12 bpm Pump down volume: 56 bbl" 02:02 POOH
2:37	0.32	FRAC	GRS			1		02:37 Routine UMW greasing.
2:56	0.15	FRAC	WLF			1		02:56 Shut in well with 4400 psi. 03:05 Handover well to frac.
3:05	0.78	FRAC	GRS			1		Frac waitnig on Cactus to grease UMHV on 2502H, 2503H due to leaking by
3:52	1.65	FRAC	FRT			1		Stage 18 Summary University 20 PW 2501H Interval 13528 - 13657 0 0 0 Open Well Pressure 4,281 0 0 psi Shut In Well Pressure 5,200 0 0 psi Max Treating Pressure 10,129 psi Max Slurry Rate 65.6 bpm Average Treating Pressure 8,910 psi Average Slurry Rate 56.2 bpm Average Rate w/ Prop on Bottom 58.1 bpm Breakdown Pressure 8,289 psi Breakdown Rate 10.0 bpm Breakdown Volume 168 gal Avg HHP 12,273 hp Final ISIP 6,164 psi Frac Gradient 0.979 psi/ft Pad Volume 2,016 gal Main Body Volume 199,878 gal Flush Volume 27,762 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 427,700 lbs Proppant in Formation 427,700 lbs Avg Proppant Concentration 2.55 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 4,759 bbls Load to Recover w/o Acid 4,759 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,701 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 58 bbls pump down rate 12.0 bpm Max pump down pressure 6,000 psi Fluid Temp 76.4 ?F Total Pump Time 1:39 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 3:52 0:00 0:00 0:00 Treatment End Time 5:31 0:00 0:00 0:00 Diverter Slurry bbls

EP WELLS DAILY OPERATIONS REPORT

Report 18

04/19/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped up to 3.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 1:38:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,434.48
5:31	7.53	FRAC	OPO			1		Other Pad Ops
13:03	0.28	FRAC	FWL			1		13:03 Handover well to wireline. 13:13 Pressure test lubricator to 4800 psi. 13:20 Open well with 4350 psi.
13:20	1.45	FRAC	WLT			1		14:04 "Stage #19 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13505' Perforate as follows: 13485' - 13486' 13439' - 13440' 13399' - 13400' 13356' - 13357' Stabilized pressure after perforating: 5420 psi Final pump down rate: 12 bpm Pump down volume: 60 bbl" 14:09 POOH
14:47	0.33	FRAC	GRS			1		Routine UMW greasing.
15:07	0.13	FRAC	WLF			1		Shut in well with 4325 psi. Handover well to frac.
15:15	2.60	FRAC	OPO			1		Other Pad Ops
17:51	1.47	FRAC	FRT			1		Stage 19 Summary University 20 PW 2501H Interval 13356 - 13485 0 0 0 Open Well Pressure 4,196 0 0 psi Shut In Well Pressure 5,397 0 0 psi Max Treating Pressure 9,634 psi Max Slurry Rate 63.1 bpm Average Treating Pressure 8,972 psi Average Slurry Rate 57.4 bpm Average Rate w/ Prop on Bottom 60.0 bpm Breakdown Pressure 8,318 psi Breakdown Rate 10.0 bpm Breakdown Volume 210 gal Avg HHP 12,622 hp Final ISIP 5,585 psi Frac Gradient 0.928 psi/ft Pad Volume 1,806 gal Main Body Volume 193,830 gal Flush Volume 18,690 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 431,830 lbs Proppant in Formation 431,830 lbs Avg Proppant Concentration 2.53 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 4,615 bbls Load to Recover w/o Acid 4,615 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,555 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls

EP WELLS DAILY OPERATIONS REPORT

Report 18

04/19/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Pump down volume 60 bbls pump down rate 12.0 bpm Max pump down pressure 7,540 psi Fluid Temp 76.4 °F Total Pump Time 1:28 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 17:51 0:00 0:00 0:00 Treatment End Time 19:19 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped up to 3.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:20:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,413.76
19:19	4.68	FRAC	FWL			1		Other pad ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.50	FRAC	FWL			1	Other pad ops
0:30	0.50	FRAC	WLT			1	00:30 Handover well to wireline. 00:51 Pressure test lubricator to 4500 psi. 01:00 Open well with 4500 psi.
1:00	1.63	FRAC	WLT			1	01:56 "Stage #20 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13333' Perforate as follows: 13313' - 13314' 13270' - 13271' 13227' - 13228' 13184' - 13185' Stabilized pressure after perforating: 4900 psi Final pump down rate: 12 bpm Pump down volume: 45 bbl" 02:00 POOH
2:38	0.20	FRAC	GRS			1	02:38 Routine UMW greasing.
2:50	0.33	FRAC	WLF			1	02:50 Shut in well with 4400 psi. 03:10 Handover well to frac.
3:10	0.83	FRAC	OPO			1	Other pad ops
4:00		FRAC	OPO			1	Start NPT KEANE FRAC ISSUE WITH PUMP UNABLE TO CONTINUE WITH FRAC OPS

EP WELLS DAILY OPERATIONS REPORT

Report 19

04/20/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	19.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp/Lindy Byerly	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	Hole size(in)	
THF Datum			
Daily NPT(hr/%)	7.62/31.74	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	1,460,617/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	70,957	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:							
Total man hours = 1150							

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	18

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 19

04/20/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	FRAC	FWL			0		Other pad ops
0:30	0.50	FRAC	WLT			0		00:30 Handover well to wireline. 00:51 Pressure test lubricator to 4500 psi. 01:00 Open well with 4500 psi.
1:00	1.63	FRAC	WLT			0		01:56 "Stage #20 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13333' Perforate as follows: 13313' - 13314' 13270' - 13271' 13227' - 13228' 13184' - 13185' Stabilized pressure after perforating: 4900 psi Final pump down rate: 12 bpm Pump down volume: 45 bbl" 02:00 POOH
2:38	0.20	FRAC	GRS			0		02:38 Routine UMW greasing.
2:50	0.33	FRAC	WLF			0		02:50 Shut in well with 4400 psi. 03:10 Handover well to frac.
3:10	0.83	FRAC	OPO			0		Other pad ops
4:00	3.93	FRAC	OPO			1		Start NPT KEANE FRAC ISSUE WITH PUMP UNABLE TO CONTINUE WITH FRAC OPS
7:56	1.63	FRAC	FRT			0		Stage 20 Summary University 20 PW 2501H Interval 13184 - 13313 Frac A Frac B/Flush 0 Open Well Pressure 4,380 4,240 0 psi Shut In Well Pressure 5,606 5,458 0 psi Max Treating Pressure 10,352 psi Max Slurry Rate 56.7 bpm Average Treating Pressure 9,020 psi Average Slurry Rate 48.3 bpm Average Rate w/ Prop on Bottom 48.3 bpm Breakdown Pressure 8,339 psi Breakdown Rate 11.0 bpm Breakdown Volume 168 gal Avg HHP 10,678 hp Final ISIP 6,609 psi Frac Gradient 1.019 psi/ft Pad Volume 7,182 gal Main Body Volume 215,334 gal Flush Volume 51,366 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 426,910 lbs Proppant in Formation 426,910 lbs Avg Proppant Concentration 2.76 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 5,127 bbls Load to Recover w/o Acid 5,127 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 5,080 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 47 bbls pump down rate 12.0 bpm Max pump down pressure 7,000 psi Fluid Temp 76.4 ?F Total Pump Time 2:42 hr:min Pumps Lost During Job 1 Frac A Frac B Flush Treatment Start Time 3:12 7:56 11:10 0:00

EP WELLS DAILY OPERATIONS REPORT

Report 19

04/20/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Treatment End Time 3:55 9:34 11:31 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 3.0 PPA then stepped up to 3.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water - After starting the ramp we had to shut down due to lack of HP. When we resumed we restarted the ramp. - Pressured out during flush. Flowed back the well and then flushed. Time between Stages (TBF) 0:45:00 Hours : Minutes Estimated Cost from Job Packet \$ 33,409.52
9:34	1.60	FRAC	FRT			1		***NPT*** Shell: Screen Out Screen out procedure Open well at 09:56 6050psi 10:02 3700psi 5.7 bpm 28.6 bbls 10:12 3200psi 5.1 bpm 79.2 bbls 10:22 2800psi 6.8 bpm 147.4 bbls 10:40 3000psi 7.3 bpm 292 bbls 10:50 3000psi 7.0 bpm 364.6 bbls 11:02 3000psi 7.4 bpm 430.2 bbls 11:02 Shut in well with 3800psi
11:10	0.35	FRAC	FRT			0		Re-flushed wellbore on stage #20
11:31	0.75	FRAC	OPO			0		Wireline prep pumpdown pumps.
12:16	1.30	FRAC	OPO			1		***NPT (WOE)*** Wait on Keane to re-pack pumpdown pump. *** END NPT (WOE) 1.3 HRS TOTAL ***
13:34	0.13	FRAC	FWL			0		13:34 Handover well to wireline. 13:38 Pressure test lubricator to 4400 psi. 13:42 Open well with 4500 psi.
13:42	1.62	FRAC	WLT			0		14:34 "Stage #21 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 13157' Perforate as follows: 13141' - 13142' 13098' - 13099' 13055' - 13056' 13012' - 13013' Stabilized pressure after perforating: 4852 psi Final pump down rate: 12 bpm Pump down volume: 46 bbl" 14:38 POOH
15:19	0.12	FRAC	GRS			0		Routine UMW greasing.
15:26	0.13	FRAC	WLF			0		Shut in well with 4500 psi.
15:34	7.52	FRAC	OPO			0		Handover well to frac. Other pad ops.
23:05	0.78	FRAC	FRT			1		*** NPT *** WAITING ON KEANE EXCESSIVE PUMP MAINTENANCE
23:52	0.13	FRAC	FRT			0		Stage 21 Summary University 20 PW 2501H Interval 13012 - 13141 0 0 0 Open Well Pressure 4,070 0 0 psi Shut In Well Pressure 5,075 0 0 psi Max Treating Pressure 9,903 psi Max Slurry Rate 63.8 bpm Average Treating Pressure 9,298 psi

EP WELLS DAILY OPERATIONS REPORT

Report 19

04/20/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Average Slurry Rate 47.7 bpm Average Rate w/ Prop on Bottom 49.1 bpm Breakdown Pressure 8,674 psi Breakdown Rate 9.0 bpm Breakdown Volume 252 gal Avg HHP 10,870 hp Final ISIP 5,714 psi Frac Gradient 0.940 psi/ft Pad Volume 1,176 gal Main Body Volume 213,696 gal Flush Volume 22,764 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 421,800 lbs Proppant in Formation 421,800 lbs Avg Proppant Concentration 2.25 lb/gal Max Proppant Concentration 2.50 lb/gal Load to Recover 5,088 bbls Load to Recover w/o Acid 5,088 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 5,042 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 46 bbls pump down rate 12.0 bpm Max pump down pressure 7,049 psi Fluid Temp 76.4 °F Total Pump Time 1:57 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 23:53 0:00 0:00 0:00 Treatment End Time 1:50 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 1:30:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,869.99
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	1.83	FRAC	FRT			0	Stage 21 Summary University 20 PW 2501H Completed
1:50	0.13	FRAC	OPO			0	Other pad ops
1:58	0.10	FRAC	OPO			0	01:50 Handover well to wireline. 01:58 Pressure test lubricator to 5100 psi. 02:04 Open well with 4800 psi.
2:04	1.77	FRAC	OPO			0	03:09 "Stage #22 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12989' Perforate as follows: 12969' - 12970' 12926' - 12927' 12883' - 12884' 12840' - 12841'

EP WELLS DAILY OPERATIONS REPORT

Report 19

04/20/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
							Stabilized pressure after perforating: 5100 psi Final pump down rate: 12 bpm Pump down volume: 42 bbl" 03:12 POOH
3:50	0.12	FRAC	OPO			0	03:50 Routine UMW greasing.
3:57	0.30	FRAC	OPO			0	03:57 Shut in well with 4700 psi. 04:15 Handover well to frac.
4:15		FRAC	OPO			0	Other pad ops.

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
04/20/2019 04:00	KEANE FRAC LP	Stimulation		OPO	EN	Frac Pump	3.93	3.93	2	OPEN
Description: KEANE UNABLE TO OVER 1200 RPM OUT OF PUMP DUE TO PUMP ISSUE FRAC OPS IS SHUT DOWN						Title: KEANE FRAC PUMP				
04/20/2019 09:34	SHELL	Stimulation		FRT	N		1.60	1.60	2	OPEN
Description: Screen Out on flush. Flowed back 1.5x wellbore volume. Re-flushed well.						Title: Shell: Sceen Out				
04/20/2019 12:16	KEANE FRAC LP	Stimulation		OPO	EN	Frac Pump	1.30	1.30	2	OPEN
Description: Wait on Keane to re-pack pumpdown pump						Title: Keane pump down pumps.				
04/20/2019 23:05	KEANE FRAC LP	Stimulation		FRT	EN	Frac Pump	0.78	0.78	1	OPEN
Description: keane perform pump maintenance						Title: Keane frac pumps				
Total							7.62	7.62		

EP WELLS DAILY OPERATIONS REPORT

Report 20

04/21/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	20.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	1,638,200/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	174,392	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:							
Total man hours = 1140							

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	19

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 20

04/21/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.83	FRAC	FRT			0		Stage 21 Summary University 20 PW 2501H Completed
1:50	0.13	FRAC	OPO			0		Other pad ops
1:58	0.10	FRAC	FWL			0		01:50 Handover well to wireline. 01:58 Pressure test lubricator to 5100 psi. 02:04 Open well with 4800 psi.
2:04	1.77	FRAC	WLT			0		03:09 "Stage #22 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12989' Perforate as follows: 12969' - 12970' 12926' - 12927' 12883' - 12884' 12840' - 12841' Stabilized pressure after perforating: 5100 psi Final pump down rate: 12 bpm Pump down volume: 42 bbl" 03:12 POOH
3:50	0.12	FRAC	GRS			0		03:50 Routine UMW greasing.
3:57	0.30	FRAC	WLF			0		03:57 Shut in well with 4700 psi. 04:15 Handover well to frac.
4:15	5.23	FRAC	OPO			0		Other pad ops.
9:29	1.65	FRAC	FRT			0		Stage 22 Summary University 20 PW 2501H Interval 12840 - 12969 0 0 0 Open Well Pressure 4,169 0 0 psi Shut In Well Pressure 5,085 0 0 psi Max Treating Pressure 9,770 psi Max Slurry Rate 66.0 bpm Average Treating Pressure 9,189 psi Average Slurry Rate 56.5 bpm Average Rate w/ Prop on Bottom 60.3 bpm Breakdown Pressure 8,564 psi Breakdown Rate 10.7 bpm Breakdown Volume 378 gal Avg HHP 12,725 hp Final ISIP 5,675 psi Frac Gradient 0.936 psi/ft Pad Volume 3,612 gal Main Body Volume 214,830 gal Flush Volume 18,270 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 428,740 lbs Proppant in Formation 428,740 lbs Avg Proppant Concentration 2.24 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 5,115 bbls Load to Recover w/o Acid 5,115 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 5,071 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 44 bbls pump down rate 12.0 bpm Max pump down pressure 6,800 psi Fluid Temp 76.4 ?F Total Pump Time 1:39 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 9:29 0:00 0:00 0:00

EP WELLS DAILY OPERATIONS REPORT

Report 20

04/21/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Treatment End Time 11:08 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped to 3.0 PPA. - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:13:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,632.35
11:08	1.13	FRAC	OPO			0		Other Pad Ops
12:16	0.72	FRAC	FWL			0		12:16 Handover well to wireline. Wait on frac to finish to swap sheaves. 12:53 Pressure test lubricator to 5100 psi. 12:59 Open well with 4400 psi.
12:59	1.67	FRAC	WLT			0		13:47 "Stage #23 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12817' Perforate as follows: 12797' - 12798' 12754' - 12755' 12711' - 12712' 12668' - 12669' Stabilized pressure after perforating: 4727 psi Final pump down rate: 12 bpm Pump down volume: 38 bbl" 13:50 POOH
14:39	0.08	FRAC	GRS			0		Routine UMV greasing.
14:44	0.13	FRAC	WLF			0		14:44 Shut in well with 4300 psi. 14:52 Handover well to frac.
14:52	4.02	FRAC	OPO			0		Other pad ops.
18:53	1.63	FRAC	FRT			0		Stage 23 Summary University 20 PW 2501H Interval 12668 - 12797 0 0 0 Open Well Pressure 4,115 0 0 psi Shut In Well Pressure 5,202 0 0 psi Max Treating Pressure 9,796 psi Max Slurry Rate 61.5 bpm Average Treating Pressure 9,111 psi Average Slurry Rate 55.9 bpm Average Rate w/ Prop on Bottom 60.0 bpm Breakdown Pressure 8,802 psi Breakdown Rate 11.0 bpm Breakdown Volume 294 gal Avg HHP 12,483 hp Final ISIP 5,385 psi Frac Gradient 0.910 psi/ft Pad Volume 3,990 gal Main Body Volume 202,860 gal Flush Volume 18,270 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 420,700 lbs Proppant in Formation 420,700 lbs Avg Proppant Concentration 2.35 lb/gal Max Proppant Concentration 3.00 lb/gal Load to Recover 4,830 bbls Load to Recover w/o Acid 4,830 bbls 15% HCL Spearhead 0 gal

EP WELLS DAILY OPERATIONS REPORT

Report 20

04/21/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Slickwater Fluid Pumped 4,792 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 38 bbls pump down rate 12.0 bpm Max pump down pressure 6,133 psi Fluid Temp 76.4 °F Total Pump Time 1:38 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 18:53 0:00 0:00 0:00 Treatment End Time 20:31 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped to 3.0 PPA. - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:58:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,308.85
20:31	3.48	FRAC	OPO			0		
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	GRS			0	

EP WELLS DAILY OPERATIONS REPORT

Report 21

04/22/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	21.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	1,720,449/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	72,853	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:							
Total man hours = 1147							

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	20

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 21

04/22/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	8.42	FRAC	OPO			0		Other Pad Ops
8:25	0.30	FRAC	FWL			0		08:25 Handover well to wireline. 08:37 Pressure test lubricator to 4600 psi. 08:43 Open well with 4200 psi.
8:43	1.37	FRAC	WLT			0		09:25 "Stage #24 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12647' Perforate as follows: 12625' - 12626' 12582' - 12583' 12539' - 12540' 12496' - 12497' Stabilized pressure after perforating: 4694 psi Final pump down rate: 12 bpm Pump down volume: 30 bbl" 09:29 POOH
10:05	0.13	FRAC	GRS			0		Routine UMV greasing.
10:13	0.13	FRAC	WLF			0		Shut in well with 4000 psi. Handover well to frac.
10:21	0.57	FRAC	OPO			0		Other Pad Ops
10:55	1.48	FRAC	FRT			0		Stage 24 Summary University 20 PW 2501H Interval 12496 - 12625 0 0 0 Open Well Pressure 3,900 0 0 psi Shut In Well Pressure 5,125 0 0 psi Max Treating Pressure 9,730 psi Max Slurry Rate 65.3 bpm Average Treating Pressure 9,047 psi Average Slurry Rate 57.0 bpm Average Rate w/ Prop on Bottom 62.1 bpm Breakdown Pressure 9,114 psi Breakdown Rate 8.7 bpm Breakdown Volume 336 gal Avg HHP 12,639 hp Final ISIP 5,707 psi Frac Gradient 0.939 psi/ft Pad Volume 2,268 gal Main Body Volume 194,334 gal Flush Volume 20,454 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 432,890 lbs Proppant in Formation 432,890 lbs Avg Proppant Concentration 2.54 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,627 bbls Load to Recover w/o Acid 4,627 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,597 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 30 bbls pump down rate 12.0 bpm Max pump down pressure 6,515 psi Fluid Temp 76.4 °F Total Pump Time 1:29 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 10:55 0:00 0:00 0:00 Treatment End Time 12:24 0:00 0:00 0:00 Diverter Slurry bbls

EP WELLS DAILY OPERATIONS REPORT

Report 21

04/22/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								- No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Proppant was ramped from 0.5 PPA to 2.5 PPA then stepped up to 4.0 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:10:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,361.39
12:24	11.60	FRAC	OPO			0		Other Pad Ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	OPO			0	Other Pad Ops

EP WELLS DAILY OPERATIONS REPORT

Report 22

04/23/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	22.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Brett Oldenkamp	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Eric Brunet	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	1,738,233/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	17,784	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:							
Total man hours	1146						

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	21

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 22

04/23/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	13.52	FRAC	OPO			0		Other Pad Ops
13:31	0.17	FRAC	FWL			0		Flush well
13:41	0.15	FRAC	FWL			0		13:33 Handover well to wireline. 13:43 Pressure test lubricator to 5200 psi. 13:50 Open well with 4900 psi.
13:50	1.58	FRAC	WLT			0		14:45 "Stage #25 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12473' Perforate as follows: 12453' - 12454' 12410' - 12411' 12365' - 12366' 12324' - 12325' Stabilized pressure after perforating: 5216 psi Final pump down rate: 12 bpm Pump down volume: 30 bbl" 14:51 POOH
15:25	0.20	FRAC	GRS			0		Routine UMW greasing.
15:37	0.08	FRAC	WLF			0		Shut in well with 4200 psi. Handover well to frac.
15:42	8.30	FRAC	OPO			0		Other Pad Ops
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	OPO			0	Other Pad Ops

EP WELLS DAILY OPERATIONS REPORT

Report 23

04/24/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	23.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Matt Randolph / Mike Parker	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	1,810,493/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	72,260	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:							
Total Man hours = 1140							

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 Ops
Update Since Report Time
25
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 23

04/24/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	17.18	FRAC	OPO			0		Other Pad Ops
17:11	1.62	FRAC	FRT			0		Stage 25 Summary University 20 PW 2501H Interval 12324 - 12453 Flush Frac 0 Open Well Pressure 4,000 4,700 0 psi Shut In Well Pressure 5,596 5,100 0 psi Max Treating Pressure 9,747 psi Max Slurry Rate 59.3 bpm Average Treating Pressure 9,301 psi Average Slurry Rate 52.3 bpm Average Rate w/ Prop on Bottom 55.7 bpm Breakdown Pressure 9,327 psi Breakdown Rate 12.7 bpm Breakdown Volume 294 gal Avg HHP 11,923 hp Final ISIP 5,351 psi Frac Gradient 0.907 psi/ft Pad Volume 2,058 gal Main Body Volume 206,466 gal Flush Volume 30,324 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 425,200 lbs Proppant in Formation 425,200 lbs Avg Proppant Concentration 2.46 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 4,916 bbls Load to Recover w/o Acid 4,916 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,886 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 30 bbls pump down rate 12.0 bpm Max pump down pressure 7,359 psi Fluid Temp 76.4 ?F Total Pump Time 1:48 hr:min Pumps Lost During Job 0 Flush Frac 0 Treatment Start Time 13:31 17:11 0:00 0:00 Treatment End Time 13:42 18:48 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Sand was ramped from 0.5 PPA to 2.5 PPA then stepped to 3.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water - The well was flushed prior to wireline making their run Time between Stages (TBF) 0:14:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,929.74
18:48	1.20	FRAC	OPO			0		OPO
20:00	0.17	FRAC	FWL			0		Frac to WL
20:10	1.03	FRAC	WLT			0		"Stage #26 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12299' UP 2' Perforate as follows: 12281' - 12282' 12238' - 12239'

EP WELLS DAILY OPERATIONS REPORT

Report 23

04/24/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								12195' - 12196' 12152' - 12153' Stabilized pressure after perforating: 4800 psi Final pump down rate: 9 bpm Pump down volume: 15 bbl"
21:12	0.70	FRAC	GRS			0		Routine UMW greasing. Shut in well with 4600 psi. Handover well to frac.
21:54	2.10	FRAC	OPO			0		OPO
Total	24.00							

EP WELLS DAILY OPERATIONS REPORT

Report 24

04/25/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	24.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Matt Randolph / Mike Parker	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	1,923,748/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	113,254	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:							
Man Hours = 1140							

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	23

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
27
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 24

04/25/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.97	FRAC	OPO			0		OPO
6:58	1.82	FRAC	FRT			0		Stage 26 Summary University 20 PW 2501H Interval 12152 - 12281 0 0 0 Open Well Pressure 4,060 0 0 psi Shut In Well Pressure 5,230 0 0 psi Max Treating Pressure 9,810 psi Max Slurry Rate 57.9 bpm Average Treating Pressure 9,069 psi Average Slurry Rate 49.0 bpm Average Rate w/ Prop on Bottom 52.6 bpm Breakdown Pressure 7,783 psi Breakdown Rate 11.3 bpm Breakdown Volume 672 gal Avg HHP 10,892 hp Final ISIP 5,471 psi Frac Gradient 0.918 psi/ft Pad Volume 2,436 gal Main Body Volume 205,464 gal Flush Volume 21,420 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 430,900 lbs Proppant in Formation 430,900 lbs Avg Proppant Concentration 2.38 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 4,892 bbls Load to Recover w/o Acid 4,892 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,874 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 18 bbls pump down rate 9.0 bpm Max pump down pressure 6,100 psi Fluid Temp 76.4 ?F Total Pump Time 1:48 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 6:58 0:00 0:00 0:00 Treatment End Time 8:46 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCl was pumped. - Sand was ramped 0.5 PPA to 2.5 PPA then stepped to 3.5 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:55:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,702.57
8:47	0.25	FRAC	WLT			0		Handover well to wireline. Pressure test lubricator to 5300 psi. Open well with 4900 psi.
9:02	1.02	FRAC	WLT			0		"Stage #27 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Boss Hog composite ball-in-place frac plug. Set plug @ 12129' Perforate as follows: 12109' - 12110' 12066' - 12067' 12023' - 12024' 11981' - 11982'

EP WELLS DAILY OPERATIONS REPORT

Report 24

04/25/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
								Stabilized pressure after perforating: 4318 psi Final pump down rate: 10 bpm Pump down volume: 9 bbl"
10:03	0.77	FRAC	WLT			0		POOH
10:49	0.32	FRAC	WLT			0		Routine UMW greasing crown valve Shut in well with 4700 psi. Handover well to frac.
11:08	8.05	FRAC	OPO			0		Other pad operations
19:11	0.33	FRAC	FWL			0		WL to Frac.
19:31	1.88	FRAC	FRT			0		Stage 27 Summary University 20 PW 2501H Interval 11980 - 12109 0 0 0 Open Well Pressure 4,000 0 0 psi Shut In Well Pressure 5,100 0 0 psi Max Treating Pressure 9,656 psi Max Slurry Rate 62.8 bpm Average Treating Pressure 9,184 psi Average Slurry Rate 50.7 bpm Average Rate w/ Prop on Bottom 57.8 bpm Breakdown Pressure 9,105 psi Breakdown Rate 9.0 bpm Breakdown Volume 294 gal Avg HHP 11,412 hp Final ISIP 5,381 psi Frac Gradient 0.910 psi/ft Pad Volume 2,898 gal Main Body Volume 208,556 gal Flush Volume 16,548 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 417,700 lbs Proppant in Formation 417,700 lbs Avg Proppant Concentration 2.21 lb/gal Max Proppant Concentration 4.00 lb/gal Load to Recover 4,966 bbls Load to Recover w/o Acid 4,966 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,956 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 10 bbls pump down rate 9.0 bpm Max pump down pressure 5,885 psi Fluid Temp 76.4 ?F Total Pump Time 1:54 hr:min Pumps Lost During Job 1 0 0 0 Treatment Start Time 19:31 0:00 0:00 0:00 Treatment End Time 21:25 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCL was pumped - Sand was stepped from 0.5 PPA to 1.0 PPA then ramped to 3.0 PPA then stepped to 4.0 PPA - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water - Lost pump 10014 due to electrical issues Time between Stages (TBF) 0:19:00 Hours : Minutes Estimated Cost from Job Packet \$ 32,701.91
21:24	0.23	FRAC	FWL			0		SI Frac @ 5100 psi, Frac to WL Pressure test lubricator to 5600 psi. Open well with 4600 psi.

EP WELLS DAILY OPERATIONS REPORT

Report 24

04/25/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
21:38	1.57	FRAC	WLT			0		"Stage #28 Plug and Perf. RIH with (4) 1' Keane guns: 2.75" OD 16g HMX at 6 SPF with 60° phased perforating guns and Downhole Technology Eco composite ball-in-place frac plug. Set plug @ 11957' Perforate as follows: 11937' - 11938' 11894' - 11895' 11851' - 11852' 11808' - 11809' Stabilized pressure after perforating: 4608 psi Final pump down rate: 6 bpm Pump down volume: 6 bbl" POOH @ 2237
23:12	0.20	FRAC	WLF			0		Routine UMV,Fcross, Pdown, inner/outer wing Shut in well with 4400 psi. Handover well to frac.
23:24	0.60	FRAC	OPO			0		OPO
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	OPO			0	OPO

EP WELLS DAILY OPERATIONS REPORT

Report 25

04/26/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	25.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Matt Randolph / Mike Parker	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	1,943,857/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	17,650	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:							
Man Hours = 1440							

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 Ops
Update Since Report Time
On NPT, Fuel
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 25

04/26/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	24.00	FRAC	OPO			0		OPO
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	OPO			0	OPO

EP WELLS DAILY OPERATIONS REPORT

Report 26

04/27/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	26.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Matt Randolph / Mike Parker	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	2,007,186/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	63,328	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:							
Man Hours = 1440							

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	25

Operations Summary

24 Hour Summary
Frac Ops
Update Since Report Time
28
24 Hour Forecast
Continue Frac Ops

EP WELLS DAILY OPERATIONS REPORT

Report 26

04/27/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	17.33	FRAC	OPO			0		OPO
17:20	0.27	FRAC	WLF			0		WL to Frac, Ptest / EQ = 5000 psi Open Well @ 3809 psi, Frac Stage 28
17:36	1.40	FRAC	FRT			0		Stage 28 Summary University 20 PW 2501H Interval 11808 - 11937 0 0 0 Open Well Pressure 3,809 0 0 psi Shut In Well Pressure 5,000 0 0 psi Max Treating Pressure 9,629 psi Max Slurry Rate 65.5 bpm Average Treating Pressure 8,924 psi Average Slurry Rate 56.6 bpm Average Rate w/ Prop on Bottom 60.0 bpm Breakdown Pressure 8,261 psi Breakdown Rate 8.7 bpm Breakdown Volume 252 gal Avg HHP 12,380 hp Final ISIP 5,188 psi Frac Gradient 0.893 psi/ft Pad Volume 1,386 gal Main Body Volume 175,813 gal Flush Volume 13,314 gal 100 Mesh Brown Sand Pumped 0 lbs 100 Mesh AZ Sand Pumped 0 lbs 100 Mesh Sand Pumped 423,500 lbs Proppant in Formation 423,500 lbs Avg Proppant Concentration 2.63 lb/gal Max Proppant Concentration 3.50 lb/gal Load to Recover 4,186 bbls Load to Recover w/o Acid 4,186 bbls 15% HCL Spearhead 0 gal Slickwater Fluid Pumped 4,178 bbls 20# Linear Fluid Pumped 0 bbls Brine Fluid Pumped 0 bbls Pump down volume 8 bbls pump down rate 6.0 bpm Max pump down pressure 5,300 psi Fluid Temp 76.4 ?F Total Pump Time 1:24 hr:min Pumps Lost During Job 0 0 0 0 Treatment Start Time 17:37 0:00 0:00 0:00 Treatment End Time 19:01 0:00 0:00 0:00 Diverter Slurry bbls - No incidents, accidents or spills to report. - FR was set at 0.75 gpt - No 15% HCL was pumped - Sand was ramped from 0.5 PPA to 3.0 PPA then stepped to 3.5 PPA. - A ball in place style plug was used - All proppant was placed and the stage was treated with Fresh water Time between Stages (TBF) 0:15:00 Hours : Minutes Estimated Cost from Job Packet \$ 31,505.83
19:00	0.25	FRAC	GRS			0		SI well @ 5000 psi, Greased LMV & UMW, Final Stag
19:15	4.75	FRAC	OPO			0		OPO, Stand By CTDO
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
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EP WELLS DAILY OPERATIONS REPORT

Report 26 04/27/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00		FRAC	OPO			0	OPO, Stand By CTDO

EP WELLS DAILY OPERATIONS REPORT

Report 27

04/28/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	27.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Matt Randolph / Mike Parker	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	2,021,066/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	13,881	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:							
Man hours = 1440							

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	26

Operations Summary

24 Hour Summary
No Activity
Update Since Report Time
No Activity, Stand by CTDO
24 Hour Forecast
RDMO frac spread

EP WELLS DAILY OPERATIONS REPORT

Report 27

04/28/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	9.00	FRAC	OPO			0		OPO, Stand By CTDO
9:00	8.50	FRAC	ROF			0		Rig down frac and WL equipment
17:30	0.50	FRAC	ROF			0		PJSM with night crew, transition to work
18:00	0.50	FRAC	ROF			0		Remove Rig lock from the 1H,2H,3H,4H
18:30	0.50	FRAC	ROF			0		Remove / load hout Hydraulic / greases hoses from wellheads,
19:00	1.00	FRAC	ROF			0		RDMO 4 leg manifold.
20:00	1.75	FRAC	ROF			0		Remove restraints x 4
21:45	1.25	FRAC	ROF			0		Remove Risers from goathead x 4
23:00	1.00	FRAC	ROF			0		ND,Goat head + HCR Crown valve off of all 4 wells
Total	24.00							

06.00 Update

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Description
0:00	0.75	FRAC	ROF			0	Continue,ND,Goat head + HCR Crown valve off of all 4 wells
0:45	1.00	FRAC	ROF			0	MIRD Crane.
1:45	4.25	FRAC	ROF			0	SDFN, No Activity, Wells Secure

EP WELLS DAILY OPERATIONS REPORT

Report 28

04/29/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 4249534181.00



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	28.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est. Days	0.00	Contractor	PERMIAN WELL SVC		
Work Unit	PERMIAN COMPLETIONS	Days To Release			
		Rig Phone/FAX No.			

Well Status

Supervisor	Nick Morrison	Measured Depth(ft)	
Engineer	Matt Bowman	TVD(ft)	
Other Supervisor	Matt Randolph / Mike Parker	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,798.10 / 2,772.10	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	2,032,790/	Current MW / BH EMW(ppg)	/
Actual divided by AFE		LOT/FIT EMW(ppg)	
Daily Cost	11,723	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	27

Operations Summary

24 Hour Summary
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 28

04/29/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H

Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.75	FRAC	ROF			0		Continue,ND,Goat head + HCR Crown valve off of all 4 wells
0:45	1.00	FRAC	ROF			0		MIRD Crane.
1:45	4.25	FRAC	ROF			0		SDFN, No Activity, Wells Secure
6:00		FRAC	ROF			0		
Total	6.00							

EP WELLS DAILY OPERATIONS REPORT

Report 29

04/30/2019

Company PERMAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	29.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	M HARRIS	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	T HURDEL	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	0.00 / 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,051,327 /	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$18,537.00	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	
FAC			GOAL ZERO DAYS			Safety card - Unsafe	
Last casing pressure test			PS BARRIER EVENT			SSE%	
			PS barrier bowtie review			Last casing pressure (psi)	
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks	
Last Derrick Inspection			Day's Since Last Drill	28
Last BOP Function Test				
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
PREP FOR CTU
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 29

04/30/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
07:00	1.50	COIL	RGU			0		MI CT AND SUPPORT EQUIPMENT FORM UNI 2705H
08:30	1.75	COIL	RGU			0		HELD A&A SPOT IN EQUIPMENT, PREP CT FOR NEW CT CONN
10:15	0.25	COIL	SAF			0		HELD A&A , DISCUSSED INHERENT HAZARDS AND MITIGATIONS
10:30	1.50	COIL	RGU			0		INSTALLED CT CONN, TESTED CT BOPS AT 500 LOW AND 10M HIGH
12:00	2.50	COIL	RGU			0		NU BOP STACK, PU INJECTOR & RISER
14:30		COIL	RGU			0		- START NPT KEANE - WAIT ON KEANE TO REMOVE CONTAINMENT TO MIRU SUPPORT EQUIPMENT
Total	7.50							

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
04/30/2019 14:30				RGU	EN		0.00	0.00		
Description: WAIT ON FRAC TO REMOVE EQUIPMENT						Title:				
Total							0.00	0.00		

EP WELLS DAILY OPERATIONS REPORT

Report 30

05/01/2019

Company PERMAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	30.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	M HARRIS	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	T HURDLE	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,128,619 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$29,759.22	Lithology	
		Formation/MDTop	

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 Day's Since Last Drill	
Last Derrick Inspection Last BOP Function Test Last BOP Test Next BOP Test				29

Operations Summary

24 Hour Summary
Load reel with fresh water. Test connector. M/U BHA and test motor. M/U lubricator to well and pressure test. RIH w/ cleanout BHA.
Update Since Report Time
24 Hour Forecast
Move to next well.

EP WELLS DAILY OPERATIONS REPORT

Report 30

05/01/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
		COIL	MIL			1		Tag #22 @ 15415 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION=light / med sand MILL TIME = 13 STALLS= 0 FR= 0.30 POP= 0 RIH
		COIL	MIL			1		
00:00	4.25	COIL	CHB			1		Fill reel with 94 bbls of fresh water. Pressure test connector to 2500 psi - Test Good. P/U BHA. Test motor at 3 bpm @ 2850 Cir psi. M/U lubricator to BOP's. Attempted to test twice and found a leak each time. Bleed off and changed out o-rings. On the third try we discovered a leak on the filter sub. Bleed off pressure to address. On forth attempted: Tested 500 psi low 5 min & 8000 psi high 5 min. - Test Good. Bleed down to 4000 psi. Open well and equalized at 3800 psi.
04:15	1.25	COIL	CTR			1		RIH pumping at 1 bpm @ Cir 4400 psi, WH 3800 psi
05:30	0.25	COIL	SAF			1		HELD TT MEETING, AAR DISCUSSED COMMUNICATIONS
05:45	1.50	COIL	MIL			1		CONTINUED TO RIH
07:15	0.67	COIL	MIL			1		Tag #1 @ 11970 WELLHEAD=3400 CIRC PRES= 6200 PUMP RATE= 3.5 RETURN RATE= 3.6 RETURN DESCRIPTION= MILL TIME = 5 TRIP TIME BETWEEN PLUGS= 0 STALLS= 0 FR= 0.25 POP= 0 RIH TO NEXT PLUG"
07:55	0.33	COIL	MIL			1		Tag #2 @ 12140 WELLHEAD=3400 CIRC PRES= 6200 PUMP RATE= 3.5 RETURN RATE= 3.6 RETURN DESCRIPTION= MILL TIME =3 STALLS= 0 FR= 0.25 POP= 0 RIH TO NEXT PLUG"
08:15	0.50	COIL	MIL			1		Tag #3 @ 12307 WELLHEAD=3400 CIRC PRES= 6200 PUMP RATE= 3.5 RETURN RATE= 3.6 RETURN DESCRIPTION= MILL TIME = 3 STALLS= 0 FR= 0.30 POP= 0 RIH TO NEXT PLUG"

EP WELLS DAILY OPERATIONS REPORT

Report 30

05/01/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



08:45	0.25	COIL	MIL			1	<p>Tag #4@ 12481 WELLHEAD=3550 CIRC PRES= 6300 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= MILL TIME = 12 STALLS= 0 FR= 0.30 POP= 0</p> <p>RIH TO NEXT PLUG"</p>
09:00	0.50	COIL	MIL			1	<p>Tag #5@ 12655 WELLHEAD=3500 CIRC PRES= 6250 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= MILL TIME = 7 STALLS= 0 FR= 0.30 POP= 0</p> <p>RIH TO NEXT PLUG"</p>
09:30	1.00	COIL	MIL			1	<p>Tag #6 @ 12826 WELLHEAD=3500 CIRC PRES= 6300 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= med/heavy sand MILL TIME = 3 STALLS= 0 FR= 0.30 POP= 0</p> <p>RIH TO NEXT PLUG"</p>
10:30	0.50	COIL	MIL			1	<p>Tag #7 @ 12826 WELLHEAD=3500 CIRC PRES= 6300 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= med/heavy sand MILL TIME = 2 STALLS= 0 FR= 0.30 POP= 0</p> <p>RIH TO NEXT PLUG"</p>
11:00	0.25	COIL	MIL			1	<p>Tag #8 @ 13169 WELLHEAD=3500 CIRC PRES= 6300 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= MILL TIME = 2 STALLS= 0 FR= 0.30 POP= 0</p> <p>RIH TO NEXT PLUG"</p>

EP WELLS DAILY OPERATIONS REPORT

Report 30

05/01/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



11:15	0.25	COIL	MIL			1	Tag #9 @ 13344 WELLHEAD=3550 CIRC PRES= 6300 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= light sand MILL TIME = 7 STALLS= 0 FR= 0.30 POP= 0 RIH
11:30	0.58	COIL	MIL			1	Tag #10 @ 13517 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= light sand MILL TIME = 8 STALLS= 0 FR= 0.30 POP= 0 RIH
12:05	0.67	COIL	MIL			1	Tag #11 @ 13687 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= light sand MILL TIME = 4 STALLS= 0 FR= 0.30 POP= 0 RIH
12:45	0.25	COIL	MIL			1	Tag #12 @ 13860 WELLHEAD=3550 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= light sand MILL TIME = 3 STALLS= 0 FR= 0.30 POP= 0 RIH
13:00	0.25	COIL	MIL			1	Tag #13 @ 14034 WELLHEAD=3550 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= light sand MILL TIME = 5 STALLS= 0 FR= 0.30 POP= 0 RIH
13:15	0.50	COIL	MIL			1	Tag #14 @ 14206 WELLHEAD=3550 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= light sand MILL TIME = 4 STALLS= 0 FR= 0.30 POP= 0 RIH

EP WELLS DAILY OPERATIONS REPORT

Report 30

05/01/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



13:45	0.50	COIL	MIL			1	<p>Tag #15 @ 14385 WELLHEAD=3550 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= med sand MILL TIME = 10 STALLS= 0 FR= 0.30 POP= 0 RIH</p>
14:15	0.50	COIL	MIL			1	<p>Tag #16 @ 14551 WELLHEAD=3500 CIRC PRES= 6200 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= med sand MILL TIME = 5 STALLS= 0 FR= 0.30 POP= 0 RIH</p>
14:45	0.50	COIL	MIL			1	<p>Tag #17 @ 14728 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION= med sand MILL TIME = 7 STALLS= 0 FR= 0.30 POP= 0 RIH</p>
15:15	0.50	COIL	MIL			1	<p>Tag #18 @ 14893 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION=light / med sand MILL TIME = 10 STALLS= 0 FR= 0.30 POP= 0 RIH</p>
15:45	0.25	COIL	MIL			1	<p>Tag #19 @ 15074 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION=light / med sand MILL TIME = 5 STALLS= 0 FR= 0.30 POP= 0 RIH</p>
16:00	0.50	COIL	MIL			1	<p>Tag #20 @ 15243 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION=light / med sand MILL TIME = 9 STALLS= 0 FR= 0.30 POP= 0 RIH</p>

EP WELLS DAILY OPERATIONS REPORT

Report 30

05/01/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



16:30		COIL	MIL			1	Tag #21 @ 15415 WELLHEAD=3500 CIRC PRES= 6100 PUMP RATE= 3.3 RETURN RATE= 3.5 RETURN DESCRIPTION=light / med sand MILL TIME = 13 STALLS= 0 FR= 0.30 POP= 0 RIH
Total	16.50						

EP WELLS DAILY OPERATIONS REPORT

Report 31

05/02/2019

Company PERMAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	31.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	M HARRIS	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	T HURDLE	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,242,278 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$108,706.12	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	
FAC			GOAL ZERO DAYS			Safety card - Unsafe	
Last casing pressure test			PS BARRIER EVENT			SSE%	
			PS barrier bowtie review			Last casing pressure (psi)	
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks	
Last Derrick Inspection			Day's Since Last Drill	30
Last BOP Function Test				
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
POOH. R/D CT.
Update Since Report Time
24 Hour Forecast
Other Well Ops

EP WELLS DAILY OPERATIONS REPORT

Report 31

05/02/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	1.50	COIL	PCT			0		POOH.
01:30	0.25	COIL	RGO			0		Bumped up and shut in well @ 3500 psi. Held TBT to R/D and move to next well.
01:45	1.50	COIL	RGO			0		Break lubricator at bowen connection. L/D BHA and inspect welded connector. Connector good to re-use. M/U BHA for next well. M/U lubricator to CT BOP's. N/D BOP's. N/U night cap. Move to next well
Total	3.25							

EP WELLS DAILY OPERATIONS REPORT

Report 32

05/03/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	32.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	M HARRIS	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	T HURDLE	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,202,247 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$10,188.50	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	
FAC			GOAL ZERO DAYS			Safety card - Unsafe	
Last casing pressure test			PS BARRIER EVENT			SSE%	
			PS barrier bowtie review			Last casing pressure (psi)	
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks	
Last Derrick Inspection			Day's Since Last Drill	31
Last BOP Function Test				
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
PRPE FOR E-LINE
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 32

05/03/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
11:30	0.50	WINF	SAF			0		DISCUSSED EQUIPMENT PLACEMENT AND ACCESS
12:00	0.75	WINF	RGU			0		SPOTTED IN CRANE & E-LINE EQUIPMENT
12:45	2.75	WINF	RGU			0		RU W/L AND SUPPORT EQUIPMENT
15:30		WINF	RGU			0		WOOO
Total	4.00							

EP WELLS DAILY OPERATIONS REPORT

Report 33

05/04/2019

Company PERMAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	33.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	M HARRIS	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	T HURDLE	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DfE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	2.50 / 26.32	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,229,342 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$10,799.81	Lithology	
		Formation/MDTop	

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 Day's Since Last Drill	
Last Derrick Inspection Last BOP Function Test Last BOP Test Next BOP Test				32

Operations Summary

24 Hour Summary
RIH w/ packer. Set Packer. POOH. Bleed off gas head. Neg test packer.
Update Since Report Time
PKR SET AT 11293' (TOP) XN NIPPLE 11310', EOT 11323
24 Hour Forecast
PREP FOR WOR

EP WELLS DAILY OPERATIONS REPORT

Report 33

05/04/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	2.50	WINF	SPB			1		Inspected setting tool but didn't find anything out of normal. Re-built setting tool. Inspected the packer and found that the pins sheared. M/U new packer BHA. P/U lubricator and M/U to the well. Pressure test to 8000 psi. - Test Good. Bleed down to 4500 psi. Open well, equalized at 4200 psi.
02:30	2.25	WINF	SPB			1		RIH w/ packer BHA, correlated and set PKR top at 11293', center 11296', EOT 11323'
04:45	1.50	WINF	PEL			1		POOH SICP 4100 PSI, OPENED WELL TO FLOW ON A 18/64 " CHOKE, RECOVERED 28 BBLS, CLOSED CHOKE AND MONITORED WELL, SICP 300 PSI
06:15	0.50	WINF	RWP			1		MONITOR WHP START 300 PSI - END 300 PSI - GOOD
06:45	0.25	WINF	SAF			1		HELD SM REVIEWED 12 QUESTIONS, 7 STEP , BLED OFF GAS HEAD
07:00	2.50	WINF	RGO			1		LD LUB, ND BOPS, ND FRAC TREE, INSTALL TREE CAP
09:30		WINF	RGO			1		EOD
Total	9.50							

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
05/04/2019 00:00				SPB	EN		2.50	2.50		
Description: The shear pins sheared on the upper packer slips.Changed out to new packer.						Title: ***NPT HES***				
Total							2.50	2.50		

EP WELLS DAILY OPERATIONS REPORT

Report 35

05/06/2019

Company PERMAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	35.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	Rafael Diaz/ Elsa Garcia/ Donnie Van Ness	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	Tommy Hurdle / James Light	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,453,480 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$15,566.82	Lithology	
		Formation/MDTop	

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 Day's Since Last Drill	34

Operations Summary

24 Hour Summary
R/U WOR. RIH w/ tubing
Update Since Report Time
24 Hour Forecast
Move to next well

EP WELLS DAILY OPERATIONS REPORT

Report 35

05/06/2019

Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:00	2.50	WOR	NUB			0		Connect hydraulic hoses and function test BOP's. Pressure test against the blinds 500 psi low - 5 min & 8000 psi high 5 mins - Test Good. Bleed off pressure and line up to test the pipe rams. P/U test mandrel and closed rams. Test 500 psi low - 5 min & 8000 psi high - 5 min - Test Good. Bleed off pressure
02:30	1.25	WOR	PWO			0		Wait on crane to move
03:45	1.75	WOR	RGU			0		R/U WOR.
05:30	0.50	COIL	NOA			0		Conduct concurrent safety with WOR and WL. Walk around with crews to establish zones.
06:00	1.25	WOR	RGU			0		Move WL crane and mini tripper.
07:15	4.25	WOR	RGU			0		Continue RU WOR. Spot pump, mini tripper, and pipe racks. Load tubing, remove thread protectors, and tally pipe.
11:30	1.25	WOR	TBG			0		Open well and RIH with ERW 2-7/8" tubing and GLV.
12:45	0.50	COIL	NOA			0		Lunch break
13:15	3.00	WOR	TBG			0		Continue RIH with ERW 2-7/8" tubing
Total	16.25							

EP WELLS DAILY OPERATIONS REPORT

Report 36

05/07/2019

Company PERMIAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	36.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	Rafael Diaz/ Elsa Garcia/ Donnie Van Ness	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	Tommy Hurdle / James Light	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	2.42 / 24.37	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,492,970 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$13,442.00	Lithology	
		Formation/MDTop	

HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC			PSI			TRCF	
RWC			NII			LWCF	
MTC			HPI			Safety Cards - Safe	
FAC			GOAL ZERO DAYS			Safety card - Unsafe	
Last casing pressure test			PS BARRIER EVENT			SSE%	
			PS barrier bowtie review			Last casing pressure (psi)	
Safety Comments:							

HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	
Last BOP Function Test			Day's Since Last Drill	35
Last BOP Test				
Next BOP Test				

Operations Summary

24 Hour Summary
Pump packer fluid and land tubing.
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 36

05/07/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
00:05	1.92	WOR	TBG			0		Move pipe racks and catwalk. R/U flowback iron to the backside. M/U pump line to the tubing. Pressure test to 2000 psi. – Test Good. Aligned valves to circulate packer fluid down tubing taking returns up the backside. Pumped 3 bpm @ 800 psi for a total of 240 bbls.
02:00	1.17	WOR	SOH			0		R/D pump hose. M/U hanger to tubing. Pickup landing joint with hanger setting tool. Sat down 10k for 5 minutes. Picked up 85k and held for 5 minutes to confirm the on/off tool latched on the packer. S/O to 56k and set packer in 10k compression - hanger landed. Turn landing joint to the right twice and engage lock rings for the hanger. Pull test hanger lock ring 20k over string weight (88k). Verified lock. Seal tested the hanger body seals to 10k – Test Good. Release setting tool and L/D. Set BPV.
03:10	0.42	WOR	RGO			0		R/D stairs and floor. N/D BOP and frac valve and N/U production tree.
03:35	2.42	WOR	RGO			0		*** NPT Start *** Shut down for lightning. *** NPT End ***
06:00	2.00	WOR	RGO			0		Resume RD of WOR.
08:00	1.00	WOR	PTW			0		Set BPV. N/D BOP's. N/D Frac valve. N/U Production tree. Remove BPV and install TWCV. Test void @ 10k for 10 minutes. - Test Good. Pressure test production tree 500 psi low for 5 min - 9800 psi high for 5 min - Test Good Bleed off pressure. Remove TWCV and secure well.
09:00	1.00	WOR	PTW			0		Move WOR to The University 20 TTG Unit 2502H
Total	9.92							

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
05/07/2019 03:35	SHELL	Wait On Weather		RGO	N		2.42	2.42		
Description: Shut down due to lightning						Title: NPT Weather				
Total							2.42	2.42		

EP WELLS DAILY OPERATIONS REPORT

Report 37

05/10/2019

Company PERMAN
 Well Type Development
 Well UNIVERSITY 20 PW 2501H
 Wellbore UNIVERSITY 20 PW 2501H
 WBS No/API No 30296777 / 42495341810000



Event Summary

Event Type	Completion only	Event Start Date	02/23/2019	Days on Location	37.00
Objective	Install Completion	Original Spud Date	12/21/2018		
Est.Days		Contractor			
Work Unit		Days To Release			
		Rig Phone/Fax No.			

Well Status

Supervisor	Rafael Diaz/ Elsa Garcia/ Donnie Van Ness	Measured Depth (ft)	
Engineer	Matt Bowman	TVD (ft)	
Other Supervisor	Tommy Hurdle / James Light	24 Hr Progress (ft)	
Depth Ref/Grd Elev/Water Depth (ft)	DFE: 2,798.10 / 2,772.10	Hole Size (in)	
THF Datum			
Daily NPT (hr/%)	/ 0.00	Last Casing MD	
Days Ahd(-) Bhnd(+)(50/50)		Next Casing MD	
Actual cost to date/AFE	2,508,385 / 0.00	Current MWM / BH EMW (ppg)	
Actual Divided by AFE	0.00	LOT/FIT EMW (ppg)	
Daily Cost	\$12,542.00	Lithology	
		Formation/MDTop	

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 Day's Since Last Drill	36

Operations Summary

24 Hour Summary
Rig up on well and pressure test tubing. Rupture disk.
Update Since Report Time
24 Hour Forecast

EP WELLS DAILY OPERATIONS REPORT

Report 37

05/10/2019

Well UNIVERSITY 20 PW 2501H
Wellbore UNIVERSITY 20 PW 2501H



Time Summary

Start	Hours	PH	OPN	Detail	Drilled Depth (ft)	NPT Level	Rig Rate	Description
		WOR	PTW			0		Rig up on well and pressure test tubing. Rupture disk.
Total								